



CHIRANJEEV JAIN **CLASSES**

FOR CA - FINAL COURSE

QUESTION BANK **FOR** **FINANCIAL REPORTING**

**As per the latest syllabus of Final issued by
Board of Studies of ICAI**

**"IT'S TIME TO BE BUSY BECAUSE TODAY WILL
BE YESTERDAY VERY SOON"**

PAPER: 1

FINANCIAL REPORTING

QUESTION BANK

VOLUME – II

COMPILED BY
CA. CHIRANJEEV JAIN
[B.Com (H); FCA; DISA; MBA(F)]

**WITHOUT AMBITION ONE STARTS NOTHING. WITHOUT
WORK ONE FINISHES NOTHING. THE PRIZE WILL NOT
BE SENT TO YOU. YOU HAVE TO WIN IT.**

**“AT THE END OF THE DAY, LET THERE BE NO EXCUSES,
NO EXPLANATIONS, NO REGRETS.**

**MATURITY IS WHEN YOU STOP COMPLAINING AND
MAKING EXCUSES, AND START MAKING CHANGES.”**

*Dedicated to
My Father Sri Mool Chand Jain
and
My Mother Smt. Sarala Devi Jain*

**“NEVER STOP DREAMING, NEVER STOP BELIEVING,
NEVER GIVE UP, NEVER STOP TRYING, AND NEVER
STOP LEARNING.”**

Dear student,

"The difference between a successful person and others is not a lack of strength, not a lack of knowledge, but a lack of will." -Vince Lombardi

In life, NO ONE and NOTHING will help you until you start helping YOURSELF.

Every problem might not have a solution right now, but don't forget that but every solution was once a problem.

It is true that experience is one of life's best teachers. But if you don't study you will probably never get any experience in the first place.

In real life, there is no such thing as second place. Either you are a winner, or you're not.

Success might be relative but most things that matter in real life aren't. A degree is a degree, a job is a job and hard work is hard work – as simple and direct as it can be.

Life is all about CHANCES and OPPORTUNITIES. Never leave anything to CHANCE and never let an OPPORTUNITY get away.

Study like there's no tomorrow because if you keep putting off your studies for tomorrow, you'll probably be too late.

Winners from all walks of life have their own strategies and plans but they all have one thing in common – they TRY. Keep trying.

Give up on your frustration but never on your hopes. Give up thinking about your setbacks but never on your goals. Give up worrying about your past but never on your future.

Everyone has a talent and so do you. Let it shine out, is all you have to do.

Don't feel sad because you are different from others. Every unique skill and talent a have the potential to make you a superstar. Embrace your personality and unchain your inner strength. Don't forget – the one thing that all successful people have in common is that they were different than everyone around them.

“BELIEVE IN YOURSELF. YOU ARE BRAVER THAN YOU THINK, MORE TALENTED THAN YOU KNOW, AND CAPABLE OF MORE THAN YOU IMAGINE.”

PREFACE

Financial Reporting is Paper 1 in Chartered Accountancy – Final Course. It is rightly so because Accounting is the language of business and without understanding accounting terminology, it is not possible to understand business and commerce. It is, therefore, essential for all CA students to possess knowledge of Financial Reporting concepts and practices.

The approach of the book is examination-oriented problems from ICAI Study Resource and solutions have also been included in all chapters as per ICAI Suggested solution. Examples and Illustration (mostly selected from ICAI Study Modules) have been included in the book to understand the IND AS concepts.

Recent question from ICAI RTP, MTP and Exam papers with answers have been included to help the students.

Practical Question from Other Sources are also included in some of the chapters for better understanding of the concepts. Solutions for some of these questions may not be provided for which students may refer our class notes.

Considering the importance of the question bank and its practical implications, care has been taken to solve almost all the problems for the benefit of the students.

We are sure the book will prove extremely useful to CA Final students.

We are Thankful to all my students to have faith on me.

Suggestions from all readers would be highly appreciated and acknowledged.

CA Chiranjeev Jain

Contact No: +91-7731007722

Email: hello@cachiranjeevjain.com

Website: www.cachiranjeevjain.com

**NOTE: FOR CHIARNJEEV SIR'S LATEST CLASS NOTES
CONTACT - +91- 8766 246 684**

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“IT'S NEVER TOO LATE TO CHANGE YOUR LIFE FOR THE BETTER. YOU DON'T HAVE TO TAKE HUGE STEPS TO CHANGE YOUR LIFE. MAKING EVEN THE SMALLEST CHANGES TO YOUR DAILY ROUTINE CAN MAKE A BIG DIFFERENCE TO YOUR LIFE.”

NUMBER OF EXAMPLES & QUESTIONS COVERED

No	Chapter Name	Examples/ Illustrations	Questions
1	Framework for Preparation and Presentation of Financial Statement	16	8
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3	Presentation of Financial Statements (IND AS 1)	-	29
4	Schedule III of Companies Act	-	4
5	Statement of Cash Flows (IND AS 7)	-	25
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17	Impairment of Assets	-	44
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19	Operating Segments (IND AS 108)	-	19
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24	Leases (IND AS 116)	-	62
25	Accounting for Income Tax (IND AS 12)	-	43
26	Consolidated Financial Statement as per IND AS	70	86
27	Related Party Disclosures (IND AS 24)	26	15
28	The Effects of Changes in Foreign Exchange Rates	-	19
29	Business Combination (IND AS 103)	69	31
30	Earnings Per Share (IND AS 33)	-	22
31	FIRST-TIME ADOPTION OF IND AS (Ind AS 101)	-	28
32	FAIR VALUE MEASUREMENT (IND AS 113)	16	8
33	CORPORATE SOCIAL RESPONSIBILITY	-	14
34	ANALYSIS OF FINANCIAL STATEMENTS	-	15
35	INTEGRATED REPORTING	-	4
	Total	370	1024

CA Final - Paper 1 Financial Reporting

ABC & TREND ANALYSIS

Category	Chapter	May-18	Nov-18	May-19	Nov-19	Nov-20	Jan-21	Jul-21	Total
A	<i>Consolidated Financial Statement</i>	25	16	27		10	20	16	114
A	<i>Financial instruments</i>	16	20	12	14	6	19	19	106
A	<i>Revenue from Contact with Customers</i>	4	10	5	12	18	12	12	73
A	ANALYSIS OF FINANCIAL STATEMENTS	10	8	16	12	12		8	66
A	<i>Business Combination (IND AS 103)</i>	10	4	8	28	8		5	63
A	<i>Shares based Payment (IND AS 102)</i>	10	8	5	8	5	12	5	53
	Total (A)	75	66	73	74	59	63	65	475
B	<i>Impairment of Assets</i>		15	4		8		6	33
B	<i>Leases (IND AS 116)</i>	12				8	6	4	30
B	<i>Property, Plant and Equipment</i>		8		8		5		21
B	<i>Agriculture (IND AS 41)</i>				4		4	9	17
B	<i>Earnings Per Share (IND AS 33)</i>					8		8	16
B	<i>Employee Benefits (IND AS 19)</i>			8		6			14
B	<i>The Effects of Changes in Foreign Exchange Rates (Ind AS 21)</i>			5	4			5	14
B	<i>Non-current Assets Held for Sale and Discontinued Operations</i>				10				10
B	<i>Accounting for Income Tax</i>					6	4		10
B	FIRST-TIME ADOPTION OF IND AS							6	6
	Total (B)	12	23	17	26	36	19	38	171
C	CORPORATE SOCIAL RESPONSIBILITY	8	4			5	6	6	29
C	<i>Operating Segments (IND AS 108)</i>	10				6	4	8	28
C	<i>Interim Financial Reporting (IND AS 34)</i>		5	4		6		5	20
C	<i>Events occurring after the Balance Sheet Date</i>				8		8		16
C	<i>Intangible Assets (IND AS 38)</i>			5			10		15
C	<i>Presentation of Financial Statements</i>			4			5	4	13
C	<i>Statement of Cash Flows (IND AS 7)</i>					8	5		13
C	FAIR VALUE MEASUREMENT		5		8				13
C	<i>Government Grant (IND AS 20)</i>		5	4					9
C	<i>Valuation of Inventories (IND AS 2)</i>	4				4			8
C	<i>Borrowing Costs (IND AS 23)</i>				8				8
C	INTEGRATED REPORTING						6		6
C	<i>Framework for Preparation and Presentation of Financial Statement</i>			5					5
C	<i>Provisions, Contingent Liabilities and Contingent Assets (IND AS 37)</i>		4						4
C	IND AS – Introduction								0
C	<i>Schedule III of Companies Act</i>								0
C	<i>Accounting Policies, Changes in Accounting Estimates and Errors</i>								0
C	<i>Investment Property (IND AS 40)</i>								0
C	<i>Related Party Disclosures</i>								0
	Total (C)	22	23	22	24	29	44	23	187
	<i>Portions Deleted</i>	15	12	12					
	Total (A+ B+C)	124	124	124	124	124	126	126	

CHAPTER 18

NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS (IND AS 105)

CONCEPTS BASED EXAMPLES

Examples: Available for Immediate Sale

1. A property being used as a headquarters by the entity needs to be vacated before it can be sold. The time required to vacate the building is usual and customary for sale of such assets. Hence the criteria for classification as held for sale would be met.
2. In above example, if property can be vacated only after a replacement is available then this may indicate that the property is not available for immediate sale, but only after the replacement becomes available.
3. An entity can't classify a manufacturing facility as held for sale if prior to selling the facility it needs to clear a backlog of uncompleted order.
4. In above example, if entity intends to sell the manufacturing facility along with the uncompleted orders it can be classified as held for sale.
5. An entity plans to renovate some of its property to increase its value prior to selling it to a third party. The entity is already searching for a buyer at current market values. But due to the plans to renovate the property prior to sale, the property may not be meeting condition of available for immediate sale.
6. A company has put a property on the market and expects that all the conditions of classification as held for sale is meeting. Any buyer will undertake searches and valuations before making an offer and exchanging contracts: Such conditions are normal for properties and any delays that might arise from such legal processes do not preclude the property from being classified as held for sale.
7. When minor pre-selling activities are outstanding, and those activities are usually performed immediately before an asset is transferred, the asset could nevertheless be appropriately treated as available for immediate sale.

However, when an asset is still in the course of construction, and significant activities will need to be performed before it can be transferred, it is unlikely that it could be regarded as available for immediate sale

Example: Highly probable: specific conditions

8. An entity is committed to a plan to sell a building and has started looking for a buyer for that building. The entity will continue to use the building until another building is completed to house the office staff located in the building. There is no intention to relocate the office staff until the new building is completed. Would the building be classified as held for sale?

The building will not be classified as held for sale as it is not available for immediate sale.

Examples – Requiring shareholder’s approval

9. At the end of the reporting period, ABC Company’s board of directors has approved a plan to sell a non-current asset. The eventual disposal requires approval by a majority of company’s shareholders through a formal vote which will take place after the reporting period. At the end of the reporting period, a majority of the company’s shareholders have provided the company with signed irrevocable agreements stating that they will vote in favour of the disposal. The 'highly probable' test is met because the shareholders have irrevocably committed to approving the transaction and, therefore, the vote by the shareholders is merely a formality.
10. Company XYZ holds an 85 per cent interest in a subsidiary, Company ABC. At the year end, the board of directors of Company ABC has approved a plan to sell a non-current asset to Company XYZ. The eventual disposal requires approval by a majority of Company ABC’s shareholders through a formal vote which will take place after the reporting period. For a transaction with a major shareholder (in this case, the parent), the minority shareholders are given protection in law if the value of the transaction exceeds a specified threshold. The law prevents Company XYZ from participating in the formal vote on such a transaction. Company ABC has not received any undertakings to vote in a particular manner from any of the shareholders. It is possible that the proposed transaction may be controversial, and the outcome of the shareholder vote is uncertain. From Company ABC’s perspective, the 'highly probable' test is not met at the end of the reporting period because the outcome of the formal vote by the remaining shareholders is too uncertain.

Exception to the period of One year

11. An entity in the mining industry is committed to a plan to sell a disposal group that represents a significant portion of its regulated operations. The sale requires regulatory approval, which could extend the period required to complete the sale beyond one year. Actions necessary to obtain that approval cannot be initiated until after a buyer is known and a firm purchase commitment is obtained. However, a firm purchase commitment is highly probable within one year. In this situation, the exception to one-year requirement will be met.
12. A company is committed to a plan to sell a non-current asset and classifies the asset as held for sale at that date. During the initial one-year period, the market conditions that existed at the date the asset was classified initially as held for sale deteriorate and, as a result, the asset is not sold by the end of that period. During that period, the company actively solicited but did not receive any reasonable offers to purchase the asset and, in response, reduced the price. The asset continues to be actively marketed at a price that is reasonable given the change in market conditions. In this situation, the exception to the one-year requirement will be met. At the end of the initial one-year period, the asset would continue to be classified as held for sale.

Example Non-current assets to be abandoned

13. An entity is reorganizing its business activities. In one location, it is stopping the usage of certain equipment because the demand for the product produced by that equipment has reduced significantly. The equipment is to be maintained in good working order, and it is expected that it will be brought back into use if the demand increases. Additionally, the entity

intends to close three out of five manufacturing units. The manufacturing units constitute a major activity of the entity. All the work within the three units will end during the current year, and as of the year-end all work will have ceased. How will the piece of equipment and the closure of the manufacturing units be treated in the financial statements for the current year?

The equipment will not be treated as abandoned as it will subsequently be brought back into usage. The manufacturing units will be treated as discontinued operations.

14. In February 20X2, PQR Limited decides to abandon all of its coal mines, which constitute a major line of business. All work stops at the coal mines during the year ended 31 March 20X2. In the financial statements for the year ended 31 March 20X1, results and cash flows of the coal mines are treated as continuing operations. In the financial statements for the year ended 31 March 20X2, the results and cash flows of the coal mines are treated as discontinued operations and PQR Limited is required to make the disclosures as per Ind AS 105.

Entity ceases to use a manufacturing plant because demand has declined. However, the plant is maintained in a workable condition and it is expected to be brought back into use in future when demand picks up.

It is neither to be treated as abandoned asset nor as held for sale because its carrying amount will be principally recovered through continuous use, therefore the entity will not stop charging depreciation or treat it as held for sale. This is because its carrying amount will be recovered principally through continuing use to the end of its economic life.

Example 14 - Classification as held for sale

15. A Ltd. acquired a property for ₹ 2,00,000. After few years, the cumulative depreciation on the property of ₹ 80,000 has been recognised and subsequently the property is classified as held for sale under Ind AS 105.

At the time of classification as held for sale it will be measured at lower of its carrying amount which is ₹ 1,20,000 (2,00,000 – 80,000) and fair value less costs to sell as estimated at ₹ 1,00,000.

Accordingly, there is a write-down on initial classification of property as held for sale and accordingly the property is carried at ₹ 1,00,000. A loss of ₹ 20,000 is recognised in profit or loss.

On next reporting date, the property's fair value less costs to sell is estimated at ₹ 85,000. Accordingly, a loss of ₹ 15,000 is recognised in profit or loss and the property is carried at ₹ 85,000.

Subsequently, the property is sold for ₹ 90,000. A gain of ₹ 5,000 will be recognised.

Example 16 - Reversal of Impairment Losses

16. A freehold property was originally acquired for ₹ 40,00,000. Some years later, after cumulative depreciation of ₹ 11,00,000 has been recognised, an impairment loss of ₹ 3,50,000 is recognised, taking the carrying amount to ₹ 25,50,000, which represents the estimated value in use of the property. Shortly thereafter, as a consequence of a proposed move to new premises, the freehold property is classified as held for sale.

At the time of classification as held for sale:

carrying amount is ₹ 25,50,000; and

fair value less costs to sell is assessed at ₹ 25,00,000.

Accordingly, the initial write-down on classification as held for sale is ₹ 50,000 and the property is carried at ₹ 25,00,000. Following classification as held for sale, no further depreciation is recognised.

At the next reporting date, the property market has improved and fair value less costs to sell is reassessed at ₹ 26,50,000. The gain of ₹ 1,50,000 is less than the cumulative impairment losses recognised to date ($₹ 3,50,000 + ₹ 50,000 = ₹ 4,00,000$). Accordingly, it is credited in profit or loss and the property is carried at ₹ 26,50,000.

Six months after that, the property market has continued to improve, and fair value less costs to sell is now assessed at ₹ 30,00,000. This further gain of ₹ 3,50,000 is, however, in excess of the cumulative impairment losses recognised to date ($₹ 3,50,000 + ₹ 50,000 - ₹ 1,50,000 = ₹ 2,50,000$). Accordingly, a restricted gain of ₹ 2,50,000 is credited in profit or loss and the property is carried at ₹ 29,00,000.

Subsequently, the property is sold for ₹ 30,00,000, at which time a gain of ₹ 1,00,000 is recognised.

Example 17: Remeasuring non-current assets that are no longer held for sale

17. Company ABC has several operations including the manufacture and sale of leisure equipment.

Company ABC financial year ends on 31 March. In April, Company ABC adopts a plan to sell all of the assets and liabilities of the leisure equipment operations. Having met the requirements of Ind AS 105 at the end of the first quarter, Company ABC appropriately classifies those assets and liabilities as a disposal group held for sale.

In September, Company ABC decides not to sell certain existing trademarks and licence arrangements associated with the leisure equipment operations. Subsequent to the sale of the other assets and liabilities, Company ABC will continue to generate revenue (and incur the associated costs) from its trademarks and licences.

Company ABC should reclassify the trademarks and licence arrangements out of assets held for sale and remeasure them at the lower of (1) their carrying amounts before being classified as held for sale less any amortisation expense that would have been recognised if they had not been classified as held for sale, and (2) their recoverable amount at the date of the subsequent decision not to sell.

If this requirement triggers an adjustment to the carrying amounts of the trademarks and licences, assuming that the assets were not revalued in accordance with Ind AS 38 before classification as held for sale, the adjustment should be included in profit or loss from continuing operations in the period in which the held for sale criteria are no longer met. The adjustment should be included in the same caption in the statement of profit and loss used to present other gains or losses, if any, on held for sale items not meeting the definition of discontinued operations.

If the remaining assets and liabilities of the leisure equipment operations continue to meet the conditions to be accounted for as held for sale, Company ABC should continue to classify those remaining assets and liabilities as held for sale.

Examples – Discontinued Operations

18. Company XYZ has 5 different operating segments, one of which solely produces consumer goods. All of the consumer goods production facilities are situated in Central Europe. XYZ also has other operations in Central Europe for other operating segments. In April 20X1, XYZ disposed of its consumer goods segment which meets the definition of a component of a business and represents a separate major line of business and would therefore be considered as a discontinued operation.
19. A group has announced that it is closing an engineering contracting segment. Although no new contracts are being undertaken, all existing contracts will be completed and the business will be run down accordingly. In this situation, the operation will have ceased to be used when the contracting activity has been completed (that is, at the end of the last contract). In the period during which existing contracts are completed, the group is continuing to carry out a revenue-earning activity, albeit that the activity is being wound down, and so it does not qualify as a discontinued operation.
20. A company carried out a merchandise wholesaling business that it operated from several leasehold premises throughout the country. The business has been closed, all stocks have been disposed of, and employees have been made redundant before the end of three months into the next financial year. At that time, some debtors remain to be collected, and costs will continue to be incurred in respect of the vacated premises until the leases are disposed of. In this case, the former activity of merchandise wholesaling has ceased. The outstanding future transactions do not constitute the continuation of the activity and, consequently, the operation has been discontinued.
21. XYZ Company has one business segment, and it operates in the UK, the US and Australia. Each of these operations represents a component of XYZ and a major geographical area of operations. Management has decided to sell the US operation, which met the criteria to be classified as held for sale during the year. The US operation should be disclosed in the XYZ's financial statements as a discontinued operation, despite the fact that there has been no change to the number of business segments.

QUESTIONS FROM ICAI STUDY MATERIAL

Q1: An item of property, plant and equipment that is measured on the cost basis should be measured in accordance with Ind AS 16.

Entity ABC owns an item of property and it was stated at the following amounts in its last financial statements:

31st December, 20X1	₹
Cost	12,00,000
Depreciation	(6,00,000)

Net book value 6,00,000

The asset is depreciated at an annual rate of 10% ie. ₹ 1,20,000 p.a.

During July, 20X2, entity ABC decides to sell the asset and on 1st August it meets the conditions to be classified as held for sale. Analyse.

Ans: At 31st July, entity ABC should ensure that the asset is measured in accordance with Ind AS 16. It should be depreciated by further ₹ 70,000 (₹1,20,000 x 7/12) and should be carried at ₹ 5,30,000 before it is measured in accordance with Ind AS 105.

Note: From the date the asset is classified as held for sale no further depreciation will be charged.

Q2: S Ltd purchased a property for ₹ 6,00,000 on 1 April 20X1. The useful life of the property is 15 years. On 31 March 20X3 S Ltd classify the property as held for sale. The impairment testing provides the estimated recoverable amount of ₹ 4,70,000.

The fair value less cost to sell on 31 March 20X3 was ₹ 4,60,000. On 31 March 20X4 management change the plan as property no longer met the criteria of held for sale. The recoverable amount as at 31 March 20X4 is ₹ 5,00,000.

Value the property at the end of 20X3 and 20X4.

Ans: (a) Value of property immediately before the classification as held for sale as per Ind AS 16 as on 31 March 20X3 ₹

Purchase Price	6,00,000
Less: Accumulated Depreciation (for two years)	80,000
Less: Impairment loss (5,20,000-4,70,000)	50,000
Carrying Amount	4,70,000

On initial classification as held for sale on 31 March 20X3, the value will be lower of:

Carrying amount	₹ 4,70,000
Fair Value less Cost to sell	₹ 4,60,000

On 31 March 20X3 Non-current classified as held for sale will be recorded at ₹ 4,60,000.

Depreciation of ₹ 40,000 and Impairment Loss of ₹ 60,000 (50,000 +10,000) is charged in profit or loss for the year ended 31 March 20X3.

(b) On 31 March 20X4 held for sale property is reclassified as criteria doesn't met. The value will be lower of:

Carrying amount had the asset is not classified as held for sale

Carrying amount immediately before classification

on 31 March 20X3	₹ 4,70,000
Less Depreciation based on 13 years balance life	₹ 36,154
Recoverable Amount	₹ 5,00,000

Property will be valued at ₹ 4,33,846 on 31 March 20X4

Adjustment to the carrying amount of ₹ 26,154 (₹ 4,60,000 - 4,33,846) is charged to the profit or loss.

Q3: Sun Ltd is a retailer of takeaway food like burger and pizzas. It decides to sell one of its outlets located in Chandni Chowk in New Delhi. The company will continue to run 200 other outlets in New Delhi.

All Ind AS 105 criteria for held for sale classification were first met at 1st October 20X1. The outlet will be sold in June 20X2.

Management believes that outlet is a discontinued operation and wants to present the results of outlet as 'discontinued operations'. Analysis

Ans: The Chandni Chowk outlet is a disposal group; it is not a discontinued operation as it is only one outlet. It is not a major line of business or geographical area, nor a subsidiary acquired with a view to resale.

Q4: On November 30, 20X1, Entity X becomes committed to a plan to sell a property. However, it plans certain renovations to increase its value prior to selling it. The renovations are expected to be completed within a short span of time i.e., 2 months.

Can the property be classified as held for sale at the reporting date i.e. December 31, 20X1?

Ans: The property cannot be classified as held for sale at the balance sheet date as it is not available for sale immediately in its present condition. Although the renovations are expected to be completed within a short span 2 months, this fact is not relevant for classification.

However, if the PPE meets the criteria for held for sale by January 31, 20X2 (i.e., 2 months from November 30, 20X1) and the accounts are not authorised by that date, then necessary disclosures need to be given in the financial statements.

Q5: On March 1, 20X1, entity R decides to sell one of its factories. An agent is appointed and the factory is actively marketed. As on March 31, 20X1, it is expected that the factory will be sold by February 28, 20X2. However, in May 20X1, the market price of the factory deteriorated. Entity R believed that the market will recover and thus did not reduce the price of the factory. The company's accounts are authorised for issue on June 26, 20X1. Should the factory be shown as held for sale as on March 31, 20X1?

Ans: In this example, the factory ceases to meet the definition of held for sale post the balance sheet date but before the financial statements are authorised for issue, as it is not actively marketed at a reasonable price. But, since the market conditions deteriorated post the balance sheet date, the asset will be classified as held for sale as at March 31, 20X1.

Q6: On June 1, 20X1, entity X plans to sell a group of assets and liabilities, which is classified as a disposal group. On July 31, 20X1, the Board of Directors approves and becomes committed to the plan to sell the manufacturing unit by entering into a firm purchase commitment with entity Y. However, since the manufacturing unit is regulated, the approval from the regulator is needed for sale. The approval from the regulator is customary and highly probable to be received by November 30, 20X1 and the sale is expected to be completed by March 31, 20X2.

Entity X follows December year end. The assets and liabilities attributable to this manufacturing unit are as under:

(Amount in ₹)

Particulars	Carrying value as on December 31, 20X0	Carrying value as on July 31, 20X1
Goodwill	500	500
Plant and Machinery	1,000	900
Building	2,000	1,850
Debtors	850	1,050
Inventory	700	400
Creditors	(300)	(250)
Loans	(2,000)	(1,850)
	2,750	2,600

The fair value of the manufacturing unit as on December 31, 20X0 is ₹ 2,000 and as on July 31, 20X1 is ₹ 1,850. The cost to sell is 100 on both these dates. The disposal group is not sold at the period end i.e., December 31, 20X1. The fair value as on December 31, 20X1 is lower than the carrying value of the disposal group as on that date.

Required:

1. Assess whether the manufacturing unit can be classified as held for sale and reasons there for. If yes, then at which date?
2. The measurement of the manufacturing unit as on the date of classification as held for sale.
3. The measurement of the manufacturing unit as at the end of the year. **[NOV 19]**

Ans: Assessing whether the manufacturing unit can be classified as held for sale

The manufacturing unit can be classified as held for sale due to the following reasons:

- (a) The disposal group is available for immediate sale and in its present condition. The regulatory approval is customary and it is expected to be received in one year. The date at which the disposal group must be classified as held for sale is July 31, 20X1, i.e., the date at which management becomes committed to the plan.
- (b) The sale is highly probable as the appropriate level of management i.e., board of directors in this case have approved the plan.
- (c) A firm purchase agreement has been entered with the buyer.
- (d) The sale is expected to be complete by March 31, 20X2, i.e., within one year from the date of classification.

Measurement of the manufacturing unit as on the date of classification as held for sale

Following steps need to be followed:

Step 1: Immediately before the initial classification of the asset (or disposal group) as held for sale, the carrying amounts of the asset (or all the assets and liabilities in the group) shall be measured in accordance with applicable Ind AS.

This has been done and the carrying value of the disposal group as on July 31, 20X1 is determined at ₹ 2,600. The difference between the carrying value as on December 31, 20X0 and July 31, 20X1 is accounted for as per the relevant Ind AS i.e., (Ind AS 2 for inventory and Ind AS 39 for debtors, creditors and loans).

Step 2: An entity shall measure a non-current asset (or disposal group) classified as held for sale at the lower of its carrying amount and fair value less costs to sell.

The fair value less cost to sell of the disposal group as on July 31, 20X1 is ₹ 1,750 (i.e.1,850-100). This is lower than the carrying value of ₹ 2,600. Thus an impairment loss needs to be recognised and allocated first towards goodwill and thereafter pro-rata between assets of the disposal group which are within the scope of Ind AS 105 based on their carrying value. Thus, the assets will be measured as under:

Particulars	Carrying value – July 31, 20X1	Impairment	Carrying value as per Ind AS 105 – 31 July 31, 20X1
Goodwill	500	(500)	-
Plant and Machinery	900	(115)	785
Building	1,850	(235)	1,615
Debtors	1,050	-	1,050
Inventory	400	-	400
Creditors	(250)	-	(250)
Loans	(1,850)	-	(1,850)
	2,600	(850)	1,750

Measurement of the manufacturing unit as on the date of classification as at the year end

The measurement as at the year-end shall be on similar lines as done above.

The assets and liabilities in the disposal group not within the scope of this Standard are measured as per the respective Standards.

The fair value less cost to sell of the disposal group as a whole is calculated. This fair value less cost to sell as at the year-end shall be compared with the carrying value as at the date of classification as held for sale. It is provided that the fair value as on the year end is less than the carrying amount as on that date – thus the impairment loss shall be allocated in the same way between the assets of the disposal group falling within the scope of this standard as shown above.

NEW QUESTIONS IN SM (FOR MAY 21 ATTEMPT)

Q7: Identify whether each of the following scenarios gives rise to a discontinued operation and/or classification of assets as held for sale

S. No	Particulars	Discontinued operation Yes/No	Assets held for sale Yes/No
1	MNO disposes of a component of the entity by selling the underlying assets. The sales transaction is incomplete at the reporting date.		
2	PQR has ceased activities that meet the definition of a discontinued operation without selling any assets.		
3	STU ceases activities and has already completed the sale of the underlying assets at the reporting date.		
4	VWX will sell or has sold assets that are within the scope of Ind AS 105, but does not discontinue any of its operations.		

Ans: Discontinued operations and assets held for sale

S. No	Particulars	Discontinued operation Yes/No	Assets held for sale Yes/No
1	MNO disposes of a component of the entity by selling the underlying assets. The sales transaction is incomplete at the reporting date.	Yes	Yes
2	PQR has ceased activities that meet the definition of a discontinued operation without selling any assets.	Yes	No
3	STU ceases activities and has already completed the sale of the underlying assets at the reporting date.	Yes	No
4	VWX will sell or has sold assets that are within the scope of Ind AS 105, but does not discontinue any of its operations.	No	Yes

Q8: Identify which of the following is a disposal group at 31 March 20X1:

- On 21 March 20X1, XYZ announced the Board's intention to sell its shares in a subsidiary company, Alpha, contingent upon the approval of Alpha's shareholders. It seems

unlikely that approval will be granted in the near future and no specific potential buyer has been identified.

2. PQR has entered into a contract to sell the entire delivery fleet of vehicles operated from its warehouse to a competitor, ABC, on 14 March 20X1. The assets will be transferred on 28 April 20X1 from which date the Group will outsource its delivery activities to another company, LMN.
3. On 16 January 20X1, DEF's management and shareholders approved a plan to sell its retail business in Mumbai and a consultant is hired to manage the sale. As at 31 March 20X1 heads of agreement had been signed although due diligence and the negotiation of final terms are still in process. The transaction is expected to be completed in April 20X1.

Ans: Presented as held for sale

- PQR's fleet is classified as held for sale because it constitutes a group of assets to be sold in their present condition and the sale is highly probable at the reporting date (as a contract has been entered into).
- DEF's sale of its retail business will not be completed until the final terms (e.g. of purchase price) are agreed. However, the business is ready for immediate sale and the sale is highly probable unless other evidence after the reporting date but before the financial statements are approved for issue, comes to light to indicate the contrary.

Not presented as held for sale

- XYZ's shares in Alpha are not available for an immediate sale as shareholders' approval is required. Also no specific potential buyer has been identified. In taking these fact into consideration for the assessment of whether the sale is highly probable, it is clearly not highly probable.

QUESTIONS FROM RTP/MTP/EXAMS

Q9: Following is the extract of the consolidated financial statements of A Ltd. for the year ended on:

Asset/(liability)	Carry amount as on 31st March, 20X1 (In ₹ '000)
Attributed goodwill	200
Intangible assets	950
Financial asset measured at fair value through other comprehensive income	300
Property, plant & equipment	1100
Deferred tax asset	250
Current assets – inventory, receivables and cash balances	600
Current liabilities	(850)
Non-current liabilities – provisions	(300)
Total	2,250

On 15th September 20X1, Entity A decided to sell the business. It noted that the business meets the condition of disposal group classified as held for sale on that date in accordance with Ind AS 105. However, it does not meet the conditions to be classified as discontinued operations in accordance with that standard.

The disposal group is stated at the following amounts immediately prior to reclassification as held for sale.

Asset/ (liability)	Carry amount as on 15th September 20X1 (In ₹ '000)
Attributed goodwill	200
Intangible assets	930
Financial asset measured at fair value through other comprehensive income	360
Property, plant & equipment	1,020
Deferred tax asset	250
Current assets – inventory, receivables and cash balances	520
Current liabilities	(870)
Non-current liabilities – provisions	(250)
Total	2,160

Entity A proposed to sell the disposal group at ₹ 19,00,000. It estimates that the costs to sell will be ₹ 70,000. This cost consists of professional fee to be paid to external lawyers and accountants.

As at 31st March 20X2, there has been no change to the plan to sell the disposal group and entity A still expects to sell it within one year of initial classification. Mr. X, an accountant of Entity A remeasured the following assets/ liabilities in accordance with respective standards as on 31st March 20X2:

Available for sale:	(In ₹ '000)
Financial assets	410
Deferred tax assets	230
Current assets- Inventory, receivables and cash balances	400
Current liabilities	900
Non- current liabilities- provisions	250

The disposal group has not been trading well and its fair value less costs to sell has fallen to ₹ 16,50,000.

Required:

What would be the value of all assets/ liabilities within the disposal group as on the following dates in accordance with Ind AS 105?

- 15th September, 20X1 and
- 31st March, 20X2

[RTP Nov 2018]

Ans: (a) As at 15 September, 20X1

The disposal group should be measured at ₹ 18,30,000 (19,00,000-70,000). The impairment write down of ₹ 3,30,000 (₹ 21,60,000 – ₹ 18,30,000) should be recorded within profit from continuing operations.

The impairment of ₹ 3,30,000 should be allocated to the carrying values of the appropriate non-current assets.

Asset/ (liability)	Carrying value as at 15 June 2004	Impairment	Revised carrying value as per IND AS 105
Attributed goodwill	200	(200)	-
Intangible assets	930	(62)	868
Financial asset measured at fair value through other comprehensive income	360	-	360
Property, plant & equipment	1,020	(68)	952
Deferred tax asset	250	-	250
Current assets – inventory, receivables and cash balances	520	-	520
Current liabilities	(870)	-	(870)
Non-current liabilities – provisions	(250)	-	(250)
Total	2,160	(330)	1,830

The impairment loss is allocated first to goodwill and then pro rata to the other assets of the disposal group within Ind AS 105 measurement scope. Following assets are not in the measurement scope of the standard- financial asset measured at other comprehensive income, the deferred tax asset or the current assets. In addition, the impairment allocation can only be made against assets and is not allocated to liabilities.

(b) As on 31 March, 20X2:

All of the assets and liabilities, outside the scope of measurement under IFRS 5, are remeasured in accordance with the relevant standards. The assets that are remeasured in this case under the relevant standards are the Financial asset measured at fair value through other comprehensive income (Ind AS 109), the deferred tax asset (Ind AS 12), the current assets and liabilities (various standards) and the non-current liabilities (Ind AS 37).

Asset/ (liability)	Carrying amount as on 15 September, 20X1	Change in value to 31st March 20X2	Impairment	Revised carrying value as per Ind AS 105
Attributed goodwill	-	-	-	-

Intangible assets	868	-	(29)	839
Financial asset measured at fair value through other comprehensive income	360	50	-	410
Property, plant & equipment	952	-	(31)	921
Deferred tax asset	250	(20)	-	230
Current assets – inventory, receivables and cash balances	520	(120)	-	400
Current liabilities	(870)	(30)	-	(900)
Non-current liabilities – provisions	(250)	-	-	(250)
Total	1,830	(120)	(60)	1,650

PB Limited purchased a plastic bottle manufacturing plant for ₹ 24 lakh on 1st April, 2015. The useful life of the plant is 8 years. On 30th September, 2017, PB Limited temporarily stops using the manufacturing plant because demand has declined. However, the plant is maintained in a workable condition and it will be used in future when demand picks up.

Q10: The accountant of PB Limited decided to treat the plant as held for sale until the demand picks up and accordingly measures the plant at lower of carrying amount and fair value less cost to sell. The accountant has also stopped charging depreciation for rest of the period considering the plant as held for sale. The fair value less cost to sell on 30th September, 2017 and 31st March, 2018 was ₹ 13.5 lakh and ₹ 12 lakh respectively.

The accountant has made the following working:

	₹	₹
Carrying amount on initial classification as held for sale		
Purchase price of Plant		24,00,000
Less: Accumulated Depreciation [(₹ 24,00,000/8)x2.5 years]	7,50,000	16,50,000
Fair value less cost to sell as on 31st March, 2017		12,00,000
The value lower of the above two		12,00,000

Balance Sheet extracts as on 31st March, 2018

Particulars	₹
Assets	
Current Assets	
Other Current Assets	
Assets classified as held for sale	12,00,000

Required:

Analyze whether the above accounting treatment is in compliance with the Ind AS. If not, advise the correct treatment showing necessary workings. **[Nov 2018]**

Ans: As per Ind AS 105 'Non-current Assets Held for Sale and Discontinued Operations', an entity shall classify a non-current asset as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use.

For asset to be classified as held for sale, it must be available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets and its sale must be highly probable. In such a situation, an asset cannot be classified as a non-current asset held for sale, if the entity intends to sell it in a distant future.

For the sale to be highly probable, the appropriate level of management must be committed to a plan to sell the asset, and an active programme to locate a buyer and complete the plan must have been initiated. Further, the asset must be actively marketed for sale at a price that is reasonable in relation to its current fair value. In addition, the sale should be expected to qualify for recognition as a completed sale within one year from the date of classification and actions required to complete the plan should indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Further Ind AS 105 also states that an entity shall not classify as held for sale a non-current asset that is to be abandoned. This is because its carrying amount will be recovered principally through continuing use.

An entity shall not account for a non-current asset that has been temporarily taken out of use as if it had been abandoned.

In addition to Ind AS 105, Ind AS 16 states that depreciation does not cease when the asset becomes idle or is retired from active use unless the asset is fully depreciated.

The Accountant of PB Ltd. has treated the plant as held for sale and measured it at the fair value less cost to sell. Also, the depreciation has not been charged thereon since the date of classification as held for sale which is not correct and not in accordance with Ind AS 105 and Ind AS 16.

Accordingly, the manufacturing plant should neither be treated as abandoned asset nor as held for sale because its carrying amount will be principally recovered through continuous use. PB Ltd. shall not stop charging depreciation or treat the plant as held for sale because its carrying amount will be recovered principally through continuing use to the end of their economic life.

The working of the same for presenting in the balance sheet will be as follows:

Calculation of carrying amount as on 31stMarch, 2018	₹
Purchase Price of Plant	24,00,000
Less: Accumulated depreciation (24,00,000/ 8 years) x 3 years	(9,00,000)
Carrying amount before impairment	15,00,000
Less: Impairment loss (Refer Working Note)	(3,00,000)
Revised carrying amount after impairment	12,00,000

Balance Sheet extracts as on 31stMarch 2018

Assets	₹
Non-Current Assets	
Property, Plant and Equipment	12,00,000

Working Note:

Fair value less cost to sell of the Plant = ₹ 12,00,000

Value in Use (not given) or = Nil (since plant has temporarily not been used for manufacturing due to decline in demand)

Recoverable amount = higher of above i.e. ₹ 12,00,000

Impairment loss = Carrying amount – Recoverable amount

Impairment loss = ₹ 15,00,000 - ₹ 12,00,000 = ₹ 3,00,000.

Q11: CK Ltd. prepares the financial statement under Ind AS for the quarter year ended 30th June, 2018. During the 3 months ended 30th June, 2018 following events occurred:

On 1st April, 2018, the Company has decided to sell one of its divisions as a going concern following a recent change in its geographical focus. The proposed sale would involve the buyer acquiring the non-monetary assets (including goodwill) of the division, with the Company collecting any outstanding trade receivables relating to the division and settling any current liabilities.

On 1st April, 2018, the carrying amount of the assets of the division were as follows:

- Purchased Goodwill –	₹ 60,000
- Property, Plant & Equipment (average remaining estimated useful life two years) -	₹ 20,00,000
- Inventories -	₹ 10,00,000

From 1st April, 2018, the Company has started to actively market the division and has received number of serious enquiries. On 1st April, 2018 the directors estimated that they would receive ₹ 32,00,000 from the sale of the division. Since 1st April, 2018, market condition has improved and as on 1st August, 2018 the Company received and accepted a firm offer to purchase the division for ₹ 33,00,000.

The sale is expected to be completed on 30th September, 2018 and ₹ 33,00,000 can be assumed to be a reasonable estimate of the value of the division as on 30th June, 2018. During the period from 1st April to 30th June inventories of the division costing ₹ 8,00,000 were sold for ₹ 12,00,000. At 30th June, 2018, the total cost of the inventories of the division was ₹ 9,00,000. All of these inventories have an estimated net realisable value that is in excess of their cost.

The Company has approached you to suggest how the proposed sale will be reported in the interim financial statements for the quarter ended 30th June, 2018 giving relevant explanations.

[RTP May 2019]

Ans: The decision to offer the division for sale on 1st April, 2018 means that from that date the division has been classified as held for sale. The division available for immediate sale, is being actively marketed at a reasonable price and the sale is expected to be completed within one year.

The consequence of this classification is that the assets of the division will be measured at the lower of their existing carrying amounts and their fair value less cost to sell. Here the

division shall be measured at their existing carrying amount ie ₹ 30,60,000 since it is less than the fair value less cost to sell ₹ 32,00,000.

The increase in expected selling price will not be accounted for since earlier there was no impairment to division held for sale.

The assets of the division need to be presented separately from other assets in the balance sheet. Their major classes should be separately disclosed either on the face of the balance sheet or in the notes.

The Property, Plant and Equipment shall not be depreciated after 1st April, 2018 so its carrying value at 30th June, 2018 will be ₹ 20,00,000 only. The inventories of the division will be shown at ₹ 9,00,000.

The division will be regarded as discontinued operation for the quarter ended 30th June, 2018. It represents a separate line of business and is held for sale at the year end.

The Statement of Profit and Loss should disclose, as a single amount, the post-tax profit or loss of the division on classification as held for sale.

Further, as per Ind AS 33, EPS will also be disclosed separately for the discontinued operation.

NOTES

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CHAPTER 19

OPERATING SEGMENTS (IND AS 108)

QUESTIONS FROM ICAI STUDY MATERIAL

Q1: ABC Ltd. manufactures and sells healthcare products, and food and grocery products. Three products namely A, B & C are manufactured. Product A is classified as healthcare product and product B & C are classified as food and grocery products. Products B & C are similar products. Discrete financial information is available for each manufacturing locations and for the selling activity of each product. There are two line managers responsible for manufacturing activities of products A, B & C. Manager X manages product A and Manager B manages products B & C. The operating results of health care products (product A) and food and grocery products (products B & C) are regularly reviewed by the CODM. Identify reportable segments of ABC Ltd.

Ans: In this situation both the healthcare, and food and grocery product line meet the criteria for operating segments set out above. Therefore, it is likely that ABC Ltd.'s operating segments would be classified as being (i) healthcare and (ii) food and grocery segments.

Q2: X Ltd. is engaged in the manufacture and sale of two distinct type of products A & B. X Ltd. supplies the product in the domestic market in India as well as in Singapore. There are two regional managers responsible for manufacturing activities of product A & B worldwide and also two other managers responsible for different geographical areas. For internal reporting purposes, X Ltd. provides information product-wise and as per the geographical location of the company. The CODM regularly reviews the operating results of both sets of components. How should X Ltd. identify its operating segments?

Ans: In this situation, both the geographical sales areas and product areas may meet the criteria for operating segment. However, in such situation, it is more difficult to determine clearly which set of components should be identified as the entity's operating segments. In such situation the entity should determine which set of components constitutes the operating segments by reference to the core principle. The core principle is that the entity should disclose information to enable users of its financial statements to evaluate the nature and financial effects of the business activities in which it engages and the economic environments in which it operates. The entity should also assess whether the identified operating segments could realistically represent the level at which the CODM is assessing performance and allocating resources. Therefore, X Ltd. should consider all the above factors and apply judgement to determine which component should be disclosed as operating segment.

Q3: X Ltd. is engaged in the business of manufacturing and selling papers. Varieties of paper like adhesive paper, anti-rust paper, antique paper, art paper etc., are manufactured and sold by X Ltd. Should X Ltd. classify these papers into different segments?

Ans: Two or more operating segments may be aggregated into a single operating segment if the segments have similar economic characteristics, and the segments are similar with respect to various factors like nature of the product and production process, type of customers, method of distribution and regulatory requirement.

In case of X Ltd., so far as varieties of paper concerned, if all factors such as nature of the product and production process, type of customers, method of distribution and regulatory requirement are common, there is no need to create different segments for each type of paper.

Q4: M/s XYZ Ltd. has three segments namely X, Y, Z. The total assets of the Company are Rs. 10.00 crs. Segment X has Rs. 2.00 crs., segment Y has Rs. 3.00 crs. and segment Z has Rs. 5.00 crs. Deferred tax assets included in the assets of each segment are X – Rs. 0.50 crs., Y–Rs. 0.40 crs. and Z–Rs. 0.30 crs. The accountant contends that all the three segments are reportable segments. Comment.

Ans: According to IND AS 108 “Operating Segment”, segment assets do not include income tax assets. Therefore, the revised total assets are 8.8 crores [10 crores – (0.5+0.4+0.3)]. Segment X holds total assets of 1.5 crores (2 crores – 0.5 crores); Segment Y holds 2.6 crores (3 crores – 0.4 crores); and Segment Z holds 4.7 crores (5 crores – 0.3 crores). Thus all the three segments hold more than 10% of the total assets, all segments are reportable segments.

Q5: X Ltd. has identified the following business components.

Segment	Revenue (Rs.)		Profit (Rs.)	Assets (Rs.)
	External	Internal		
Pharma	97,00,000	Nil	20,00,000	55,00,000
FMCG	Nil	4,00,000	2,50,000	25,00,000
Ayurveda	3,00,000	Nil	2,00,000	4,00,000
Others	8,00,000	41,00,000	5,50,000	6,00,000
Total for the entity	1,08,00,000	45,00,000	30,00,000	90,00,000

Which of the segments would be reportable as per the criteria prescribed in Ind AS108?

Ans: Quantitative thresholds are calculated below:

Segments	Pharma	FMCG	Ayurveda	Others
% segment sales to total sales	63.40	2.61	1.96	32.03
% segment profit to total profits	66.67	8.33	6.67	18.33
% segment assets to total assets	61.11	27.78	4.44	6.67

Segment Pharma would separately reportable since they meet all three size criteria, though any one criteria is required. FMCG segment does not satisfy the revenue and profit test but does satisfy the asset test. So it would be separately reportable. Ayurveda segment does not meet any threshold. It may not be classified as reportable segment.

An entity may combine information about operating segments that do not meet the quantitative thresholds with information about other operating segments that do not meet the quantitative thresholds to produce a reportable segment only if the operating segments have similar economic characteristics and share a majority of the aggregation criteria.

If the total external revenue reported by operating segments constitutes less than 75% of the entity’s revenue, additional operating segments should be identified as reportable segments (even if they do not meet the criteria) until at least 75% of the entity’s revenue is included in reportable segments.

Q6: X Ltd. has identified 4 operating segments for which revenue data is given below:

	External Sale (Rs.)	Internal Sale (Rs.)	Total (Rs.)
Segment A	30,00,000	Nil	30,00,000
Segment B	6,50,000	Nil	6,50,000
Segment C	8,50,000	1,00,000	9,50,000
Segment D	5,00,000	49,00,000	54,00,000
Total Sales	50,00,000	50,00,000	1,00,00,000

Additional information:

Segment C is a new business unit and management expect this segment to make a significant contribution to external revenue in coming years.

Which of the segments would be reportable under the criteria identified in Ind AS 108?

Ans: Threshold amount is Rs. 10,00,000 (Rs. 1,00,00,000 × 10%).

Segment A exceeds the quantitative threshold (Rs. 30,00,000 > Rs. 10,00,000) and hence reportable segment.

Segment D exceeds the quantitative threshold (Rs. 54,00,000 > Rs. 10,00,000) and hence reportable segment.

Segment B & C do not meet the quantitative threshold amount and may not be classified as reportable segment.

However, the total external revenue generated by these two segments A & D represent only 70% (Rs. 35,00,000/50,00,000 × 100) of the entity's total external revenue. If the total external revenue reported by operating segments constitutes less than 75% of the entity total external revenue, additional operating segments should be identified as reportable segments until at least 75% of the revenue is included in reportable segments.

In case of X Ltd., it is given that Segment C is a new business unit and management expect this segment to make a significant contribution to external revenue in coming years. In accordance with the requirement of Ind AS 108, X Ltd. designates this start-up segment C as a reportable segment, making the total external revenue attributable to reportable segments 87% (Rs. 43,50,000/ 50,00,000 × 100) of total entity revenues.

Alternatively, segment B can be considered as a reportable segment as well as it meets the definition of operating segment. If Segment B is considered as reportable segment:

External revenue reported: ` 30,00,000 + ` 6,50,000 + ` 5,00,000 = ` 41,50,000

% of Total External Revenue = ` 41,50,000 / ` 50,00,000 = 83%

Accordingly, Segments A, B and D will be reportable segments and Segment C will be shown as other segment.

Q7: X Ltd. is operating in coating industry. Its business segment comprises coating and others consisting of chemicals, polymers and related activities. Certain information for financial year 20X1-20X2 is given below: (Rs. in lakhs)

Segments	External Revenue (Including GST)	GST	Other operating income	Result	Asset	Liabilities
Coating	2,00,000	5,000	40,000	10,000	50,000	30,000
Others	70,000	3,000	15,000	4,000	30,000	10,000

Additional information:

1. Unallocated revenue net of expenses is Rs. 30,00,00,000
2. Interest and bank charges is Rs. 20,00,00,000
3. Income tax expenses is Rs. 20,00,00,000 (current tax Rs. 19,50,00,000 and deferred tax Rs. 50,00,000)
4. Investments Rs. 1,00,00,00,000 and unallocated assets Rs. 1,00,00,00,000.
5. Unallocated liabilities, Reserve & surplus and share capital are Rs. 2,00,00,00,000, Rs. 3,00,00,00,000 & Rs. 1,00,00,00,000 respectively.
6. Depreciation amounts for coating & others are Rs. 10,00,00,000 and Rs. 3,00,00,000 respectively.
7. Capital expenditure for coating and others are Rs. 50,00,00,000 and Rs. 20,00,00,000 respectively.
8. Revenue from outside India is Rs. 3,00,00,00,000 and segment asset outside India Rs. 1,00,00,00,000.

Based on the above information, how X Ltd. would disclose information about reportable segment revenue, profit or loss, assets and liabilities for financial year 20X1-20X2?

[May 2018]

Ans: Segment information

(A) Information about operating segment

(1) the company's operating segments comprise :

Coatings: consisting of decorative, automotive, industrial paints and related activities.

Others: consisting of chemicals, polymers and related activities.

(2) Segment revenues, results and other information.

(Rs. in Lakhs)

	Revenue	Coating	Others	Total
1	External Revenue (gross)	2,00,000	70,000	2,70,000
	GST	(5,000)	(3,000)	(8,000)
	External Revenue (net)	1,95,000	67,000	2,62,000
	Other operating income	40,000	15,000	55,000
	Total Revenue	2,35,000	82,000	3,17,000

2	Results			
	Segment results	10,000	4,000	14,000
	Unallocated income (net of unallocated expenses)			3,000
	Profit from operation before interest, taxation and exceptional items			17,000
	Interest and bank charges			2,000
	Profit before exceptional items			15,000
	Exceptional items			Nil
	Profit before taxation			15,000
	Income Taxes			
	-Current taxes			1,950
	-Deferred taxes			50
	Profit after taxation			13,000
3	Other Information			
(a)	Assets			
	Segment Assets	50,000	30,000	80,000
	Investments			10,000
	Unallocated assets			10,000
	Total Assets			1,00,000
(b)	Liabilities/Shareholder's funds			
	Segment liabilities	30,000	10,000	40,000
	Unallocated liabilities			20,000
	Share capital			10,000
	Reserves and surplus			30,000
	Total liabilities/shareholder's funds			1,00,000
(c)	Others			
	Capital Expenditure	5,000	2,000	
	Depreciation	1,000	300	
	Geographical Information			
		India (Rs.)	Outside India (Rs.)	Total (Rs.)
	Revenue	2,32,000	30,000	2,62,000
	Segment assets	90,000	10,000	80,000
	Capital expenditure	7,000		7,000

Notes:

- (i) The operating segments have been identified in line with the Ind AS 108, taking into account the nature of product, organisation structure, economic environment and internal reporting system.

- (ii) Segment revenue, results, assets and liabilities include the respective amounts identifiable to each of the segments. Unallocable assets include unallocable fixed assets and other current assets. Unallocable liabilities include unallocable current liabilities and net deferred tax liability.
- (iii) Corresponding figures for previous year have not been provided. However, in practical scenario the corresponding figures would need to be given.

NEW QUESTIONS IN SM (FOR MAY 21 ATTEMPT)

Q8: The CEO along with other Board members do a review of financial information about various business segments and take decisions on the basis of discrete information available for these segments and are correctly identified as Chief Operating Decision Maker (CODM). Review of only revenue information is done for decision making about those segments by the CODM. As per CODM, many segments require minimal costs due to centralization of costs. Whether review of only the revenue related information is sufficient for these segments to be considered as operating segments for the purposes of Ind AS 108 'Operating Segments'?

Ans: Many entities would be considering the decision making for segments on the basis of revenue growth – especially the ones aggressively trying to build a market share. Common examples would be businesses into technology sector or those creating or launching new products from time to time. For them, the decision making for different regional segments would need revenue growth and related information for further investment decision.

The logic given by the CODM is that since many segments require minimal costs (due to centralization of costs), therefore, revenue-only data is a fair representation of the operating results.

In the above case, review of the information that is based only on revenue data may be appropriate to consider that the segment meets the definition of an operating segment.

Q9: CODM of XY Ltd. receives and reviews multiple sets of information when assessing the businesses' overall performance to take a decision on resources allocation. It receives the information as under:

- Level 1 Report: Summary report for all 4 regions
- Level 2 Report: Summary report for 20 Sub-regions within those regions
- Level 3 Report: Detailed report for 50 Branches within the sub-regions

What factors and level should be considered for determining an operating segment?

Ans: We need to consider multiple factors (including but not limited to below):

- The process that CODM may use to assess the performance (Key Financial Matrix, KPIs, Ratio etc.);
- Identify the segment managers and their responsibility areas;
- The process of budgeting for resource allocations.

Q10: XY Ltd. has operations in France, Italy, Germany, UK and India. It wishes to apply aggregation criteria on geographical basis.

How will the aggregation criteria apply for reporting segments in the given scenario?

Ans: XY Ltd. needs to assess and prove that each country possesses the same economic characteristics. Factors including exchange control regulations, currency risks and economic conditions are required to be considered.

Considering above factors, it may be possible to aggregate the results of France, Italy and Germany (falling within EU region) and results of UK and India may be separately reported (no aggregation is permitted).

Q11: T Ltd is engaged in transport sector, running a fleet of buses at different routes. T Ltd has identified 3 operating segments:

- Segment 1: Local Route
- Segment 2: Inter-city Route
- Segment 3: Contract Hiring

The characteristics of each segment are as under:

Segment 1: The local transport authority awards the contract to ply the buses at different routes for passengers. These contracts are awarded following a competitive tender process; the ticket price paid by passengers are controlled by the local transport authority. T Ltd would charge the local transport authority on a per kilometer basis.

Segment 2: T Ltd operates buses from one city to another, prices are set by T Ltd on the basis of services provided (Deluxe, Luxury or Superior).

Segment 3: T Ltd also leases buses to schools under a long-term arrangement.

While Segment 1 has been showing significant decline in profitability, Segment 2 is performing well in respect of higher revenues and improved margins. The management of the company is not sure why is the segment information relevant for users when they should only be concerned about the returns from overall business. They would like to aggregate the Segment 1 and Segment 2 for reporting under 'Operating Segment'

Required: Whether it is appropriate to aggregate Segments 1 and 2 with reference to Ind AS 108 'Operating Segments'? and

Discuss, in the above context, whether disclosure of segment information is relevant to an investor's appraisal of financial statements?

Ans: Ind AS 108 'Operating Segments' requires operating segments to be aggregated to present a reportable segment if the segments have similar economic characteristics, and the segments are similar in each of the following aggregation criteria:

- The nature of the products and services
- The nature of the production process
- The type or class of customer for their products and services

- The methods used to distribute their products or provide their services
- If applicable, the nature of the regulatory environment

While the products and services are similar, the customers for those products and services are different.

In Segment 1, the decision to award the contract is in the hands of the local authority, which also sets prices and pays for the services. The company is not exposed to passenger revenue risk, since a contract is awarded by competitive tender.

On the other hand, in the inter-city segment, the customer determines whether a bus route is economically viable by choosing whether or not to buy tickets. T Ltd sets the ticket prices but will be affected by customer behavior or feedback. T Ltd is exposed to passenger revenue-risk, as it sets prices which customers may or may not choose to pay.

Operating Segment provides information that makes the financial statements more useful to investors. In making the investment decisions, investors and creditors consider the returns they are likely to make on their investment. This requires assessment of the amount, timing and uncertainty of the future cash flows of T Ltd as well as of management's stewardship of T Ltd's resources. How management derives profit is therefore relevant information to an investor.

Inappropriately aggregating segments reduces the usefulness of segment disclosures to investors. Ind AS 108 requires information to be disclosed that is not readily available elsewhere in the financial statements, therefore it provides additional information which aids an investor's understanding of how the business operates and is managed.

In T Ltd.'s case, if the segments are aggregated, then the increased profits in segment 2 will hide the decreased profits in segment 1. However, the fact that profits have sharply declined in segment 1 would be of interest to investors as it may suggest that future cash flows from this segment are at risk.

Q12: An entity has branches in different parts of the country – catering to different customers and selling local made products (a product of one region is not sold in any other region). No region or product contributes more than 5% to total revenue of the entity.

Discuss how many segments are reportable?

Ans: Under the quantitative threshold, external revenue of reportable segments must be $\geq 75\%$ of total external revenue of the entity. Considering above case, minimum 15 operating segments need to be reportable (75% [threshold] / 5% {revenue}).

Q13: GH Ltd. has four distinct operating segments. The management of GH is concerned as it is unsure on how common costs be reasonably allocated to different operating segments. They intend to allocate management charges, interest costs of internal funding, cost of management of properties and pension costs.

Whether such costs need to conform to the accounting policies as used to prepare the financial statements?

Ans: Ind AS 108 does not prescribe any specific basis but suggests that a reasonable basis to be used in allocation of common costs. Here, it may not be reasonable to allocate management charges

to most profitable segment. However, it may be reasonable to charge interest costs of internal funding on the basis of actual usage over time, even if majority of funds are used for running a loss-making segment.

A reasonable manner of allocation of above costs could be:

Management Charges: These may be allocated based on Net Assets invested or Revenue earned by the segments. It needs to be understood if there is an operating segment which is yet to earn revenue, it would fail to have any costs being allocated.

Interest costs: As mentioned above, these may be allocated on the basis of actual usage and time.

Cost of management of properties: Based on value of property used at each segment.

Pension costs: Based on salary expenses of each segment.

QUESTIONS FROM OTHER SOURCE

Q14: The Chief Accountant of Sports Ltd. gives the following data regarding its six segments:

Particulars	Rs. In lakhs						Total
	M	N	O	P	Q	R	
Segment Assets	40	80	30	20	20	10	200
Segment Results	50	-190	10	10	-10	30	-100
Segment Revenue	300	620	80	60	80	60	1,200

The chief accountant is of the opinion that segment “M” and “N” alone should be reported. Is he justified in his view? Discuss.

Ans: As per para IND AS 108 ‘Segment Reporting’, a operating segment should be identified as a reportable segment if:

- (i) Its revenue from sales to external customers and from other transactions with other segments is 10% or more of the total revenue- external and internal of all segments; or
- (ii) Its segment result whether profit or loss is 10% or more of:
 - (1) The combined result of all segments in profit; or
 - (2) The combined result of all segments in loss, whichever is greater in absolute amount; or
- (iii) Its segment assets are 10% or more of the total assets of all segments.

If the total external revenue attributable to reportable segments constitutes less than 75% of total enterprise revenue, additional segments should be identified as reportable segments even if they do not meet the 10% thresholds until at least 75% of total enterprise revenue is included in reportable segments.

- (a) On the basis of turnover criteria segments M and N are reportable segments.

- (b) On the basis of the result criteria, segments M, N and R are reportable segments (since their results in absolute amount is 10% or more of Rs.200 lakhs).
- (c) On the basis of asset criteria, all segments except R are reportable segments.

Since all the segments are covered in at least one of the above criteria all segments have to be reported upon in accordance with IND AS 108. Hence, the opinion of chief accountant is wrong.

Q15: Following details are given for Sunder Ltd. for the year ended 31st March, 2011:

	(Rs. in lakhs)	(Rs. in lakhs)
Sales (including inter-segment sales):		
Food Products	10,000	
Plastic and Packaging	1,240	
Health and Scientific	690	
Others	364	12,294
Expenses:		
Food products	7,170	
Plastic and Packaging	800	
Health and Scientific	444	
Others	400	8,814
Other items:		
General corporate expenses		1,096
Income from investments		252
Interest expenses		126
Identifiable assets:		
Food products	15,096	
Plastic and Packaging	4,000	
Health and Scientific	1,400	
Others	1,364	21,860
General corporate assets		1,664

Other information:

(a)	Inter-segment sales are as below:	(Rs. '000)
	Food Products	120
	Plastic and Packaging	168
	Health and Scientific	36
	Others	10
(b)	Operating profit includes Rs.('000) 66 on inter-segment sales.	

You are required to identify reportable segments.

[RTP]

Ans: Calculation of Segment Result

	Sales	Expenses	Segment result
	(Rs. in lakhs)	(Rs. in lakhs)	(Rs. in lakhs)

Food products	10,000	7,170	2,830
Plastic & packaging	1,240	800	440
Health & scientific	690	444	246
Other	364	400	(36)

Sunder Ltd. operates through four segments, namely, 'Food Products', 'Plastic and Packaging', 'Health and Scientific' and 'Others'. The relevant information about these segments is given in the following table: (Rs. in lakhs)

		Food Products	Plastic and Packaging	Health Scientific	Others	Total
1	Segment Assets	15,096	4,000	1,400	1,364	21,860
2	Segment assets as a percentage of total assets of all segments	69.06%	18.3%	6.4%	6.24%	
3	Segment Results	2,830	440	246	(36)	3,480
4	Combined Result of all Segments in profits	2,830	440	246		3,516
5	Combined Result of all Segments in loss				(36)	36
6	Segment Result as a percentage of the greater of the totals arrived at 4 and 5 above in absolute amount (i.e., 3516)	80.49%	12.51%	7%	1.02%	
7	Segment Revenue	10,000	1,240	690	364	12,294
8	Total Revenue of each segment as a percentage of total revenue of all segments	81.34%	10.09%	5.61%	2.96%	

- (a) On the basis of 'Revenue' criteria segments 'Food Products' and 'Plastic and Packaging' are reportable segments.
- (b) On the basis of 'Result' criteria, segments 'Food Products' and 'Plastic and Packaging' are reportable segments (since their results in absolute amount is 10% or more of Rs. 3516 lakhs).
- (c) On the basis of 'Asset' criteria, 'Food Products' and 'Plastic and Packaging' are reportable segments

Q16: Prepare a segmental report for publication in Diversifiers Ltd. from the following details of the company's three divisions and the head office.

	Rs. ('000)
Forging Shop Division	
Sales to Bright Bar Division	4,575

Other Domestic Sales				90
Export Sales				6,135
				10,800
Bright Bar Division				
Sales to Fitting Division				45
Export Sales to Rwanda				300
				345
Fitting Division				
Export Sales to Maldives				270
Particulars	Head Office	Forging Shop Division	Bright Bar Division	Fitting Division
	Rs. ('000)	Rs. ('000)	Rs. ('000)	Rs. ('000)
Pre-tax				
Operating result		240	30	(12)
Head office cost Reallocated		72	36	36
Interest costs		6	8	2
Fixed assets	75	300	60	180
Net current assets	72	180	60	135
Long-term liabilities	57	30	15	180

Ans: Segmental Report of Diversifiers Ltd.

Particulars	Divisions			Inter Segment Eliminations	(Rs.'000)
	Forging shop	Bright Bar	Fitting		Consolidated
Segment revenue					
Sales:					
Domestic	90	---	---	---	90
Export	6,135	300	270	---	6,705
External Sales	6,225	300	270	---	6,795
Inter-segment sales	4,575	45	---	4,620	---
Total revenue	10,800	345	270	4,620	6,795
Segment result (given)	240	30	(12)		258
Head office expenses					(144)
Operating profit					114
Interest					(16)

expense					
Profit before tax					98
Information in relation to assets and liabilities:					
Fixed assets	300	60	180	---	540
Net current assets	180	60	135	---	375
Segment assets	480	120	315	---	915
Unallocated corporate assets(75 + 72)					147
Total assets					1,062
Segment liabilities	30	15	180	---	225
Unallocated corporate liabilities					57
Total liabilities					282
Sales Revenue by Geographical Market					(Rs.'000)
	Home Sales	Export Sales (by forging Shop division)	Export To Rwanda	Export to Maldives	Consolidated Total
External sales	90	6,135	300	270	6,795

QUESTIONS FROM RTP/MTP/EXAMS

Q17: An entity uses the weighted average cost formula to assign costs to inventories and cost of goods sold for financial reporting purposes, but the reports provided to the chief operating decision maker use the First-In, First-Out (FIFO) method for evaluating the performance of segment operations. Which cost formula should be used for Ind AS 108 disclosure purposes?

[RTP May 2019]

Ans: The entity should use First-In, First-Out (FIFO) method for its Ind AS 108 disclosures, even though it uses the weighted average cost formula for measuring inventories for inclusion in its financial statements. Where chief operating decision maker uses only one measure of segment asset, same measure should be used to report segment information. Accordingly, in the given case, the method used in preparing the financial information for the chief operating decision maker should be used for reporting under Ind AS 108.

However, reconciliation between the segment results and results as per financial statements needs to be given by the entity in its segment report.

Q18: ABC Limited has 5 operating segments namely A, B, C, D and E. The profit/ loss of respective segments for the year ended March 31, 20X1 are as follows:

Segment	Profit/(Loss) (Rs. in crore)
A	780
B	1,500
C	(2,300)
D	(4,500)
E	<u>6,000</u>
Total	<u>1,480</u>

Based on the quantitative thresholds, which of the above segments A to E would be considered as reportable segments for the year ending March 31, 20X1? **[RTP May 2020]**

Ans: With regard to quantitative thresholds to determine reportable segment relevant in context of instant case, paragraph 13(b) of Ind AS 108 may be noted which provides as follows:

“The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of (i) the combined reported profit of all operating segments that did not report a loss and (ii) the combined reported loss of all operating segments that reported a loss.”

In compliance with Ind AS 108, the segment profit/loss of respective segment will be compared with the greater of the following:

- All segments in profit, i.e., A, B and E – Total profit Rs. 8,280 crores.
- All segments in loss, i.e., C and D – Total loss Rs. 6,800 crores. Greater of the above – Rs. 8,280 crores.

Based on the above, reportable segments will be determined as follows:

Segment	Profit/(Loss) (Rs. in crore)	As absolute % of Rs. 8,280 crore	Reportable segment
A	780	9%	No
B	1,500	18%	Yes
C	(2,300)	28%	Yes
D	(4,500)	54%	Yes
E	<u>6,000</u>	72%	Yes
Total	<u>1,480</u>		

Hence B, C, D, E are reportable segments.

Q19: Heavy Goods Ltd. has 6 operating segments namely L-Q (below). The total revenues (internal and external), profits or losses and assets are set out below :

Segment	Inter Segment Sales	External	Profit / loss	Total assets

(In ₹)

		Sales		
L	4,200	12,300	3,000	37,500
M	3,500	7,750	1,500	23,250
N	1,000	3,500	(1,500)	15,750
O	0	5,250	(750)	10,500
P	500	5,500	900	10,500
Q	1,200	1,050	600	5,250
	10,400	35,350	3,750	1,02,750

Heavy Goods Ltd. needs to determine how many reportable segments it has. You are required to advise Heavy Goods Ltd. as per the criteria defined in Ind AS 108.

Exam Paper January 2021 (4 Marks)

Ans: As per paragraph 13 of Ind AS 108, an entity shall report separately information about an operating segment that meets any of the following quantitative thresholds:

- (a) Its reported revenue, including both sales to external customers and inter -segment sales or transfers, is 10 per cent or more of the combined revenue, internal and external, of all operating segments.

Combined total sales of all the segment = ₹ 10,400 + ₹ 35,350 = ₹ 45,750. 10% thresholds = 45,750 x 10% = 4,575.

- (b) The absolute amount of its reported profit or loss is 10 per cent or more of the greater, in absolute amount, of

- (i) the combined reported profit of all operating segments that did not report a loss and
(ii) the combined reported loss of all operating segments that reported a loss.

In the given situation, combined reported profit = ₹ 6,000 and combined reported loss (₹ 2,250). Hence, for 10% thresholds ₹ 6,000 will be considered.

10% thresholds = ₹ 6,000 x 10% = ₹ 600

- (c) Its assets are 10 per cent or more of the combined assets of all operating segments.

Combined total assets of all the segment = ₹ 1,02,750 10% thresholds = ₹ 1,02,750 x 10% = 10,275

Accordingly, quantitative thresholds are calculated below:

Segments	L	M	N	O	P	Q	Reportable segments
% segment sales to total sales	36.66%	24.59%	9.84%	11.48%	13.11%	4.92%	L, M,O,P

% segment profit to total profits	50%	25%	25%	12.5%	15%	10%	L,M,N,O,P,Q
% segment assets to total assets	36.50%	22.63%	15.33%	10.22%	10.22%	5.11%	L,M,N,O,P

Segments L, M, O and P clearly satisfy the revenue and assets tests and they are separate reportable segments.

Segment N does not satisfy the revenue test, but it does satisfy the asset test and it is a reportable segment.

Segment Q does not satisfy the revenue or the assets test but it does satisfy the profits test. Therefore, Segment Q is also a reportable segment.

Hence, all segments i.e; L, M, N, O, P and Q are reportable segments.

CHAPTER 20

ACCOUNTING FOR SHARE BASED PAYMENTS (IND AS 102)

Example: Analysis of SBP

1. A management committee of an entity has initiated a plan to provide some stock options to its employees but there are some terms which are to be finalized and the plan is not yet communicated to the employee. Since, there is no formal communication stating the terms or conditions of the agreement, it will not attract Ind AS 102 provisions. The standard will be attracted when there will be a binding arrangement.
2. A goods/service has been received by an entity for which it has issued its own equity shares to the counterparty (who has supplied the goods) at discount/ premium. The value of the goods received has been paid by using its own equity shares but if the fair value of the goods received are more / less than the value of share issued by an entity, then some un-identified goods / services will be received / or have been received. Hence, Ind AS 102 will still be applicable for such unidentified goods/ services.
3. An entity issues its own shares for a charity without any consideration will be covered under Ind AS 102.
4. Service Maintenance Agreement has been entered by an entity with one of the supplier, outside the entity. The agreement requires to pay for these services by issuing equity shares of the entity. Such an agreement will be covered under Ind AS 102.

However, if such services are being provided by one of its own existing shareholder, then this will fall outside the scope of Ind AS 102.

5. An entity issued right shares to all its shareholders which include employees of the company. Since the employees who have received such shares are acting in a capacity of shareholders and not as employees, this transaction will not be covered under Ind AS 102.
6. A parent issues share options to the employee of its subsidiary company or a subsidiary company issues share options to its employee based on the equity price of its parent company. Both the plans will be covered under Ind AS 102.
7. An entity issues certain benefits to its employee by taking a reference of earnings of next year. Since the benefit is not based on share price of the entity, hence this transaction will not be covered under Ind AS 102. However, it may be treated as employee benefits under Ind AS 19.

Example: What is covered within Ind AS 102?

8. An entity grants 10 shares to its employees who will remain in service for next 2 years- this will be covered within the standard as equity settled share based payment.

9. An entity grants INR 1,000 to each employee which is based on its current equity price of the entity. This will not be covered under Ind AS 102 as the amount of INR 1,000 is fixed now and it will be paid to the employees even the market rate of its share goes up/down from the current level.
10. An entity received services from a party who is acting as shareholder will not be covered under the standard. However, an employee who received additional payment from the entity for providing services other than its normal employment will be covered under this standard.
11. An entity has agreed to provide bonus to its employees purely based on the share price of the entity. Since the benefit is with reference to the share price of the entity, hence it will be covered under Ind AS 102.

Example: What is not covered within Ind AS 102?

12. If an entity grants all holders of a particular class of its equity instruments the right to acquire additional equity instruments of the entity at a price that is less than the fair value of those equity instruments, and an employee receives such a right because he/she is a holder of equity instruments of that particular class, the granting or exercise of that right is not subject to the requirements of this Standard.
13. An entity has issued equity instruments in exchange for control of the acquiree is not within the scope of this standard. However, if the equity instruments are being issued to acquiree's employees in their capacity as employee, then it will be covered under this standard.
14. An entity buys a business from an Individual to whom equity instruments are being issued. The Individual will be working as an employee in the combined new entity. Now, if the instruments that are being issued as part of business purchase consideration under Ind AS 103- Business Combination, then this transaction will not be covered under this standard. However, if the Equity Instrument is being issued in a capacity of accepting employment in new company, then it will be covered within this standard.
15. Contracts to purchase and sale of goods/ services which are entered for settling in net amounts/ or keep it for speculation purposes will be covered under Ind AS 109- Financial Instruments and hence will not be covered under Ind AS 102.

Example: Service condition

16. An entity has issued 100 shares each to its 1,000 employees under share based payment if they remain in the organization for next 3 years. This would be considered to be a service condition; 3 years being the period over which employee would be required to be in service as a condition.
17. If an employee remains in service for at least three years from the grant date of the award, the employee can exercise the options at any time between three and ten years from the grant date of the award. The fair value of the award at the grant date, ignoring the effect of vesting condition, is ₹ 6,00,000.

For this award, the vesting period is three years, the exercise period is seven years, and the life of the option is ten years. The requirement to remain employed is a (vesting) service condition.

The entity recognizes an expense of ₹ 2,00,000 per year for three years, with a corresponding increase in equity.

If the employee leaves at the end of year two, the entity reverses the cumulative expense previously recognised. However, if the employee does not exercise options after the vesting period, expense previously recognized cannot be reversed.

Consider an alternate scenario. The employee was given an unconditional right to exercise the option at any time between the grant date and ten years from the grant date of the award. For this award, the vesting period is nil, the exercise period and the life of the option are ten years. The entity recognizes an expense of ₹ 6,00,000 immediately, with a corresponding increase in equity. Subsequently, the entity cannot reverse this expense even if the employee does not exercise its options. This is because they are vested from day 1.

Example: Market related condition

18. An entity issues stock option to its employees for those who will serve the organization for next 2 years and till the time the share price reaches to ₹ 100. The target price to reach ₹ 100 is one of the market related condition.

Example: Non-market related condition

19. An entity has issued some stock options to employees with a condition that they have to remain in the organisation for next 2 years and EBITA of the entity will rise to 10 million. Here, the EBITA target is non-market related condition.

Example: Non-vesting conditions

20. An entity has issued some stock options to its employee in which it is required to serve minimum period of next 2 years and from the end of the 2nd year there will further be waiting time till of next 1 year within which the entity will achieve revenue of 100 million. However, if an employee leaves job after the end of 2nd year then the employee will not lose its entitlement to get such share based payment. Hence the condition of achieving revenue target is non-vesting condition.
21. An entity grants share options to a director on the condition that the director does not compete with the reporting entity for a period of at least three years. The fair value of the award at the date of the grant, including the effect of non - compete clause is ₹ 15 million. The 'non-compete' clause is a non-vesting condition because the entity does not receive any services. On the grant date, the entity immediately recognizes a cost of ₹ 15 million because director is not providing any future services. The entity cannot reverse the expense recognised, even if the director goes to work for a competitor and loses the share options.

Example: Grant date

22. Entity initiated a share based payment agreement in its board meeting and directed the supervisors to communicate the agreement to the employee, considering the following scenarios to arrive at grant date:

Employee has not yet given his/her consent either implicitly or explicitly. However, entity has taken approval of the agreement in its General Meeting.

Employee has agreed the terms implicitly/ explicitly. However, the approval process is under finalization.

Certain terms have not been specifically mentioned since they are based on some subjective conditions in future.

Now,

Even when the approval has been acquired, no consent has been given by an employee/ counterparty; therefore, grant date cannot be determined.

Even when the employee/ counterparty has agreed the terms but approval process is still not done, then grant date is not achieved.

Terms/ conditions mentioned in the agreement must be objectively defined and should not be based on subjective outcome. Mutual understanding is crucial which essentially means that all terms/ clauses and calculation related to the equity prices must be clear and objectively defined.

QUESTIONS FROM ICAI STUDY MATERIAL

Equity Settled Shared Based Payment- Service conditions

Q1: ABC limited granted to its employees, share options with a fair value of INR 5,00,000 on 1 April 20X0, if they remain in the organization upto 31st March 20X3. On 31st March 20X1, ABC limited expects only 91% of the employees to remain in the employment. On 31st March 20X2, company expects only 89% of the employees to remain in the employment. However, only 82% of the employees remained in the organisation at the end of March, 20X3 and all of them exercised their options. Pass the Journal entries?

Ans:

Period	Proportion	Fair value	To be vested	Cumulative expenses	Expenses
	a	b	c	d= b x c x a	e = d-previous period d
Period 1	1/3	5,00,000	91%	1,51,667	1,51,667
Period 2	2/3	5,00,000	89%	2,96,667	1,45,000
Period 3	3/3	5,00,000	82%	4,10,000	1,13,333
					4,10,000

Journal Entries

31 st March, 20X1			
Employee benefits expenses	Dr.	1,51,667	
To Share based payment reserve (equity)			1,51,667

(1/3 of expected vested equity instruments value)			
31st March, 20X2			
Employee benefits expenses	Dr.	1,45,000	
To Share based payment reserve (equity)			1,45,000
(2/3 of expected vested equity instruments value)			
31st March, 20X3			
Employee benefits expenses	Dr.	1,13,333	
To Share based payment reserve (equity)			1,13,333
(Final vested equity instruments value)			
Share based payment reserve (equity)	Dr.	4,10,000	
To Share Capital			4,10,000
(re-allocated and issued shares)			

Cash Settled Shared Based Payment-Service conditions

Q2: XYZ issued 10,000 Share Appreciation Rights (SA₹) that vest immediately to its employees on 1 April 2000. The SA₹ will be settled in cash. At that date it is estimated, using an option pricing model, that the fair value of a SAR is INR 95. SAR can be exercised any time upto 31 March 20X3. At the end of period on 31 March 2001 it is expected that 95% of total employees will exercise the option, 92% of total employees will exercise the option at the end of next year and finally 89% will be vested only at the end of the 3rd year. Fair Values at the end of each period have been given below:

Fair value of SAR	INR
31-Mar-20X1	112
31-Mar-20X2	109
31-Mar-20X3	114

Pass the Journal entries?

Period	Fair value a	To be vested b	Cumulative c= a x b x 10,000	Expense d= c-prev. period c
Start	95	100%	9,50,000	9,50,000
Period 1	112	95%	10,64,000	1,14,000
Period 2	109	92%	10,02,800	(61,200)
Period 3	114	89%	10,14,600	11,800
				10,14,600

Journal Entries

1 st April, 20X0			
Employee benefits expenses	Dr.	9,50,000	
To Share based payment liability			9,50,000
(Fair value of the SAR recognized)			
31 st March, 20X1			
Employee benefits expenses	Dr.	1,14,000	
To Share based payment liability			1,14,000
(Fair value of the SAR re-measured)			
31 st March, 20X2			
Share based payment liability	Dr.	61,200	
To Employee benefits expenses			61,200
(Fair value of the SAR re-measured & reversed)			
31 st March,-20X3			
Employee benefits expenses	Dr.	11,800	
To Share based payment liability			11,800
(Fair value of the SAR recognized)			
Share based payment liability	Dr.	10,14,600	
To Cash			10,14,600
(Settlement of SAR)			

Share Based Payment-Cash Alternative

Q3: On 1 January 20X1, ABC limited gives options to its key management employees to take either cash equivalent to 1,000 shares or 1,500 shares. The minimum service requirement is 2 years and shares being taken must be kept for 3 years.

Fair values of the shares are as follows: INR

Share alternative fair value (with restrictions) 102

Grant date fair value on 1 Jan 20X1 113

Fair value on 31 Dec 20X1 120

Fair Value on 31 Dec 20X2 132

The key management exercises his cash option at the end of 20X2. Pass the journal entries.

Ans:

	1-Jan-20X1	31-Dec-20X1	31-Dec-20X2

	INR	INR	INR
Equity alternative (1,500 x 102)	1,53,000		
Cash alternative (1,000 x 113)	1,13,000		
Equity option (1,53,000 - 1,13,000)	40,000		
Cash Option (cumulative) (using period end fair value)		(1,000 x 120 x ½)	
		60,000	1,32,000
Equity Option (cumulative)		(40,000 x ½) 20,000	40,000
Expense for the period			
Equity option		20,000	20,000
Cash Option		60,000	72,000
Total		80,000	92,000

Journal Entries

31st December, 20X1			
Employee benefits expenses	Dr.	80,000	
To Share based payment reserve (equity)*			20,000
To Share based payment liability			60,000
(Recognition of Equity option and cash settlement option)			
31st December, 20X2			
Employee benefits expenses	Dr.	92,000	
To Share based payment reserve (equity)*			20,000
To Share based payment liability			72,000
(Recognition of Equity option and cash settlement option)			
Share based payment liability	Dr.	1,32,000	
To Bank/ Cash			1,32,000
(Settlement in cash)			

*The equity component recognized (₹ 40,000) shall remain within equity. By electing to receive cash on settlement, the employees forfeited the right to receive equity instruments. However, ABC Limited may transfer the share based payment reserve within equity, i.e. a transfer from one component of equity to another.

Q4: Tata Industries has issued a share based option to one of its key management personal which can be exercised either in cash or equity and it has following features:

Option I	Period	INR
Cash settled shares		74,000
Service condition	3 years	
Option II		
Equity settled Shares		90,000
Conditions:		
Service	3 years	
Restriction to sell	2 years	
Fair values		
Equity price with a restriction of sale for 2 years		115
Fair value grant date		135
Fair value	20X0	138
	20X1	140
	20X2	147

Pass the Journal entries?

Ans:

Fair value of Equity option component:		
Fair value of a share with restrictive clause		INR 115
No. of shares		90,000
Fair Value	A	INR 1,03,50,000
Fair value of a share at the date of grant		INR 135
No. of cash settled shares		74,000
Fair Value	B	INR 99,90,000
Fair value of Equity component in Compound Instrument (A-B)		INR 3,60,000

Journal Entries

31/12/20X0	Employee benefit expenses	Dr.	35,24,000	
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	To Share based payment reserve (equity) (3,60,000/3)			1,20,000
	To Share based payment liability (138 x 74,000) / 3			34,04,000
	(Recognition of Equity option and cash settlement option)			
31/12/20X1	Employee benefits expenses	Dr.	36,22,667	
	To Share based payment reserve (equity) (3,60,000/3)			1,20,000
	To Share based payment liability (140 x 74,000) 2/3-34,04,000			35,02,667
	(Recognition of Equity option and cash settlement option)			
31/12/20X2	Employee benefits expenses	Dr.	40,91,333	
	To Share based payment reserve (equity) (3,60,000/3)			1,20,000
	To Share based payment liability			39,71,333
	(147 x 74,000) 3/3- (34,04,000 + 35,02,667)			
	(Recognition of Equity option and cash settlement option)			
	Upon cash alternative chosen			
	Share based payment liability (147 x 74,000)	Dr.	1,08,78,000	
	To Bank/ cash			1,08,78,000
	(Being settlement made in cash)			
	Share based payment reserve (equity)		3,60,000	
	To Retained Earnings			3,60,000
	(Being transfer of equity from one account			

	to another one)			
	Upon equity alternative chosen			
	Share based payment liability (147 x 74,000)	Dr.	1,08,78,000	
	To Share Capital			90,00,000
	To Share Premium			18,78,000
	(Being settlement made in equity)			
	Share based payment reserve (equity)	Dr.	3,60,000	
	To Retained Earnings			3,60,000
	(Being transfer of equity from one account to another one)			

Equity Settled – Non market conditions-

Q5: Ankita Holding Inc. grants 100 shares to each of its 500 employees at 1st January 20X1, provided the employees remain in service during the vesting period. The shares will vest at the end of the

First year if the company's earnings is more than 12%;

Second year if the company's earnings is more than 20% over the two-year period;

Third year if the entity's earnings increase by more than 22% over the three-year period.

The fair value of one share at the grant date is INR 122. In 20X1, earnings was 10%, and 29 employees left the organisation. The company expects that earnings will continue at a similar rate in 20X2 and expects that the shares will vest at the end of the year 20X2. The company also expects that additional 31 employees will leave the organisation in the year 20X2 and that 440 employees will receive their shares at the end of the year 20X2. At the end of 20X2, company's earnings was 18%. Therefore, the shares did not vest. Only 29 employees left the organization during 20X2. Company believes that additional 23 employees will leave in 20X3 and earnings will further increase so that the performance target will be achieved in 20X3. At the end of the year 20X3, only 21 employees have left the organization. Assume that the company's earnings increased to desired level and the performance target had been met.

Required: Determine the expense for each year?

[Nov 2018]

Ans: Since the earnings of the entity is non-market related, hence it will not be considered in fair value calculation of the shares given. However, the same will be considered while calculating number of shares to be vested.

Workings:

	20X1	20X2	20X3
Total employees	500	500	500
Employees left	(29)	(58)	(79)
Expected to leave in future	(31)	(23)	-
Year End	440	419	421
Shares/employee	100	100	100
Fair value	122	122	122
Vesting period	1/2	2/3	3/3
Expenses-20X1	26,84,000	34,07,867	51,36,200
Expenses-20X2		7,23,867	
Expenses-20X3			17,28,333

Journal Entries

31st December, 20X1			
Employee benefits expenses	Dr.	26,84,000	
To Share based payment reserve (equity)			26,84,000
(Equity settled shared based payment expected vesting amount)			
31st December, 20X2			
Employee benefits expenses	Dr.	7,23,867	
To Share based payment reserve (equity)			7,23,867
(Equity settled shared based payment expected vesting amount)			
31st December, 20X3			
Employee benefits expenses	Dr.	17,28,333	
To Share based payment reserve (equity)			17,28,333
(Equity settled shared based payment expected vesting amount)			
Share based payment reserve (equity)	Dr.	51,36,200	
To Share Capital			51,36,200
(Share capital Issued)			

Equity Settled – Non market conditions (Reversals)

Q6: ACC limited granted 10,000 share options to one of its manager. In order to get the options, the manager has to work for next 3 years in the organization and reduce the cost of production by 10% over the next 3 years.

Fair value of the option at Grant date was 95

Cost reduction achieved-

Year 1	12% Achieved
Year 2	8% Not expected to vest in future
Year 3	10% Achieved

How the expenses would be recorded?

Ans: It is a non-market related condition. Hence, the target to achieve cost reduction would be taken while estimating the number of options to be vested.

Year	Options	Fair value		FV of the options vested
Year 1	10,000	95	1/3	3,16,667
Year 2	10,000	95	0	(3,16,667)
Year 3	10,000	95	3/3	9,50,000

The condition to achieve 10% cost reduction each was not fulfilled in the year 2 and there was no expectation to vest this non-market condition in future as well and hence earlier expense amount was reversed in year 2. Since in the year 3 the non-market condition again met, hence all such expense will be charged to Profit and Loss.

Equity Settled – Market based conditions

Q7: Apple Limited has granted 10,000 share option to one of its directors for which he must work for next 3 years and the price of the share should be 20% on an average over next 3 years.

The share price has moved as per below details -

Year 1	22%
Year 2	19%
Year 3	25%

At the grant date, the fair value of the option was INR 120. How should we recognize the transaction?

Ans: The share price movement is a market based vesting condition hence its expectations are being taken into consideration in calculating fair value of the option.

Even the required market condition does not meet, so there is no requirement to reverse the expense previously booked.

Irrespective of the outcome of the market price (as it is already taken care in fair value of the option), each period an amount of $(120 \times 10,000)/3 = \text{INR } 4,00,000$ will be charged to profit and loss.

Modifications- Equity Settled Share based payment

Q8: Marathon Inc. has issued 150 share option to each of its 1,000 employees subject to the service condition of 3 years. Fair value of the option given was calculated at INR 129. the below are the details and activities related to the SBP plan-

Year 1: 35 left, further 60 are expected to leave

Share options re-priced (as MV of shares has fallen) as the FV had fallen to INR 50.

After the re-pricing they are now worth INR 80, hence expense is expected to increase by INR 30

Year 2: 30 left, further 36 expected to leave

Year 3: 39 left

How the modification/ re-pricing will be accounted?

Ans: The re-pricing has been done at the end of year 1, and hence the increased expense would be spread over next 2 years equally.

Total increased value due to modification is INR 30

(1/2 weight each years)

	Year 1	Year 2	Year 3
No. of employees	1,000	1,000	1,000
Employee left	(35)	(65)	104
Expected to leave	(60)	(36)	
Net employees	905	899	896
Options/ employee	150	150	150
Fair value of option	129	129	129
Period weight	1/3	2/3	3/3
Modification		30	30
Expense (original)	58,37,250	57,59,850	57,40,500
Modification	nil	20,22,750	20,09,250
		(899x150x30x1/2)	(896x150x30x2/2)-20,22,750)

Cancellation- Equity Settled Share based payment

Q9: Anara Fertilisers limited has issued 2000 Share options to its 10 directors for an exercise price of INR 100. The directors are required to stay with the company for next 3 years.

Fair value of the option estimated 130

Expected Directors to vest the option 8

During the year 2, there was a crisis in the company and Management decided to cancel the such scheme immediately, it was estimated further as below-

Fair value of option at the time of cancellation was 90

Market price of the share at the cancellation date was 99

There was a compensation which was paid to directors and since only 9 directors were currently in employment. During the date of cancellation of such scheme hence amount of 95 per option has been given to each of 9 directors.

How the cancellation would be recorded?

Ans:

A)	Year 1	Year 2
Expected directors to vest	8	9
Fair value of option	130	130
No. of options	2,000	2,000
Total	20,80,000	23,40,000
Expense weightage	1/3	Full, as it is cancelled
Expense for the year	6,93,333	16,46,667
Remaining amount since cancelled		
B) Cancellation compensation		
No. of directors		9
Amount agreed to pay		95
No. of options/ director		2,000
Compensation amount Refer W-1 & W-2 (9 x 95 x 2,000)		17,10,000
Working Notes:		
1. Amount to be deducted from Equity		
No. of directors		9
Fair value of option (at the date of cancellation)		90
No. of options/ director		2,000
Total		16,20,000
2. Amount transferred to Profit and Loss		
Total cancellation compensation		17,10,000
Less: To deduct from Equity		(16,20,000)
Balance transferred to Profit and Loss		90,000

Share based Payment- Purchase of Goods

Q10: Indian Inc. issued 995 shares in exchange for a purchase of Office building. The title has been transferred in the name of Indian Inc. on Feb 20X1 and shares were issued. Fair value of the office building was INR 2,00,000 and face value of each share of Indian Inc was INR 100.

Pass the journal entries?

Ans:

1/2/20X1	Office Building	Dr.	2,00,000	
	To Share capital (995 x 100)			99,500
	To Securities premium (balance)			1,00,500
	(Recognition of equity option and cash settlement option)			

Share Based Payment- Services

Q11: Reliance limited hired a maintenance company for its oil fields. The services will be settled by issuing 1,000 shares of Reliance. Period for which the service is to be provided is 1 April 20X1 to 31 July 20X1 and fair value of the service was estimated using market value of similar contracts for INR 1,00,000. Nominal value per share is INR 10.

Record the transactions?

Ans:	Fair value of services			1,00,000
	No. of months			4
	Monthly expense			25,000
30-Apr-20X1	Repair & Maintenance	Dr.	25,000	
	To Share based payment reserve (equity)			25,000
	(Recognition of Equity settled SBP using fair value of services rendered)			
31-May-20X1	Repair & Maintenance	Dr.	25,000	
	To Share based payment reserve (equity)			25,000
	(Recognition of Equity settled SBP using fair value of services rendered)			
30-Jun-20X1	Repair & Maintenance	Dr.	25,000	
	To Share based payment reserve (equity)			25,000
	(Recognition of Equity settled SBP using fair value of services rendered)			
31-Jul-20X1	Repair & Maintenance	Dr.	25,000	
	To Share based payment reserve (equity)			25,000

(Recognition of Equity settled SBP using fair value of services rendered)

Share based payment reserve (equity) Dr.	1,00,000	
To Equity Shares (1000 x 10)		10,000
To Securities premium (balancing figure)		90,000

Q12: Company P is a holding Company for Company B. A group Share based payment is being organized in which Parent issues its own Equity shares for the employee of Company B. The details are as below –

No. of employee of Company B	100 nos.
Grant date fair value of Shares	INR 87
No. of Shares to each employee granted	25 nos.
Vesting conditions	Immediately

Pass the journal entry in the books of Company P & Company B?

Ans: **Books of Company P**

Investment in Company B	Dr.	INR 2,17,500	
To Equity (Issue of Shares)			INR 2,17,500

Books of Company B

Expense	Dr.	INR 2,17,500	
To Capital contribution from Parent P			INR 2,17,500

Q13: Plastic manufacturing company “X” enters into an agreement with a Company “Y” to purchase 100kg of fiber which will be settled in cash at an amount equal to 10 Shares of X. However, X can settle the contract at any time by paying an amount of current share price less market value of fiber. There is intention taking delivery of such fiber. How the transaction would be evaluated under Ind AS 102?

Ans: A non-financial item which is not intended to use for its expected purchases/ sale and could be settled at net value would be covered as per Ind AS 109 ‘Financial Instruments’. The transaction would not be accounted under Ind AS 102.

Q14: An Entity P issues Share based payment to its employees based on the below details –

No. of employees	100 nos.
Fair value at Grant date	INR 25
Market condition	Share price to reach at INR 30
Service condition	To remain in service until market condition meets
Expected completion of market condition	4 years

Define expenses related to such Share based payment in each year subject to the below scenarios-

- a) Market condition meets in the year 3, OR
b) Market condition meets in the year 5

Ans: Market conditions are required to be considered while calculating fair value at grant date. However, service conditions will be considered as per the expected vesting right to be exercised by the employees and would be re-estimated during vesting period. However, if the market related condition is fulfilled before it is expected then all remaining expenses would immediately be charged off. If market related condition takes longer than the expected period then original expected period will be followed.

Market condition is fulfilled in year 3:

Year 1	$2,500/4 = 625$
Year 2	$2,500/4 = 625$
Year 3	$2,500-625-625=1,250$
Year 4	NIL

Market condition is fulfilled in year 5:

Year 1	$2,500/4 = 625$
Year 2	$2,500/4 = 625$
Year 3	$2,500/4 = 625$
Year 4	$2,500/4 = 625$
Year 5	NIL

Q15: MINDA issued 11,000 share appreciation rights (SAR₹) that vest immediately to its employees on 1 April 20X0. The SAR₹ will be settled in cash. Using an option pricing model, at that date it is estimated that the fair value of a SAR is INR 100. SAR can be exercised any time up until 31 March 20X3. At the end of period on 31 March 20X1 it is expected exercise the option 95% of total employees, 92% at the end of next year and finally it was vested only 89% at the end of the 3rd year.

Fair value of SAR	INR
31-Mar-20X1	132
31-Mar-20X2	139
31-Mar-20X3	141
Pass the Journal entries?	

Ans:

Period	Fair value	To be vested	Cumulative	Expense
Start	100	100%	11,00,000	11,00,000

Period 1	132	95%	13,79,400	2,79,400
Period 2	139	92%	14,06,680	27,280
Period 3	141	89%	13,80,390	(26,290)
				13,80,390

Journal Entries

1st April, 20X0				
Employee benefits expenses	Dr.	11,00,000		
To Share based payment liability				11,00,000
(Fair value of the SAR recognised)				
31st March, 20X1				
Employee benefits expenses	Dr.	2,64,880		
To Share based payment liability				2,64,880
(Fair value of the SAR re-measured)				
31st March, 20X2				
Employee benefits expenses	Dr.	26,510		
To Share based payment liability				26,510
(Fair value of the SAR re-measured)				
31st March, 20X3				
Share based payment liability	Dr.	73,040		
To Employee benefits expenses				73,040
(Fair value of the SAR reversed)				

Q16: Entity X grants 10 shares to its 1000 employees on the conditions as below-

- Service condition to remain in service & Entity's PAT will reach to INR 100 Million,
- Expected to reach PAT of INR 100 Million by end of 3 years
- Fair value at Grant date is INR 100
- Expected for vesting right by 1st year 97%, then it revises to 95% by 2nd year and finally to 93% by 3rd year,

Calculate expenses for next 3 years on account of Share-based payment?

Ans: Entity's PAT is one of the non-market related condition and hence would be included while making an expectation of vesting shares and there is no requirement to make any changes in the non-market condition if it meets or not because it has already been considered in the expectation of vesting rights at the end of each year.

Year -1	$1,000 \times 10 \times 100 \times 97\% \times 1/3 = 3,23,333$
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Year-2	$1,000 \times 10 \times 100 \times 95\% \times 2/3 - 3,23,333 = 3,10,000$
Year -3	$1,000 \times 10 \times 100 \times 93\% \times 3/3 - 6,33,333 = 2,96,667$

Q17: At 1 January 20X1, Ambani Limited grants its CEO to take either 800 shares equivalent cash amount or 990 shares. The minimum service requirement is 2 years. There are some 3 years restriction if shares are being taken and must be kept for 3 years.

Fair values of the shares	INR
Share alternative fair value (with restrictions)	212
Grant date fair value on 1 January, 20X0	213
Fair value on 31 December, 20X0	220
Fair value on 31 December, 20X1	232

The key management exercises his cash option at the end of 20X1.

Ans:

	1-Jan-20X0	31-Dec-20X0	31-Dec-20X1
Equity alternative (990 x 212)	2,09,880		
Cash alternative (800 x 213)	1,70,400		
Equity option (2,09,880 – 1,70,400)	39,480		
Cash Option (cumulative) (using period end fair value)		88,000	1,85,600
Equity Option (cumulative)		19,740	39,480
Expense for the period			
Equity option		19,740	19,740
Cash Option		88,000	97,600
Total		1,07,740	1,17,340

Journal Entries

31-Dec-20X0	Employee benefits expenses	Dr.	1,07,740	
	To Share based payment reserve (equity)			19,740
	To Share based payment liability			88,000
	(Recognition of Equity option and cash settlement option)			
31-Dec 20X1	Employee benefits expenses	Dr.	1,17,340	
	To Share based payment reserve (equity)			19,740
	To Share based payment liability			97,600

(Recognition of Equity option and cash settlement option)

Share based payment liability	Dr.	1,85,600	
To Bank/ Cash			1,85,600

(Settlement in cash)

NEW QUESTIONS IN SM (FOR MAY 21 ATTEMPT)

Q18: A parent, Company P, grants 30 shares to 100 employees each of its subsidiary, Company S, on condition that the employees remain employed by Company S for three years. Assume that at the outset, and at the end of Years 1 and 2, it is expected that all the

employees will remain employed for all the three years. At the end of Year 3, none of the employees has left. The fair value of the shares on grant date is ₹ 5 per share.

Company S agrees to reimburse Company P over the term of the arrangement for 75 percent of the final expense recognised by Company S. What would be the accounting treatment in the books of Company P and Company S?

Ans: Company S expects to recognise an expense totalling ₹ 15,000 (30 shares x 100 employees x ₹ 5 per share) and, therefore, expects the total reimbursement to be ₹ 11,250 (₹ 15,000 x 75%). Company S therefore reimburses Company P ₹ 3,750 (₹ 11,250 x 1/3) each year.

Accounting by Company S

In each of Years 1 to 3, Company S recognises an expense in profit or loss, the cash paid to Company P, and the balance of the capital contribution it has received from Company P.

Journal Entry			₹
Employee benefits expenses	Dr.	5,000	
To Cash/Bank			3,750
To Equity (Contribution from the parent)			1,250
(To recognise the share-based payment expense and partial reimbursement to parent)			

Accounting by Company P

In each of Years 1 to 3, Company P recognises an increase in equity for the instruments being granted, the cash reimbursed by Company S, and the balance as investment for the capital contribution it has made to Company S.

Journal Entry			₹
Investment in Company S	Dr.	1,250	
Cash/Bank	Dr.	3,750	
To Equity			

(To recognise the grant of equity instruments to employees of subsidiary less partial reimbursement from subsidiary)

5,000

QUESTIONS FROM OTHER SOURCE

Q19: The following particulars in respect of stock options granted by a company are available:

Grant date	April 1, 2006
Number of employees covered	525
Number options granted per employee	100
Vesting condition:	Continuous employment for 3 years
Nominal value per share (₹)	100
Exercise price per share (₹)	125
Market price per share on grant date (₹)	149
Vesting date	March 31, 2009
Exercise Date	March 31, 2010
Fair value of option per share on grant date (₹)	30
Position on 31/03/07	
(a)	Estimated annual rate of departure 2%
(b)	Number of employees left = 15
Position on 31/03/08	
(a)	Estimated annual rate of departure 3%
(b)	Number of employees left = 10
Position on 31/03/09	
(a)	Number of employees left = 8
(b)	Number of employees entitled to exercise option = 492
Position on 31/03/10	
(a)	Number of employees exercising the option = 480
(b)	Number of employees not exercising the option = 12

Compute expenses to recognise in each year by fair value method and show important accounts in books of the company by both of the methods.

Ans:

Year	Calculation	Compensation expense for period	Cumulative compensation expense
1	$[(525 - 15) \times 98\% \times 98\% \text{ employees} \times 100 \text{ options} \times ₹ 30] \times 1/3$	4,90,000	4,90,000
2	$[(525 - 15 - 10) \times 97\% \text{ employees} \times 100 \text{ options} \times ₹ 30] \times 2/3$	9,70,000	4,80,000
3	$[492 \text{ employees} \times 100 \text{ options} \times ₹ 30] \times 3/3$	14,76,000	5,06,000

Q20: Santhosh Ltd. granted 500 options to each of its 2,500 employees in 2003 at an exercise price of ₹50 when the market price was the same. The contractual life (vesting and exercise period) of the options granted is 6 years with the vesting period and exercise period being 3 years each. The expected life is 5 years and the expected annual forfeitures are estimated at 3 per cent. The fair value per option is arrived at ₹15. Actual forfeitures in 2003 were 5 per cent. However at the end of 2003 the management of Santhosh Ltd. still expects that the actual forfeitures would average only 3 per cent over the entire vesting period. During 2004 the management revises its estimated forfeiture rate to 10 per cent per annum. Of the 2,500 employees, 1,900 employees have completed the 3 year vesting period. 1,000 employees exercise their right to obtain shares vested in them in pursuance of ESOP at the end of 2007 and 500 employees exercise their right at the end of 2008. The rights of the remaining employees expire unexercised at the end of 2008. The face value per share is ₹10. Show the necessary journal entries with suitable narrations. Workings should form part of the answers.

[Old Syllabus]

Ans:

Year	Calculation	Compensation expense for period	Cumulative compensation expense
1	$[(2500 \times 97\% \times 97\% \times 97\%) \text{ employees} \times 500 \text{ options} \times ₹ 15] \times 1/3$	57,05,000	57,05,000
2	$[(2,500 \times 90\% \times 90\% \times 90\%) \text{ employees} \times 500 \text{ options} \times ₹ 15] \times 2/3$	91,15,000	34,10,000
3	$[1900 \text{ employees} \times 500 \text{ options} \times ₹ 15] \times 3/3$	1,42,50,000	51,35,000

Q21: The following particulars in respect of stock options granted by a company are available:

Grant date	April 1, 2006
Number of employees covered	500
Number options granted per employee	100

Fair value of option per share on grant date (₹)	25
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The vesting period shall be determined as below:

If the company earns ₹ 120 crore or above after taxes in 2006-07, the options will vest on 31/03/07.

If condition (a) is not satisfied but the company earns ₹ 250 crores or above after taxes in aggregate in 2006-07 and 2007-08, the options will vest on 31/03/08.

If conditions (a) and (b) are not satisfied but the company earns ₹ 400 crores or above after taxes in aggregate in 2006-07, 2007-08 and 2008-09, the options will vest on 31/03/09.

	Position on 31/03/07
(a)	The company earned ₹ 115 crore after taxes in 2006-07
(b)	The company expects to earn ₹ 140 crores in 2007-08 after taxes
(c)	Expected vesting date: March 31, 2008
(d)	Number of employees expected to be entitled to option = 474
	Position on 31/03/08
(a)	The company earned ₹ 130 crore after taxes in 2007-08
(b)	The company expects to earn ₹ 160 crores in 2008-09 after taxes
(c)	Expected vesting date: March 31, 2009
(d)	Number of employees expected to be entitled to option = 465
	Position on 31/03/09
(a)	The company earned ₹ 165 crore after taxes in 2008-09
(b)	Number of employees on whom the option actually vested = 450

Compute expenses to recognise in each year.

Ans: Year 2006-07

Fair value of option per share = ₹ 25

Number of shares expected to vest under the scheme = $474 \times 100 = 47,400$ Fair value = $47,400 \times ₹ 25 = ₹ 11,85,000$

Expected vesting period = 2 years

Value of option recognised as expense in 2014-15 = $₹ 11,85,000 / 2 = ₹ 5,92,500$

Year 2007-08

Fair value of option per share = ₹ 25

Number of shares expected to vest under the scheme = $465 \times 100 = 46,500$ Fair value = $46,500 \times ₹ 25 = ₹ 11,62,500$

Expected vesting period = 3 years

Cumulative value of option to recognise as expense in 2014-15 and 2015-16

= $(₹ 11,62,500 / 3) \times 2 = ₹ 7,75,000$

Value of option recognised as expense in 2014-15 = ₹ 5,92,500

Value of option recognised as expense in 2015-16 = ₹ 7,75,000 – ₹ 5,92,500 = ₹ 1,82,500

Year 2008-09

Fair value of option per share = ₹ 25

Number of shares actually vested under the scheme = $450 \times 100 = 45,000$ Fair value = $45,000 \times ₹ 25 = ₹ 11,25,000$

Vesting period = 3 years

Cumulative value of option to recognise as expense in 2014-15, 2015-16 and 2016-17 = ₹ 11,25,000 Value of option recognised as expense in 2014-15 and 2015-16 = ₹ 7,75,000

Value of option recognised as expense in 2016-17 = ₹ 11,25,000 – ₹ 7,75,000 = ₹ 3,50,000

Q22: The following particulars in respect of stock options granted by a company are available:

Grant date	April 1, 2006
Number of employees covered	50
Number options granted per employee	1,000
Fair value of option per share on grant date (₹)	9

The options will vest to employees serving continuously for 3 years from vesting date, provided the share price is ₹ 70 or above at the end of 2008-09.

The estimates of number employees satisfying the condition of continuous employment were 48 on 31/03/07, 47 on 31/03/08. The number of employees actually satisfying the condition of continuous employment was 45.

The share price at the end of 2008-09 was ₹ 68

Compute expenses to recognise in each year and show important accounts in books of the Company.

Ans: The vesting of options is subject to satisfaction of two conditions viz. service condition of continuous employment for 3 years and market condition that the share price at the end of 2008-09 is not less than ₹ 70. Since the share price on 31/03/14 was ₹ 68, the actual vesting as nil. Despite this, the company should recognise value of option over 3-year vesting period from 2006-07 to 2008-09.

Year 2006-07

Fair value of option per share = ₹ 9

Number of shares expected to vest under the scheme = $48 \times 1,000 = 48,000$ Fair value = $48,000 \times ₹ 9 = ₹ 4,32,000$

Expected vesting period = 3 years

Value of option recognised as expense in 2014-15 = $₹ 4,32,000 / 3 = ₹ 1,44,000$

Year 2007-08

Fair value of option per share = ₹ 9

Number of shares expected to vest under the scheme = $47 \times 1,000 = 47,000$ Fair value = $47,000 \times ₹ 9 = ₹ 4,23,000$

Expected vesting period = 3 years

Cumulative value of option to recognise as expense in 2014-15 and 2015-16

= $(₹ 4,23,000 / 3) \times 2 = ₹ 2,82,000$

Value of option recognised as expense in 2014-15 = ₹ 1,44,000

Value of option recognised as expense in 2015-16 = $₹ 2,82,000 - ₹ 1,44,000 = ₹ 1,38,000$

Year 2008-09

Fair value of option per share = ₹ 9

Number of shares actually vested under the scheme = $45 \times 1,000 = 45,000$ Fair value = $45,000 \times ₹ 9 = ₹ 4,05,000$

Vesting period = 3 years

Cumulative value of option to recognise as expense in 2014-15, 2015-16 and 2016-17 = ₹ 4,05,000 Value of option recognised as expense in 2014-15 and 2015-16 = ₹ 2,82,000

Value of option recognised as expense in 2016-17 = $₹ 4,05,000 - ₹ 2,82,000 = ₹ 1,23,000$

Q23: The following particulars in respect of stock options granted by a company are available:

Grant date	April 1, 2006
Number of employees covered	400
Number options granted per employee	60
Nominal value per share (₹)	100
Exercise price per share (₹)	125

Shares offered were put in three groups. Group 1 was for 20% of shares offered with vesting period one-year. Group II was for 40% of shares offered with vesting period two-years. Group III

was for 40% of shares offered with vesting period three-years. Fair value of option per share on grant date was ₹ 10 for Group I, ₹ 12.50 for Group II and ₹ 14 for Group III.

	Position on 31/03/07
(a)	Number of employees left = 40
(b)	Estimate of number of employees to leave in 2007-08 = 36
(c)	Estimate of number of employees to leave in 2008-09 = 34
(d)	Number of employees exercising options in Group I = 350
	Position on 31/03/08
(a)	Number of employees left = 35
(b)	Estimate of number of employees to leave in 2008-09 = 30
(c)	Number of employees exercising options in Group II = 319
	Position on 31/03/09
(a)	Number of employees left = 28
(b)	Number of employees at the end of last vesting period = 297
(c)	Number of employees exercising options in Group III = 295

Options not exercised immediately on vesting, were forfeited.

Compute expenses to recognise in each year and show important accounts in books of the company by both of the methods.

Ans: Expected vesting

Year	Group	Number of employees expected to qualify	Number of shares vested to each employee	Total number of shares expected to vest	Fair value of option per share	Fair value of option
2006-07	I	360	12	4,320	10.00	43,200
	II	324	24	7,776	12.50	97,200
	III	290	24	6,960	14.00	97,440
2007-08	II	325	24	7,800	12.50	97,500
	III	295	24	7,080	14.00	99,120
2008-09	III	297	24	7,128	14.00	99,792

Expense recognised in year 2014-15

	₹	
Group I	43,200	
Group II	48,600	97,200/2

Group III	32,480	97,440/3
	1,24,280	

Expense recognised in year 2015-16

	₹	
Group I	43,200	
Group II	97,500	
Group III	66,080	(99,120/3) × 2
Cumulative expense for 2014-15 and 2015-16	2,06,780	
Less: Expense recognised in 2014-15	(1,24,280)	
Expense recognised in 2015-16	82,500	

Expense recognised in year 2016-17

	₹
Group I	43,200
Group II	97,500
Group III	99,792
Cumulative expense for 2014-15 to 2016-17	2,40,492
Less: Expense recognised in 2014-15 and 2015-16	(2,06,780)
Expense recognised in 2016-17	33,712

Options Forfeited

	Group I 2006-07	Group II 2007-08	Group III 2008-09
Number of employees qualifying	360	325	297
Less: Number of employees exercising	(350)	(319)	(295)
Number of employees not exercising	10	6	2
Number of options per employee	12	24	24
Number of options forfeited	120	144	48

Q24: On April 1, 2006, a company offered 100 shares to each of its 500 employees at ₹ 40 per share. The employees are given a month to decide whether or not to accept the offer. The shares issued under the plan shall be subject to lock-in on transfers for three years from grant date. The market price of shares of the company on the grant date is ₹ 50 per share. Due to post-vesting restrictions on transfer, the fair value of shares issued under the plan is estimated at ₹ 48 per Share. On April 30, 2006, 400 employees accepted the offer and paid ₹ 40 per share purchased. Nominal value of each share is ₹ 10. Record the issue of shares in book of the company under the aforesaid plan.

Ans: Intrinsic value of ESPP per share = ₹ 48 – ₹ 40 = ₹ 8 Number of share issued = 400 × 100 = 40,000

Fair value of ESPP = 40,000 × ₹ 8 = ₹ 3,20,000 Vesting period = One month

Expense recognised in 2006-07 = ₹ 3,20,000

Date		₹	₹	
April 30, 2006	Bank	16,00,000		40,000 × ₹ 40
	Employees' Compensation A/c	3,20,000		40,000 × ₹ 8
	To Share Capital		4,00,000	40,000 × ₹ 10
	To Securities Premium		15,20,000	40,000 × ₹ 38

Q25: The following particulars in respect of stock options granted by a company are available:

Grant date	April 1, 2006
Number of employees covered	600
Number options granted per employee	60
Vesting condition:	Continuous employment for 3 years
Nominal value per share (₹)	100
Exercise price per share (₹)	125
Vesting date	March 31, 2009
Exercise Date	March 31, 2010
Fair value of option per share on grant date (₹)	14
Position on 31/03/07	
(a) Number of employees left = 30	
(b) Estimate of number of employees to leave in 2007-08 and 2008-09 = 70	
(c) Exercise price was reduced to ₹ 120	
(d) Fair value of original option on 31/03/07 = ₹ 13	
(e) Fair value of option at reduced exercise price on 31/03/07 = ₹ 15	
(f) Vesting date for modified option was March 31, 2009	
Position on 31/03/08	
(a) Number of employees left = 35	
(b) Estimate of number of employees to leave in 2008-09 = 30	
Position on 31/03/09	
(a) Number of employees left = 28	
(b) Number of employees entitled to exercise option = 507	
Position on 31/03/10	
(a) Number of employees exercising the option = 500	
(b) Number of employees not exercising the option = 7	

Compute the amount of expense the company should recognise in each of the years 2006-07, 2007-08 and 2008-09 and show important accounts in books of the company.

Ans: Year 2006-07

Fair value of option per share = ₹ 14

Number of shares expected to vest under the scheme = $(600 - 100) \times 60 = 30,000$ Fair value = $30,000 \times ₹ 14 = ₹ 4,20,000$

Vesting period = 3 years

Value of option recognised as expense in 2013-14 = ₹ 4,20,000 / 3 = ₹ 1,40,000

Year 2007-08

Fair value of option per share = ₹ 14

Incremental fair value of option per share = ₹ 15 – ₹ 13 = ₹ 2

Number of shares expected to vest under the scheme = $(600 - 95) \times 60 = 30,300$ Fair value of option = $30,300 \times ₹ 14 = ₹ 4,24,200$

Incremental fair value = $30,300 \times ₹ 2 = ₹ 60,600$ Vesting period = 3 years;

Remaining vesting period = 2 years (including current year)

Cumulative value of option to recognise as expense in 2013-14 and 2014-15

= $(₹ 4,24,200 / 3) \times 2 + ₹ 60,600 / 2 = ₹ 3,13,100$

Value of option recognised as expense in 2013-14 = ₹ 1,40,000

Value of option recognised as expense in 2014-15 = ₹ 3,13,100 – ₹ 1,40,000 = ₹ 1,73,100

Year 2008-09

Fair value of option per share = ₹ 14

Number of shares actually vested under the scheme = $507 \times 60 = 30,420$ Fair value of option = $30,420 \times ₹ 14 = ₹ 4,25,880$

Incremental fair value = $30,420 \times ₹ 2 = ₹ 60,840$

Cumulative value of option to recognise as expense in 3 years = ₹ 4,25,880 + ₹ 60,840 = ₹ 4,86,720

Value of option recognised as expense in 2013-14 and 2014-15 = ₹ 3,13,100

Value of option recognised as expense in 2015-16 = ₹ 4,86,720 – ₹ 3,13,100 = ₹ 1,73,620

Q26: A company announced a Stock Appreciation Right on 01/04/06 for each of its 525 employees. The scheme gives the employees the right to claim cash payment equivalent to excess on market price of company's shares on exercise date over the exercise price ₹ 125 per share in respect of 100 shares, subject to condition of continuous employment for 3 years. The SAR is exercisable after 31/03/09 but before 30/06/09. The fair value of SAR was ₹ 21 in 2006-07, ₹ 23 in 2007-08 and ₹ 24 in 2008-09. In 2006-07 the company estimates that 2% of the employees shall leave the company annually. This was revised to 3% in 2007-08. Actually, 15 employees left the company in 2006-07, 10 left in 2007-08 and 8 left in 2008-09. The SAR therefore actually vested to 492 employees. On 30/06/09, when the SAR was exercised, the intrinsic value was ₹ 25 per share.

Show SBP Liability Account by fair value method.

Ans:

Year	Calculation	Compensation expense for period	Cumulative compensation expense
2006-07	$(525 - 15 \times 0.98 \times 0.98) \times 100 \text{ SARs} \times ₹ 21] \times 1/3$	3,43,000	3,43,000
2007-08	$[(525 - 15 - 10) \times 0.97] \times 100 \text{ SARs} \times ₹ 23] \times 2/3$	7,43,667	4,00,667
2008-09	$[492 \times 100 \text{ SARs} \times ₹ 15] \times 3/3$	11,80,800	4,37,133

Year 2009–10

Cash payment of SARs = 49,200 SARs ₹ 25 = ₹ 12,30,000

Value of SARs to be recognized as an expense in 2013–14 = ₹ 12,30,000 – ₹ 11,80,800 = ₹ 49,200

Q27: A company announced a share-based payment plan for its employees on 01/04/06, subject to a vesting period of 3 years. By the plan, the employees can (i) either claim difference between exercise price ₹ 150 per share and market price of those shares on vesting date in respect of 10,000 shares or (ii) can subscribe to 12,000 shares at exercise price ₹ 150 per share, subject to lock in period of 5 years. On 01/04/06, fair value of the option, without considering restrictions on transfers was ₹ 30 and that after considering restrictions on transfer was ₹ 27. The fair value estimates, without considering transfer restrictions were ₹ 31.50, ₹ 32.70 and ₹ 34 respectively, at the end of 2006-07, 2007-08 and 2008-09.

Show important accounts in books of the company if employees opt for

- (i) cash settlement
- (ii) equity settlement.

Ans:

	1/4/2006	31/03/2007	31/03/2008	31/03/2009
	INR	INR	INR	
Equity alternative (12,000 x 27)	3,24,000			
Cash alternative (10,000 x 30)	3,00,000			
Equity option (3,24,000 - 3,00,000)	24,000			
Cash Option (cumulative) (using period end fair value)		$(10,000 \times 31.5 \times 1/3)$ 1,05,000	$(10,000 \times 32.7 \times 2/3)$ 2,18,000	$(10,000 \times 34 \times 3/3)$ 3,40,000
Equity Option (cumulative)		$(24,000 \times 1/3)$	$(24,000 \times 2/3)$	$(24,000 \times 3/3)$

		8,000	16,000	24,000
Expense for the period				
Equity option		8,000	8,000	8,000
Cash Option		1,05,000	1,13,000	1,22,000
Total		1,13,000	1,21,000	1,30,000

Cash Settlement

SBP Liability A/c

		₹			₹
2016-17	To Bank	<u>3,40,000</u>	2016-17	By Balance b/d	<u>3,40,000</u>
		<u>3,40,000</u>			<u>3,40,000</u>

SBP Reserve A/c

Year		₹	Year		₹
2016-17	To Other Equity	<u>24,000</u>	2016-17	By Balance b/d	<u>24,000</u>
		<u>24,000</u>			<u>24,000</u>

Equity Settlement

SBP Liability A/c

		₹			₹
2016-17	To SBP Reserve A/c	<u>3,40,000</u>	2016-17	By Balance b/d	<u>3,40,000</u>
		<u>3,40,000</u>			<u>3,40,000</u>

SBP Reserve A/c

Year		₹	Year		₹
2016-17	To Share Capital	12,00,000	2016-17	By Balance b/d	24,000
	To Securities Premium	9,64,000		By SBP Liability	3,40,000
				By Bank	<u>18,00,000</u>
		<u>21,64,000</u>			<u>21,64,000</u>

Q28: At the beginning of year 1, an enterprise grants 10,000 stock options to a senior executive, conditional upon the executive remaining in the employment of the enterprise until the end of year 3. The exercise price is ₹ 40. However, the exercise price drops to ₹ 30 if the earnings of the enterprise increase by at least an average of 10 per cent per year over the three-year period.

On the grant date, the enterprise estimates that the fair value of the stock options, with an exercise price of ₹ 30, is ₹ 16 per option. If the exercise price is ₹ 40, the enterprise estimates

that the stock options have a fair value of ₹ 12 per option. During year 1, the earnings of the enterprise is 12 per cent, and the enterprise expects that earnings will continue to increase at this rate over the next two years. The enterprise, therefore, expects that the earnings target will be achieved, and hence the stock options will have an exercise price of ₹ 30. During year 2, the earnings of the enterprise is 13 per cent, and the enterprise continues to expect that the earnings target will be achieved.

During year 3, the earnings of the enterprise is only 3 per cent, and therefore the earnings target was not achieved. The executive completes three years' service, and therefore satisfies the service condition. Because the earnings target was not achieved, 10,000 vested stock options have an exercise price of ₹ 40.

Calculate the amount to be charged to Profit and Loss Account every year on account of compensation expenses.

Ans: Since the exercise price varies depending on the outcome of a performance condition which is not a market condition the effect of that performance condition (i.e. the possibility that the exercise price might be ₹ 40 and the possibility that the exercise price might be ₹ 30) is not taken into account when estimating the fair value of the stock options at the grant date. Instead, the enterprise estimates the fair value of the stock options at the grant date under each scenario and revises the transaction amount to reflect the outcome of that performance condition at the end of every year based on the information available at that point of time.

Calculation of compensation expenses to be charged every year

Year	Calculation	Compensation expenses for the period (₹)	Cumulative compensation expenses (₹)
1	10,000 options × ₹ 16 × 1/3	53,333	53,333
2	(10,000 options × ₹ 16 × 2/3) – ₹ 53,333	53,334	1,06,667
3	(10,000 options × ₹ 12 × 3/3) – ₹ 1,06,667	13,333	1,20,000

Q29: At the beginning of year 1, an enterprise grants 300 options to each of its 1,000 employees. The contractual life (comprising the vesting period and the exercise period) of options granted is 6 years. The other relevant terms of the grant are as below:

Vesting Period	3 years
Exercise Period	3 years
Expected Life	5 years
Exercise Price	₹ 50
Market Price	₹ 50
Expected forfeitures per year	3%

The fair value of options, calculated using an option pricing model, is ₹ 15 per option. Actual forfeitures, during the year 1, are 5 per cent and at the end of year 1, the enterprise still expects that actual forfeitures would average 3 per cent per year over the 3-year vesting period. During the year 2, however, the management decides that the rate of forfeitures is

likely to continue to increase, and the expected forfeiture rate for the entire award is changed to 6 per cent per year. It is also assumed that 840 employees have actually completed 3 years vesting period.

200 employees exercise their right to obtain shares vested in them in pursuance of the ESOP at the end of year 5 and 600 employees exercise their right at the end of year 6. Rights of 40 employees expire unexercised at the end of the contractual life of the option, i.e., at the end of year 6. Face value of one share of the enterprise is ₹ 10.

Ans: Working Notes:

1. The enterprise estimates the fair value of the options expected to vest at the end of the vesting period as below:

No. of options expected to vest = $300 \times 1,000 \times 0.97 \times 0.97 \times 0.97 = 2,73,802$ options

Fair value of options expected to vest = $2,73,802$ options \times ₹ 15 = ₹ 41,07,030

2. As the enterprise still expects actual forfeitures to average 3 per cent per year over the 3-year vesting period, therefore, it recognizes ₹ 41,07,030/3 towards the employee services.

3. The revised number of options expected to vest = $2,49,175$ ($3,00,000 \times .94 \times .94 \times .94$).

The fair value of revised options expected to vest = ₹ 37,37,625 ($2,49,175 \times ₹ 15$).

The expense to be recognised during the year is determined as below:

Revised total fair value ₹ 37,37,625

Revised cumulative expense at the end of year 2 = ($₹ 37,37,625 \times 2/3$) ₹ 24,91,750

Less: Expense already recognised in year 1 ₹ 13,69,010

Expense to be recognised in year 2 ₹ 11,22,740

4. The expense to be recognised during the year is determined as below:

No. of options actually vested = $840 \times 300 = 2,52,000$

Fair value of options actually vested ($₹ 2,52,000 \times ₹ 15$) = ₹ 37,80,000

Expense already recognised ₹ 24,91,750

Expense to be recognised in year 3 ₹ 12,88,250

- Q30:** On 1.1.2009, Surya Kiran Ltd grants 200 stock options to each of its 300 employees, which will vest at the end of 3rd year, provided the employees are in service at the end of 3rd year. The exercise price per option is ₹ 60 if average annual output per employee is in the range of 100 units to 120 units, ₹ 50 if the same is in the range of 121 units to 130 units, ₹ 40 if the same is above 130 units.

Fair value as on grant date is estimated at ₹ 50 per option if the exercise price is ₹ 60, ₹ 40 per option if the exercise price is ₹ 50, ₹ 30 per option if the exercise price is ₹ 40.

On 31.12.2009, 20 employees have left. Actual average annual output per employee is 115 till date. X Ltd. expects that it is most likely that the average output will be 122 over the 3 years and that further 30 employees will leave during next 2 years.

On 31.12.2010, further 25 employees have left. Actual average annual output per employee is 132 till date. X Ltd. expects that it is most likely that the average output will be above 130 units over the 3 years. It also estimates that a further 10 employees will leave during the 3rd year.

On 31.12.2011, further 15 employees have left. Actual average annual output per employees is only 112 till date.

Compute the amounts to be recognized for each year.

Hint:

	Particulars	31.12.09	31.12.10	31.12.11
A	Number of employees expected to satisfy vesting conditions	250	245	240
		[300-20-30]	[300-20-25-10]	[300-20-25-15]
B	Expected/Most likely average annual output per employee	122	Above 130	112
C	Fair value per option as on grant date, based on most likely outcome	40	30	50
D	Fair value of options expected to vest (A x C x 200 options per employee)	20,00,000	14,70,000	24,00,000
E	Cumulative fair value to be recognized till date	6,66,667	9,80,000	24,00,000
		[20,00,000x1/3]	[14,70,000x2/3]	[24,00,000x3/3]
F	Cumulative fair value already recognized	0	6,66,667	9,80,000
G	Expense to be recognized for the period (E-F)	6,66,667	3,13,333	14,20,000

Q31: Quittle Ltd. announced a Stock Appreciation Rights (SAR) Scheme to its employees on 1st April, 2011. The salient features of the scheme is given below:

- (1) The scheme will be applicable to employees who have completed three years of continuous service with the company.

- (2) Each eligible employee can claim cash payment amounting to the excess of Market Price of the company's shares on exercise date over exercise price in respect of 60(sixty) shares.
- (3) The exercise price is fixed at ₹ 75 per share.
- (4) The option to exercise the SAR is open from 1st April, 2014 for 45 days and the same vested on 975 employees.
- (5) The intrinsic value of the company's share on date of closing (15th May, 2014) was ₹ 30 per share.
- (6) The fair value of the SAR was ₹ 20 in 2011-12; ₹ 25 in 2012-13 and ₹ 27 in 2013-14.
- (7) In 2011-12, the expected rate of employee attrition was 5% which rate was doubled in the next year.
- (8) Actual attrition year wise was as under:

2011-12	35 employees of which 5 had served the company for less than 3 years.
2012-13	30 employees of which 20 employees served for more than 3 years.
2013-14	20 employees of which 5 employees served for less than 3 years.

You are required to show the Provision for Stock Appreciation Rights Account by Fair Value Method.

Ans: Working Notes:

1. No. of eligible employees = $975 + 35 - 5 + 20 + 20 - 5 = 1040$
2. Expenses to be recognized each year:

	2011-12	2012-13	2013-14
No. of SARs to Vest			
$1040 \times 0.95 \times 0.95 \times 0.95 \times 60 =$	53,500*		
$1040 - (35-5) \times 0.90 \times 0.90 \times 60 =$		49,086*	
$1040 - (35-5) - 20 - (20-5) \times 60 =$			58,500*
Fair Value of SAR	20	25	27
Total Fair Value	10,70,000	12,27,150	15,79,500
Expenses to be recognized each year			
$10,70,000 \times 1/3 =$	3,56,667		
$12,27,150 \times 2/3 - 3,56,667 =$		4,61,433	
$15,79,500 - (3,56,667 + 4,61,433) =$			7,61,400

* SA₹ expected to vest in years 2011-12 and 2012-13 can also be worked out by rounding off the number of employees.

3. Expenses to be recognized in the year 2014-15.

Total intrinsic Value of SA₹ less expense recognized till date. = $(975 \times 60 \times 30) - 15,79,500$
= 1,75,500.

QUESTIONS FROM RTP/MTP/EXAMS

Q32: P Ltd. granted 400 stock appreciation rights (SAR) each to 75 employees on 1st April 2017 with a fair value ₹ 200. The terms of the award require the employee to provide service for four years in order to earn the award. The fair value of each SAR at each reporting date is as follows:

31st March 2018	₹ 210
31st March 2019	₹ 220
31st March 2020	₹ 215
31st March 2021	₹ 218

What would be the difference if at the end of the second year of service (i.e. at 31 st March 2019), P Ltd. modifies the terms of the award to require only three years of service. Answer on the basis of relevant Ind AS.

[RTP Nov 2018; Exam Nov 2019]

Ans:

Date	Particulars	Debit	Credit
31.03.2018	Profit and Loss account	15.75	
	To Liability against SAR		15.75
	(Being expenses liability for stock appreciation rights recognised)		
31.03.2019	Profit and Loss account	17.25	
	To Liability for SAR		17.25
	(Being expenses liability for stock appreciation rights recognised)		
31.03.2020	Profit and Loss account	15.38	
	To Liability for SAR		15.38
	(Being expenses liability for stock appreciation rights recognised)		
31.03.2021	Profit and Loss account	17.02	
	To Liability for SAR		17.02
	(Being expenses liability for stock appreciation rights recognised)		

Journal entries in the books of P Ltd (with modification of service period of stock appreciation rights)
(₹ in lakhs)

31.03.2018	Profit and Loss account	Dr.	15.75	
	To Liability for SAR			15.75
	(Being expenses liability for stock appreciation rights recognised)			
31.03.2019	Profit and Loss account	Dr.	28.25	
	To Liability for SAR			28.25
	(Being expenses liability for stock appreciation rights recognised)			
31.03.2020	Profit and Loss account	Dr.	20.50	
	To Liability for SAR			20.50
	(Being expenses liability for stock appreciation rights recognised)			

Working Notes:**Calculation of expenses for issue of stock appreciation rights without modification of service period**

For the year ended 31st March 2018

$$= ₹ 210 \times 400 \text{ awards} \times 75 \text{ employees} \times 1 \text{ year} / 4 \text{ years of service} = ₹ 15,75,000$$

For the year ended 31st March 2019

$$= ₹ 220 \times 400 \text{ awards} \times 75 \text{ employees} \times 2 \text{ years} / 4 \text{ years of service} - ₹ 15,75,000 \text{ previous recognised}$$

$$= ₹ 33,00,000 - ₹ 15,75,000 = ₹ 17,25,000$$

For the year ended 31st March 2020

$$= ₹ 215 \times 400 \text{ awards} \times 75 \text{ employees} \times 3 \text{ years} / 4 \text{ years of service} - ₹ 33,00,000 \text{ previously recognised}$$

$$= ₹ 48,37,500 - ₹ 33,00,000 = ₹ 15,37,500$$

For the year ended 31st March 2021

$$= ₹ 218 \times 400 \text{ awards} \times 75 \text{ employees} \times 4 \text{ years} / 4 \text{ years of service} - ₹ 48,37,500 \text{ previously recognised}$$

$$= ₹ 65,40,000 - ₹ 48,37,500 = ₹ 17,02,500$$

Calculation of expenses for issue of stock appreciation rights with modification of service period

For the year ended 31st March 2018

$$= ₹ 210 \times 400 \text{ awards} \times 75 \text{ employees} \times 1 \text{ year} / 4 \text{ years of service} = ₹ 15,75,000$$

For the year ended 31st March 2019

= ₹ 220 x 400 awards x 75 employees x 2 years / 3 years of service - ₹ 15,75,000 previous recognised = ₹ 44,00,000 - ₹ 15,75,000 = ₹ 28,25,000

For the year ended 31st March 2020

= ₹ 215 x 400 awards x 75 employees x 3 years/ 3 years of service - ₹ 44,00,000 previous recognised = ₹ 64,50,000 - ₹ 44,00,000 = ₹ 20,50,000.

Q33: A parent grants 200 share options to each of 100 employees of its subsidiary, conditional upon the completion of two years' service with the subsidiary. The fair value of the share options on grant date is ₹ 30 each. At grant date, the subsidiary estimates that 80 percent of the employees will complete the two-year service period. This estimate does not change during the vesting period. At the end of the vesting period, 81 employees complete the required two years of service. The parent does not require the subsidiary to pay for the shares needed to settle the grant of share options.

Pass the necessary journal entries for giving effect to the above arrangement. **[RTP May 2019]**

Ans: As required by paragraph B53 of the Ind AS 102, over the two-year vesting period, the subsidiary measures the services received from the employees in accordance, the requirements applicable to equity-settled share-based payment transactions as given in paragraph 43B. Thus, the subsidiary measures the services received from the employees on the basis of the fair value of the share options at grant date. An increase in equity is recognised as a contribution from the parent in the separate or individual financial statements of the subsidiary.

The journal entries recorded by the subsidiary for each of the two years are as follows:

Year 1	Remuneration expense	Dr.	
	(200 x 100 employees x ₹ 30 x 80% x ½)		2,40,000
	To Equity (Contribution from the parent)		2,40,000
Year 2	Remuneration expense	Dr.	
	[(200 x 81 employees x ₹ 30) – 2,40,000]		2,46,000
	To Equity (Contribution from the parent)		2,46,000

Q34: QA Ltd. had on 1st April, 2015 granted 1,000 share options each to 2,000 employees. The options are due to vest on 31st March, 2018 provided the employee remains in employment till 31st March, 2018.

On 1st April, 2015, the Directors of Company estimated that 1,800 employees would qualify for the option on 31st March, 2018. This estimate was amended to 1,850 employees on 31st March, 2016 and further amended to 1,840 employees on 31st March, 2017.

On 1st April, 2015, the fair value of an option was ₹ 1.20. The fair value increased to ₹ 1.30 as on 31st March, 2016 but due to challenging business conditions, the fair value declined

thereafter. In September 2016, when the fair value of an option was ₹ 0.90, the Directors repriced the option and this caused the fair value to increase to ₹ 1.05. Trading conditions improved in the second half of the year and by 31st March, 2017 the fair value of an option was ₹1.25. QA Ltd. decided that additional cost incurred due to repricing of the options on 30th September, 2016 should be spread over the remaining vesting period from 30th September, 2016 to 31st March, 2018.

The Company has requested you to suggest the suitable accounting treatment for these transaction as on 31st March, 2017. **[MTP May 2019]**

Ans: Paragraph 27 of Ind AS 102 requires the entity to recognise the effects of repricing that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee.

If the repricing increases the fair value of the equity instruments granted paragraph B43(a) of Appendix B requires the entity to include the incremental fair value granted (ie the difference between the fair value of the repriced equity instrument and that of the original equity instrument, both estimated as at the date of the modification) in the measurement of the amount recognised for services received as consideration for the equity instruments granted.

If the repricing occurs during the vesting period, the incremental fair value granted is included in the measurement of the amount recognised for services received over the period from the repricing date until the date when the repriced equity instruments vest, in addition to the amount based on the grant date fair value of the original equity instruments, which is recognised over the remainder of the original vesting period. Accordingly, the amounts recognised in years 1 and 2 are as follows:

Year	Calculation	Compensation expense for period	Cumulative compensation expense
1	$[1,850 \text{ employees} \times 1,000 \text{ options} \times ₹ 1.20] \times \frac{1}{3}$	7,40,000	7,40,000
2	$(1,840 \text{ employees} \times 1,000 \text{ options} \times [₹1.20 \times \frac{2}{3}] + \{₹1.05 - 0.90\} \times 0.5/1.5] - 7,40,000$	8,24,000	15,64,000

Q35: An entity which follows its financial year as per the calendar year grants 1,000 share appreciation rights (SAR) to each of its 40 management employees as on 1st January 20X5. The SAR provide the employees with the right to receive (at the date when the rights are exercised) cash equal to the appreciation in the entity's share price since the grant date. All of the rights vest on 31st December 20X6; and they can be exercised during 20X7 and 20X8. Management estimates that, at grant date, the fair value of each SAR is ₹ 11; and it estimates that overall 10% of the employees will leave during the two-year period. The fair values of the SAR at each year end are shown below:

Year

Fair value at year end

31 December 20X5	12
31 December 20X6	8
31 December 20X7	13
31 December 20X8	12

10% of employees left before the end of 20X6. On 31st December 20X7 (when the intrinsic value of each SAR was ₹ 10), six employees exercised their options; and the remaining 30 employees exercised their options at the end of 20X8 (when the intrinsic value of each SAR was equal to the fair value of ₹ 12).

How much expense and liability is to be recognized at the end of each year? Pass Journal entries. **[MTP Nov 2020]**

Ans: The amount recognized as an expense in each year and as a liability at each year end) is as follows:

Year	Expense ₹	Liability ₹	Calculation of Liability
31 December 20X5	2,16,000	2,16,000	= 36 x 1,000 x 12 x ½
31 December 20X6	72,000	2,88,000	= 36 x 1,000 x 8
31 December 20X7	1,62,000*	3,90,000	= 30 x 1,000 x 13
31 December 20X8	(30,000)**	0	Liability extinguished

* Expense comprises an increase in the liability of ₹ 102,000 and cash paid to those exercising their SAR of ₹ 60,000 (6 x 1,000 x 10).

** Difference of opening liability (₹ 3,90,000) and actual liability paid [₹ 3,60,000 (30 x 1,000 x 12)] is recognised to Profit and loss ie ₹ 30,000.

Journal Entries

31 December 20X5			
Employee benefits expenses	Dr.	2,16,000	
To Share based payment liability (Fair value of the SAR recognized)			2,16,000
31 December 20 X 6			
Employee benefits expenses	Dr.		
To Share based payment liability (Fair value of the SAR re-measured)			72,000
31 December 20 X 7			
Employee benefits expenses	Dr.	1,62,000	
To Share based payment liability (Fair value of the SAR recognized)			1,62,000
Share based payment liability	Dr.	60,000	

To Cash		60,000
(Settlement of SAR)		
31 December 20 X 8		
Share based payment liability	Dr.	30,000
To Employee benefits expenses		30,000
(Fair value of the SAR recognized)		
Share based payment liability	Dr.	3,60,000
To Cash		3,60,000
(Settlement of SAR)		

Note: Last two entries can be combined.

Q36: On 1st April 2017, Kara Ltd. granted an award of 150 share options to each of its 1,000 employees, on condition of continuous employment with Kara Ltd. for three years and the benefits will then be settled in cash of an equivalent amount of share price. Fair value of each option on the grant date was ₹ 129.

Towards the end of 31st March 2018, Kara Ltd.'s share price dropped; so on 1st April 2018 management chose to reduce the exercise price of the options. At the date of the re-pricing, the fair value of each of the original share options granted was ₹ 50 and the fair value of each re-priced option was ₹ 80. Thus, the incremental fair value of each modified option was ₹ 30.

At the date of the award, management estimated that 10% of employees would leave the entity before the end of three years (i.e., 900 awards would vest). During financial year 2018-2019, it became apparent that fewer employees than expected were leaving, so management revised its estimate of the number of leavers to only 5% (i.e. 950 awards would vest). At the end of 31st March 2020, awards to 930 employees actually vested.

Determine the expense for each year and pass appropriate journal entries as per the relevant Ind AS.

Exam Paper January 2021 (12 Marks)

Ans: **Note:** The first para of the question states that “benefits will then be settled in cash of an equivalent amount of share price.” This implies that the award is cash settled share-based payment. However, the second and third para talks about repricing of the option which arises in case of equity settled share-based payment.

Hence, two alternative solutions have been provided based on the information taking certain assumptions.

1st Alternative based on the assumption that the award is cash settled share -based payment.

In such a situation, the services received against share-based payment plan to be settled in cash are measured at fair value of the liability and the liability continues to be re- measured at every reporting date until it is actually paid off.

There is a vesting condition attached to the share-based payment plans i.e. to remain in service for next 3 years. The recognition of such share-based payment plans should be done by recognizing fair value of the liability at the time of services received and not at the date of grant. The liability so recognized will be fair valued at each reporting date and difference in fair value will be charged to profit or loss for the period.

Calculation of expenses:

For the year ended 31st March 2018

= ₹ 50 x 150 awards x 900 employees x (1 year / 3 years of service)

= ₹ 22,50,000

For the year ended 31st March 2019

Note: It is assumed that the fair value of ₹ 80 each of repriced option continues at the end of the remaining reporting period ie 31st March, 2019 and 31st March, 2020

= [₹ 80 x 150 awards x 950 employees x (2 year / 3 years of service)] - ₹ 22,50,000

= ₹ 7,60,00,000 – ₹ 22,50,000 = ₹ 53,50,000

For the year ended 31st March 2020

= [₹ 80 x 150 awards x 930 employees] - ₹ 22,50,000 - ₹ 53,50,000

= ₹ 1,11,60,000 – ₹ 22,50,000 - ₹ 53,50,000= ₹ 35,60,000

Journal Entries

31 st March, 2018			
Employee benefits expenses	Dr.	22,50,000	
To Share based payment liability (Fair value of the liability recognized)			22,50,000
31 st March, 2019			
Employee benefits expenses	Dr.	53,50,000	
To Share based payment liability (Fair value of the liability re-measured)			53,50,000
31 st March, 2020			
Employee benefits expenses	Dr.	35,60,000	
To Share based payment liability (Fair value of the liability recognized)			35,60,000
Share based payment liability To Bank	Dr.	1,11,60,000	
			1,11,60,000

(Being liability for awards settled in cash)			
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2nd Alternative based on fair value at the grant date (ignoring the fact that the award has to be settled in cash).

Calculation of expenses:

For the year ended 31st March 2018

= [₹ 129 x 150 awards x 900 employees x (1 year / 3 years of service)]

= ₹ 58,05,000

For the year ended 31st March 2019

Ind AS 102 requires the entity to recognise the effects of repricing that increase the total fair value of the share-based payment arrangement or are otherwise beneficial to the employee.

If the repricing increases the fair value of the equity instruments granted standard requires the entity to include the incremental fair value granted (ie. the difference between the fair value of the repriced equity instrument and that of the original equity instrument, both estimated as at the date of the modification) in the measurement of the amount recognised for services received as consideration for the equity instruments granted.

If the repricing occurs during the vesting period, the incremental fair value granted is included in the measurement of the amount recognised for services received over the period from the repricing date until the date when the repriced equity instruments vest, in addition to the amount based on the grant date fair value of the original equity instruments, which is recognised over the remainder of the original vesting period. Accordingly, the amounts recognised are as follows:

Year ended	Calculation	Compensation expense for period	Cumulative compensation expense
		₹	₹
31 March, 2018	[₹ 129 x 150 awards x 900 employees x (1 year / 3 years of service)]	58,05,000	58,05,000
31 March, 2019	[₹ 129 x 150 awards x 950 employees x (2 year / 3 years of service)] + (80-50) x 150 awards x 950 employees x (1 year / 2 years of service) - 58,05,000	85,87,500	1,43,92,500
31 March, 2020	[(₹ 129 + 30) x 150 awards x 930 employees] - 1,43,92,500	77,88,000	2,21,80,500

Journal Entries

31 st March, 2018			
Employee benefits expenses	Dr.	58,05,000	
To Outstanding Share based payment option (Fair value of the liability recognized)			58,05,000
31 st March, 2019			
Employee benefits expenses	Dr.	85,87,500	
To Outstanding Share based payment option (Fair value of the liability re-measured)			85,87,500
31 st March, 2020			
Employee benefits expenses	Dr.	77,88,000	
To Outstanding Share based payment option (Fair value of the liability recognized)			77,88,000
Outstanding Share based payment option Dr.		2,21,80,500	
To Equity share capital (Being award settled)			2,21,80,500

Q37: New Age Technology Limited has entered into following Share Based payment transactions:

- (i) On 1st April, 20X1, New Age Technology Limited decided to grant share options to its employees. The scheme was approved by the employees on 30th June, 20X1. New Age Technology Limited determined the fair value of the share options to be the value of the equity shares on 1st April, 20X1.
- (ii) On 1st April, 20X1, New Age Technology Limited entered into a contract to purchase IT equipment from Bombay Software Limited and agreed that the contract will be settled by issuing equity instruments of New Age Technology Limited. New Age Technology Limited received the IT equipment on 30th July, 20X1. The share-based payment transaction was measured based on the fair value of 'the equity instruments as on 1 st April, 20X1.
- (iii) On 1st April, 20X1, New Age Technology Limited decided to grant the share options to its employees. The scheme was approved by the employees on 30th June, 20X1. The issue of the share options was however subject to the same being approved by the shareholders in a general meeting. The scheme was approved in the general meeting held on 30th September, 20X1. The fair value of the equity instruments for measuring the share- based payment transaction was taken on 30th September, 20X1.

Identify the grant date and measurement date in all the 3 cases of Share based payment transactions entered into by New Age Technology Limited, supported by appropriate rationale for the determination? [MTP May 2021]

Ans: Ind AS 102 defines grant date and measurement dates as follows:

Grant date: The date at which the entity and another party (including an employee) agree to a share-based payment arrangement, being when the entity and the counterparty have a shared understanding of the terms and conditions of the arrangement. At grant date the entity confers on the counterparty the right to cash, other assets, or equity instruments of the entity, provided the specified vesting conditions, if any, are met. If that agreement is subject to an approval process (for example, by shareholders), grant date is the date when that approval is obtained.

Measurement date: The date at which the fair value of the equity instruments granted is measured for the purposes of this Ind AS. For transactions with employees and others providing similar services, the measurement date is grant date. For transactions with parties other than employees (and those providing similar services), the measurement date is the date the entity obtains the goods or the counterparty renders service.

Applying the above definitions in the given scenarios following would be the conclusion based on the assumption that the approvals have been received prospectively:

Scenario	Grant date	Measurement date	Base for grant date	Base for measurement date
(i)	30th June, 20X1	30th June, 20X1	The date on which the scheme was approved by the employees	For employees, the measurement date is grant date
(ii)	1st April, 20X1	30th July, 20X1	The date when the entity and the counterparty entered a contract and agreed for settlement by equity instruments	The date when the entity obtains goods from the counterparty
(iii)	30th September, 20X1	30th September, 20X1	The date when the approval by shareholders was obtained	For employees, the measurement date is grant date

NOTES

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CHAPTER 21

EMPLOYEE BENEFITS (IND AS 19)

CONCEPTS BASED EXAMPLES

Examples – short-term employee benefits

1. On 31 December 20X1 a retailer paid its employees ₹ 10,00,000 (net of ₹ 4,00,000 income taxes deducted from the employees' remuneration and paid by the retailer on behalf of the employees to the tax authorities) for work performed in December 20X1. On 1 January 20X2 the entity paid to the government the ₹ 4,00,000 deducted from its employees' remuneration.

On 2 January 20X2 the retailer paid a further ₹ 20,000 to the tax authority. This tax was levied by the tax authority directly on the retailer's December 20X1 payroll (ie the retailer cannot recover the payroll tax from its employees).

In December 20X1 the retailer incurred ₹ 14,00,000 short-term employee benefits (ie ₹ 10,00,000 paid to employees and ₹ 4,00,000 paid on behalf of its employees to the revenue authorities).

Note: The ₹ 20,000 payroll tax levied directly on the retailer is not an employee benefit—it is not consideration given by the entity in exchange for services rendered by its employees.

The retailer could recognise the transactions as follows:

31 December 20X1

To recognise the short-term employee benefits expenses incurred in December 20X1.

Dr Profit or loss (short-term employee benefits expenses)	₹ 14,00,000
Cr Cash	₹ 1,00,000
Cr Liability (accrued expense)	₹ 400,000

To recognise the tax levied on the entity's payroll incurred in December 20X1.

Dr Profit or loss	₹ 20,000
Cr Liability (accrued expense)	₹ 20,000

1 January 20X2

To recognise the payment to the government of taxes collected on its behalf from the entity's employees accrued in 20X1.

Dr Liability (accrued expense)	₹ 400,000
Cr Cash	₹ 400,000

2 January 20X2

To recognise the settlement of the tax levied on the entity's payroll accrued in 20X1.

Dr Liability (accrued expense)	₹ 20,000
Cr Cash	₹ 20,000

2. An entity provides its expatriate employees with residential accommodation that it rents from independent third parties.

The expatriate housing scheme is a short-term employee benefit—the housing benefit is due in the period in which the employees render the related employee service.

3. A profit-sharing plan requires an entity to pay employees 5 per cent of its profit for the year before profit-sharing bonuses. For the year ended 31 December 20X1 the entity recorded a profit before profit-sharing bonuses of ₹ 2 million. Bonuses are paid in January.

At 31 December 20X1 the entity could account for its profit-sharing plan obligation as follows:

To recognise the profit-sharing bonuses plan liability.

Dr Profit or loss	₹ 100,000*
Cr Profit-sharing bonuses plan	₹ 100,000

* 5% × ₹ 2,000,000. The amount is not discounted.

Example - current service cost

4. A defined benefit plan provides a lump-sum benefit of ₹ 200 payable on retirement for each year of service. A benefit of ₹ 200 is attributed to each year. The current service cost is the present value of ₹ 200. The present value of the defined benefit obligation is the present value of ₹ 200, multiplied by the number of years of service up to the end of the reporting period. What is the current service cost?

If the benefit is payable immediately when the employee leaves the entity, the current service cost and the present value of the defined benefit obligation reflect the date at which the employee is expected to leave. Thus, because of the effect of discounting, they are less than the amounts that would be determined if the employee left at the end of the reporting period.

Examples – other long-term employee benefits

5. An entity's employees are each entitled to five working days of paid sick leave for each year. Unused sick leave may be carried forward for three calendar years.

The sick leave is accounted for as other long-term employee benefits. The sick leave is not a short-term employee benefit as the paid absence is not expected to occur wholly within 12 months after the end of the period in which the employees render the related employee service.

6. A profit-sharing plan requires an entity to pay a specified proportion of its cumulative profit for a five-year period to employees who serve throughout the five-year period.

The profit-sharing plan is accounted for as other long-term employee benefits. The profit-sharing plan is not a short-term employee benefit as the profit share is not due wholly within 12 months after the end of the period in which the employees render the related employee

service. Even in the fifth year of the five-year period of the profit-sharing plan it is accounted for as other long-term employee benefits.

7. An entity's expatriate employees are each entitled to 30 working days' expatriate leave for each three-year period of continuous employment with the entity. Unused expatriate leave may be carried forward for three calendar years.

Ans: The expatriate leave is accounted for as other long-term employee benefits. It is not a short-term employee benefit as the paid absence is not expected to occur wholly within 12 months after the end of the period in which the employees render the related employee service.

Example: Termination Benefits

8. As a result of a recent acquisition, an entity plans to close a factory in ten months and, at that time, terminate the employment of all of the remaining employees at the factory. Because the entity needs the expertise of the employees at the factory to complete some contracts, it announces a plan of termination as follows.

Each employee who stays and renders service until the closure of the factory will receive on the termination date a cash payment of ₹ 30,000. Employees leaving before closure of the factory will receive ₹ 10,000.

There are 120 employees at the factory. At the time of announcing the plan, the entity expects 20 of them to leave before closure. Therefore, the total expected cash outflows under the plan are ₹ 3,200,000 (ie $20 \times ₹ 10,000 + 100 \times ₹ 30,000$). As required by paragraph 160, the entity accounts for benefits provided in exchange for termination of employment as termination benefits and accounts for benefits provided in exchange for services as short-term employee benefits.

Termination benefits

The benefit provided in exchange for termination of employment is ₹ 10,000. This is the amount that an entity would have to pay for terminating the employment regardless of whether the employees stay and render service until closure of the factory or they leave before closure. Even though the employees can leave before closure, the termination of all employees' employment is a result of the entity's decision to close the factory and terminate their employment (ie all employees will leave employment when the factory closes).

Therefore the entity recognises a liability of ₹ 1,200,000 (ie $120 \times ₹ 10,000$) for the termination benefits provided in accordance with the employee benefit plan at the earlier of when the plan of termination is announced and when the entity recognises the restructuring costs associated with the closure of the factory.

Benefits provided in exchange for service

The incremental benefits that employees will receive if they provide services for the full ten month period are in exchange for services provided over that period. The entity accounts for them as short-term employee benefits because the entity expects to settle them before twelve months after the end of the annual reporting period. In this example, discounting is not required, so an expense of ₹ 200,000 (ie $₹ 2,000,000 \div 10$) is recognised in each month during

the service period of ten months, with a corresponding increase in the carrying amount of the liability.

QUESTIONS FROM ICAI STUDY MATERIAL

Q1: Sunderam Pvt. Ltd. has a headcount of 100 employees in 2010-11. As per the employee policy, the employees are entitled for 30 annual leaves out of which 10 may be carried forward to the next current year, 10 sick leaves out of which 2 may be carried forward as paid leave. At March 31, 2011, the average unused entitlement is 5 days per employee for privilege leave and 1 for sick leave. On an average, it is found that the number of such employees who would be claiming annual leaves would be 30 and 10 employees who would claim sick leaves. Compute the liability to be recognised as sick pay and privilege leave by the entity in 2010-11.

Ans: The entity will recognise liability in the books equal to 150 (30 x 5) days of annual leave and 10 (10 x 1) days of sick leave.

Q2: Laxmi Mills is a profit making entity and has reported ₹ 200 crore in the financial year 20X1-20X2. According to its profit-sharing plan, it distributes and pays 5% as its portion of profit to its employees if they complete 1 year with the organisation. As under these kinds of plans, an entity is under an obligation to pay if the employees complete a specified period with the organisation. Laxmi mills has estimated that due to turnover in the organisation, the estimated pay-out would be around 4.5%. Compute the liability and expense of the company under this plan.

Ans: The company shall make a provision for liability and recognise the same amount as an expense of the amount of ₹ 9 crores in 20X1-20X2 (4.5% of ₹ 200 crores).

Q3: Paras Pvt. Ltd. does not have sufficient information to about a defined benefit plan and thus accounts for the plan as if it were defined contribution plan. In this kind of plan, there is a contractual agreement between Paras Pvt. Ltd. and its participants to share the deficit amongst all. This kind of funding valuation shows a deficit of ₹ 500 million in the plan. The plan has agreed under contract a schedule of contributions with the participating employers in the plan that will eliminate the deficit over the next 10 years. The entity's total contributions under the contract are ₹ 30 million.

Ans: As per Ind AS 19, Paras Pvt. Ltd. should recognise a liability for the contributions adjusted for the time value of money and an equal expense in profit or loss.

Q4: A plan provides a monthly pension of 0.3% of final salary for each year of service. The pension is payable from the age of 65. What is the current service cost?

Ans: Benefit equal to the present value, at the expected retirement date, of a monthly pension of 0.3% of the estimated final salary payable from the expected retirement date until the expected date of death is attributed to each year of service. The current service cost is the present value of that benefit. The present value of the defined benefit obligation is the present value of monthly pension payments of 0.3% of final salary, multiplied by the number of years of service up to the end of the reporting period. The current service cost and the present value of the defined benefit obligation are discounted because pension payments begin at the age of 65.

Q5: A plan pays a benefit of ₹ 140 for each year of service, excluding service before the age of 25. The benefits vest immediately. Compute the benefit to be attributed before the age of 25 and after 25?

Ans: No benefit is attributed to service before the age of 25 because service before that date does not lead to benefits (conditional or unconditional). A benefit of ₹ 140 is attributed to each subsequent year.

Q6: B Pvt. Ltd. has a post-employment medical plan which will reimburse 20% of an employee's post-employment medical costs if the employee leaves after more than ten and less than twenty years of service and 50% of those costs if the employee leaves after twenty or more years of service. Compute the benefit attributed for last 20 years, 10 and 20 years and within 10 years?

Ans: As per Ind AS 19, the benefit will be attributed till the period the employee service will lead to no material amount of benefits. And service in later years will lead to a materially higher level of benefit than in earlier years. Therefore, for employees expected to leave after twenty or more years, the entity attributes benefit on a straight-line basis. Service beyond twenty years will lead to no material amount of further benefits. Therefore, the benefit attributed to each of the first twenty years is 2.5% of the present value of the expected medical costs (50% divided by twenty).

For employees expected to leave between ten and twenty years, the benefit attributed to each of the first ten years is 2% (20 % divided by 10) of the present value of the expected medical costs. For these employees, no benefit is attributed to service between the end of the tenth year and the estimated date of leaving.

For employees expected to leave within ten years, no benefit is attributed.

Q7: Cisca Pvt. Ltd. has a headcount of around 1,000 employees in the organisation in 2010-11. As per the company policy, the employees are given 35 days of privilege leave (PL), 15 days of sick leave (SL) and 10 days of casual leave. Out of the total PL and sick leave, 10 and 5 can be carried forward to next year. On the basis of past trends, it has been noted that 200 employees will take 5 days of PL and 2 days of SL and 800 employees will avail 10 as PL and 5 as SL.

Also the company has been incurring profits since 2009. It has decided in 2010-11 to distribute profits to its employees @ 4% during the year. However, due to the employee turnover in the organisation, the expected pay-out of the Cisca Pvt. Ltd. is expected to be around 3.5%. The profits earned during 2010-11 is ₹ 2,000 crores.

Cisca Pvt. Ltd. has a post-employment benefit plan also available which is the nature of defined contribution plan where contribution to this fund amounts to ₹ 100 crores which will fall due within 12 months from the end of accounting period.

The company has paid ₹ 20 crores to its employees in 2010-11.

What is the treatment for the short-term compensating absences, profit-sharing plan and the defined contribution plan by Cisca Pvt. Ltd?

Ans: (i) Cisca Pvt. Ltd. will recognise a liability in its books to the extent of 5 days of PL for 200 employees and 10 days of PL for remaining 800 employees and 2 days of SL for 200

employees and 5 days of SL for remaining 800 employees in its books as an unused entitlement that has accumulated in 2010-11.

- (ii) Cisca Pvt. Ltd. will recognise ₹ 70 crores (2,000 x 3.5%) as a liability and expense it books of account.
- (iii) When an employee has rendered service to an entity during a period, the entity shall recognise the contribution payable to a defined contribution plan in exchange for that service:
 - (a) Under Ind AS 19, the amount of ₹ 80 crores may be recognised as a liability (accrued expense), after deducting any contribution already paid (100-20). However, if the contribution already paid would have exceeded the contribution due for service before the end of the reporting period, an entity shall recognise that excess as an asset (prepaid expense); and
 - (b) Also, ₹ 80 crores will be recognised as an expense in this case study which will be disclosed as an expense in the statement of profit or loss.

It can also be seen that the contributions are payable within 12 months from the end of the year in which the employees render the related service, they will not be discounted. However, where contributions to a defined contribution plan do not fall due wholly within twelve months after the end of the period in which the employees render the related service, they shall be discounted using the discount rate.

Q8: AJ Ltd is engaged in the business of trading of chemicals having a net worth of ₹ 150 crores. The company's profitability is good and hence the company has introduced various benefits for its employees to keep them motivated and to ensure that they stay with the organization. The company is an associate of RJ Ltd which is listed on Bombay Stock Exchange in India.

The company initially did not have any HR function but over the last 2 years, the management set up that function and now HR department takes care of all the benefits related to the employees and how they can be structured in a manner beneficial to both the employees and the objectives of the company.

One of the employee benefits involves a lump sum payment to employee on termination of service and that is equal to 1 per cent of final salary for each year of service. Consider the salary in year 1 is ₹ 10,000 and is assumed to increase at 7 per cent (compound) each year.

Taking a discount rate at 10 per cent per year, you are required to show

- (a) benefits attributed (year on year) and
- (b) the obligation in respect of this benefit (year on year)

For and employee who is expected to leave at the end of year 5 Following assumptions may be taken to solve this:

- There are no changes in actuarial assumptions.
- No additional adjustments are needed to reflect the probability that the employee may leave the entity at an earlier or later date.

Ans: Computation of benefit attributed to prior years and current year:

Year	1	2	3	4	5
Benefit attributed to:					
- Prior years	-	131	262	393	524
- Current year (Refer W.N.1)	131	131	131	131	131
Total (i.e. current and prior years)	131	262	393	524	655

a. Computation of the obligation for an employee who is expected to leave at the end of year 5 (taking discount rate of 10% p.a.)

	Amount in ₹				
Year	1	2	3	4	5
Opening obligation (A)	-	89	196	324	475
Interest at 10% B = (A X 10%)	-	9	20	32	47
Current service cost (C) (Refer WN 2)	89	98	108	119	131
Closing obligation D = (A+B+C)	89	196	324	475	653

Figures have been rounded off in the table.

Working Notes

1. A lump sum benefit is payable on termination of service and equal to 1 per cent of final salary for each year of service. The salary in year 1 is ₹ 10,000 and is assumed to increase at 7 per cent (compound) each year.

Accordingly, for the purpose of above mentioned employee benefit, 1% of final salary to be considered for each year of service would be ₹ 131.

2. Computation of current service cost:

Year	1	2	3	4	5
1% salary at the end of year 5	-	-	-	-	131
PV factor at the end of each year to be considered at 10% p.a. (E)	0.683	0.751	0.826	0.909	1.000
PV at the end of each year	89	98	108	119	131
	(131 x E)	(131 x E)	(131 x E)	(131 x E)	(131 x E)

Accordingly, for the purpose of above mentioned employee benefit, 1% of final salary to be considered for each year of service would be ₹ 131.

An entity discounts the whole of a post-employment benefit obligation, even if part of the obligation is expected to be settled before twelve months after the reporting period.

Q9: AKJ Ltd is a listed company engaged in the business of manufacturing of electronic equipment. The company has various branch offices spread out across India and has 1,000 employees.

As per the statutory requirements, gratuity shall be payable to an employee on the termination of his employment after he has rendered continuous service for not less than five years -

- (a) on his superannuation, or
- (b) on his retirement or resignation, or
- (c) on his death or disablement due to accident or disease.

The completion of continuous service of five years shall not be necessary where the termination of the employment of any employee is due to death or disablement.

The amount payable is determined by a formula linked to number of years of service and last drawn salary. The amount payable to an employee shall not exceed ₹ 10,00,000.

Compute the amount of employee benefit, if any, attributed to each year of service.

Ans: The amount of gratuity would be attributed to each year of service and calculated as follows: Number of employees not likely to fulfill the eligibility criteria will be ignored.

Other employees will be grouped according to period of service they are expected to render taking into account:

- mortality rate,
- disablement and
- resignation after 5 years.

Gratuity payable will be calculated in accordance with the formula prescribed in the governing statute based on the period of service and the salary at the time of termination of employment, assuming promotion, salary increases etc.

For those employees for whom the amount payable as per the formula does not exceed ₹ 10,00,000, over the expected period of service, the amount payable will be divided by the expected period of service and the resulting amount will be attributed to each year of the expected period of service, including the period before the stipulated period of 5 years.

In case of the remaining employees, the amount as per the formula exceeds ₹ 10,00,000 over the expected period of service of 10 years, and the amount of the threshold of ₹ 10,00,000 is reached at the end of 8 years i.e. ₹ 1,25,000 (₹ 10,00,000 divided by 8) is attributed to each of the first 8 years. In this case, no benefit is attributed to subsequent two years. This is because service beyond 8 years will lead to no material amount of further benefits.

Q10: RKA Private Ltd is an old company established in 1911. The company started with a very small capital base and today it is one of the leading companies in India in its industry. The company has an annual turnover of ₹ 11,000 crores and planning to get listed in the next year.

The company has a large employee base. The company provided a defined benefit plan to its employees. Following is the information relating to the balances of the fund's assets and liabilities as at 1st April, 2011 and 31st March, 2012.

₹ in lacs

Particulars	1st April, 2011	31 st Mar, 2012
Present value of benefit obligation	1,400	1,580
Fair value of plan assets	1,140	1,275

For the financial year ended 31st March, 2012, service cost was ₹ 55 lacs. The company made a contribution of an amount of ₹ 111 lacs to the plan. No benefits were paid during the year.

Consider a discount rate of 8%. You are required to -

- Compute the balance(s) of the company to be included its balance sheet as on 31st March, 2012 and amounts to be recognized in the statement of profit and loss and other comprehensive income for the year ended 31st March, 2012.
- Give the journal entries in respect of amount(s) to be recognized.

Ans:

(a)

Extract of the Balance Sheet of RKA Private Ltd as at 31 st March, 2012	₹ in lacs
Closing net defined liability (1,580 – 1,275) lacs	305
Extract of the Statement of Profit or Loss of RKA Private Ltd for the year ended 31 st March, 2012	₹ in lacs
Service cost	55
Net interest (Refer W.N.1)	21
Profit or loss	76
Other comprehensive income:	
Remeasurements (Refer W.N.2)	80
Total	156

Journal entry

Particulars		₹ in lacs	₹ in lacs
Profit & Loss	Dr.	76	
Other comprehensive income	Dr.	80	
To Cash (Contribution)			111
To Net defined benefit liability (Refer WN 3)			45

Working Notes:

- a. Computation of Net interest taken to the Statement of Profit or Loss

= Discount rate x Opening net defined benefit liability

= 8% x (1,400 – 1,140) lacs

= 8% x 260 lacs

= 21 lacs (Rounded off to nearest lacs)

- b. Computation of Remeasurements

Actuarial gain or loss on defined benefit liability:

Particulars	₹ in lacs
Opening balance of liability	1,400
Current service cost	55
Interest on opening liability (1,400 x 8%)	112
Actuarial loss (Bal. fig)	13
Closing balance of liability	1,580

Particulars	₹ in lacs
Opening balance of asset	1,140
Cash contribution	111
Actual return (Bal. fig)	24
Closing balance of asset	1,275

Actuarial loss on liability + Loss on return = ₹ 13 lacs + ₹ 67 lacs = ₹ 80 lacs.

- c. Computation of increase/ decrease in net defined benefit liability:

Particulars	₹ in lacs
Opening net liability (₹ 1,400 lacs – ₹ 1,140 lacs)	260
Closing net liability (₹ 1,580 lacs – ₹ 1,275 lacs)	305
Increase in liability	45

Q11: An entity has 100 employees, who are each entitled to five working days of paid sick leaves for each year. Unused sick leave may be carried forward for one calendar year. Sick leave is taken first out of the current year's entitlement and then out of any balance brought forward from the previous year (LIFO basis). At 31 March, 2011, the average unused entitlement is two days per employee. The entity expects, on the basis of experience that is expected to continue, that 92 employees will take no more than five days of paid sick leaves in 2011-2012 and that the remaining eight employees will take an average of six and a half days each.

The entity expects that it will pay an additional twelve days of sick pay as a result of the unused entitlement that has accumulated at 31st March, 2011 (one and a half days each, for eight employees). Would the entity require to recognize any liability in respect of leaves?

Ans: At 31 March, 2011, the average unused entitlement is two days per employee. The entity expects, on the basis of experience that is expected to continue, that 92 employees will take no more than five days of paid sick leaves in 2011-2012 and that the remaining eight employees will take an average of six and a half days each.

The entity expects that it will pay an additional twelve days of sick pay as a result of the unused entitlement that has accumulated at 31st March, 2011 (one and a half days each, for eight employees).

Therefore, the entity would recognize a liability equal to twelve days of sick pay.

Q12: OPQ Ltd is a listed company having its corporate office at Nagpur. The company has a branch office at Chennai. The company has been operating in Indian market for the last 10 years.

The company operates a pension plan that provides a pension of 2.5% of the final salary for each year of service. The benefits become vested after seven years of service.

On 1st April, 2018, the company increased the pension to 3% of the final salary for each year of service starting from 1st April, 2011. On the date of the improvement, the present value of the additional benefits for service from 1 April, 2011 to 1st April 2018 was as follows:

- Employees with more than seven years' service on 1 January 2018 – ₹ 2,75,000
- Employees with less than 7 years of service – ₹ 2,21,000 (average 4 years to go). What would be the accounting treatment in this case?

Ans: OPQ Ltd increased the pension to 3% of the final salary for each year of service starting from 1st April, 2011 to 1st April, 2018.

The company would recognize the total amount of ₹ 4,96,000 (i.e. ₹ 2,75,000 + ₹ 2,21,000) immediately, as for the purpose of recognition it does not make any difference as to whether the benefits are already vested or not.

Q13: SA Pvt Ltd is engaged in the business of retail having 100 retail outlets across Northern and Southern India. The company's head office is located at Chennai.

SA Pvt Ltd is a subsidiary of SAG Ltd. SAG Ltd is listed on the National Stock Exchange in India. Following information is available for SA Pvt Ltd:

Plan Assets

At 1st April, 2011, the fair value of plan assets was ₹ 10,000.

Contribution to the plan assets done on 31 March, 2012 – ₹ 3,000

Amount paid on 31st March, 2012 – ₹ 300

At 31st March, 2012, the fair value of plan assets was ₹ 14,700 Actual return on plan assets – ₹ 2,000

Defined Benefit Obligation

At 1st April, 2011, present value of the defined benefit obligation was ₹ 12,000.

At 31st March, 2012, present value of the defined benefit obligation was ₹ 15,500.

Actuarial losses on the obligation for the year ended 31st March, 2012 were ₹ 100.

Current Service Cost – ₹ 2,500

Benefit paid – ₹ 300

Discount rate used to calculate defined benefit liability - 10%.

As per Ind AS 19, please suggest if there is any amount based on the above mentioned information that would be taken to other comprehensive income (with workings). Also compute net interest on the net defined benefit liability (asset).

Ans: As per Ind AS 19, net remeasurement of ₹ 900 would be recognized in other comprehensive income.

Computation of Net remeasurement

= Remeasurement – Actuarial loss

= ₹ 1000 (Refer WN - 1) – ₹ 100 (Given in the question)

= ₹ 900.

Computation of net interest expense

Particulars	Amount in ₹
Defined benefit liability as at 1 April 2011 (A)(Given in the question)	12,000
Fair value of plan asset as at 1 April 2011 (B) (Given in the question)	(10,000)
Net defined benefit liability (A - B)	2,000
Net interest expense (as it is net liability) (Refer note given below)	200

Note:

Net interest expense would be computed on net defined benefit liability using discount rate of 10% given in the question-

= Net defined benefit liability x Discount rate

= 2,000 x 10% = ₹ 200.

Working Note: Computation of amount of remeasurement

Particulars	Amount in ₹
Actual return on plan asset for the year ended 31 March 2012 (C) (Given in the question)	2,000
Less: Interest income on ₹ 10,000 held for 12 months at 10% (D)	(1,000)
Remeasurement (E = C - D)	1,000

NEW QUESTIONS IN SM (FOR MAY 21 ATTEMPT)**Q14: Vested Accumulating Benefits**

Mr. Rajan is working for Infotech Ltd. Consider the following particulars: Annual salary of Mr. Rajan = ₹ 30,00,000

Total working days in 20X0-X1 = 300 days

Leaves allowed in 20X0-X1 as per company policy = 10 days
Leaves utilized by Mr. Rajan in 20X0-X1 = 8 days

The unutilized leaves are settled by way of payment and accordingly, carry forward of such leaves to the subsequent period is not allowed.

Compute the total employee benefit expense for Infotech Ltd. in respect of 20X0-X1.

Ans: Mr Rajan is entitled to a salary of ₹ 30,00,000 for 300 total working days.

Thus, per day salary works out to ₹ 30,00,000 ÷ 300 days = ₹ 10,000 per day

In the year 20X0-20X1, Mr. Rajan availed 8 out of 10 leaves allowed by the company. Accordingly, leaves unutilized = 10 – 8 = 2 days

In line with the company policy, Infotech Ltd. will pay Mr. Rajan for the unutilized leave.

Thus, total expense for 20X0-20X1 = ₹ 30,00,000 + (2 days unutilized leaves x ₹ 10,000 per day) = ₹ 30,20,000.

Q15: Non-Vested Accumulating Benefits

Mr. Niranjan is working for Infotech Ltd. Consider the following particulars:

	Year 20X0-20X1	Year 20X1-20X2
Annual salary	₹ 30,00,000	₹ 30,00,000
No. of working days during the year	300 days	300 days
Leave allowed	10 days	10 days
Leave taken	7 days	13 days
Leave unutilized carried forward to next year	3 days	NIL

Based on past experience, Infotech Ltd. assumes that Mr. Niranjan will avail the unutilized leaves of 3 days of 20X0-20X1 in 20X1-20X2.

Infotech Ltd. contends that it will record ₹ 30,00,000 as employee benefits expense in each of the years 20X0-20X1 and 20X1-20X2, stating that the leaves will, in any case, be utilized by 20X1-20X2.

Comment on the accounting treatment proposed to be followed by Infotech Ltd. Also pass journal entries for both the years

Ans:

Particulars	Year 20X0-20X1	Year 20X1-20X2
Annual Salary	₹ 30,00,000	₹ 30,00,000
No. of working days (A)	300 days	300 days
Leaves Allowed	10 days	10 days
Leaves Taken (B)	7 days	13 days
Therefore, No. of days worked (A – B)	293 days	287 days
Expense proposed to be recognized by Infotech Ltd.	₹ 30,00,000	₹ 30,00,000

Based on the evaluation above, Mr. Niranjana has worked for 6 days more (293 days – 287 days) in 20X0-X1 as compared to 20X1-20X2.

Since he has worked more in 20X0-20X1 as compared to 20X1-20X2, the accrual concept requires that the expenditure to be recognized in 20X0-20X1 should be more as compared to 20X1-20X2.

Thus, if Infotech Ltd. recognizes the same expenditure of ₹ 30,00,000 for each year, it would be in violation of the accrual concept.

The expenditure to be recognized will be as under:

Particulars	Year 20X0-20X1	Year 20X1-20X2
Annual salary (A)	₹ 30,00,000	₹ 30,00,000
No. of working days (B)	300 days	300 days
Salary cost per day (A ÷ B)	₹ 10,000 per day	₹ 10,000 per day
No. of days worked (from above)	293 days	287 days
Expense to be recognised: In 20X0-20X1: ₹ 30,00,000 + [₹ 10,000 per day x 3 days (leaves unutilized expected to be utilized subsequently)]	₹ 30,30,000	
In 20X1-20X2: ₹ 30,00,000 – [₹ 10,000 per day – 3 days (excess leave utilized in 20X1-20X2)]		₹ 29,70,000

Journal Entry for 20X0-20X1

Employee Benefits Expense Account	Dr.	30,30,000
To Bank Account		30,00,000
To Provision for Leave Encashment		30,000

Journal Entry for 20X1-20X2

Employee Benefits Expense Account	Dr.	29,70,000
Provision for Leave Encashment Account	Dr.	30,000
To Bank Account		30,00,000

Q16: Non-Vested Accumulating Benefits

Assume same information as in above question.

Based on past experience, Infotech Ltd. assumes that Mr. Niranjana will avail the unutilized leaves of 2 days of 20X0-20X1 subsequently.

However, in 20X1-20X2, Mr. Niranjana availed in actual all 3 days of brought forward leave.

Compute the expense to be recognised in 20X0-20X1 and 20X1-20X2. Also pass journal entries for both the years.

Ans: The expenditure to be recognized will be as under:

Particulars	Year 20X0-20X1	Year 20X1-20X2
Annual salary (A)	₹ 30,00,000	₹ 30,00,000
No. of working days (B)	300 days	300 days
Salary cost per day (A ÷ B)	₹ 10,000 per day	₹ 10,000 per day
No. of days worked (from above)	293 days	287 days
Expense to be recognised:		
In 20X0-20X1: ₹ 30,00,000 + [₹ 10,000 per day x 2 days (leaves unutilized expected to be utilized subsequently)]	₹ 30,20,000	
In 20X1-20X2: ₹ 30,00,000 – [₹ 10,000 per day x 3 days (excess leave utilized in 20X1-20X2)] + ₹ 10,000 (additional expense due to change in accounting estimate)		₹ 29,80,000

The additional ₹ 10,000 booked as an expense in 20X1-20X2 represents a change in accounting estimate (i.e. as against the entity's estimation that 2 days of unutilized leave would be utilized subsequently, actually 3 days were utilized subsequently), for which a prospective effect needs to be given, in line with Para 36 of Ind AS 8 Accounting Policies, Changes in Accounting Estimates and Errors.

Journal Entry for 20X0-20X1

Employee Benefits Expense Account	Dr.	30,20,000
To Bank Account		30,00,000

To Provision for Leave Encashment 20,000

Journal Entry for 20X1-20X2

Employee Benefits Expense Account	Dr.	29,80,000
Provision for Leave Encashment Account	Dr.	20,000
To Bank Account		30,00,000

Q17: An entity has 100 employees, who are each entitled to ten working days of paid sick leave for each year. Unused sick leave may be carried forward for one financial year. Sick leave is taken first out of the current year's entitlement and then out of any balance brought forward from the previous year (a LIFO basis).

At 31 March 20X1, the average unused entitlement is two days per employee. Based on past experience, the management expects that only 20% of the employees will use 1 day from their carried forward leave. Salary per day is ₹ 2,500.

Compute the expenses in respect of the short-term compensated absences, if they are assumed to be (a) vested short-term compensated absences, and (b) non-vested short-term compensated absences.

Ans: Vested short-term compensated absences:

Employee Benefit Expense = 100 Employees x 2 Days x ₹ 2,500 = ₹ 5,00,000
Non-vested short-term compensated absences:

Employee Benefit Expense = 100 Employees x 20% x 1 Days x ₹ 2,500 = ₹ 50,000

Q18: Acer Ltd. has 350 employees (same as a year ago). The average staff attrition rates observed during past 10 years represents 6% per annum. Acer Ltd. provides the following benefits to all its employees:

Paid vacation - 10 days per year regardless of date of hiring. Compensation for paid vacation is 100% of employee's salary and unused vacation can be carried forward for 1 year. As of 31st March, 20X1, unused vacation carried forward was 3 days per employee, average salary was ₹ 15,000 per day and accrued expense for unused vacation in 20X0-20X1 was ₹ 65,00,000. During 20X1-20X2, employees took 9 days of vacation in average. Salary increase in 20X1-20X2 was 10%.

How would Acer Ltd. recognize liabilities and expenses for these benefits as of 31st March, 20X2?. Pass the journal entry to show the accounting treatment.

Ans: Paid Vacation:

Step 1: Calculation of Unused Vacation in man-days as on 31st March, 20X2:

No. of Employees in service for the whole year (94%):

Particulars	Man-days
Unused vacation as on 31 st March, 20X1	3 days per employee
Entitlement to vacation for 20X1-20X2	10 days per

	employee
Average vacation availed in 20X1-20X2	(9) days per employee
Unused vacation as on 31st March, 20X2 (being unused leaves of 20X1-20X2 on FIFO basis)	4 days per employee
Total Unused vacation as on 31st March, 20X2 - (A) (350 employees x 94% x 4 days per employee)	1,316 man-days

Newcomers (6%):

Particulars	Man-days
Entitlement to vacation for 20X1-20X2	10 days per employee
Average vacation availed in 20X1-20X2	(9) days per employee
Unused vacation as on 31st March, 20X2 (being unused leaves of 20X1-20X2 on FIFO basis)	1 day per employee
Total Unused vacation as on 31st March, 20X2 - (B) (350 employees x 6% x 1 day per employee)	21 man-days
Total unused vacation as on 31 st March, 20X2 (A + B)	1,337 man-days

Step 2: Calculation of average salary per day:

Particulars	Amount (₹)
Average salary per day as on 31 st March, 20X1	15,000
Salary increase in 20X1-20X2	10%
Average salary per day as on 31st March, 20X2	16,500

Step 3: Calculation of provision for unused paid vacation:

Particulars	Amount (₹)
Calculation of provision for unused paid vacation 20X1-20X2: (1,337 man-days x ₹ 16,500)	2,20,60,500
Provision for unused paid vacation 20X0-20X1	65,00,000

Step 4: Accounting treatment

Provision for 20X1-20X2

Employee Benefits Expenses A/c

Dr.

2,20,60,500

To Provision for Leave Encashment 2,20,60,500

Settlement of Liability of 20X0-20X1

Provision for Leave Encashment A/c Dr. 65,00,000

To Cash / Bank 65,00,000

Q19: Acer Ltd. has 350 employees (same as a year ago). The average staff attrition rates as observed during past 10 years represents 6% per annum. Acer provides the following benefits to all its employees:

Annual bonus - during past 10 years.

Acer paid bonus to all employees who were in service during the entire financial year. Bonus was paid in June following the financial year-end. Amount of bonus for 20X1-20X2 paid in June 20X2 represented ₹ 1,25,000 per employee. Acer Ltd. used to increase amount of bonus based on official inflation rate which is 8.5% for 20X2-20X3, although there was no legal obligation to increase the bonus by such inflation rate.

How would Acer Ltd. recognize liabilities and expenses for these employee benefits as on 31st March, 20X3? Pass the journal entry to show the accounting treatment.

Ans:

Particulars	Amount (₹)
Bonus paid for 20X1-20X2	1,25,000 per employee
Bonus for 20X2-20X3 - increased by inflation of 8.5%: [1,25,000 x (100% + 8.5%)]	1,35,625 per employee
No. of employees in staff during the whole year [350 x (100-6%)]	329 employees
Provision for Bonus for 20X2-20X3	4,46,20,625

Accounting Treatment:

Provision for Bonus for 20X2-20X3

Employee Benefits Expenses A/c Dr. 4,46,20,625

To Provision for Bonus 20X2-20X3 4,46,20,625

Note:

It is given that the company is under no legal obligation to increase the bonus by the official inflation rate. However, the company has been increasing the bonus by the inflation rate over the past years. This has given rise to a constructive obligation for Acer Ltd. Informal practices, such as these, give rise to a constructive obligation where the entity has no realistic alternative but to pay employee benefits. Accordingly, provision is made for the amount considering the inflation rate.

Q20: A company pays each employee a lump-sum one-time benefit upon retirement. This benefit is computed based on the employee's years in service in the company and the final salary prior to retirement. To cover its liabilities from this remuneration, the company contributes 3% of annual gross salaries to the fund. Would this obligation represent a defined contribution plan or a defined benefit plan and why?

Ans: Defined benefit plan.

Reason: Although the Company pays contributions to the fund to cover its liabilities, amount of remuneration is determined in advance and Company will have to carry the risk in case the fund's assets are not sufficient to cover remuneration in full.

Q21: In accordance with applicable legislation, company contributes 12% and employees 12% of annual gross salaries to the provident and pension fund. Upon retirement, the employees will get the accumulated balance that is calculated based on employee's years of service and his average salary for past 15 years before retirement. The pension will be paid out of the state fund assets and the company has no further obligation except to make contributions. Would this obligation represent a defined contribution plan or a defined benefit plan?

Ans: Defined contribution plan.

Reason: Although employee's pension is determined in advance by the formula (and thus employees neither carry actuarial nor investment risks), Company's liability is limited to contributions to the fund. In this case, as pension will be paid out of the state fund, it is a state fund which carries all the risks.

Q22: Acer Ltd. provides lump-sum remuneration upon retirement to its employees. Remuneration is paid out of the fund to which Acer Ltd. contributes 12% of annual gross salaries. Contributions are made twice a year i.e. in November of the related financial year and in June after the financial year-end. Total annual gross salaries for 20X0-X1 amounted to ₹ 50 crores. Contribution made by Acer Ltd. in November 20X0 was ₹ 2.8 crores. Remuneration depends on the number of employee's service and amount of cash in the fund at retirement date (Acer Ltd. has no further obligations except for contributions).

How should this transaction appear in the financial statements of Acer Ltd. as of 31 March 20X1?

Ans: Calculation of accrual for contributions in 20X0-20X1:

Annual gross salaries in 20X0-20X1:	50.00 crores
Amount of total contributions for 20X0-20X1 (12%):	6.00 crores
Contributions already made in November 20X0:	2.80 crores
Accrual (₹ 6 crores - ₹ 2.8 crores)	3.20 crores

Accounting Treatment:

Employee Benefits Expenses Account	Dr.	6.00 crores
To Bank Account		2.80 crores
To Contribution Payable		3.20 crores

The contribution of ₹ 6 crores will be debited to the statement profit and loss. The contribution payable of ₹ 3.20 crores will appear as a liability as at 31st March, 20X1.

Q23: How will the following information be presented in the Balance Sheet of Udyog Ltd.?

Particulars	₹ in lakhs
PV of Defined Benefit Obligations	3,500
Fair Value of Plan Assets	3,332

Ans:

Particulars	₹ in lakhs
PV of Defined Benefit Obligations	3,500
Less: Fair Value of Plan Assets	(3,332)
Deficit, to be treated as Net Defined Benefit Liability under Non-current Liabilities as Provisions in the Balance Sheet	168

Q24: How will the following information be presented in the Balance Sheet of Udyog Ltd.?

Particulars	₹ in lakhs
PV of Defined Benefit Obligations	2,750
Fair Value of Plan Assets	2,975
Asset Ceiling	175

Ans:

Particulars	₹ in lakhs
PV of Defined Benefit Obligations	2,750
Less: Fair Value of Plan Assets	(2,975)
Surplus, to be treated as Net Defined Benefit Asset,	225
Asset Ceiling as per Ind AS 19	175
Least of above is Surplus to be treated as Net Defined Benefit Asset under Balance Sheet	175

Q25: A post-employment medical plan reimburses 40 percent of an employee's post-employment medical costs if the employee leaves after more than ten and less than twenty years of service and 50 per cent of those costs if the employee leaves after twenty or more years of service. How will the benefit be attributed to the years of service?

Ans: Under the Plan's Benefit Formula, the entity should attribute 4% of the present value of the expected medical costs ($40\% \div 10$ years) to each of the first ten years, and 1% ($10\% \div 10$ years) to each of the second ten years.

For employees expected to leave within 10 years, no benefit is attributed.

The Current Service Cost in each year reflects the probability that the employee may not complete the necessary period of service to earn part or all of the benefits.

Q26: A post-employment medical plan reimburses 10 percent of an employee's post-employment medical costs if the employee leaves after more than ten and less than twenty years of service and 50 per cent of those costs if the employee leaves after twenty or more years of service.

How will the benefit be attributed to the years of service?

Ans:

1. Service in later years will lead to a materially higher level of benefit than in earlier year. So, for employees expected to leave after 20 or more years, the entity should attribute benefit on a straight-line basis under Para 71. Service beyond 20 years will lead to no material amount of further benefits. So, the benefit attributed to each of the first 20 years will be 2.5% of the Present Value of the Expected Medical Costs ($50\% \div 20$ years).
2. For employees expected to leave between 10 and 20 years, the benefit attributed to each of the first 10 years is 1% ($10\% \div 10$ years) of the Present Value of the expected medical costs. For these employees, no benefit is attributed to service between the end of the tenth year and the estimated date of leaving.
3. For employees expected to leave within ten years, no benefit is attributed.
4. The Current Service Cost in each year reflects the probability that the employee may not complete the necessary period of service to earn part or all of the benefits.

Q27: Pratap Ltd. belongs to the ship-building industry. The company reviewed an Actuarial Valuation for the first time for its pension scheme which revealed a surplus of ₹ 60 lakhs. It wants to spread the same over the next 2 years by reducing the annual contribution to ₹ 20 lakhs instead of ₹ 50 lakhs.

The average remaining life of the employees is estimated to be 6 years. Advise the Company in line with Ind AS 19.

Ans: **Recognition:** As per Ind AS 19, any Actuarial Gains and Losses should be recognized as a re-measurement of the Net Defined Benefit Liability / (Asset) in "Other Comprehensive Income".

Measurement and Presentation: In the given case, the amount of surplus from Pension Scheme of ₹ 60 lakhs is an Actuarial Gain and should be recognized as a "re-measurement" in "Other Comprehensive Income", and not to be adjusted from the amount of annual contribution in future years.

Disclosure: The change relating to Actuarial Valuation for the Pension Scheme requires disclosure under Ind AS 8. Disclosures required by Ind AS 19 should also be made in the financial statements.

QUESTIONS FROM OTHER SOURCE

Q28: A company has a scheme for payment of settlement allowance to retiring employees. Under the scheme, retiring employees are entitled to reimbursement of certain travel expenses for class they are entitled to as per company rule and to a lump-sum payment to cover expenses on food and stay during the travel. Alternatively, employees can claim a lump sum amount equal to one month pay last drawn.

The company's contentions in this matter are:

- (i) Settlement allowance does not depend upon the length of service of employee. It is restricted to employee's eligibility under the Travel rule of the company or where option for lump-sum payment is exercised, equal to the last pay drawn.
- (ii) Since it is not related to the length of service of the employees, it is accounted for on claim basis.

State whether the contentions of the company are correct as per relevant Accounting Standard. Give reasons in support of your answer.

Ans: The present case falls under the category of defined benefit scheme of IND AS 19 "Employee Benefits". The said para encompasses cases where payment promised to be made to an employee at or near retirement presents significant difficulties in the determination of periodic charge to the statement of profit and loss. The contention of the Company that the settlement allowance will be accounted for on claim basis is not correct even if company's obligation under the scheme is uncertain and requires estimation. In estimating the obligation, assumptions may need to be made regarding future conditions and events, which are largely outside the company's control. Thus,

- (1) Settlement allowance payable by the company is a defined retirement benefit, covered by IND AS 19.
- (2) A provision should be made every year in the accounts for the accruing liability on account of settlement allowance. The amount of provision should be calculated according to actuarial valuation.
- (3) Where, however, the amount of provision so determined is not material, the company can follow some other method of accounting for settlement allowances.

Q29: Kumar Ltd., is in engineering industry. The company received an actuarial valuation for the first time for its pension scheme which revealed a surplus of ₹ 6 lakhs. It wants to spread the same over the next 2 years by reducing the annual contribution to ₹ 2 lakhs instead of ₹ 5 lakhs. The average remaining life of the employee is estimated to be 6 years.

You are required to advise the company.

Ans: According IND AS 19 "Employee Benefits", actuarial gains and losses should be recognized immediately in the OCI. Therefore, surplus of ₹ 6 lakhs in the pension scheme on its actuarial valuation is required to be credited to the OCI of the current year. Hence, Kumar Ltd. cannot spread the actuarial gain of ₹ 6 lakhs over the next 2 years by reducing the annual contributions to ₹ 2 lakhs instead of ₹ 5 lakhs. It has to contribute ₹ 5 lakhs annually for its pension schemes.

QUESTIONS FROM RTP/MTP/EXAMS/GFRS

Q30: A Ltd. prepares its financial statements to 31st March each year. It operates a defined benefit retirement benefits plan on behalf of current and former employees. A Ltd. receives advice from actuaries regarding contribution levels and overall liabilities of the plan to pay benefits. On 1st April, 2017, the actuaries advised that the present value of the defined benefit obligation was ₹ 6,00,00,000. On the same date, the fair value of the assets of the defined benefit plan was ₹ 5,20,00,000. On 1st April, 2017, the annual market yield on government bonds was 5%. During the year ended 31st March, 2018, A Ltd. made contributions of ₹ 70,00,000 into the plan and the plan paid out benefits of ₹ 42,00,000 to retired members. Both these payments were made on 31st March, 2018.

The actuaries advised that the current service cost for the year ended 31st March, 2018 was ₹ 62,00,000. On 28th February, 2018, the rules of the plan were amended with retrospective effect. These amendments meant that the present value of the defined benefit obligation was increased by ₹ 15,00,000 from that date.

During the year ended 31st March, 2018, A Ltd. was in negotiation with employee representatives regarding planned redundancies. The negotiations were completed shortly before the year end and redundancy packages were agreed. The impact of these redundancies was to reduce the present value of the defined benefit obligation by ₹ 80,00,000. Before 31st March, 2018, A Ltd. made payments of ₹ 75,00,000 to the employees affected by the redundancies in compensation for the curtailment of their benefits. These payments were made out of the assets of the retirement benefits plan.

On 31st March, 2018, the actuaries advised that the present value of the defined benefit obligation was ₹ 6,80,00,000. On the same date, the fair value of the assets of the defined benefit plan were ₹ 5,60,00,000.

Examine and present how the above event would be reported in the financial statements of A Ltd. for the year ended 31st March, 2018 as per Ind AS. **[RTP Nov 2018]**

Ans: All figures are ₹ in '000.

On 31st March, 2018, A Ltd. will report a net pension liability in the statement of financial position. The amount of the liability will be 12,000 (68,000 – 56,000).

For the year ended 31st March, 2018, A Ltd. will report the current service cost as an operating cost in the statement of profit or loss. The amount reported will be 6,200. The same treatment applies to the past service cost of 1,500.

For the year ended 31st March, 2018, A Ltd. will report a finance cost in profit or loss based on the net pension liability at the start of the year of 8,000 (60,000 – 52,000). The amount of the finance cost will be 400 (8,000 x 5%).

The redundancy programme represents the partial settlement of the curtailment of a defined benefit obligation. The gain on settlement of 500 (8,000 – 7,500) will be reported in the statement of profit or loss.

Other movements in the net pension liability will be reported as remeasurement gains or losses in other comprehensive income.

defined benefit obligation was ₹ 27,20,000. Provide a reconciliation from the opening balance to the closing balance for Plan assets and Defined benefit obligation. Also show how much amount should be recognised in the statement of profit and loss, other comprehensive income and balance sheet?

Ans: Reconciliation of Plan assets and Defined benefit obligation

	Plan Assets ₹	Defined benefit obligation ₹
Fair value/present value as at 1 st April 20X1	20,40,000	21,25,000
Interest @ 5%	1,02,000	1,06,250
Current service cost		5,10,000
Contributions received	4,25,000	-
Benefits paid	(2,55,000)	(2,55,000)
Return on gain (assets) (balancing figure)	68,000	-
Actuarial Loss (balancing figure)	-	2,33,750
Closing balance as at March 31,20X2	23,80,000	27,20,000

In the Statement of Profit and loss, the following will be recognised: ₹

Current service cost	5,10,000
Net interest on net defined liability (₹ 1,06,250 – ₹ 1,02,000)	4,250
Defined benefit re-measurements recognised in Other Comprehensive Income: ₹	
Loss on defined benefit obligation	(2,33,750)
Gain on plan assets	68,000
	(1,65,750)

In the Balance sheet, the following will be recognised : ₹

Net defined liability (₹ 27,20,000 – ₹ 23,80,000)	3,40,000
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Q33: Durable Industries previously had a defined pension plan (a defined benefit plan) under which the employees who joined before April 1, 2012 were enrolled. With respect to employees who joined on or after April 1, 2012 were all enrolled in the industrial pension plan. The Company found that the industrial pension plan was more beneficial to the employees than the defined pension plan. Hence, during 2018-19 it decided to change all the employees from defined pension plan to the industrial pension plan. The entity paid ₹ 5 crore to the employees who in turn agreed to forfeit the pension entitlement from the defined pension plan. The liability recognised in the financials, for the year ended March 31, 2018, with respect to the pension liability was ₹ 7 crores.

How should this be accounted in the financials for the year ended March 31, 2019 ? **[GFRS]**

Ans: The discontinuation of old defined pension plan is a curtailment event. Durable Industries is supposed to recognised gain or loss on settlement when the legally bind agreement has been reached, that eliminates all further legal or constructive obligations for the benefits provided under the pension plan in exchange for lump sum payment.

As per para 109 of IAS 19 'Employee Benefits', the gain or loss on a settlement is the difference between:

- the present value of the defined benefit obligation being settled, as determined on the date of settlement
- the settlement price, including any plan assets transferred and any payments made directly by the entity in connection with the settlement.

Accordingly, Durable Industries recognises a settlement gain of ₹ 2 crore (ie ₹ 7 crore – ₹ 5 crore) in its financial statements for the year ended 31st March, 2019.

Q34: At 1 April, 20X0, the fair value of the Plan Assets was ₹ 10,00,000. The Plan paid benefits of ₹ 1,90,000 and received contributions of ₹ 4,90,000 on 30 September, 20X0. The company computes the Fair Value of Plan Assets to be ₹ 15,00,000 as on 31 March, 20X1 and the Present Value of the Defined Benefit Obligation to amount to ₹ 14,79,200 on the same date. Actuarial losses on defined benefit obligation were ₹ 6,000.

Compounding happens half-yearly. The normal interest rate for 6 months period is 10% per annum, while the effective interest rate for 12 months period is based on the following data:

At 1 April, 20X0, the company made the following estimates based on market prices at that date:

Particulars	%
Interest and Dividend Income, after tax payable by the fund	9.25
<i>Add:</i> Realized and Unrealized Gains on Plan Assets (after tax)	2.00
<i>Less:</i> Administration Costs	(1.00)
Expected Rate of Return	10.25

Determine actual return and expected return on plan asset. Also compute amount to be recognized in 'Other Comprehensive Income' in this case. **[RTP May 2021]**

Ans: Computation of Expected Return on Plan Assets

Particulars	₹
Return on ₹ 10,00,000 for 20X0-20X1 at 10.25% = ₹ 10,00,000 x 10.25%	1,02,500
<i>Add:</i> Return on ₹ 3,00,000 for 6 months at 10% Normal Rate =	

[3,00,000 (Inflow ₹ 4,90,000 less Payments ₹ 1,90,000) x 10% x 6/12]	15,000
Expected Return on Plan Assets	1,17,500

Computation of Actual Return on Plan Assets

Particulars	₹
Fair Value of Plan Assets at the year-end – 31 March 20X1	15,00,000
Less: Fair Value of Plan Assets at the beginning – 1 April 20X0	(10,00,000)
Less: Contributions received during the year 20X0-20X1	(4,90,000)
Add: Benefits paid during the year 20X0-20X1	1,90,000
Actual Return on Plan Assets	2,00,000

Computation of Net Actuarial Gain

Particulars	₹
Actual Return on Plan Assets	2,00,000
Less: Expected Return on Plan Assets	(1,17,500)
Actuarial Gain on Plan Assets	82,500
Less: Actuarial Loss on Defined Benefit Obligation (given)	(6,000)
Net Actuarial Gain to be recognized in 'Other Comprehensive Income'	76,500

NOTES

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CHAPTER 22

FINANCIAL INSTRUMENTS (IND AS 32/107/109)

ILLUSTRATIONS BASED QUESTIONS FROM ICAI SM

FINANCIAL INSTRUMENT

Illustration 1: Trade receivables

A Ltd. makes sale of goods to customers on credit of 45 days. The customers are entitled to earn a cash discount @ 2% per annum if payment is made before 45 days and an interest @ 10% per annum is charged for any payments made after 45 days. Company does not have a policy of selling its debtors and holds them to collect contractual cash flows. Evaluate the financial instrument.

Solution: In the above case, the trade receivable recorded in books represents contractual cash flows that are solely payments of principal (and interest if paid beyond credit period). Further, Company's business model is to collect contractual cash flows.

Hence, this meets the definition of financial assets carried at amortised cost.

Illustration 2: Deposits

Z Ltd. (the 'Company') makes sale of goods to customers on credit. Goods are carried in large containers for delivery to the dealers' destinations. All dealers are required to deposit a fixed amount of ₹ 10,000 as security for the containers, which is returned only when the contract with Company terminates. The deposits carry 8% per annum which is payable only when the contract terminates. If the containers are returned by the dealers in broken condition or any damage caused, then appropriate adjustments shall be made from the deposits at the time of settlement. How would such deposits be treated in books of the dealers?

Solution: In this case, deposits are receivable in cash at the end of contract period between the dealer and the Company. These deposits represent cash flows that are solely payments of principal and interest. Moreover, these deposits normally cannot be sold. Hence, they meet the definition of financial asset carried at amortised cost

Illustration 3: Perpetual debt instruments

A Ltd. issues a bond at principal amount of CU 1000 per bond. The terms of bond require annual payments in perpetuity at a stated interest rate of 8 per cent applied to the principal amount of CU 1000. Assuming 8 per cent to be the market rate of interest for the instrument when it was issued, the issuer assumes a contractual obligation to make a stream of future interest payments having a fair value (present value) of CU1,000 on initial recognition. Evaluate the financial instrument in the hands of both the holder and the issuer.

Solution

For the Holder – ₹right to receive cash in future – classifies to be a financial asset

For the Issuer – contractual obligation to pay cash in future – classifies to be a financial liability.

Illustration 4: Creditors for sale of goods

A Ltd. (the 'Company') makes purchase of steel for its consumption in normal course of business. The purchase terms provide for payment of goods at 30 days credit and interest payable @12% per annum for any delays beyond the credit period. Analyse the nature of this financial instrument.

Solution: A Ltd. has entered into a contractual arrangement for purchase of goods at a fixed consideration payable to the creditor. A contractual arrangement that provides for payment in fixed amount of cash to another entity meets the definition of financial liability.

Illustration 5: Contract for exchange on unfavourable conditions

A Ltd. (the 'Company') makes a borrowing for INR 10 lacs from RBC Bank, with annual installments of INR 10 lacs and an annual interest rate of 12% per annum. Now, Company defaults at the end of 5th year and consequently, a rescheduling of the payment schedule is made beginning 6th year onwards. The Company is required to pay INR 1,300,000 at the end of 6th year for one time settlement, in lieu of defaults in payments made earlier.

(a) Does the above instrument meet definition of financial liability? Please explain.

(b) Analyse the differential amount to be exchanged for one-time settlement.

Solution

(a) A Ltd. has entered into an arrangement wherein against the borrowing, A Ltd. has contractual obligation to make stream of payments (including interest and principal). This meets definition of financial liability.

(b) Let's compute the amount required to be settled and any differential arising upon one time settlement at the end of 6th year –

◆ Loan principal amount = ₹ 10,00,000

◆ Amount payable at the end of 6th year = ₹ 12,54,400 [10,00,000 * 1.12 * 1.12 (Interest for 5th & 6th year in default plus principal amount)]

◆ One time settlement = INR 13,00,000

◆ Additional amount payable = ₹ 45,600

The above represents a contractual obligation to pay cash against settlement of a financial liability under conditions that are unfavourable to A Ltd. (owing to additional amount payable in comparison to amount that would have been paid without one time settlement). Hence, the rescheduled arrangement meets definition of 'financial liability'.

Illustration 6: Derivative contract:

Entity – B Ltd writes an option contract for sale of shares of Target Ltd. at a fixed price of ₹ 100 per share to C Ltd. This option is exercisable anytime for a period of 90 days ('American option'). Evaluate this under definition of financial instrument. Market price of shares is ₹ 120.

Solution: In the above case – B Ltd has written an option, which if exercised by C Ltd. will result in B Ltd. selling equity shares of Target Ltd. for fixed cash of ₹ 100 per share. Such option will be exercised

by C Ltd. only if the market price of shares of Target Ltd. increases beyond ₹ 100, thereby resulting in contractual obligation over B Ltd. to settle the contract under potential unfavourable terms.

In the above case, market price is already ₹ 120 which means that if option is exercised by C Ltd, then B Ltd shall buy shares from the market at ₹ 120 per share and sell at ₹ 100, thereby resulting in a loss or exchange at unfavourable terms to B Ltd. Hence, it meets the definition of financial liability in books of B Ltd.

The additional question that arises here is the nature of this financial liability and if it meets the definition of derivative. A derivative is a financial instrument that meets following conditions –

1. Its value changes in response to change in specified variable like interest rate, equity index, commodity price, etc. If the variable is non-financial, it is not specific to party to the contract
2. It requires no or little initial net investment
3. It is settled at a future date.

Evaluating the above instrument, B Ltd. has written an option whose value changes based on change in market price of equity share, it requires no initial net investment and is settled at a future date (anytime in 90 days). Hence, it meets definition of derivative financial liability in books of B Ltd.

Illustration 7: Settlement in variable number of shares

Target Ltd. took a borrowing from Z Ltd. for ₹10,00,000. Z Ltd. enters into an arrangement with Target Ltd. for settlement of the loan against issue of a certain number of equity shares of Target Ltd. whose value equals ₹10,00,000. For this purpose, fair value per share (to determine total number of equity shares to be issued) shall be determined based on the market price of the shares of Target Ltd. at a future date, upon settlement of the contract. Evaluate this under definition of financial instrument.

Solution: In the above scenario, Target Ltd. is under an obligation to issue variable number of equity shares equal to a total consideration of ₹ 10,00,000. Hence, equity shares are used as currency for purpose of settlement of an amount payable by Target Ltd. Since this is variable number of shares are to be issued in a non-derivative contract for fixed amount of cash, it tantamounts to use of equity shares as 'currency' and hence, this contract meets definition of financial liability in books of Target Ltd.

NON FINANCIAL CONTRACTS

Illustration 8: Executory contract:

Entity XYZ enters into a fixed price forward contract to purchase 10,00,000 kilograms of copper in accordance with its expected usage requirements.

The contract permits XYZ to take physical delivery of the copper at the end of 12 months or to pay or receive a net settlement in cash, based on the change in fair value of copper. Is the contract covered under Financial Instruments standard?

Solution: The above contract needs to be evaluated to determine whether it falls within the scope of the financial instruments standards. The contract is a derivative instrument because there is no initial net investment, the contract is based on the price of copper and it is to be settled at a future date.

However, if XYZ intends to settle the contract by taking delivery and has no history for similar contracts of settling net in cash, or of taking delivery of the copper and selling it within a short period after delivery for the purpose of generating a profit from short term fluctuations in price or dealer's margin, the contract is not accounted for as a derivative under Ind AS 109.

Instead, it is accounted for as an executory contract and if it becomes onerous then Ind AS 37 would apply.

Illustration 9: Contracts for purchase or sale of non-financial item Key terms of contracts to buy/sell non-financial items

Company Z is engaged in the business of importing oil seeds for further processing as well as trading purposes. It enters into the following types of contracts as on 1 October 20X1:

Particulars	Contract 1	Contract 2	Contract 3
Nature of Contract	Import of oil seeds from a foreign supplier	Purchase of oil seeds from a domestic producer / supplier	Contract to sell oil seeds on the commodity exchange
Quantity and rate	100 MT at USD 400 per MT to be delivered as on 31 March 20X2	50 MT at ₹ 30,000 per MT to be delivered as on 31 January 20X2	50 MT at USD 450 per MT, maturing as on 15 January 20X2
Net settlement clause included in the contract	Yes	Yes	Yes
Net settlement in practice for similar contracts	There have also been several instances of the oil seeds being sold prior to or shortly after taking delivery. These instances of net settlement constitute approximately 30 per cent of the value of total import contracts.	Yes – company Z has net settled some of the domestic purchase contracts. However, these instances constitute only 1 per cent of the total domestic purchase contracts in value. The remaining contracts are settled by taking delivery of oil seeds which are used for further processing.	Yes – these contracts are required to be net settled with the exchange on the maturity date. Company Z enters into these types of derivative contracts to hedge the risks on its domestic oil seeds purchase contracts

Company Z is required to determine if the contracts entered into for purchase and sale of oil seeds are derivatives within the scope of Ind AS 109 or are executory contracts outside the scope of Ind AS 109.

Solution

Contract 1: The following factors indicate that this contract does not meet the 'own use' exemption:

- The contract permits net settlement, and
- There is a past practice of a significant proportion (30 per cent in this illustration) of similar contracts being settled on a net basis either in cash or by sale of the oil seeds prior to delivery/shortly after taking delivery.

Therefore, this contract would fall within the scope of Ind AS 109 and should be recognised as a derivative instrument as on 1 October 20X1. The contract would be in the nature of a forward contract to buy 100 MT of oil seeds as on 31 March 20X2 at USD 400 per MT. Company Z would have to recognise the fair value changes (based on change in forward purchase rate) on this contract in the statement of profit and loss at each reporting date.

Contract 2: Contract 2 also permits net settlement in cash. Further, there have been some instances of similar domestic purchase contracts being settled net in cash in the past. However, these have been infrequent in nature and insignificant in proportion to the total value of similar contracts (i.e. 1 percent in this illustration).

Company Z is in the practice of taking delivery of the oil seeds purchased under similar contracts and using them for further processing in its plants.

This indicates that the domestic purchase contract meets the criteria for the 'own-use' exemption and should be considered as an executory contract.

Therefore, this contract would not fall within the scope of Ind AS 109.

Contract 3: This contract is in the nature of a derivative contract transacted on a commodity exchange and is required to be net settled in cash on maturity. Therefore, this derivative contract would be covered by Ind AS 109 and required to be classified and measured at FVTPL.

FINANCIAL LIABILITIES Vs EQUITY INSTRUMENT

Illustration 10: Preference shares with non-cumulative dividend

Silver Ltd. issued irredeemable preference shares with face value of ₹ 10 each and premium of ₹ 90. These shares carry dividend @ 8% per annum, however dividend is paid only when Silver Ltd declares dividend on equity shares. Analyse the nature of this instrument

Solution

In the above case, two main characteristics of the preference shares are:

1. Preference shares carry dividend, which is payable only when Company declares dividend on equity shares
2. Preference share are irredeemable.

Analysing the definition of equity, an instrument meets definition of equity if:

1. It contains no contractual obligation to pay cash; and
2. Where an instrument shall be settled in own equity instruments, it's a non-derivative contract that will be settled only by issue of fixed number of shares or a derivative contract that will be settled by issue of fixed number of shares for a fixed amount of cash.

In the above instrument, there is no contractual obligation on the Company to pay cash since –

1. Face value is not redeemable (except in case of liquidation); and
2. Dividend is payable only if Company declares dividend on equity shares. Since dividend on equity shares is discretionary and the Company can choose not to pay, Company has an unconditional right to avoid payment of cash on preference shares also.

Hence, preference shares meet definition of equity instrument.

Illustration 11: Non-derivative contract to be settled in own equity instruments

A Ltd. invests in compulsorily convertible preference shares (CCPS) issued by its subsidiary – B Ltd. at ₹ 1,000 each (₹ 10 face value + ₹ 990 premium). Under the terms of the instrument, each CCPS is compulsorily convertible into one equity share of B Ltd at the end of 5 years. Such CCPS carry dividend @ 12% per annum, payable only when declared at the discretion of B Ltd. Evaluate this under definition of financial instrument

Solution: B Ltd. has issued CCPS which provide for –

- (a) Conversion into fixed number of equity shares, ie, one equity share for every CCPS
- (b) Non-cumulative dividends.

Applying the definition of 'equity' under Ind AS 32 –

- (a) There is no contractual obligation to deliver cash or other financial asset. Dividends are payable only when declared and hence, at the discretion of the Issuer – B Ltd., thereby resulting in no contractual obligation over B Ltd.
- (b) Conversion is into a fixed number of equity shares.

Hence, it meets definition of equity instrument and shall be classified as such in books of B Ltd.

Illustration 10: Derivative contract to be settled in own equity instruments

A Ltd. issues warrants to all existing shareholders entitling them to purchase additional equity shares of A Ltd. (with face value of ₹ 100 per share) at an issue price of ₹ 150 per share. Evaluate whether this constitutes an equity instrument or a financial liability?

Solution In this case, Company A Ltd. has issued warrants entitling the shareholders to purchase equity shares of the Company at a fixed price. Hence, it constitutes a contractual arrangement for issuance of fixed number of shares against fixed amount of cash.

Now, evaluating this contract under definition of derivative –

- (a) The value of warrant changes in response to change in value of underlying equity shares;
- (b) This involves no initial net investment
- (c) It shall be settled at a future date.

Hence, this warrant meets the definition of derivative.

Applying definition of equity under Ind AS 32, a derivative contract that will be settled by exchange of fixed number of equity shares for fixed amount of cash meets definition of equity instrument. The above contract is derivative contract that will be settled by issue of fixed number of own equity instruments by A Ltd. for fixed amount of cash and hence, meets definition of equity instrument.

Illustration 12: Redeemable preference shares with mandatory fixed dividend

A Company has issued 6% mandatorily redeemable preference shares with mandatory fixed dividends. Evaluate whether such preference shares are an equity instrument or a financial liability to the issuer entity?

Solution: In determining whether a mandatorily redeemable preference share is a financial liability or an equity instrument, it is necessary to examine the particular contractual rights attaching to the instrument's principal and return components.

The instrument in this example provides for mandatory periodic fixed dividend payments and mandatory redemption by the issuer for a fixed amount at a fixed future date. Since there is a contractual obligation to deliver cash (for both dividends and repayment of principal) to the shareholder that cannot be avoided, the instrument is a financial liability in its entirety.

Illustration 13: Redeemable preference shares with mandatory cumulative dividend

A Ltd. (issuer) issues preference shares to B Ltd. (holder). Those preference shares are redeemable at the end of 10 years from the date of issue and entitle the holder to a cumulative dividend of 15% p.a. The rate of dividend is commensurate with the credit risk profile of the issuer. Examine the nature of the financial instrument.

Solution: This instrument provides for mandatory fixed dividend payments and redemption by the issuer for a fixed amount at a fixed future date. Since there is a contractual obligation to deliver cash (for both dividends and repayment of principal) to the preference shareholder that cannot be avoided, the instrument is a financial liability in its entirety.

Illustration 14: Redeemable debentures with discretionary dividend

X Co. Ltd. (issuer) issues debentures to Y Co. Ltd. (holder). Those debentures are redeemable at the end of 10 years from the date of issue. Interest of 15% p.a. is payable at the discretion of the issuer. The rate of interest is commensurate with the credit risk profile of the issuer. Examine the nature of the financial instrument.

Solution: This instrument has two components – (1) mandatory redemption by the issuer for a fixed amount at a fixed future date, and (2) interest payable at the discretion of the issuer.

The first component is a contractual obligation to deliver cash (for repayment of principal with or without premium, as per terms) to the debenture holder that cannot be avoided. This component of the instrument is a financial liability.

The other component, discretionary interest is an equity feature because issuer can avoid payment of cash or another financial asset in this respect.

Therefore, this instrument is concluded to be a compound financial instrument.

Illustration 15: Perpetual loan with mandatory interest

P Co. Ltd. (issuer) takes a loan from Q Co. Ltd. (holder). The loan is perpetual and entitles the holder to fixed interest of 8% p.a. Examine the nature of the financial instrument.

Solution: This instrument has two components – (1) mandatory interest by the issuer for a fixed amount at a fixed future date, and (2) perpetual nature of the principal amount.

The first component is a contractual obligation to deliver cash (for payment of interest) to the lender that cannot be avoided. This component of the instrument is a financial liability.

The other component, perpetual principal, is an equity feature because issuer is not required to pay cash or another financial asset in this respect.

Therefore, this instrument is concluded to be a compound financial instrument.

Illustration 16: Optionally convertible redeemable preference shares

D Ltd. issues preference shares to G Ltd. The holder has an option to convert these preference shares to equity instruments of the issuer anytime up to a period of 10 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 10 years. Examine the nature of the financial instrument.

Solution: This instrument has two components – (1) contractual obligation that is conditional on holder exercising its right to redeem, and (2) conversion option with the holder.

The first component is a financial liability because the entity does not have the unconditional right to avoid delivering cash.

The other component, conversion option with the holder, is an equity feature if the “fixed for fixed” test is satisfied. If the conversion option does not fulfil that test, say, because the conversion ratio varies in response to an underlying variable, it is a derivative liability.

Such an instrument is called a “hybrid instrument”.

Illustration 17 Settlement alternative is non-financial obligation

LMN Ltd. issues preference shares to PQR Ltd. These preference shares are redeemable at the end of 5 years from the date of issue.

The instrument also provides a settlement alternative to the issuer whereby it can transfer a particular commercial building to the holder, whose value is estimated to be significantly higher than the cash settlement amount. Examine the nature of the financial instrument

Solution: Such preference shares are financial liability because the entity can avoid a transfer of cash or another financial asset only by settling the non-financial obligation.

INSTRUMENTS THAT WILL OR MAY BE SETTLED IN OWN EQUITY:**Illustration 18: Derivative contract to be settled in own equity instruments**

A Ltd. issues warrants to all existing shareholders entitling them to purchase additional equity shares of A Ltd. (with face value of ₹ 100 per share) at an issue price of ₹ 150 per share. Evaluate whether this constitutes an equity instrument or a financial liability?

Solution: In this case, Company A Ltd. has issued warrants entitling the shareholders to purchase equity shares of the Company at a fixed price. Hence, it constitutes a contractual arrangement for issuance of fixed number of shares against fixed amount of cash.

Now, evaluating this contract under definition of derivative –

- The value of warrant changes in response to change in value of underlying equity shares;
- This involves no initial net investment
- It shall be settled at a future date.

Hence, this warrant meets the definition of derivative.

Applying definition of equity under Ind AS 32, a derivative contract that will be settled by exchange of fixed number of equity shares for fixed amount of cash meets definition of equity instrument. The above contract is derivative contract that will be settled by issue of fixed number of own equity instruments by A Ltd. for fixed amount of cash and hence, meets definition of equity instrument.

Illustration 19: Conversion into a number of equity instruments equivalent to a fixed value

CBA Ltd. issues convertible debentures to RQP Ltd. for a subscription amount of ₹ 100 crores. Those debentures are convertible after 5 years into equity shares of CBA Ltd. using a pre-determined formula. The formula is:

$$\frac{100 \text{ crores} \times (1 + 10\%)^5}{\text{Fair value on the date of conversion}}$$

Examine the nature of the financial instrument.

Solution: Such a contract is a financial liability of the entity even though the entity can settle it by delivering its own equity instruments. It is not an equity instrument because the entity uses a variable number of its own equity instruments as a means to settle the contract. The underlying thought behind this conclusion is that the entity is using its own equity instruments 'as currency'.

Illustration 20: Conversion into a fixed number of equity instruments

DF Ltd. issues convertible debentures to JL Ltd. for a subscription amount of ₹ 100 crores. Those debentures are convertible after 5 years into 15 crore equity shares of ₹ 10 each. Examine the nature of the financial instrument.

Solution: This contract is an equity instrument because changes in the fair value of equity shares arising from market related factors do not affect the amount of cash or other financial assets to be paid or received, or the number of equity instruments to be received or delivered.

Illustration 21: Written option for a fixed or variable number of equity instruments

ST Ltd. purchases an option from AT Ltd. entitling the holder to subscribe to equity shares of issuer at a fixed exercise price of ₹ 50 per share at any time during a period of 3 months. Holder paid an initial premium of ₹ 2 per option. Examine whether the financial instrument will be classified as equity.

Solution: For the issuer AT Ltd., this option is an equity instrument as it will be settled by the exchange of a fixed amount of cash for a fixed number of its own equity instruments.

If, on the other hand, if the exercise price of the option was variable, say benchmarked to an index or a variable, other than the market price of equity shares of AT Ltd., the written option will be classified as a “financial liability” in the books of the issuer, AT Ltd.

In the above illustration, if the instrument is classified as “equity instrument”, any consideration received (such as the premium received for a written option or warrant on the entity's own shares) is added directly to equity. It must also be noted that changes in the fair value of an equity instrument are not recognised in the financial statements. (Ind AS 32.22)

On the contrary, if the derivative instrument (i.e. the written option) is classified as “financial liability”, any consideration received is measured initially at fair value and subsequently also at fair value, with fair value changes recognised in profit or loss.

Illustration 22: Written option with multiple exercise prices

WC Ltd. writes an option in favour of GT Ltd. wherein the holder can purchase issuer's equity instruments at prices that fluctuate in response to the share price of issuer.

As per the terms, if the share price of issuer is less than ₹ 50 per share, option can be exercised at ₹ 40 per share. If the share price is equal to or more than ₹ 50 per share, option can be exercised at ₹ 60 per share. Explain the nature of the financial instrument.

Solution: As the contract will be settled by delivery of fixed number of instruments for a variable amount of cash, it is a financial liability.

Illustration 23: Written put option over non-controlling interests

Parent P holds a 70% controlling interest in Subsidiary S. The remaining 30% is held by Entity Z. On 1 January 20X1, P writes an option to Z which grants Z the right to sell its shares to Parent P on 31 December 20X2 for ₹ 1,000. Parent P receives a payment of ₹ 100 for the option. The applicable discount rate for the put liability is determined to be 12%. State by which amount the financial instrument will be recognised and under which category.

Solution: On 1 January 20X1, the present value of the (estimated) exercise price is ₹ 797 (₹ 1,000 discounted over 2 years at 12%).

Accordingly, P will recognise a financial liability of ₹ 797 and the difference between cash received i.e. ₹ 1000 and the financial liability of ₹ 797 will be debited to equity.

Illustration 24: Share swap arrangements

Acquirer Ltd. enters into an arrangement with shareholders of Target Ltd. wherein Acquirer Ltd. will purchase shares of Target Ltd. in a share swap arrangement. The share swap ratio is agreed as 1:5 i.e. 1 equity share of Acquirer Ltd. for every 5 equity shares held in Target Ltd. Examine whether the financial instrument will be classified as equity.

Solution: Such arrangements will not meet the condition for classification as “equity instrument” since the contract will be settled by delivery of fixed number of Acquirer Ltd.’s own equity instruments against a variable amount of cash i.e. market value of Target Ltd.’s equity shares.

Such a contract will likely result in a derivative liability or asset for both the parties.

Illustration 25: Conversion ratio changes with time

On 1 January 20X1, NKT Ltd. subscribes to convertible preference shares of VT Ltd. The conversion ratio varies as below:

Conversion upto 31 March 20X1: 1 equity share of VT Ltd. for each preference share held

Conversion upto 30 June 20X1: 1.5 equity share of VT Ltd. for each preference share held

Conversion upto 31 December 20X1: 2 equity share of VT Ltd. for each preference share held.

Examine whether the financial instrument will be classified as equity.

Solution:

The convertible preference shares can be classified as “equity instrument” in the books of the issuer, VT Ltd. The conversion ratio doesn’t change corresponding to any underlying variable, it only varies in response to passage of time which is a certain event and hence fixed.

Illustration 26: Conversion ratio changes to protect rights of convertible instrument holders

On 1 January 20X1, HT Ltd. subscribes to convertible preference shares of RT Ltd. The preference shares are convertible in the ratio of 1:1.

The terms of the instrument entitle HT Ltd. to proportionately more equity shares of RT Ltd. in case of a stock split or bonus issue. Examine whether the financial instrument will be classified as equity.

Solution: The convertible preference shares can be classified as “equity instrument” in the books of the issuer, RT Ltd. The variability in the conversion ratio is only to protect the rights of the holder of convertible instrument vis-à-vis other equity shareholders.

The conversion was always intended to be in a fixed ratio and hence the holder is exposed to the change in equity value. The variability is brought in to maintain holder’s exposure in line with other holders.

Illustration 27: Conversion ratio changes if issuer subsequently issues shares to others at a lower price

On 1 January 20X1, PG Ltd. subscribes to convertible preference shares of BG Ltd. at ₹ 100 per preference share. The preference shares are convertible in the ratio of 10:1 i.e. 10 equity shares for each preference share held. On a fully diluted basis, PG Ltd. is entitled to 30% stake in BG Ltd.

If subsequent to the issuance of these convertible preference shares, BG Ltd. issues any equity instruments at a price lower than ₹ 10 per share, conversion ratio will be changed to compensate PG Ltd. for dilution in its stake below the expected dilution at a price of ₹ 10 per share. Examine the nature of the financial instrument.

Solution: The convertible preference shares will be classified as “financial liability” in the books of the issuer, BG Ltd. The variability in the conversion ratio underwrites the return on preference shares and not just protects the rights of convertible instrument holders vis-à-vis equity shareholders.

Illustration 28: Conversion ratio is variable in a narrow range

On 1 January 20X1, NG Ltd. subscribes to convertible preference shares of AG Ltd. at ₹ 100 per preference share. On a fully diluted basis, NG Ltd. is entitled to 30% stake in AG Ltd.

The preference shares are convertible at fair value, subject to, NG Ltd.’s stake not going below 15% and not going above 40%. Examine the nature of the financial instrument.

Solution: The convertible preference shares will be classified as “financial liability” in the books of the issuer, AG Ltd. The variability in the conversion ratio underwrites the return on preference shares to an extent and also restricts that return. The preference shareholder is not entitled to residual net assets of the issuer.

Illustration 29: Instrument convertible only at the option of issuer

XYZ Ltd. issues optionally convertible debentures with the following terms:

The debentures carry interest at the rate of 7% p.a.

Issuer has option to either:

Convert the instrument into a fixed number of its own shares at any time, or redeem the instrument in cash at any time. The redemption price is the fair value of the fixed number of shares into which the instrument would have converted if it had been converted.

The holder has no conversion or redemption options.

Debentures have a tenor of 12 years and, if not converted or redeemed earlier, will be repaid in cash at maturity, including accrued interest, if any.

Examine the nature of the financial instrument.

Solution: The issuer has the ability to convert the debentures into a fixed number of its own shares at any time. The issuer, therefore, has the ability to avoid making a cash payment or settling the debentures in a variable number of its own shares. Therefore, such a financial instrument is likely to be classified as equity.

However, it must be noted that mere existence of a right to avoid payment of cash is not conclusive. The instrument is to be accounted for as per its substance and hence it needs to be seen whether the conversion option is substantive.

In this particular situation, the issuer will need to determine whether it is favourable to exercise the conversion option or redemption option. In case of latter, the instrument will be classified as a financial liability (a hybrid instrument, whose measurement is dealt with in a subsequent section).

Illustration 30: Conversion ratio changes under independent scenarios

On 1 January 20X1, STAL Ltd. subscribes to convertible preference shares of ATAL Ltd.

The preference shares are convertible as below:

Convertible 1:1 if another strategic investor invests in the issuer within one year

Convertible 1.5:1: if an IPO is successfully completed within 2 years

Convertible 2:1: if a binding agreement for sale of majority stake by equity shareholders is entered into within 3 years

Convertible 3:1: if none of these events occur in 3 years' time.

Examine whether the financial instrument will be classified as equity.

Solution: In this case the four events can be viewed as discrete because the achievement of each one of these can occur independently of the other (as they relate to different periods). The arrangement can therefore be considered to be economically equivalent to four separate contracts. The price per share and the amount of shares to be issued is fixed in each of these discrete periods, with each event relating to a different year and therefore a separate risk. The “fixed for fixed” test is therefore met.

The instrument is therefore classified as “equity instrument”.

Illustration 31: Conversion ratio changes under inter-dependent scenarios

On 1 January 20X1, RHT Ltd. subscribes to convertible preference shares of RDT Ltd.

The preference shares are convertible as below:

Convertible 1:1 if another strategic investor invests at an enterprise valuation (EV) of USD 100 million.

Convertible 1.5:1: if another strategic investor invests at EV of USD 150 million

Convertible 2:1: if another strategic investor invests at EV of USD 200 million

Convertible 3:1: if no strategic investment is made within a period of 3 years

Examine the nature of the financial instrument.

Solution: The four events are interdependent because the second event cannot be met without also meeting the first event, and the third event cannot be met unless the first two are met.

Therefore, this contract should be treated as a single instrument when applying the “fixed for fixed” test. The test is then failed because the number of shares to be exchanged for cash are variable.

Illustration 32: Foreign currency convertible bond

Entity A issues a bond with face value of USD 100 and carrying a fixed coupon rate of 6% p.a. Each bond is convertible into 1,000 equity shares of the issuer. Examine the nature of the financial instrument.

Solution: While the number of equity shares is fixed, the amount of cash is not. The variability in cash arises on account of fluctuation in exchange rate of INR-USD. Such a foreign currency convertible bond (FCCB) will qualify the definition of “financial liability”.

However, Ind AS 32.11 provides, “the equity conversion option embedded in a convertible bond denominated in foreign currency to acquire a fixed number of the entity’s own equity instruments is an equity instrument if the exercise price is fixed in any currency.”

Accordingly, FCCB will be treated as an “equity instrument”.

PUTTABLE INSTRUMENTS

Illustration 33: Cap on amount payable on liquidation

ABC Ltd. has two classes of puttable shares – Class A shares and Class B shares. On liquidation, Class B shareholders are entitled to a pro rata share of the entity’s residual assets up to a maximum of ₹ 10,000,000. There is no limit to the rights of the Class A shareholders to share in the residual assets on liquidation. Examine the nature of the financial instrument.

Solution: The cap of ₹ 10,000,000 means that Class B shares do not have entitlement to a pro rata share of the residual assets of the entity on liquidation. They cannot therefore be classified as equity.

Illustration 34: Investment manager’s share in a mutual fund

Mutual Fund X has an Investment Manager Y. At the inception of the fund, Y had invested a nominal or token amount in units of X. Such units rank last for repayment in the event of liquidation. Accordingly, they constitute the most subordinate class of instruments. Examine the nature of the financial instrument.

Solution: Resultantly, the units held by other unit holders are classified as financial liability as they are not the most subordinate class of instruments – they are entitled to pro rate share of net assets on liquidation, and their claim has a priority over claims of Y.

It may be noted that the most subordinate class of instruments may consist of two or more legally separate types of instruments.

Illustration 35: Differential voting rights

T Motors Ltd. has issued puttable ordinary shares and puttable ‘A’ ordinary shares whereby holders of ordinary shares are entitled to one vote per share whereas holders of ‘A’ ordinary shares are not entitled to any voting rights. The holders of two classes of shares are equally entitled to receive share in net assets upon liquidation. Examine whether the financial instrument will be classified as equity.

Solution: Neither of the two classes of puttable shares can be classified as equity, as they do not have identical features due to the difference in voting rights. It is not possible for T Motors Ltd. to achieve equity classification of the ordinary shares by designating them as being more subordinate than the ‘A’

ordinary shares, as this does not reflect the fact that the two classes of share are equally entitled to share in entity's residual assets on liquidation.

Illustration 36: Conversion into a variable number of equity instruments

S Ltd. has issued a class of puttable ordinary shares to T Ltd. Besides the put option (which is consistent with other classes of ordinary shares), T Ltd. is also entitled to convert the class of ordinary shares held by it into equity instruments of S Ltd. whose number will vary as per the market value of S Ltd. Examine whether the financial instrument will be classified as equity.

Solution The shares cannot qualify for equity classification in their entirety as in addition to the put option there is also a contractual obligation to settle the instrument in variable number of entity's own equity instruments.

Illustration 37: Management fee contract between issuer and puttable instrument holder

P Ltd. has issued puttable ordinary shares to Q Ltd. Q Ltd. has also entered into an asset management contract with P Ltd. whereby Q Ltd. is entitled to 50% of the profit of P Ltd. Normal commercial terms for similar contracts will entitle the service provider to only 4%-6% of the net profits. Examine whether the financial instrument will be classified as equity.

The puttable ordinary shares cannot qualify for equity classification as (a) in addition to the put option, there is another contract between the issuer (P Ltd.) and holder of puttable instrument (Q Ltd.) whose cash flows are based substantially on profit or loss of issuer, (b) whose contractual terms are not similar to a contract between a non-instrument holder and issuer and (c) it has the effect of substantially restricting return on puttable ordinary shares.

TREASURY SHARES

Illustration 38:

A Limited buys back 1,00,000 of its own equity shares in the market for ₹5 per share. The shares will be held as treasury shares to enable A Limited to satisfy its obligations under its employee share option scheme.

Solution: The following entry will be made to recognise the purchase of the treasury shares as a deduction from equity:

Dr Equity ₹ 5,00,000

Cr Cash ₹ 5,00,000

ACCOUNTING TREATMENT OF INTEREST, DIVIDEND, LOSSES AND GAINS

Illustration 39:

Entity B places its privately held ordinary shares that are classified as equity with a stock exchange and simultaneously raises new capital by issuing new ordinary shares on the stock exchange. Transaction costs are incurred in respect of both transactions. Determine the treatment of the incurred transactions costs?

Solution: Since the issue of new shares is the issue of an equity instrument, but the placing of the existing equity instruments with the exchange is not, the transaction costs will need to be allocated between the two transactions.

Transaction costs in respect of the new shares issued will be recognised in equity whereas the transaction costs incurred in placing the existing shares with the stock exchange will be recognised in profit or loss.

Illustration 40:

An entity issues a non-redeemable callable subordinated bond with a fixed 6% coupon. The coupon can be deferred in perpetuity at the issuer's option. The issuer has a history of paying the coupon each year and the current bond price is predicated on the holders expectation that the coupon will continue to be paid each year. In addition the stated policy of the issuer is that the coupon will be paid each year, which has been publicly communicated. Evaluate?

Solution: Although there is both pressure on the issuer to pay the coupon, to maintain the bond price, and a constructive obligation to pay the coupon, there is no contractual obligation to do so. Therefore the bond is classified as an equity instrument.

Illustration 41:

A zero coupon bond is an instrument where no interest is payable during the instrument's life and that is normally issued at a deep discount to the value at which it will be redeemed. Evaluate?

Solution: Although there are no mandatory periodic interest payments, the instrument provides for mandatory redemption by the issuer for a determinable amount at a fixed or determinable future date. Since there is a contractual obligation to deliver cash for the value at which the bond will be redeemed, the instrument is classified as a financial liability.

OFFSETTING A FINANCIAL ASSET AND A FINANCIAL LIABILITY

Illustration 42: offsetting

Company X owes Company Y ₹20 million at the end of 31 March. As part of another contract, Company Y owes Company X ₹15 million at 31 March. Company X has the legal right to set off the asset and liability but historically, Company X has settled one month after Company Y settles. Can Company X offset the asset and liability?

Solution: No, since Company X cannot demonstrate the intention to settle net or simultaneously for all payments.

COMPOUND FINANCIAL INSTRUMENTS

Illustration 43: Perpetual loan with mandatory interest

P Co. Ltd. (issuer) takes a loan from Q Co. Ltd. (holder). The loan is perpetual and entitles the holder to fixed interest of 8% p.a. Examine the nature of the financial instrument.

Solution: This instrument has two components – (1) mandatory interest by the issuer for a fixed amount at a fixed future date, and (2) perpetual nature of the principal amount.

The first component is a contractual obligation to deliver cash (for payment of interest) to the lender that cannot be avoided. This component of the instrument is a financial liability.

The other component, perpetual principal, is an equity feature because issuer is not required to pay cash or another financial asset in this respect.

Therefore, this instrument is concluded to be a compound financial instrument.

Illustration 44: Optionally convertible redeemable preference shares

D Ltd. issues preference shares to G Ltd. The holder has an option to convert these preference shares to equity instruments of the issuer anytime up to a period of 10 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 10 years. Examine the nature of the financial instrument.

Solution: This instrument has two components – (1) contractual obligation that is conditional on holder exercising its right to redeem, and (2) conversion option with the holder.

The first component is a financial liability because the entity does not have the unconditional right to avoid delivering cash.

The other component, conversion option with the holder, is an equity feature if the “fixed for fixed” test is satisfied. If the conversion option does not fulfil that test, say, because the conversion ratio varies in response to an underlying variable, it is a derivative liability. Such an instrument is called a “hybrid instrument”.

Illustration 45:

On 1 January 1999, Entity A issued a 10 per cent convertible debenture with a face value of ₹ 1,000 maturing on 31 December 2008. The debenture is convertible into equity shares of Entity A at a conversion price of ₹25 per share. Interest is payable half-yearly in cash. At the date of issue, Entity A could have issued non-convertible debt with a ten-year term bearing a coupon interest rate of 11 per cent.

On 1 January 2006, to induce the holder to convert the convertible debenture promptly, Entity A reduces the conversion price to ₹20 if the debenture is converted before 1 March 2006 (i.e. within 60 days). The market price of Entity A’s equity shares on the date the terms are amended is ₹40 per share.

Solution: The fair value of the incremental consideration paid by Entity A is calculated as follows:

Number of equity shares to be issued to debenture holders under amended conversion terms:

Face amount	₹ 1,000
New conversion price	₹ 20 per share
Number of equity shares to be issued on conversion (A)	50 shares
Number of equity shares to be issued to debenture holders under original conversion terms:	
Face amount	₹ 1,000
Original conversion price	₹25 per share

Number of equity shares issued upon conversion (B)	40 shares
Number of incremental equity shares issued upon conversion (A-B)	10 Shares
Value of incremental equity shares issued upon conversion	
₹40 per share x 10 incremental shares	₹400

FINANCIAL ASSETS: MEASUREMENT

Illustration 46: Loans with processing fee:

ABC Bank gave loans to a customer – Target Ltd. that carry fixed interest rate @ 10% per annum for a 5 year term and 12% per annum for a 3 year term. Additionally, the bank charges processing fee @ 1% of the principal amount borrowed. Target Ltd borrowed loans as follows:

- ₹ 10 lacs for a term of 5 years
- ₹ 8 lacs for a term of 3 years.

Compute the fair value upon initial recognition of the loan in books of Target Ltd.

Solution: The loans from ABC Bank carry interest@ 10% and 12% for 5 year term and 3 year term respectively. Additionally, there is a processing fee payable @ 1% on the principal amount on date of transaction. It is assumed that ABC Bank charges all customers in a similar manner and hence, this is representative of the market rate of interest.

Accordingly, if the fair value is to be computed by discounting all future cash flows (including principal and interest) at the market rate of interest (which is the same as that of the respective loans), the fair value shall be the principal amount itself.

Further, any transaction costs like the aforementioned processing fees shall be reduced from the principal amount to arrive the value on day 1 upon initial recognition.

Fair value (5 year term loan) = 10,00,000 – 10,000 (1%*1,000,000) = 9,90,000

Fair value (3 year term loan) = 8,00,000 – 8,000 (1%*800,000) = 7,92,000.

Now, effective interest rate shall be higher than the interest rate of 10% and 12% on 5 year loan and 3 year loan respectively, so that the processing fees gets recognised as interest over the respective term of loans.

Illustration 47: Deposits carrying off-market rate of interest:

Containers Ltd provides containers for use by customers for multiple purposes. The containers are returnable at the end of the service contract period (3 years) between Containers Ltd and its customers. In addition to the monthly charge, there is a security deposit that each customer makes with Containers Ltd for ₹ 10,000 per container and such deposit is refundable when the service contract terminates. Deposits do not carry any interest. Analyse the fair value upon initial recognition in books of customers leasing containers. Market rate of interest for 3 year loan is 7% per annum.

Solution: In the above case, lessee (ie, customers leasing the containers) make interest free deposits, which are refundable at the end of 3 years. Now, this money if it was to be lent to a third party would fetch interest @ 7% per annum.

Hence, discounting all future cash flows (ie, ₹ 10,000)

Fair value on initial recognition = $10,000 / (1+0.07)^3 = 8,163$. Differential on day 1 = $10,000 - 8,163 = 1,837$

The differential on day 1 shall be treated as follows:

- Scenario 1 – If fair valuation is determined using level 1 inputs or other observable inputs, difference on day 1 recognised in profit or loss
- Scenario 2 – If fair valuation is determined using other inputs, difference on day 1 shall be recognised in profit or loss unless it meets definition of an asset or liability.

In the above case, the fair valuation is made based on unobservable inputs and hence applying scenario 2, difference can be recognised as an asset if it meets the definition. Now, since the lessee gets to use the containers in return for making an interest free deposit plus monthly charges, the lost interest representing day 1 difference between value of deposit and its fair value is like ‘prepaid lease rent’ and can be recognised as such. Prepaid rent shall be charged off to profit or loss in a straight lined manner as ‘lease rent’.

Illustration 48: Deposits carrying off-market rate of interest:

Croton Limited is engaged in the business of trading commodities. The company’s main asset are investments in equity shares, preference shares, bonds, non-convertible debenture (NCD) and mutual funds.

The Company collects the periodical income (i.e. interest, dividend, etc.) from the investments and regularly sells the investment in case of favourable market conditions. Such investments have been classified as non-current investments in the financial statements.

Also, the company buys and sells equity shares of companies for earning short term profits from the stock market.

The CFO of company classified all the non-current investments as Fair Value Through Other Comprehensive Income (FVTOCI) and all the current investment as Fair value Through Profit and Loss (FVTPL).

Croton Limited raised the following queries:

- Can the Company classify the equity shares previously held under current investment as FVTOCI if the company decides to hold them for more than one-year (i.e. classify it as non-current)?
- The Company had classified NCDs with a maturity period of less than twelve months from the reporting period as current. This has been classified as FVTPL by the CFO of the company. The Company wants to know whether these NCDs can be recognized as FVTOCI?

Solution:

- It seems that the equity shares are acquired for the purpose of selling it in the near term and therefore are held for trading. Such investments have been appropriately classified as subsequently measured at fair value through profit or loss. Such investments in equity shares cannot be classified as subsequently measured at fair value through other comprehensive income. The option to measure investment in equity shares at fair value through other

comprehensive income has to be made at initial recognition. Therefore, equity shares that were held for trading previously cannot be reclassified to fair value through other comprehensive income due to change in business model to not held for trading.

- (b) In absence of contractual terms of NCDs, it is assumed that the contractual terms give rise on specified dates to cash flows that are solely payment of principal and interest on the principal outstanding. The business model also includes sales of these instruments on a regular basis. Hence, these instruments will be classified as FVTOCI. Therefore, such NCD investments shall be classified as subsequently measured at Fair Value through Other Comprehensive Income. The classification does not change based on whether the investment is current or non-current as the end of the reporting period. It seems the company has previously classified these investments at fair value through profit or loss. The company must rectify this by reclassifying as FVTOCI.

Illustration 49: Accounting for transaction costs on initial and subsequent measurement of a financial asset measured at fair value with changes through other comprehensive income:

An entity acquires a financial asset for CU100 plus a purchase commission of CU2. Initially, the entity recognises the asset at CU102. The reporting period ends one day later, when the quoted market price of the asset is CU100. If the asset were sold, a commission of CU3 would be paid. How would transaction costs be accounted in books of the entity?

Solution: On that date, the entity measures the asset at CU100 (without regard to the possible commission on sale) and recognises a loss of CU2 in other comprehensive income.

If the financial asset is measured at fair value through other comprehensive income in accordance with Ind AS 109.4.1.2A, the transaction costs are amortised to profit or loss using the effective interest method.

Illustration 50: Determining fair value upon initial measurement

The shareholders of Company C provide C with financing in the form of loan notes to enable it to acquire investments in subsidiaries. The loan notes will be redeemed solely out of dividends received from these subsidiaries and become redeemable only when C has sufficient funds to do so. In this context, 'sufficient funds' refers only to dividend receipts from subsidiaries. Analyse the initial measurement of loan notes.

Solution: In this case –

Loan notes are repayable only then C earns returns in form of dividends from subsidiaries. Hence, C cannot be forced to obtain additional external financing or to liquidate its investments to redeem the shareholder loans. Consequently, the loan notes are not considered payable on demand.

Accordingly –

- Loan notes shall be initially measured at their fair value (plus transaction costs), being the present value of the expected future cash flows, discounted using a market-related rate. The amount and timing of the expected future cash flows should be determined on the basis of the expected dividend flow from the subsidiaries. Also, the valuation would need to take into account possible early repayments of principal and corresponding reductions in interest expense.

- Since the loan notes are interest-free or bear lower-than-market interest, there will be a difference between the nominal value of the loan notes - i.e. the amount granted - and their fair value on initial recognition. Because the financing is provided by shareholders, acting in the capacity of shareholders, the resulting credit should be reflected in equity as a shareholder contribution in C's balance sheet. Conversely, in books of shareholders, the difference between amount invested and its fair value shall be recorded as 'investment in C Ltd' being representative of the underlying relationship between shareholders and C Ltd.

Illustration 51: Use of cost v/s fair value determination for equity instruments

Silver Ltd. has made an investment in optionally convertible preference shares (OCPS) of a Company – Bronze Ltd. at ₹ 100 per share (face value ₹ 100 per share). Silver Ltd. has an option to convert these OCPS into equity shares in the ratio of 1:1 and if such option not exercised till end of 9 years, then the shares shall be redeemable at the end of 10 years at a premium of 20%.

Analyse the measurement of this investment in books of Silver Ltd.

Solution: The classification assessment for a financial asset is done based on two characteristics:

Whether the contractual cash flows comprise cash flows that are solely payments of principal and interest on the principal outstanding

Entity's business model (BM) for managing financial assets – Whether the Company's BM is to collect cash flows; or a BM that involves realisation of both contractual cash flows & sale of financial assets;

In all other cases, the financial assets are measured at fair value through profit or loss.

In the above case, the Holder can realise return either through conversion or redemption at the end of 10 years, hence it does not indicate contractual cash flows that are solely payments of principal and interest. Therefore, such investment shall be carried at fair value through profit or loss. Accordingly, the investment shall be measured at fair value periodically with gain/ loss recorded in profit or loss

FINANCIAL LIABILITY: MEASUREMENT

Illustration 52: Trade creditors at market terms

A Company purchases its raw materials from a vendor at a fixed price of ₹ 1,000 per tonne of steel. The payment terms provide for 45 days of credit period, after which an interest of 18% per annum shall be charged. How would the creditors be classified in books of the Company?

Solution: In the above case, creditors for purchase of steel shall be carried at amortised cost, ie, fair value of amount payable upon initial recognition plus interest (if payment is delayed). Here, fair value upon initial recognition shall be the price per tonne, since the transaction is at market terms between two knowledgeable parties in an arms-length transaction and hence, the transaction price is representative of fair value.

Illustration 53:

An entity is about to purchase a portfolio of fixed rate assets that will be financed by fixed rate debentures. Both financial assets and financial liabilities are subject to the same interest rate risk that gives rise to opposite changes in fair value that tend to offset each other. Provide your comments.

Solution: The fixed rate assets provide for contractual cash flows and based on business model of the entity, such fixed rate assets may be classified as 'amortised cost' (if entity collects contractual cash flows) or fair value through other comprehensive income (FVOCI) (if entity manages through collecting contractual cash and sale of financial assets). In the absence of fair value option, the entity can classify the fixed rate assets as FVOCI with gains and losses on changes in fair value recognised in other comprehensive income and fixed rate debentures at amortised cost. However, reporting both assets and liabilities at fair value through profit and loss, ie, FVTPL corrects the measurement inconsistency and produces more relevant information. Hence, it may be appropriate to classify the entire group of fixed rate assets and fixed rate debentures at fair value through profit or loss (FVTPL).

Illustration 54: Issue of variable number of shares against issue of CCPS

A Ltd. issued compulsorily convertible preference shares (CCPS) at ₹ 100 each (₹ 10 face value + ₹ 90 premium per share) for ₹ 10,00,000. These are convertible into equity shares at the end of 10 years, where the number of equity shares to be issued shall be determined based on fair value per equity share to be determined at the time of conversion.

Evaluate if this is financial liability or equity? What if the conversion ratio was fixed at the time of issue of such preference shares?

Solution

- i. As Per Ind AS 109, non-derivative contracts which will be settled against issue of variable number of own equity shares meet the definition of financial liability.

In this case, A Ltd. has issued CCPS which are convertible into variable number of shares. Hence, it is akin to use of own equity shares as currency for settlement of the liability of CCPS issued. Accordingly, it meets the definition of financial liability.

Measurement –

Initial measurement – this shall be measured at fair value on date of transaction. Being a transaction with third party and in the absence of any other indicators, the transaction price is representative of fair value.

Subsequent measurement – Such liability shall be carried at fair value through profit or loss.

- ii. As Per Ind AS 109, a non-derivative contract that involves issue of fixed number of equity shares shall be classified as equity.

In this case, if the conversion of CCPS was into a fixed number of equity shares at the end of 10 years, then it meets the definition of equity and hence, shall be classified as 'equity instrument'.

An equity instrument is carried at cost and no further adjustments made to its carrying value after initial recognition.

Illustration 55:

Silver Ltd. has purchased 100 ounces of gold on 10 March 20X1. The transaction provides for a price payable which is equal to market value of 100 ounces of gold on 10 April 20X1 and shall be settled by issue of such number of equity shares as is required to settle the aforementioned transaction price at

₹ 10 per share on 10 April 20X1. Whether this is classified as liability or equity? Own use exemption does not apply.

Solution: In the above scenario, there is a contract for purchase of 100 ounces of gold whose consideration varies in response to changing value of gold. Analysing this contract as a derivative –

- Value of contract changes in response to change in market value of gold;
- There is no initial net investment
- It will be settled at a future date, i.e. 10 April 20X1.

Since the above criteria are met, this is a derivative contract.

Now, a derivative contract that is settled in own equity other than exchange of fixed amount of cash for fixed number of shares is classified as 'liability'. In this case, since

the contract results in issue of variable number of shares based on transaction price to be determined in future, hence, this shall be classified as 'derivative financial liability'.

Per Ind AS 109.4.2.1 – A derivative financial liability shall be carried at fair value through profit or loss.

DERECOGNITION OF FINANCIAL ASSET

Illustration 56: Assignment of receivables

ST Ltd. assigns its trade receivables to AT Ltd. The carrying amount of the receivables is ₹ 10,00,000. The consideration received in exchange of this assignment is ₹ 9,00,000. Customers have been instructed to deposit the amounts directly in a bank account for the benefit of AT Ltd. AT Ltd. has no recourse to ST Ltd. in case of any shortfalls in collections. State whether the derecognition principles will be applied or not.

Solution: In this situation, ST Ltd. has transferred the rights to contractual cash flows and has also transferred substantially all the risks and rewards of ownership (credit risk being the most significant risk in this situation).

Accordingly, ST Ltd. derecognises the financial asset and recognises ₹ 1,00,000, the difference between consideration received and carrying amount, as an expense in the statement of profit or loss.

Illustration 57:

Entity A (the transferor) holds a portfolio of receivables with a carrying value of ₹ 1,000,000. It enters into a factoring arrangement with entity B (the transferee) under which it transfers the portfolio to entity B in exchange for ₹ 900,000 of cash.

Entity B will service the loans after their transfer and debtors will pay amounts due directly to entity B. Entity A has no obligations whatsoever to repay any sums received from the factor and has no rights to any additional sums regardless of the timing or the level of collection from the underlying debts.

Solution: Entity A has transferred its rights to receive the cash flows from the asset via an assignment to entity B. Furthermore, as entity B has no recourse to entity A for either late payment risk or credit risk, entity A has transferred substantially all the risks and rewards of ownership of the portfolio.

Hence, entity A derecognises the entire portfolio. The difference between the carrying value of ₹ 1,000,000 and cash received of ₹ 900,000 i.e. ₹ 100,000 is recognised immediately as a financing cost in profit or loss.

Had Entity A not transferred its rights to receive the cash flows from the asset or there would have been any credit default guarantee given by entity A, then it would have not led to complete transfer of risk and rewards and entity A could not derecognise the portfolio due to the same.

Illustration 58:

A Ltd. sells certain receivables, due in 6 months with a carrying amount of ₹ 1,00,000 to P Ltd. for a cash payment of ₹ 95,000 with full right of recourse. Under the terms of the recourse provisions, the transferor is obliged to reacquire certain receivables at original price plus interest, if P Ltd. chooses to return them. P Ltd has unconditional put option on the assets transferred. Give the accounting treatment.

Solution: In this situation, A Ltd. has transferred the rights to contractual cash flows but not transferred substantially all the risks and rewards of ownership (credit risk being the most significant risk in this situation). Accordingly, A Ltd. the entity shall,

- continue to recognise the transferred asset in its entirety,
- recognise a financial liability for the consideration received at ₹ 95000. The liability is subsequently measured at amortised cost using the effective interest method, and
- in subsequent periods, recognise any income on the transferred asset and any expense incurred on the financial liability.

Illustration 59: Proportionate “pass through” arrangement

Entity A makes a five-year interest-bearing loan (the 'original asset') of ₹ 100 crores to Entity

B. Entity A settles a Trust and transfers the loan to that Trust. The Trust issues participatory notes to an investor, Entity C, that entitle the investor to the cash flows from the asset.

As per Trust's agreement with Entity C, in exchange for a cash payment of ₹ 90 crores, Trust will pass to Entity C 90% of all principal and interest payments collected from Entity B (as, when and if collected). Trust accepts no obligation to make any payments to Entity C other than 90% of exactly what has been received from Entity B. Trust provides no guarantee to Entity C about the performance of the loan and has no rights to retain 90% of the cash collected from Entity B nor any obligation to pay cash to Entity C if cash has not been received from Entity B.

Compute the amount to be derecognised.

Solution: If the three conditions are met, the proportion sold is derecognised, provided the entity has transferred substantially all the risks and rewards of ownership. Thus, Entity A would report a loan asset of ₹ 10 crores and derecognise ₹ 90 crores.

Illustration 60: Repurchase agreements

A financial asset is sold under repurchase agreement. The repurchase price as per that agreement is (a) fixed price or (b) sale price plus a lender's return. Let's look at three alternate scenarios:

- Repurchase agreement is for the same financial asset.

- Repurchase agreement is for substantially the same asset
- Repurchase agreement provides the transferee a right to substitute assets that are similar and of equal fair value to the transferred asset at the repurchase date.

State whether the derecognition principles will be applied or not.

Solution: In each of these scenarios, the transferred financial asset is not derecognised because the transferor retains substantially all the risks and rewards of ownership.

Let's look at another scenario:

Repurchase agreement provides the transferor only a right of first refusal to repurchase the transferred asset at fair value if the transferee subsequently sells it

In this scenario, the transferred financial asset is derecognised because the transferor has transferred substantially all the risks and rewards of ownership.

Illustration 61: Put options on transferred financial assets

A financial asset is sold and the transferee has a put option. Let's look at some alternate scenarios:

- Put option is deeply in the money
- Put option is deeply out of the money.

State whether the derecognition principles will be applied or not.

Solution: In the first scenario, the transferred asset does not qualify for derecognition because the transferor has retained substantially all the risks and rewards of ownership. However, in the second scenario, the transferor has transferred substantially all the risks and rewards of ownership

Illustration 62: Call options on transferred financial assets

A financial asset is sold and the transferor has a call option. Let's look at some alternate scenarios:

- i. Call option is deeply in the money
- ii. Call option is deeply out of the money.
- iii. Call option is neither deeply in the money nor deeply out of the money

State whether the derecognition principles will be applied or not.

Solution :

In the first scenario, the transferred asset does not qualify for derecognition because the transferor has retained substantially all the risks and rewards of ownership.

However, in the second scenario, the transferor has transferred substantially all the risks and rewards of ownership.

In the third scenario, the asset is derecognised. This is because the entity (i) has neither retained nor transferred substantially all the risks and rewards of ownership, and (ii) has not retained control.

REGULAR WAY PURCHASE OR SALE OF FINANCIAL ASSETS

Illustration 63: Regular way contracts: forward contracts

ST Ltd. enters into a forward contract to purchase 10 lakh shares of ABC Ltd. in a month's time for ₹ 50 per share. This contract is entered into with a broker, Mr. AG and not through regular trading mode in a stock exchange. The contract requires Mr. AG to deliver the shares to ST Ltd. upon payment of agreed consideration. Shares of ABC Ltd. are traded on a stock exchange. Regular way delivery is two days. Assess the forward contract.

Solution: In this case, the forward contract is not a regular way transaction and hence must be accounted for as a derivative i.e. between the date of entering into the contract to the date of delivery, all fair value changes are recognised in profit or loss.

On the other hand, if the forward contract is a regular way transaction, such fair value changes are recognised in other comprehensive income if share of ABC Ltd. are equity instruments and not held for trading.

Illustration 64: Regular way contracts: option contracts

NKT Ltd. purchases a call option in a public market permitting it to purchase 100 shares of VT Ltd. at any time over the next one month at a price of ₹ 1,000 per share. If NKT Ltd. exercises its option, it has 7 days to settle the transaction according to regulation or convention in the options market. VT Ltd.'s shares are traded in an active public market that requires two-day settlement.

Solution: In this case, the options contract is a regular way transaction as the settlement of the option is governed by regulation or convention in the marketplace for options. Fair value changes between the trade date and settlement date are recognised in other comprehensive income if share of VT Ltd. are equity instruments and not held for trading by NKT Ltd.

The illustrations below explain the flow of journal entries in case of trade date accounting and settlement date accounting for regular way purchase and sale of financial assets.

DERIVATIVES

Illustration 65:

Silver Ltd. has purchased 100 ounces of gold on 10 March 20X1. The transaction provides for a price payable which is equal to market value of 100 ounces of gold on 10 April 20X1 and shall be settled by issue of such number of equity shares as is required to settle the aforementioned transaction price at ₹ 10 per share on 10 April 20X1. Whether this is classified as liability or equity? Own use exemption does not apply.

Solution: In the above scenario, there is a contract for purchase of 100 ounces of gold whose consideration varies in response to changing value of gold. Analysing this contract as a derivative –

- (a) Value of contract changes in response to change in market value of gold;
- (b) There is no initial net investment
- (c) It will be settled at a future date, i.e. 10 April 20X1.

Since the above criteria are met, this is a derivative contract.

Now, a derivative contract that is settled in own equity other than exchange of fixed amount of cash for fixed number of shares is classified as 'liability'. In this case, since the contract results in issue of variable number of shares based on transaction price to be determined in future, hence, this shall be classified as 'derivative financial liability'. Per Ind AS 109.4.2.1 – A derivative financial liability shall be carried at fair value through profit or loss.

Illustration 66: Prepaid interest rate swap (fixed rate payment obligation prepaid at inception)

Entity S enters into a ₹ 100 crores notional amount five-year pay-fixed, receive-variable interest rate swap with Counterparty C.

- ◆ The interest rate of the variable part of the swap is reset on a quarterly basis to three-month Mumbai Interbank Offer Rate (MIBOR).
- ◆ The interest rate of the fixed part of the swap is 10% p.a.
- ◆ Entity S prepays its fixed obligation under the swap of ₹ 50 crores ($₹ 100 \text{ crores} \times 10\% \times 5 \text{ years}$) at inception, discounted using market interest rates
- ◆ Entity S retains the right to receive interest payments on the ₹ 100 crores reset quarterly based on three-month MIBOR over the life of the swap.

Analyse.

Solution: The initial net investment in the interest rate swap is significantly less than the notional amount on which the variable payments under the variable leg will be calculated. The contract requires an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors, such as a variable rate bond.

Therefore, the contract fulfils the condition 'no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors'.

Even though Entity S has no future performance obligation, the ultimate settlement of the contract is at a future date and the value of the contract changes in response to changes in the LIBOR index. Accordingly, the contract is regarded as a derivative contract.

Illustration 67: Prepaid pay-variable, receive-fixed interest rate swap

- ◆ Entity S enters into a ₹ 100 crores notional amount five-year pay-variable, receive-fixed interest rate swap with Counterparty C.
- ◆ The variable leg of the swap is reset on a quarterly basis to three-month MIBOR.
- ◆ The fixed interest payments under the swap are calculated as 10% of the swap's notional amount, i.e. ₹ 10 crores p.a.
- ◆ Entity S prepays its obligation under the variable leg of the swap at inception at current market rates. Say, that amount is ₹ 36 crores.
- ◆ It retains the right to receive fixed interest payments of 10% on ₹ 100 crores every year.

Analyse.

Solution: In effect, this contract results in an initial net investment of ₹ 36 crores which yields a cash inflow of ₹ 10 crores every year, for five years. By discharging the obligation to pay variable interest rate payments, Entity S in effect provides a loan to Counterparty C.

Therefore, all else being equal, the initial investment in the contract should equal that of other financial instruments that consist of fixed annuities. Thus, the initial net investment in the pay-variable, receive-fixed interest rate swap is equal to the investment required in a non-derivative contract that has a similar response to changes in market conditions.

For this reason, the instrument fails the condition 'no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors'. Therefore, the contract is not accounted for as a derivative contract.

Illustration 68: prepaid forward

Entity XYZ enters into a forward contract to purchase 1 million ordinary shares of Entity T in one year

- ◆ The current market price of T is ₹ 50 per share
- ◆ The one-year forward price of T is ₹ 55 per share
- ◆ XYZ is required to prepay the forward contract at inception with a ₹ 50 million payment.

Analyse.

Solution: Purchase of 1 million shares for current market price is likely to have the same response to changes in market factors as the contract mentioned above. Accordingly, the prepaid forward contract does not meet the initial net investment criterion of a derivative instrument.

EMBEDDED DERIVATIVES

Illustration 69: Debt instrument with indexed repayments

Entity X issues a redeemable fixed interest rate debenture to Entity Y. Amount of interest and principal is indexed to the value of equity instruments of Entity X

Analyse

Solution: In the given case, the host is a fixed interest rate debt instrument. The economic characteristics and risks of a debt instrument are not closely related to those of an equity instrument.

Hence, the exposure of this hybrid instrument to changes in value of equity instruments is an embedded derivative which is required to be separated.

The response above will not change even if the interest payment and principal repayments are indexed to a commodity index or similar underlying.

Illustration 70: Lease contracts dependent on inflation index

A lease contract, between two Indian companies of an asset in India, includes contingent lease rentals that are dependent upon an US inflation index. Can the entity treat inflation linked features as closely related?

Solution: For inflation linked features, an embedded derivative in a lease contract is considered as closely related to the host if it is an inflation—related index related to inflation in the entity's own economic environment.

In this case, whilst the asset and the lessor and lessee are located in India, lease payment are linked to US index. Hence, embedded derivative is not closely related and needs to be separated.

Illustration 71: Debt instrument with prepayment option

Entity PQR borrows ₹ 100 crores from CFDH Bank on 1 April 20X1.

Interest is payable at 12% p.a. and there is a bullet repayment of principal at the end of the term. Term of the loan is 6 years.

The loan includes an option to prepay the loan at 1st April each year with a prepayment penalty of 3%.

There are no transaction costs.

Without the prepayment option, the interest rate quoted by bank is 11% p.a. Analyse

Solution: Step 1: Identify the host contract and embedded derivative, if any

In the given case,

- Host is a debt instrument comprising annual interest payment at 12% p.a. and bullet principal repayment at the end of 6 years.
- Option to prepay the debt at ₹ 103 crores is an embedded derivative

Step 2: Determine the amortised cost of the host debt instrument

Whether the prepayment option is likely to be exercised or not, the amortised cost of the host debt instrument should be calculated as present value (PV) of expected cash flows using a fair market interest rate for a debt without the prepayment option (11% p.a. in this case). This is calculated below as ₹ 104.23 crores:

Year	Cash outflow	PV @ 11% p.a.	Finance cost	Amortised cost
₹ crores				
1	12.00	10.81	11.46	103.68
2	12.00	9.74	11.41	103.09
3	12.00	8.77	11.34	102.43
4	12.00	7.90	11.27	101.70
5	12.00	7.12	11.20	100.90
6	112.00	59.88	11.10	-
		104.22	67.78	

Step 3: Compare the exercise price of the prepayment option with the amortised cost of the host debt instrument

Year	Amortised cost	Exercise price of prepayment option	Difference
			₹ Crores

1	103.68	103.00	0.7%
2	103.09	103.00	0.1%
3	102.43	103.00	-0.6%
4	101.70	103.00	-1.3%
5	100.90	103.00	-2.1%
6	-	N/A	

The management of Entity PQR may formulate an appropriate accounting policy to determine what constitutes “approximately equal”. In this case, if the management determines that a difference of more than 2% will indicate that the option's exercise price is not approximately equal to the amortised cost of the host debt instrument, it will need to separate the embedded derivative and account for it as per principles given in the subsequent sub-section.

It may be questioned as to why an option to repay a fixed rate loan early meets the definition of embedded derivative. Let us revisit an important phrase from the definition of embedded derivative:

“...some or all of the cash flows that otherwise would be required by the contract to be modified...” In the context of a fixed rate debt, it may be interpreted that:

- the option affects cash flows only if exercised; and
- the cash flows of a fixed rate debt do not vary with interest rates.

However, in this context, a variation in cash flows should be interpreted as a possible change in the fair value of expected cash flows. Accordingly, the option's expected cash flows vary according to interest rates in a similar way as a separate option to purchase a fixed rate debt asset at a fixed price. A fixed price option to prepay a fixed rate loan will increase in value as interest rates decline (and vice versa).

PRACTICE QUESTIONS

COMPOUND FINANCIAL INSTRUMENTS

Q1: On 1 April, 2007 A Ltd. issued ₹ 10,00,000, 12% compulsory convertible debentures of face value of ₹ 100 per debenture at par. The debentures are convertible on 31.03.2011 into ordinary shares. The interest rate for equivalent debentures without conversion rights would have been 14%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.07. **[Other Sources]**

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @14%	Net present Value
31-Mar-2008	Interest	120,000	0.8772	1,05,264

31-Mar-2009	Interest	120,000	0.7694	92,340
31-Mar-2010	Interest	120,000	0.6750	81,000
31-Mar-2011	Interest	120,000	0.5921	71,052
31-Mar-2011	Principal	0	0.5921	0
Total Liability Component				3,49,656
Total Proceeds				10,00,000
Total Equity Component (Bal fig)				6,50,344

Q2: On 1 April, 2008 A Ltd. issued 5000, 6 % convertible debentures of face value of ₹ 100 per debenture at par. The debentures are redeemable at par on 31.03.12 or these may be converted into ordinary shares at the option of the holder. The interest rate for equivalent debentures without conversion rights would have been 7%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.08.

[Other Sources]

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @7%	Net present Value
31-Mar-2009	Interest	30,000	0.9346	28,038
31-Mar-2010	Interest	30,000	0.8734	26,202
31-Mar-2011	Interest	30,000	0.8163	24,489
31-Mar-2012	Interest	30,000	0.7629	22,887
31-Mar-2012	Principal	5,00,000	0.6629	3,81,450
Total Liability Component				4,83,066
Total Proceeds				5,00,000
Total Equity Component (Bal fig)				16,934

Q3: On 1 April, 2008 A Ltd. issued ₹ 3,00,000, 12% convertible debentures of face value of ₹ 100 per debenture at par. 50% of debentures are redeemable at premium of 10% on 31.03.10. The balance 50% is to be converted into ordinary shares on 31.03.13. the interest rate for equivalent debentures without conversion rights would have been 15%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.08.

[Other Sources]

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @15%	Net present Value
31-Mar-2009	Interest	36,000	0.8696	31,306
31-Mar-2010	Interest	36,000	0.7561	27,220
31-Mar-2010	Principal	1,65,000	0.7561	1,24,757
31-Mar-2011	Interest	18,000	0.6575	11,835
31-Mar-2012	Interest	18,000	0.5717	10,291
31-Mar-2013	Interest	18,000	0.4972	8,950
31-Mar-2013	Principal	0	0.4972	0
Total Liability Component				2,14,357
Total Proceeds				3,00,000
Total Equity Component (Bal fig)				85,643

Q4: On 1 April, 2008 A Ltd. issued ₹ 10,00,000, 8% convertible debentures of face value of ₹ 100 per debenture at a discount of 10%. The debentures are redeemable at a premium of 10% on 31.03.11 or these may be converted into ordinary shares at the option of the holder. The interest rate for equivalent debentures without conversion rights would have been 20%. Being compound financial instrument, you are required to separate equity and debt portion as on 01.04.08. **[Other Sources]**

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor @20%	Net present Value
31-Mar-2009	Interest	80,000	0.8333	66,664
31-Mar-2010	Interest	80,000	0.6944	55,552
31-Mar-2011	Interest	80,000	0.5787	46,296
31-Mar-2011	Principal	11,00,000	0.4823	6,36,570
Total Liability Component				8,05,082
Total Proceeds				9,00,000
Total Equity Component (Bal fig)				94,918

Q5: At the beginning of year 1, an enterprise issued 20,000 convertible debentures with face value ₹ 100 per debenture, at par. The debentures have six-year term. The interest at annual rate of 9% is paid half-yearly. The bondholders have an option to convert half of the face value of debentures into 2 ordinary shares at the end of year 3. The bondholders not exercising the

conversion option will be repaid at par to the extent of ₹ 50 per debenture at the end of year 3. The non-convertible portion will be repaid at 10% premium at the end of year 6. At the time of issue, the prevailing market interest rate for similar debt without conversion option was 10%. Being compound financial instrument, you are required to separate equity and debt portion.

[ICAI SM – Old Syllabus]

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

Computation of Liability & Equity Component

Half year end	Contractual Cash Flow	Discount Factor @5%	Net present Value
1	90,000	0.9524	85,716
2	90,000	0.907	81,630
3	90,000	0.8638	77,742
4	90,000	0.8227	74,043
5	90,000	0.7835	70,515
6	10,90,000	0.7462	8,13,358
7	45,000	0.7107	31,982
8	45,000	0.6768	30,456
9	45,000	0.6446	29,007
10	45,000	0.6139	27,626
11	45,000	0.5847	26,312
12	11,45,000	0.5568	6,37,536
Total Liability Component			19,85,922
Total Proceeds			20,00,000
Total Equity Component (Bal fig)			14,088

Q6: On 1st April, 2008 Sigma Ltd. issued 6% Convertible debentures of face value of ₹ 100 per debenture at par. The debentures are redeemable at a premium of 10% on 31-03- 2012 or these may be converted into ordinary shares at the option of the holder, the interest rate for equivalent debentures without conversion rights would have been 10%. Being a compound financial instrument, you are required to separate equity and debt portions as on 01-04-2008. Equity portion is ₹1,85,400. Find out the debt portion (Debenture amount).

[ICAI SM – Old Syllabus]

Ans: Assume that total proceeds of the issue is = ₹ M Hence, interest payable every year = 6% of ₹ M =.06M

Present value of interest (10% discount factor)= $0.06M \times$ cumulative discount factor of 4 years = $0.06M \times 3.17 = 0.1902M$.

Present value of the principal repayable after four years [$1.10 M \times 0.68(10\% \text{ discount factor})$]= $0.748 M$

Total present value of debentures (value of debt component) = $0.1902M+0.748M=0.9382M$

Hence, amount of equity = $M - 0.9382M = ₹ 1,85,400$

$0.0618M = ₹ 1,85,400$

$M = 1,85,400/0.0618=₹30,00,000$

Therefore, total proceeds of the issue is ₹ 30,00,000

Debt portion (Debenture amount) = ₹ 30,00,000 – ₹ 1,85,400 = ₹ 28,14,600.

Q7: P Co. Ltd. (issuer) takes a loan from Q Co. Ltd. (holder) for ₹ 12 lakhs. The loan is perpetual and entitles the holder to fixed interest of 8% p.a. The rate of interest commensurate with credit risk profile of the issuer is 12% p.a. Calculate the value of the liability and equity components.

[ICAI SM]

Ans: The values of the liability and equity components are calculated as follows:

Present value of interest payable in perpetuity (₹ 96,000 discounted at 12%) = ₹ 800,000

Therefore, equity component = fair value of compound instrument, say, ₹ 1,200,000 less financial liability component i.e. ₹ 800,000 = ₹ 400,000.

In subsequent years, the profit and loss account is charged with interest of 12% on the debt instrument.

Q8: ABC Company issued 10,000 compulsory cumulative convertible preference shares (CCCPS) as on 1 April 20X1 @ ₹ 150 each. The rate of dividend is 10% payable every year. The preference shares are convertible into 5,000 equity shares of the company at the end of 5th year from the date of allotment. When the CCCPS are issued, the prevailing market interest rate for similar debt without conversion options is 15% per annum. Transaction cost on the date of issuance is 2% of the value of the proceeds.

Key terms:

Date of Allotment	01-Apr-20X1
Date of Conversion	01-Apr-20X6
Number of Preference Shares	10,000
Face Value of Preference Shares	150
Total Proceeds	15,00,000
Rate Of dividend	10%
Market Rate for Similar Instrument	15%

Transaction Cost	30,000
Face value of equity share after conversion	10
Number of equity shares to be issued	5,000
The effective interest rate for liability component	15.86%

Calculate the value of the liability and equity components.

[ICAI SM]

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

a. **Computation of Liability & Equity Component**

Date	Particulars	Cash Flow	Discount Factor	Net present Value
01-Apr-20X1		0	1	0.00
31-Mar-20X2	Dividend	150,000	0.869565	130,434.75
31-Mar-20X3	Dividend	150,000	0.756144	113,421.6
31-Mar-20X4	Dividend	150,000	0.657516	98,627.4
31-Mar-20X5	Dividend	150,000	0.571753	85,762.95
31-Mar-20X6	Dividend	150,000	0.497177	74,576.55
Total Liability Component				502,823.25
Total Proceeds				1,500,000.00
Total Equity Component (Bal fig)				997,176.75

b. **Allocation of transaction costs**

Particulars	Amount	Allocation	Net Amount
Liability Component	502,823	10,056	492,767
Equity Component	997,177	19,944	977,233
Total Proceeds	1,500,000	30,000	1,470,000

c. **Accounting for liability at amortised cost:**

- Initial accounting = Present value of cash outflows less transaction costs

- Subsequent accounting = At amortised cost, ie, initial fair value adjusted for interest and repayments of the liability.

	Opening Financial Liability A	Interest B	Cash Flow C	Closing Financial Liability A+B-C
01-Apr-20X1	492,767	-	-	4,92,767

31-Mar-20X2	492,767	78,153	150,000	4,20,920
31-Mar-20X3	420,920	66,758	150,000	3,37,678
31-Mar-20X4	337,678	53,556	150,000	2,41,234
31-Mar-20X5	241,234	38,260	150,000	1,29,494
31-Mar-20X6	129,494	20,506	150,000	-

Q9: You are required to

- (i) Identify the Equity and Liability components;
- (ii) Compute bond liability at the end of each year; and
- (iii) Give necessary journal entries from the information given below:

Number, value and period of convertible Bonds	4,000 bonds, issued at the beginning of year 1, face value is ₹ 1,000 per bond (3 years validity)
Proceeds received	₹ 40 lacs
Interest rate on the bond	6% p.a. payable annually
Conversion	At the bond holders' discretion, Conversion into 250 ordinary shares for each bond of ₹ 1000
Prevailing market rate	9% per annum, for bonds issued Without conversion option
Present value factors for 9%	0.917, 0.841, 0.772

[ICAI SM – Old Syllabus]

Ans:

(a)	Ascertaining Fair Value of Liability Component	
	Had the bonds been issued at 9% p.a. the present value would emerge as below:	
	Present value of ₹ 40 lacs repayable after 3rd year (40 lacs x 0.772)	30,88,000
	Present value of interest payable at the end of	
	Year 1 – (2,40,000 x 0.917)	2,20,080
	Year 2 – (2,40,000 x 0.841)	2,01,840
	Year 3 – (2,40,000 x 0.772)	1,85,280
	Liability component (Total of Present value)	36,95,200
(b)	Ascertaining Equity Component	
	Fair Value of Instrument	40,00,000

	Less: Liability component		(36,95,200)	
	Equity component		3,04,800	
(c)	Initial Recognition at the inception of the Bond		Debit	Credit
	Cash/Bank A/c	Dr.	40,00,000	
	To Convertible Bond Liability A/c			36,95,200
	To Equity A/c			3,04,800
(d)	Bond liability at the end of each year	Year 1	Year 2	Year 3
	Beginning	36,95,200	37,87,768	38,88,668
	Add: Interest @ 9%	3,32,568	3,40,900	3,49,980
		40,27,768	41,28,668	42,38,648
	Rounding off adjustment	-	-	1,352*
	Less: Interest @ 6%	(2,40,000)	(2,40,000)	(2,40,000)
	Carrying amount	37,87,768	38,88,668	40,00,000
	* Rounding off is due to approximation of discounting factor @ 9%.			
(e)	For recording Finance Charge of each year		Debit	Credit
	Journal Entries			
	End of Year 1			
	Finance Charges A/c	Dr.	3,32,568	
	To Bonds A/c			92,568
	To Cash or Bank A/c			2,40,000
	End of Year 2			
	Finance Charges A/c	Dr.	3,40,900	
	To Bonds A/c			1,00,900
	To Cash or Bank A/c			2,40,000
	End of Year 3			
	Finance Charges A/c	Dr.	3,51,332*	
	To Bonds A/c			
	To Cash or Bank A/c			

Q10: K Ltd. issued 5,00,000, 6% Convertible Debentures off ₹ 10 each on the First of April 2010. The debentures are due for redemption on 31st March, 2014 at a premium of 10% convertible into equity shares to the extent of 50% and the balance to be settled in cash to the debenture holders. The interest rate on equivalent debentures without conversion rights was 10%. You are

required to separate the debt & equity components at the time of the issue and show the accounting entry in the company's books at initial recognition.

[ICAI SM - Old syllabus]

Ans: Computation of Debt Component of Convertible Debentures as on 1.4.2014

Particulars			₹
Present value of the principal repayable after four years			
[50,00,000 × 50% × 1.10 × 0.68 (10% Discount factor)] (a)			18,70,000
Present value of Interest [3,00,000 × 3.17 (4 years cumulative 10% discount factor)](b)			9,51,000
Total present Value of debt component (I) (a+b)			28,21,000
Issue proceeds from convertible debenture(II) (c)			50,00,000
Value of equity component (I-II) (a+b-c)			21,79,000
Journal entry at initial recognition		Dr. (₹)	Cr. (₹)
Cash / Bank A/c	Dr.	50,00,000	
To 6% Debenture (Liability component) A/c			28,21,000
To 6% Debenture (Equity component) A/c (Being the disbursement recorded at fair value)			

Q11: On 1 April 20X1, an 8% convertible loan with a nominal value of ₹ 6,00,000 was issued at par. It is redeemable on 31 March 20X5 also at par. Alternatively, it may be converted into equity shares on the basis of 100 new shares for each ₹ 200 worth of loan.

An equivalent loan without the conversion option would have carried interest at 10%. Interest of ₹ 48,000 has already been paid and included as a finance cost.

How will the Company present the above loan notes in the financial statements for the year ended 31 March 20X2.

[ICAI SM]

Ans:

Step 1 There is an 'option' to convert the loans into equity i.e. the loan note holders do not have to accept equity shares; they could demand repayment in the form of cash.

Ind AS 32 states that where there is an obligation to transfer economic benefits there should be a liability recognised. On the other hand, where there is not an obligation to transfer economic benefits, a financial instrument should be recognised as equity.

In the above illustration we have both – 'equity' and 'debt' features in the instrument. There is an obligation to pay cash – i.e. interest at 8% per annum and a redemption amount – this is 'financial liability' or 'debt component'. The 'equity' part of the transaction is the option to convert. So it is a compound financial instrument.

Step 2 Debt element of the financial instrument so as to recognise the liability is the present value of interest and principal

The rate at which the same is to be discounted, is the rate of equivalent loan note without the conversion option would have carried interest at 10%, therefore this is the rate to be used for discounting

Step 3 Calculation of the debt element of the loan note as follows:

8% Interest discounted at a rate of 10% Present Value (6,00,000 x 8%)

S. No	Year	Interest amount	PVF	Amount
Year 1	20X2	48,000	0.91	43,680
Year 2	20X3	48,000	0.83	39,840
Year 3	20X4	48,000	0.75	36,063
1,19,583				
Year 4	20X5	648,000	0.68	4,40,640
Amount to be recognised as a liability	5,60,223			
Initial proceeds	(6,00,000)			
Amount to be recognised as equity	39,777			

Step 4 The next step is to recognise the interest component equivalent to the loan that would carry if there was no option to cover. Therefore, the interest should be recognised at 10%.

As on date ₹ 48,000 has been recognised in the statement of profit and loss i.e. 6,00,000 x 8% but we have discounted the present value of future interest payments and redemption amount using discount factors of 10%, so the finance charge in the statement of profit and loss must also be recognised at the same rate i.e. for the purpose of consistency.

The additional charge to be recognised in the income statement is calculated as:

Debt component of the financial instrument ₹ 5,60,000

Interest charge (5,60,000 x 10%)	₹ 56,000
Already charged to the income statement	(₹ 48,000)
Additional charge required	₹ 8,000

CONVERSION OR EARLY SETTLEMENT OF COMPOUND FINANCIAL INSTRUMENTS

Q12: On 1 January 1999, A Ltd issued a 10 per cent convertible debenture with a face value of ₹ 1,000 maturing on 31 December 2008. The debenture is convertible into equity shares of A Ltd at a conversion price of ₹25 per share. Interest is payable half-yearly in cash. At the date of issue, A Ltd could have issued non-convertible debt with a ten-year term bearing a coupon interest rate of 11 per cent.

On 1 January 2004, the convertible debenture has a fair value of ₹ 1,700. A Ltd makes a tender offer to the holder of the debenture to repurchase the debenture for ₹ 1,700, which the holder accepts. At the date of repurchase, A Ltd. could have issued non-convertible debt with a five-

year term bearing a coupon interest rate of 8 per cent. Show how an entity accounts for (i) equity and liability at the inception and (ii) at the repurchase of the convertible instrument.

[RTP May 2018]

Ans: At the inception

Computation of fair value of Liability Component		₹	
Present value of 20 half yearly interest payments of ₹ 50, discounted @ 11% ($₹ 50 \times 11.9504$)		597	
Present value of ₹ 1,000 due in ten years, discounted @ 11% compounded half yearly ($₹ 1,000 \times 0.343$)		343	
Fair value of liability component		940	
Computation of Equity Component		₹	
Issue proceeds from convertible debenture		1,000	
Less: Fair value of liability component		940	
Fair value of Equity Component		60	
Journal Entries		Debit (₹)	Credit (₹)
Cash/Bank A/c	Dr.	1,000	
To Liability component			940
To Equity component			
(Being issue of debentures recorded at fair values)			
At the time of repurchase			
The repurchase price is allocated as follows:			
	Carrying value	Fair Value	Difference
Liability component			
Present value of 10 remaining half-yearly interest payments of ₹ 50 discounted at 11% and 8% respectively	377	405	
Present value of ₹ 1,000 due in 5 years, discounted at 11% and 8% compounded half yearly, respectively	593	680	
	970	1085	115
Equity component	60	615	555
Total	1,030	1,700	670

Journal Entries		Debit ₹	Credit ₹
Liability Component	Dr.	970	
Debt settlement expenses (statement of profit and loss)	Dr.	115	
To Cash A/c			1085
(Being repurchase of the liability component)			
Equity component	Dr.	60	
Reserves and surplus	Dr.	555	
To Cash A/c			615
(Being cash paid for the equity component)			

Q13: A Limited issues INR 1 crore convertible bonds on 1 July 20X1. The bonds have a life of eight years and a face value of INR 10 each, and they offer interest, payable at the end of each financial year, at a rate of 6 per cent annum. The bonds are issued at their face value and each bond can be converted into one ordinary share in A Limited at any time in the next eight years. Companies of a similar risk profile have recently issued debt with similar terms, without the option for conversion, at a rate of 8 per cent per annum.

Required:

- Identify the present value of the bonds, and, allocating the difference between the present value and the issue price to the equity component, provide the appropriate accounting entries.
- Calculate the stream of interest expenses across the eight years of the life of the bonds.
- Provide the accounting entries if the holders of the option elect to convert the options to ordinary shares at the end of the third year. **[ICAI SM; Nov 2018]**

Ans:

- Applying the guidance for compound instruments, the present value of the bond is computed to identify the liability component and then difference between the present value of these bonds & the issue price of INR 1 crore shall be allocated to the equity component. In determining the present value, the rate of 8 per cent will be used, which is the interest rate paid on debt of a similar nature and risk that does not provide an option to convert the liability to ordinary shares.

Present value of bonds at the market rate of debt

Present value of principal to be received in eight years discounted at 8%

$$(10,000,000 \times 0.5403) = 5,403,000$$

Present value of interest stream discounted at 8% for 8 years

$$(6,00,000 \times 5.7466) = 3,447,960$$

Total present value = 8,850,960

Equity component = 1,149,040

Total face value of convertible bonds = 10,000,000

The accounting entries will be as follows:

	Dr. Amount	Cr. Amount
1 July 20X1		
Cash	Dr. 10,000,000	
To Convertible bonds (liability)		8,850,960
To Convertible bonds (equity component)		1,149,040

(Being entry to record the convertible bonds and the recognition of the liability and equity components)

30 June 20X2

Interest expense	Dr. 708,077	
To Cash		600,000
To Convertible bonds (liability)		108,077

(Being entry to record the interest expense, where the expense equals the present value of the opening liability multiplied by the market rate of interest).

- (b) The stream of interest expense is summarised below, where interest for a given year is calculated by multiplying the present value of the liability at the beginning of the period by the market rate of interest, this is being 8 per cent.

Date	Payment	Interest expense at 8%	Increase in bond liability	Total bond liability
			01 July 20X1	8,850,960
30 June 20X2	600,000	708,077	108,077	8,959,037
30 June 20X3	600,000	716,723	116,723	9,075,760
30 June 20X4	600,000	726,061	126,061	9,201,821
30 June 20X5	600,000	736,146	136,146	9,337,967
30 June 20X6	600,000	747,037	147,037	9,485,004
30 June 20X7	600,000	758,800	158,800	9,643,804
30 June 20X8	600,000	771,504	171,504	9,815,308
30 June 20X9	600,000	784,692*	184,692	10,000,000

*for rounding off

- (c) if the holders of the options elect to convert the options to ordinary shares at the end of the third year of the debentures (after receiving their interest payments), the entries in the third would be:

	Dr. Amount	Cr. Amount
30 June 20X4		
Interest expense	Dr. 726,061	
To Cash		600,000
To Convertible bonds (liability)		126,061
(Being entry to record interest expense for the period)		

30 June 20X4

Convertible bonds (liability)	Dr. 9,201,821	
Convertible bonds (equity component)	Dr. 1,149,040	
To Contributed equity		10,350,861
(Being entry to record the conversion of bonds into shares of A Limited).		

TRADE DATE AND SETTLEMENT DATE ACCOUNTING

Q14: On 30th March 2015 an entity enters into an agreement to purchase a Financial Asset for ₹ 100 which is the Fair Value on that date. On Balance Sheet date i.e. 31/3/2015 the Fair Value is 102 and on Settlement date i.e. 2/4/2015 Fair Value is 103. Pass necessary Journal entries on trade date and settlement date when the asset acquired is measured at

- (a) Amortised cost
 (b) FVTPL
 (c) FVTOCI

[ICAI SM – Old Syllabus]

Ans: Financial Asset at Amortised Cost

Dates	Trade Date Accounting	Amount	Settlement Date Accounting	Amount
30/3/2015	Financial Asset Dr. To Payables	100 100	No Entry	
31/3/2015	No Entry		No Entry	
2/4/2015	Payables Dr. To Cash	100 100	Financial Asset Dr. To Cash	100 100

Financial Asset at FVTPL

Dates	Trade Date Accounting	Amount	Settlement Date Accounting	Amount
30/3/2015	Financial Asset Dr. To Payables	100 100	No Entry	
31/3/2015	Financial Asset Dr. To P&L	2 2	Fair Value Change Dr. To P&L	2 2
2/4/2015	Financial Asset Dr. To P&L	1 1	Fair Value Change Dr. To P&L	1 1
	Payables Dr. To Cash	100 100	Financial Asset Dr. To Cash To Fair Value Change	103 100 3

Financial Asset at FVTOCI

Dates	Trade Date Accounting	Amount	Settlement Date Accounting	Amount
30/3/2015	Financial Asset Dr. To Payables	100 100	No Entry	
31/3/2015	Financial Asset Dr. To OCI	2 2	Fair Value Change Dr. To OCI	2 2
2/4/2015	Financial Asset Dr. To OCI	1 1	Fair Value Change Dr. To OCI	1 1
	Payables Dr. To Cash	100 100	Financial Asset Dr. To Cash To Fair Value Change	103 100 3

Q15: On 1 January 20X1, X Ltd. enters into a contract to purchase a financial asset for ₹ 10 lakhs, which is its fair value on trade date. On 4 January 20X1 (settlement date), the fair value of the asset is ₹ 10.5 lakhs. The amounts to be recorded for the financial asset will depend on how it is classified and whether trade date or settlement date accounting is used. Pass necessary journal entries. **[ICAI SM]**

Ans: Journal Entries in the Buyer's Books

Trade date accounting

Dr. / Cr.	Particulars	Amortised cost	Fair value through P&L	Fair value through OCI
	1 January 20X1			

Dr.	Financial asset	10,00,000	10,00,000	10,00,000
Cr.	Financial liability (to pay)	(10,00,000)	(10,00,000)	(10,00,000)
4 January 20X1				
Dr.	Financial asset	-	50,000	50,000
Dr.	Financial liability (to pay)	10,00,000	10,00,000	10,00,000
Cr.	Profit or loss	-	(50,000)	-
Cr.	Other comprehensive income	-	-	(50,000)
Cr.	Cash	(10,00,000)	(10,00,000)	(10,00,000)

Settlement date accounting

Dr. / Cr.	Particulars	Amortised cost	Fair value through P&L	Fair value through OCI
Dr.	Financial asset	10,00,000	10,50,000	10,50,000
Cr.	Profit or loss	-	(50,000)	-
Cr.	Other comprehensive income	-	-	(50,000)
Cr.	Cash	(10,00,000)	(10,00,000)	(10,00,000)

FINANCIAL ASSETS: MEASUREMENTS

Q16: A Company invested in Equity shares of another entity on 15th March for ₹ 10,000 which was classified as FVTPL. Transaction Cost = ₹200 (not included in ₹10,000). Fair Value on Balance Sheet date i.e. 31st March 2015 = ₹ 12,000. Pass necessary Journal Entries **[ICAI SM]**

Ans:

Date	Particulars	Dr	Cr
15/3/2015	Investment A/c	10,000	
	Transaction Cost A/c	200	
	To Bank		10,200
31/3/2015	Investment A/c	2,000	
	To Fair Value Gain A/c		2,000
31/3/2015	P&L A/c	200	
	To Transaction Cost A/c		200
31/3/2015	Fair Value Gain A/c	2,000	
	To P&L A/c		2,000

Q17: A Company invested in Equity shares of another entity on 15th March for ₹ 10,000 which was classified as FVTOCI. Transaction Cost = ₹ 200 (not included in ₹ 10,000). Fair Value on Balance Sheet date i.e. 31st March 2015 = ₹ 12,000. Pass necessary Journal entries. **[ICAI SM]**

Ans:

Date	Particulars	Dr	Cr
15/3/2015	Investment A/c	10,200	
	To Bank		10,200
31/3/2015	Investment A/c	1,800	
	To Fair Value Gain A/c		1,800
31/3/2015	Fair Value Gain A/c	1,800	
	To OCI A/c		1,800
31/3/2015	OCI A/c	1,800	
	To Fair Value Reserve A/c		1,800

Q18: A Company lends ₹ 100 lacs to another company @ 12% p.a. interest on 1/4/2015 which was classified as amortised cost It incurs ₹ 40,000 incremental costs for documentation. Loan tenure = 5 years with Interest charged annually. Fair Value of Loan on Balance Sheet date i.e. 31st March 2015= 99,40,000. Pass necessary Journal entries. **[ICAI SM]**

Ans: This is based on the assumption that interest rate is based on market rate of interest.

Date	Particulars	Dr	Cr
1/4/2015	Loan A/c	100 lacs	
	To Bank A/c		100 lacs
1/4/2015	Loan Processing Expense A/c	40,000	
	To Bank A/c		40,000
1/4/2015	Loan A/c	40,000	
	To Loan Processing Expense A/c		40,000

Q19: A Ltd. invested in equity shares of C Ltd. on 15th March for ₹ 10,000. Transaction costs were ₹ 500 in addition to the basic cost of ₹ 10,000. On 31 March, the fair value of the equity shares was ₹ 11,200 and market rate of interest is 10% per annum for a 10 year loan. Pass necessary journal entries. Analyse the measurement principal and pass necessary journal entries. **[ICAI SM]**

Ans: The above investment is in equity shares of C Ltd and hence, does not involve any contractual cash flows that are solely payments of principal and interest. Hence, these equity shares shall be measured at fair value through profit or loss. Also, an irrecoverable option exists to designate such investment as fair value through other comprehensive income.

Journal Entries

Upon initial recognition –

Investment in equity shares of C Ltd.	Dr.	10,000
Transaction Cost	Dr	500

To Bank a/c			10,500
(Being investment recognized at fair value plus transaction costs upon initial recognition)			
Profit and Loss A/c	Dr	500	
To Transaction Cost			500
Subsequently –			
Investment in equity shares of C Ltd.	Dr.	1,200	
To Fair value gain on financial instruments			1,200
(Being fair value gain recognized at year end in P&L)			
Fair value gain on financial instruments		1,200	
To Profit and Loss A/c			1,200

Q20: Metallica Ltd. has made an investment in equity instrument of a company – Castor Ltd. for 19% equity stake. Significant influence not exercised. The investment was made for ₹ 5,00,000 for 10,000 equity shares on 01 April 20X1. On 30 June 20X1 the fair value per equity share is ₹45. The Company has taken an irrevocable option to measure such investment at fair value through other comprehensive income. **[ICAI SM]**

Ans: The Company has made an irrevocable option to carry its investment at fair value through other comprehensive income. Accordingly, the investment shall be initially recognised at fair value and all subsequent fair value gains/ losses shall be recognised in other comprehensive income (OCI).

Journal entries

Upon initial recognition –

Investment in equity shares of C Ltd.	Dr.	5,00,000	
To Bank a/c			5,00,000

(Being investment recognized at fair value plus transaction costs upon initial recognition)

Subsequently –

Fair value loss on financial instruments	Dr.	50,000	
To Investment in equity shares of C Ltd.			50,000

(Being fair value loss recognised)

Fair value reserve in OCI	Dr.	50,000	
To Fair value loss on financial instruments			50,000

(Being fair value loss recognized in other comprehensive income)

Q21: A Ltd purchased investment in 9% debentures of B Ltd. of ₹ 2,00,000 @ 3% premium on 1st April 2017. Brokerage was paid at 1%. These are repayable at a premium of 10% at the end of

third year. Prepare Investment in 9% Debenture account in the book of A Ltd. if when the asset acquired is measured at

- (a) Amortised cost
- (b) FVTPL
- (c) FVTOCI

[Other Sources]

[For Answer – Refer Class Notes]

Q22: A Ltd purchased investment in 10% debentures of B Ltd. Of ₹ 1,00,000 @ 10% discount. These are repayable at a premium of 10% at the end of third year. Prepare Investment in 10% Debenture account in the book of A Ltd. if it is considered as FA at amortised cost.

[Other Sources]

Ans: As per IND AS 109, if Financial Assets are measured at amortised cost, then such financial assets are initially recognised at Fair value plus transaction cost and subsequently recognised at amortised cost by applying EIR.

In the given case, Investment in debentures of B Ltd will be initially recognised at its fair value i.e., Transaction price paid 90,000.

For subsequent recognition EIR is to be determined as contractual rate of interest does not represent the rate of interest at which PV of contractual cash outflow will be equal to initial recognised amount ie, 90,000

EIR = 17.39 % (determined by applying IRR concept)

A Ltd will recognize the interest using the effective interest rate method as worked out below:

Year	Amortised Cost (Opening)	Interest income @ 17.39% to be Recognised	Total	Payment received	Amortised Cost (Closing Balance)
	(1)	(2)	(3)	(4)	(5) = (3) – (4)
1	90,000	15,651	1,05,651	10,000	95,651
2	95,651	16,634	1,12,285	10,000	1,02,285
3	1,02,285	17,715	1,20,000	1,20,000	Nil

Q23: Entity S lends ₹ 1,000,000 to Entity A. The loan carries interest at 5% per annum payable annually and is payable in full after a period of five years, even though the market rate for similar loans is 8%. To compensate entity S for the below market rate of interest, entity A pays an origination fees of ₹ 120,000 to entity S. There are no other directly related payments by either party. Prepare Loan account in the books of Entity S.

[ICAI SM – Old syllabus]

Ans: Applying the guidance in Ind AS 109, a 'financial asset' shall be recorded at its fair value upon initial recognition. Fair value is normally the transaction price.

However, if an entity originates a loan that bears an off-market interest rate, and receives an upfront fee as compensation, the entity recognises the loan at its fair value, ie net of the fee it receives.

In the given case, Entity S lends ₹ 1,000,000 to Entity A at below market rate of interest, even though the market rate for similar loans is 8% and to compensate entity S for the below market rate of interest, entity A pays an origination fee of ₹ 120,000 to entity S. Therefore, the Entity S will initially recognise the loan at fair value i.e., Transaction price paid less origination fee received which is equal to $10,00,000 - 1,20,000 = 8,80,000$.

Subsequently loan will be recognised at amortised cost by applying EIR i.e., 8%

Year	Amortised Cost (Opening)	Interest income @ 8% to be Recognised	Total	Payment received	Amortised Cost (Closing Balance)
	(1)	(2)	(3)	(4)	(5) = (3) – (4)
1	8,80,000	70,400	9,50,400	50,000	9,00,400
2	9,00,400	72,032	9,72,432	50,000	9,22,432
3	9,22,432	73,795	9,96,227	50,000	9,46,227
4	9,46,227	75,698	10,21,925	50,000	9,71,925
5	9,71,925	78,075	10,50,000	10,50,000	0

Q24: Comforts Ltd. granted ₹10,00,000 loan to its employees on January 1, 2009 at a concessional interest rate of 4% per annum. Loan is to be repaid in five equal annual installments along with interest. Market rate of interest for such loan is 10% per annum. Following the principles of recognition and measurement as laid down in IND AS 109 'Financial Instruments: Recognition and Measurement', record the entries for the year ended 31st December, 2009 for the loan transaction, and also calculate the value of loan initially to be recognised and amortised cost for all the subsequent years. [ICAI SM]

Ans:

(i) Journal Entries in the books of Comfort Ltd. for the year ended 31st December, 2009 (regarding loan to employees)				
			Dr.	Cr.
	Staff loan A/c	Dr.	10,00,000	
	To Bank A/c			10,00,000
	(Being the disbursement of loans to staff)			
	Staff cost A/c (10,00,000 – 8,54,763)[Refer part (ii)]	Dr.	1,45,237	
	To Staff loan A/c			1,45,237

	(Being the write off of excess of loan balance over present value thereof, in order to reflect the loan at its present value of ₹ 8,54,763)					
	Staff loan A/c	Dr.	85,476			
	To Interest on staff loan A/c				85,476	
	(Being the charge of interest @ market rate of 10% to the loan)					
	Bank A/c	Dr.	2,40,000			
	To Staff loan A/c				2,40,000	
	(Being the repayment of first instalment with interest for the year)					
	Interest on staff loan A/c	Dr.	85,476			
	To Profit and loss A/c				85,476	
	(Being transfer of balance in staff loan Interest account to profit and loss account)					
	Profit and loss A/c	Dr.	1,45,237			
	To Staff cost A/c				1,45,237	
	(Being transfer of balance in staff cost account to profit and loss account)					
(ii)	Calculation of initial recognition amount of loan to employees					
	Cash Inflow					
	Yearend	Principal	Interest @4%	Total	P.V. factor	Value
	2009	2,00,000	40,000	2,40,000	0.9090	2,18,160
	2010	2,00,000	32,000	2,32,000	0.8263	1,91,702
	2011	2,00,000	24,000	2,24,000	0.7512	1,68,269
	2012	2,00,000	16,000	2,16,000	0.6829	1,47,506
	2013	2,00,000	8,000	2,08,000	0.6208	1,29,126
	Present value or Fair value					8,54,763
(iii)	Calculation of amortised cost of loan to employees					
	Year	Amortised cost	Interest to be	Repayment	Amortised Cost	
		(Opening balance)	recognised@10%		(Closing balance)	
		[1]	[2]	[3]	[4]=[1]+ [2] -[3]	
	2009	8,54,763	85,476	2,40,000	7,00,239	
	2010	7,00,239	70,024	2,32,000	5,38,263	
	2011	5,38,263	53,826	2,24,000	3,68,089	

2012	3,68,089	36,809	2,16,000	1,88,898
2013	1,88,898	19,102 (Bal. fig.)*	2,08,000	Nil

Q25: A Ltd has made a security deposit whose details are described below. Make necessary journal entries for accounting of the deposit. Assume market interest rate for a deposit for similar period to be 12% per annum.

Particulars	Details
Date of Security Deposit (Starting Date)	1-Apr-20X1
Date of Security Deposit (Finishing Date)	31-Mar-20X6
Description	Lease
Total Lease Period (Years)	5
Discount rate	12.00%
Security deposit (A)	10,00,000
Present value annuity factor	0.567427

[ICAI SM; Exam Nov 2019]

Ans: The above security deposit is an interest free deposit redeemable at the end of lease term for ₹ 1,000,000. Hence, this involves collection of contractual cash flows and shall be accounted at amortised cost.

Upon initial measurement – Particulars	Details
Security deposit (A)	10,00,000
Total Lease Period (Years)	5
Discount rate	12.00%
Present value annuity factor	0.56743
Present value of deposit at beginning (B)	5,67,427
ROU Assets at beginning (A-B)	4,32,573

Journal Entries

Security deposit a/c	Dr.	5,67,427	
ROU Assets a/c	Dr.	4,32,573	
To Bank a/c			10,00,000

Subsequently, every annual reporting year, interest income shall be accrued@ 12% per annum and prepaid expenses shall be amortised on straight line basis over the lease term.

For instance – year 1			
Security deposit a/c	Dr.	68,091	
To Interest income			68,091
Depreciation	Dr.	86,515	
To ROU Assets a/c			86,515

At the end of 5 years, the security deposit shall accrue to ₹ 10,00,000 and prepaid expenses shall be fully amortised. Journal entry for realisation of security deposit –

Bank a/c	Dr.	10,00,000	
To Security deposit a/c			10,00,000

Q26: A Ltd issued redeemable preference shares to a Holding Company – Z Ltd. The terms of the instrument have been summarized below. Account for this in the books of Z Ltd.

Nature	Non-cumulative redeemable preference shares
Repayment:	Redeemable after 5 years
Date of Allotment:	1-Apr-20X1
Date of repayment:	31-Mar-20X6
Total period:	5.00 years
Value of preference shares issued:	100,000,000
Dividend rate	0.0001%
Market rate of interest	12.00% per annum
Present value factor	0.56743

[ICAI SM; Exam May 2018]

Ans: Applying the guidance in Ind AS 109, a 'financial asset' shall be recorded at its fair value upon initial recognition. Fair value is normally the transaction price. However, sometimes certain type of instruments may be exchanged at off market terms (ie, different from market terms for a similar instrument if exchanged between market participants).

For example, a long-term loan or receivable that carries no interest while similar instruments if exchanged between market participants carry interest, then fair value for such loan receivable will be lower from its transaction price owing to the loss of interest that the holder bears. In such cases where part of the consideration given or received is for something other than the financial instrument, an entity shall measure the fair value of the financial instrument.

In the above case, since A Ltd has issued preference shares to its Holding Company – Z Ltd, the relationship between the parties indicates that the difference in transaction price and fair value is akin to investment made by Z Ltd. in its subsidiary.

Following is the table summarising the computations on initial recognition:

Market rate of interest	12.00%
Present value factor	0.56743
Present value	56,742,686
Loan component	56,742,686
Investment in subsidiary	43,257,314

Subsequently, such preference shares shall be carried at amortised cost at each reporting date. The computation of amortised cost at each reporting date has been done as follows:

Year	Date	Opening Asset	Days	Interest @ 12%	Closing balance
1-Apr-20X1					
1	31-Mar-20X2	56,742,686	364	6,790,467	63,533,153
2	31-Mar-20X3	63,533,153	365	7,623,978	71,157,131
3	31-Mar-20X4	71,157,131	365	8,538,856	79,695,987
4	31-Mar-20X5	79,695,987	366	9,589,720	89,285,707
5	31-Mar-20X6	89,285,707	365	10,714,285	100,000,000

Journal Entries to be done at every reporting date

Particulars	Amount	Amount
Date of transaction		
Investment - Equity portion	Dr. 43,257,314	
Loan receivable	Dr. 56,742,686	
To Bank		(100,000,000)
Interest income - March 31, 20X2		
Loan receivable	Dr. 6,790,467	
To Interest income		(6,790,467)
Interest income - March 31, 20X3		
Loan receivable	Dr. 7,623,978	
To Interest income		(7,623,978)
Interest income - March 31, 20X4		
Loan receivable	Dr. 8,538,856	
To Interest income		(8,538,856)
Interest income - March 31, 20X5		
Loan receivable	Dr. 9,589,720	
To Interest income		(9,589,720)
Interest income - March 31, 20X6		
Loan receivable	Dr. 10,714,285	
To Interest income		(10,714,285)
Settlement of transaction		
Bank	Dr. 100,000,000	
To Loan receivable		(100,000,000)

Q27: Wheel Co. Limited has a policy of providing subsidized loans to its employees for the purpose of buying or building houses. Mr. X, who's executive assistant to the CEO of Wheel Co. Limited, took a loan from the Company on the following terms:

- Principal amount: 1,000,000
- Interest rate: 4% for the first 400,000 and 7% for the next 600,000
- Start date: 1 January 20X1
- Tenure: 5 years
- Pre-payment: Full or partial pre-payment at the option of the employee
- The principal amount of loan shall be recovered in 5 equal annual instalments and will be first applied to 7% interest bearing principal
- The accrued interest shall be paid on an annual basis
- Mr. X must remain in service till the term of the loan ends

The market rate of a comparable loan available to Mr. X, is 12% per annum.

Following table shows the contractually expected cash flows from the loan given to Mr. X:

(amount in ₹)

Date	Outflows	Principal	Interest income 7%	Interest income 4%	Principal outstanding
1-Jan-20X1	(1,000,000)				1,000,000
31-Dec-20X1		200,000	42,000	16,000	800,000
31-Dec-20X2		200,000	28,000	16,000	600,000
31-Dec-20X3		200,000	14,000	16,000	400,000
31-Dec-20X4		200,000	-	16,000	200,000
31-Dec-20X5		200,000	-	8,000	-

Mr. S, pre-pays ₹ 200,000 on 31 December 20X2, reducing the outstanding principal as at that date to ₹ 400,000.

Following table shows the actual cash flows from the loan given to Mr. X, considering the pre-payment event on 31 December 20X2:

(amount in ₹)

Date	Outflows	Principal	Interest income 7%	Interest income 4%	Principal outstanding
1-Jan-20X1	(1,000,000)				1,000,000
31-Dec-20X1		200,000	42,000	16,000	800,000
31-Dec-20X2		400,000	28,000	16,000	400,000
31-Dec-20X3		200,000	-	16,000	200,000
31-Dec-20X4		200,000	-	8,000	-
31-Dec-20X5		-	-	-	-

Record journal entries in the books of Wheel Co. Limited considering the requirements of Ind AS 109. [ICAI SM]

Ans. As per requirement of Ind AS 109, a financial instrument is initially measured and recorded at its fair value. Therefore, considering the market rate of interest of similar loan available to Mr. X at 12%, the fair value of the contractual cash flows shall be as follows:

Date	Inflows			Discount factor @12%	PV
	Principal	Interest income 7%	₹ Interest income 4%		
31-Dec-20X1	200,000	42,000	16,000	0.8929	2,30,357
31-Dec-20X2	200,000	28,000	16,000	0.7972	1,94,515
31-Dec-20X3	200,000	14,000	16,000	0.7118	1,63,709
31-Dec-20X4	200,000	-	16,000	0.6355	1,37,272
31-Dec-20X5	200,000	-	8,000	0.5674	1,18,025
Total (fair value)					8,43,878

Benefit to Mr. X, to be considered a part of employee cost for Wheel Co. ₹ 1,56,121

The deemed employee cost is to be amortised over the period of loan i.e. the minimum period that Mr. X must remain in service.

The amortization schedule of the ₹ 843,878 loan is shown in the following table:

Date	Loan outstanding	Total cash inflows (principal repayment + interest)	Interest @ 12%
1-Jan-20X1	843,878		
31-Dec-20X1	687,143	258,000	101,265
31-Dec-20X2	525,600	244,000	82,457
31-Dec-20X3	358,672	230,000	63,072
31-Dec-20X4	185,713	216,000	43,041
31-Dec-20X5	(0)	208,000	22,287

Journal Entries to be recorded at every period end:

a. **1 January 20X1 –**

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan to employee A/c Dr.	843,879	
Pre-paid employee cost A/c Dr	156,121	
To Cash A/c		1,000,000
(Being loan asset recorded at initial fair value)		

b. 31 December 20X1 –

Cash A/c Dr. To Interest income (profit and loss) @12% A/c To loan to employee A/c (Being first instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)	258,000	101,265 156,735
Employee benefit (profit and loss) A/c Dr. To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	31,224	31,224

On 31 December 20X2, due to pre-payment of a part of loan by Mr. X, the carrying value of the loan shall be re-computed by discounting the future remaining cash flows by the original effective interest rate.

There shall be two sets of accounting entries on 31 December 20X2, first the realisation of the contractual cash flow as shown in (c) below and then the accounting for the pre-payment of ₹ 200,000 included in (d) below:

c. 31 December 20X2 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr. To Interest income (profit and loss) @12% A/c To loan to employee A/c (Being second instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)	244,000	82,457 161,543
Employee benefit (profit and loss) A/c Dr. To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	31,224	31,224

Computation of new carrying value of loan to employee:

Date	Inflows			Discount factor @12%	PV
	Principal	Interest income 7%	Interest income 4%		
31-Dec-20X3	200,000	-	16,000	0.8929	192,857
31-Dec-20X4	200,000	-	8,000	0.7972	165,816
Total (revised carrying value)					358,673
Less: Current carrying value					525,601
Adjustment required					166,928

The difference between the amount of pre-payment and adjustment to loan shall be considered a gain, though will be recorded as an adjustment to pre-paid employee cost, which shall be amortised over the remaining tenure of the loan.

d. 31 December 20X2 prepayment–

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr.	200,000	
To Pre-paid employee cost A/c		33,072
To loan to employee A/c (Being gain to Wheel Co. Limited recorded as an adjustment to pre-paid employee cost)		166,928

The amortisation schedule of the new carrying amount of loan shall be as follows:

Date	Loan outstanding	Total cash inflows (principal repayment + interest)	Interest @ 12%
31-Dec-20X2	358,673		
31-Dec-20X3	185,714	216,000	43,041
31-Dec-20X4	-	208,000	22,286

Amortisation of employee benefit cost shall be as follows:

Date	Balance	Amortised to P&L	Adjustment
1-Jan-20X1	156,121		
31-Dec-20X1	124,897	31,224	
31-Dec-20X2	60,601	31,224	33,072
31-Dec-20X3	30,300	30,300	
31-Dec-20X4	-	30,300	

e. 31 December 20X3 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr.	216,000	
To Interest income (profit and loss) @12% A/c		43,041
To loan to employee A/c (Being third instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)		172,959
Employee benefit (profit and loss) A/c Dr To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	30,300	30,300

f. 31 December 20X4 –

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr	208,000	
To Interest income (profit and loss) @12% A/c		22,286

To loan to employee A/c (Being last instalment of repayment of loan accounted for using the amortised cost and effective interest rate of 12%)		185,714
Employee benefit (profit and loss) A/c Dr To Pre-paid employee cost A/c (Being amortization of pre-paid employee cost charged to profit and loss as employee benefit cost)	30,300	30,300

Q28: COFEE Ltd., borrows a sum of ₹ 20 crore from COFEE Ltd., repayable as a single bullet payment at the end of 5 years. The interest thereon @ 5% p.a. is payable at yearly rests. Since the market is 8% FEE Ltd paid an origination fee of ₹ 2,40 crores to COFEE Ltd., to compensate COFEE Ltd., for the lower rate of interest. Apart from the above, there are no other transactions between the two parties. You are required to show the value at which COFEE Ltd., would recognize the loan and the annual interest thereon.

[ICAI SM – Old syllabus]

Ans: Therefore, the fair value of the loan to Cofee Ltd. Is the present value of the interest it will receive over the next 5 years & the present value of repayment it will at the end of the 5th year.

P.V. of interest discounted @ 8% = $[(20,00,00,000 \times 5\%) \times 3.9926] = ₹ 3,99,36,000$ (A)

P.V. of principal amount = ₹ 20,00,00,000 × discounted @ 8% = $20,00,00,000 \times 0.6806 = 13,61,20,000$ (B)

FV of Loan (A + B) i.e. ₹17,60,46,000 (i.e. approximately 17,60,00,000 which is loan amount net of origination fees.

COFEE Ltd. will recognize the loan at ₹ 17.60 crores only.

COFEE Ltd will recognize the interest using the effective interest rate method as worked out below:

Year	Amortised Cost (Opening)	Interest income @ 8% to be Recognised	Total	Payment received	Amortised Cost (Closing Balance)
	(1)	(2)	(3)	(4)	(5) = (3) – (4)
1	17,60,00,000	1,40,80,000	19,00,80,000	1,00,00,000	18,00,80,000
2	18,00,80,000	1,44,06,400	19,44,86,400	1,00,00,000	18,44,86,400
3	18,44,86,400	1,47,58,912	19,92,45,312	1,00,00,000	18,92,45,312
4	18,92,45,312	1,51,39,625	20,43,84,937	1,00,00,000	19,43,84,937

5	19,43,84,937	1,56,15,063*	21,00,00,000	21,00,00,000	Nil
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*Note: The interest in the 5th year, has been adjusted in accordance to the value received on closure.

Q29: KK Ltd. has granted an interest free loan of ₹ 10,00,000 to its wholly owned Indian Subsidiary YK Ltd. There is no transaction cost attached to the said loan. The Company has not finalised any terms and conditions including the applicable interest rates on such loans. The Board of Directors of the Company are evaluating various options and has requested your firm to provide your views under Ind AS in following situations:

- (i) The Loan given by KK Ltd. to its wholly owned subsidiary YK Ltd. is interest free and such loan is repayable on demand.
- (ii) The said Loan is interest free and will be repayable after 3 years from the date of granting such loan. The current market rate of interest for similar loan is 10%. Considering the same, the fair value of the loan at initial recognition is ₹ 8,10,150.
- (iii) The said loan is interest free and will be repaid as and when the YK Ltd. has funds to repay the Loan amount.

Based on the same, KK Ltd. has requested you to suggest the accounting treatment of the above loan in the stand-alone financial statements of KK Ltd. and YK Ltd. and also in the consolidated financial statements of the group. Consider interest for only one year for the above loan.

Further the Company is also planning to grant interest free loan from YK Ltd. to KK Ltd. in the subsequent period. What will be the accounting treatment of the same under applicable Ind AS? **[RTP May 2019]**

Ans: Scenario (i)

Since the loan is repayable on demand, it has fair value equal to cash consideration given. KK Ltd. and YK Ltd. should recognize financial asset and liability, respectively, at the amount of loan given (assuming that loan is repayable within a year). Upon, repayment, both the entities should reverse the entries that were made at the origination.

Journal entries in the books of KK Ltd.

At origination

Loan to YK Ltd. A/c	Dr.	₹ 10,00,000	
To Bank A/c			₹ 10,00,000

On repayment

Bank A/c	Dr.	₹ 10,00,000	
To Loan to YK Ltd. A/c			₹ 10,00,000

Journal entries in the books of YK Ltd.

At origination

Bank A/c	Dr.	₹ 10,00,000	
To Loan from KK Ltd. A/c			₹ 10,00,000
On repayment			
Loan from KK Ltd. A/c	Dr.	₹ 10,00,000	
To Bank A/c			₹ 10,00,000

In the consolidated financial statements, there will be no entry in this regard since loan receivable and loan payable will get set off.

Scenario (ii)

Applying the guidance in Ind AS 109, a 'financial asset' shall be recorded at its fair value upon initial recognition. Fair value is normally the transaction price. However, sometimes certain type of instruments may be exchanged at off market terms (ie, different from market terms for a similar instrument if exchanged between market participants).

If a long-term loan or receivable that carries no interest while similar instruments if exchanged between market participants carry interest, then fair value for such loan receivable will be lower from its transaction price owing to the loss of interest that the holder bears. In such cases where part of the consideration given or received is for something other than the financial instrument, an entity shall measure the fair value of the financial instrument. The difference in fair value and transaction cost will be treated as investment in Subsidiary YK Ltd.

Both KK Ltd. and YK Ltd. should recognise financial asset and liability, respectively, at fair value on initial recognition, i.e., the present value of ₹ 10,00,000 payable at the end of 3 years using discounting factor of 10%. Since the question mentions fair value of the loan at initial recognition as ₹ 8,10,150, the same has been considered. The difference between the loan amount and its fair value is treated as an equity contribution to the subsidiary. This represents a further investment by the parent in the subsidiary.

Journal entries in the books of KK Ltd. (for one year)

At origination

Loan to YK Ltd. A/c	Dr.	₹ 8,10,150	
Investment in YK Ltd. A/c	Dr.	₹ 1,89,850	
To Bank A/c			₹ 10,00,000

During periods to repayment- to recognise interest

Year 1 – Charging of Interest

Loan to YK Ltd. A/c	Dr.	₹ 81,015	
To Interest income A/c			₹ 81,015

Transferring of interest to Profit and Loss

Interest income A/c	Dr.	₹ 81,015	
To Profit and Loss A/c			₹ 81,015

On repayment

Bank A/c	Dr.	₹ 10,00,000	
To Loan to YK Ltd. A/c			₹ 10,00,000

Note- Interest needs to be recognised in statement of profit and loss. The same cannot be adjusted against capital contribution recognised at origination.

Journal entries in the books of YK Ltd. (for one year)

At origination

Bank A/c	Dr.	₹ 10,00,000	
To Loan from KK Ltd. A/c			₹ 8,10,150
To Equity Contribution in KK Ltd. A/c			₹ 1,89,850

During periods to repayment- to recognise interest

Year 1

Interest expense A/c	Dr.	₹ 81,015	
To Loan from KK Ltd. A/c			₹ 81,015

On repayment

Loan from KK Ltd. A/c	Dr.	₹ 10,00,000	
To Bank A/c			₹ 10,00,000

In the consolidated financial statements, there will be no entry in this regard since loan and interest income/expense will get set off.

Scenario (iii)

Generally, a loan which is repayable when funds are available, cannot be stated as loan repayable on demand. Rather the entity needs to estimate the repayment date and determine its measurement accordingly by applying the concept prescribed in Scenario (ii).

In the consolidated financial statements, there will be no entry in this regard since loan and interest income/expense will get set off.

In case the subsidiary YK Ltd. is planning to grant interest free loan to KK Ltd., then the difference between the fair value of the loan on initial recognition and its nominal value should be treated as dividend distribution by YK Ltd. and dividend income by the parent KK Ltd.

DERECOGNITION OF FINANCIAL ASSETS

Q30: A Ltd. has receivables ₹ 1,00,000 yielding 12% interest p.a. for 10 years. The company transferred the right to receive 50% principal on maturity and the right to receive 70% interest per year to B Ltd. Fair value of principal part is ₹ 95,000 and Interest part is ₹ 15,000. Show important accounting entries in books of A Ltd. [Other Sources]

Ans:

(i)	Calculation of fair value of loan		₹	₹
	Fair Value of Principal Portion			95,000
	Fair Value of Interest Portion			15,000
				1,10,000
(ii)	Allocation of carrying amount in the ratio of fair values:			
		Fair value		Appointment
		(₹)		(₹)
	Securitized component of loan			
	- Principal Portion (50%)	47,500	$(47,500/1,10,000) \times 1,00,000$	43,182
	- Interest Portion (70%)	10,500	$(10,500/1,10,000) \times 1,00,000$	9,545
		58,000		52,727
	Retained Component of loan			
	- Principal strip receivable (50%)	47,500	$(47,500/1,10,000) \times 1,00,000$	43,182
	- Interest strip receivable (30%)	4,500	$(4,500/1,10,000) \times 1,00,000$	4091
		1,10,000		1,00,000
(iii)	Entries to record the derecognition of the Loan			
	Bank A/c	Dr.	58,000	
	To Receivables A/c			52,727
	To Profit & Loss A/c			5,273
	(Being entry for securitization)			
	Interest strip a/c	Dr.	4,091	
	Principal strip A/c	Dr.	43,182	
	To Loan A/c			47,273
	(Being creation of principal strip receivable and interest strip receivable)			

Q31: A Ltd. has lent ₹ 1,00,000 yielding 10% interest p.a. for 4 years. The company transferred the right to receive 60% principal on maturity and the right to receive 40% interest per year. Show important accounting entries in books of A Ltd. Assume expected yield rate 6% p.a.

[Other Sources]

Ans:

(i)	Calculation of fair value of loan		₹	₹
	Fair Value of Principal Portion	1,00,000 x PVF (6%,4)		79,210
	Fair Value of Interest Portion	10,000 x PVAF (6%,4)		34,651
				1,13,861
(ii)	Allocation of carrying amount in the ratio of fair values:			
		Fair value		Appointment
		(₹)		(₹)
	Securitized component of loan			
	- Principal Portion (60%)	47,526	$(47,526/1,13,861) \times 1,00,000$	41,740
	- Interest Portion (40%)	13,860	$(13,860/1,13,861) \times 1,00,000$	12,173
		61,386		53,913
	Retained Component of loan			
	- Principal strip receivable (40%)	31,684	$(31,684/1,13,861) \times 1,00,000$	27,827
	- Interest strip receivable (60%)	20,791	$(20,791/1,13,861) \times 1,00,000$	18,260
		1,13,861		1,00,000
(iii)	Entries to record the derecognition of the Loan		₹	₹
	Bank A/c	Dr.	61,386	
	To Loan A/c			53,913
	To Profit & Loss A/c			7,473
	(Being entry for securitization)			
	Interest strip a/c	Dr.	18,260	
	Principal strip A/c	Dr.	27,827	
	To Loan A/c			46,087
	(Being creation of principal strip receivable and interest strip receivable)			

Q32: A hold ₹ 1000 of loan yielding interest @ 18% per annum with the remaining life of 9 years. Fair value of these loan is estimated at ₹ 1100/-. The company securitises the principal component of loan plus the right to receive interest @ 14% to an SPE for ₹ 1000/. 2% interest will be allowed to company as cost of service to loans. The fair value of servicing asset so created is

estimated at ₹ 40/- after adjusting the costs likely to be incurred. The remaining 2% interest is treated as an interest strip receivable whose fair value is estimated at ₹ 60/. Give the accounting treatment of the above transactions in the form of journal entries in the books of originator.

[ICAI SM – Old syllabus]

Ans:

Allocation of carrying amount			
		Fair value	Carrying amount
		₹	₹
Principal + 14% Interest transferred		1,000	909
Servicing asset		40	36
Interest strip		60	55
Total		1,100	1000
Journal Entries in the Books of A Ltd.			
Cash	Dr.	1,000	
To Loan			909
To Profit & Loss A/c			91
Servicing Asset	Dr.	36	
Interest Strip	Dr.	55	
To Loans			91

Q33: A Ltd. has lent ₹ 50,000 yielding 18% interest p.a. for 10 years. The company transferred the right to receive principal ₹ 50,000 on maturity and the right to receive 14% interest per year. Of the balance 4% interest, 2% is due to the transferor, i.e. A Ltd. as service fee for collection of principal and interest. The expected cost for collection etc. is ₹ 400. A Ltd. has retained the right to receive the remaining 2% interest per year. Show important accounting entries in books of A Ltd. Assume expected yield rate 13% p.a.

[ICAI SM – Old syllabus]

Ans:

	Interest Transferred	Principal Transferred	Interest Retained	Service Fee
Cash inflow	7,000	50,000	1,000	1,000
Less: Cost of servicing loan	---	---	---	400
Net cash flow	7,000	50,000	1,000	600
Year	1 - 10	10	1 - 10	1 - 10

DF (13%)	5.43	0.29	5.43	5.43
Fair value of components	38,010	14,500	5,430	3,258
Allocation of carrying amount				
		Fair value	Carrying amount	
	₹	₹	₹	
Principal transferred	38,010			
Interest transferred	14,500	52,510		42,902
Servicing asset		3,258		2,662
Interest strip		5,430		4,436
Total		61,198		50,000
Journal Entries in the Books of A Ltd.				
Cash	Dr.	52,510		
To Loan				42,902
To Profit & Loss A/c				9,608
Servicing Asset	Dr.	2,662		
Interest Strip	Dr.	4,436		
To Loans				7,098

Q34: Entity C agrees with factoring company D to enter into a debt factoring arrangement. Under the terms of the arrangement, the factoring company B agrees to pay ₹ 91.5 crores, less a servicing charge of ₹ 1.5 crores (net proceeds of ₹ 90 crores), in exchange for 100% of the cash flows from short-term receivables.

The receivables have a face value of ₹ 100 crores and carrying amount of ₹ 95 crores.

The customers will be instructed to pay the amounts owed into a bank account of the factoring company. Entity C also writes a guarantee to the factoring company under which it will reimburse any credit losses upto ₹ 5 crores, over and above the expected credit losses of ₹ 5 crores and losses of up to ₹ 15 crores are considered reasonably possible. The guarantee is estimated to have a fair value of ₹ 0.5 crores. Comment. Pass the necessary Journal Entry

[ICAI SM]

Ans: In this situation, the “continuing involvement asset” will be recognised at ₹ 5 crores i.e. lower of:

- i. the amount of the asset – ₹ 95 crores
 - ii. the guarantee amount – ₹ 5 crores
- the entity also recognises an associated liability that is measured in such a way that the net carrying amount of the transferred asset and the associated liability is:

- ◆ the amortised cost of the rights and obligations retained by the entity, if the transferred asset is measured at amortised cost, or
- ◆ equal to the fair value of the rights and obligations retained by the entity when measured on a stand-alone basis, if the transferred asset is measured at fair value.

Recognised changes in the fair value of the transferred asset and the associated liability are accounted for consistently with each other and shall not be offset. If the transferred asset is measured at amortised cost, the option in this Standard to designate a financial liability as at fair value through profit or loss is not applicable to the associated liability.

In case of guarantees, as per the application guidance in Ind AS 109, the associated liability is initially measured at

- ◆ the guarantee amount plus
- ◆ the fair value of the guarantee (which is normally the consideration received for the guarantee).

The associated liability is recognised at ₹ 5.5 crores, as below:

- i. the guarantee amount (i.e. ₹ 5 crores) plus
 - ii. the fair value of the guarantee (i.e. ₹ 0.5 crores). Comment
- If an entity's continuing involvement is in only a part of a financial asset, the entity allocates the previous carrying amount of the financial asset between the part it continues to recognise under continuing involvement, and the part it no longer recognises on the basis of the relative fair values of those parts on the date of the transfer. The difference between:
 - ◆ the carrying amount (measured at the date of derecognition) allocated to the part that is no longer recognised and
 - ◆ the consideration received for the part no longer recognised
 shall be recognised in profit or loss.

The journal entries passed by Entity C on the date of derecognition is as below:

Cash	Dr.	₹ 90 crores	
Loss on derecognition	Dr.	₹ 5.5 crores	
Continuing involvement asset	Dr.	₹ 5 crores	
To Receivables			₹ 95 crores
To Associated liability			₹ 5.5 crores

- the entity shall continue to recognise any income arising on the transferred asset to the extent of its continuing involvement and shall recognise any expense incurred on the associated liability

In the example above, the guarantee liability of ₹ 0.5 crores shall be amortised in profit or loss over the underlying period.

Q35: Parikshit Ltd. holds ₹1,00,000 of loans yielding 18 per cent interest per annum for their estimated lives of 9 years. The fair value of these loans, after considering the interest yield, is estimated at ₹1,10,000.

The company securitises the principal component of the loan plus the right to receive interest at 14% to Susovana Corporation, a special purpose vehicle, for ₹1,00,000. Out of the balance interest of 4 percent, it is stipulated that half of such balance interest, namely 2 per cent, will be due to Parikshit Ltd. as fees for continuing to service the loans. The fair value of the servicing asset so created is estimated at ₹3,500. The remaining half of the interest is due to Parikshit Ltd. as an interest strip receivable, the fair value of which is estimated at ₹6,500. Give the accounting treatment of the above transactions in the form of journal entries in the books of originator.

[ICAI SM – Old syllabus]

Ans:

Journal Entries in the Books of Originator						
S.No.	Particulars				Debit	Credit
1.	Bank A/c			Dr.	1,00,000	
	To Loans (Cost of Securitised Component)					90,910
	To Profit on Securitisation					9,090
	(Being securitization of principal amount and right to receive interest at 14% interest rate)					
2.	Servicing Asset A/c			Dr.	3,180	
	Interest Strip A/c			Dr.	5,910	
	To Loans					9,090
	(Being creation of servicing asset and interest strip receivable)					
Working Notes:						
1.	Fair value of securitized component of loan					₹
	Fair value of Loan					1,10,000
	Less: Fair value of servicing asset				3,500	
	Fair value of interest strip				6,500	10,000
						1,00,000
2.	Apportionment of carrying amount based on relative Fair Values					
	Particulars	Fair Value	% based on Total Fair Value			Carrying Amount/Cost
	Securitized component of the loan	1,00,000	90.91%			90,910

	Servicing Asset	3,500	3.18%	3,180
	Interest Strip Receivable	6,500	5.91%	5,910
		1,10,000	100.00%	1,00,000
3.	Profit on Securitisation			₹
	Net proceeds from securitisation			1,00,000
	Less: Cost (apportioned carrying amount) of securitized component of loan			90,910
				9,090

Q 36: Sea Ltd. has lent a sum of ₹ 10 lakhs @ 18% per annum for 10 years. The loan had a Fair Value of ₹ 12,23,960 at the effective interest rate of 13%. To mitigate prepayment risks but at the same time retaining control over the loan. Sea Ltd. transferred its right to receive the Principal amount of the loan on its maturity with interest, after retaining rights over 10% of principal and 4% interest that carries Fair Value of ₹ 29,000 and ₹ 1,84,620 respectively. The consideration for the transaction was ₹ 9,90,000. The interest component retained included a 2% fee towards collection of principal and interest that has a Fair Value of ₹ 65,160. Defaults if any are deductible to a maximum extent of the company's claim on Principal portion. You are required to show the Journal Entries to record derecognition of the Loan. **[ICAI SM – Old syllabus]**

Ans:

(i)	Calculation of securitized component of loan		₹	₹
	Fair Value			12,23,960
	Less: Principal strip receivable (fair value)		29,000	
	Less: Interest strip receivable (fair value)	1,19,460		
	Less: Value of service asset (fair value)	65,160	1,84,620	2,13,620
				10,10,340
(ii)	Appointment of carrying amount in the ration of fair values:			
		Fair value		Appointment
		(₹)		(₹)
	Securitized component of loan	10,10,340	$[10,10,340 \times 10,00,000] / 12,23,960$	8,25,468
	Principal strip receivable	29,000	$[29,000 \times 10,00,000] / 12,23,960$	23,694
	Interest strip receivable	1,19,460	$[1,19,460 \times 10,00,000] / 12,23,960$	97,601
	Servicing asset	65,160	$[65,160 \times 10,00,000] / 12,23,960$	53,237

				10,00,000
(iii)	Entries to record the derecognition of the Loan		₹	₹
	Bank A/c	Dr.	9,90,000	
	To Loan A/c			8,25,468
	To Profit & Loss A/c			1,64,532
	(Being entry for securitization)			
	Interest strip a/c	Dr.	97,601	
	Servicing asset A/c	Dr.	53,237	
	Principal strip A/c	Dr.	23,694	
	To Loan A/c			1,74,532

FINANCIAL LIABILITIES: MEASUREMENTS

Q37: A Ltd has made a borrowing from RBC Bank for ₹ 10,000 at a fixed interest of 12% per annum. Loan processing fees were additionally paid for ₹ 500 and loan is payable 4 half-yearly installments of ₹ 2,500 each. Details are as follows:

Particulars	Details
Loan amount	₹ 10,000
Date of loan (Starting Date)	1-Apr-20X1
Date of loan (Finishing Date)	31-March-20X2
Description of repayment	Repayment of loan starts from 30-Sept-20X1 (To be paid half yearly)
Installment amount	₹ 2,500
Interest rate	12.00%
Interest charge	Interest to be charged quarterly
Upfront fees	₹ 500

How would loan be accounted in books of A Ltd?

[ICAI SM]

Ans: The loan taken by A Ltd shall be measured at amortised cost as follows:

- Initial measurement – At transaction price less processing fees

$$= 10,000 - 500 = 9,500$$

- Subsequently – interest to be accrued using effective rate of interest as follows:

Date	Amount of Loan	Repayment	Upfront fees paid	Amount of Interest	Days	IRR Calculation	Revised Interest computed	Loan Balance
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				t			ed		
1-Apr-20X1	10,000	-	500	-	-	9,500	-	-	
30-Jun-20X1	-	-	-	300	90	(300)	389	9,589	
30-Sep-20X1	-	2500	-	300	92	(2,800)	401	7,190	
31-Dec-20X1	-	-	-	225	92	(225)	301	7,266	
31-Mar 20X2	-	2500	-	225	90	(2,725)	297	4,838	
30-Jun-20X2	-	-	-	150	91	(150)	200	4,888	
30-Sep-20X2	-	2500	-	150	92	(2,650)	204	2,442	
31-Dec-20X2	-	-	-	75	92	(75)	102	2,473	
31-Mar-20X3	-	2500	-	75	91	(2,575)	102	0	
IRR							16.60%		

Q38: QA Ltd. issued 10,00,000 of 8% Long Term bond-A Series of ₹ 1 each on 1st April, 2016. The bond tenure is 3 years. Interest is payable annually on 1st April each year. The investors expect an effective interest rate on the loan at 10%. QA Ltd. wants you to suggest the suitable accounting entries for the issue of these bonds as per applicable Ind AS. Consider the discounting factor 3 years, 10% discounting factor is 0.751315 and 3 years cumulative discounting factor is 2.48685.

- What is the principal value of the bond at the initial recognition at the time of issue of bond as per applicable Ind AS?
- What is the present value of the interest payment to be recognised as part of the sale price of the bond as per applicable Ind AS?
- What are the proceeds of the sale of the bond to be recognized at the time of initial recognition as per applicable Ind AS?
- What is the accounting entry to be passed at the time of accounting for payment of interest for the first year? [MTP May 2019]

Ans: (i) ₹ 7,51,315

(ii) ₹ 1,98,948

(iii) ₹ 9,50,263

(iv) Bond Interest Expenses A/c	Dr.	₹ 95,026
To Discount on Bond A/s		₹ 15,026
To Cash/Bank A/c		₹ 80,000

Workings for the above

Since the Effective interest rate on the loan is 10% while the Bond has been issued at 8%, the financial liability will be recognized at fair value determined as follows:

Calculation of initial recognition amount of 8% Long term Loan Bond A Series

Particulars

₹

Present value of the principal repayable after 3 years (10,00,000 x .751315)	7,51,315
Present value of Interest [(10,00,000 x 8%) x 2.48685]	1,98,948
Total Present Value of Long term Loan Bond	9,50,263

Interest for the first year recognized in the books as per effective interest rate method

$$= ₹9,50,263 \times 10\% = ₹ 95,026$$

However, interest paid is @ 8% i.e. ₹ 10,00,000 x 8% = ₹ 80,000

Q39: NAV Limited granted a loan of ₹ 120 lakh to OLD Limited for 5 years @ 10% p.a. which is Treasury bond yield of equivalent maturity. But the incremental borrowing rate of OLD Limited is 12%. In this case, the loan is granted to OLD Limited at below market rate of interest. Ind AS 109 requires that a financial asset or financial liability is to be measured at fair value at the initial recognition. Should the transaction price be treated as fair value? If not, find out the fair value. What is the accounting treatment of the difference between the transaction price and the fair value on initial recognition in the book of NAV Ltd.?

Present value factors at 12%: Year	1	2	3	4	5
PVF	0.892	0.797	0.712	0.636	0.567

[Nov 2018]

Ans: Since the loan is granted to OLD Ltd at 10% i.e below market rate of 12%. It will be considered as loan given at off market terms. Hence the Fair value of the transaction will be lower from its transaction price & not the transaction price.

Calculation of fair value

Year	Future cash flow (in lakh)	Discounting factor @ 12%	Present value (in lakh)
1	12	0.892	10.704
2	12	0.797	9.564
3	12	0.712	8.544
4	12	0.636	7.632
5	120+12=132	0.567	74.844
			111.288

The fair value of the transaction be ₹ 111.288 lakh.

Since fair value is based on level 1 input or valuation technique that uses only data from observable markets, difference between fair value and transaction price will be recognized in Profit and Loss as fair value loss i.e ₹ 120 lakh – ₹ 111.288 lakh = ₹ 8.712 lakh.

Note: One may also calculate the above fair value by the way of annuity on interest amount rather than separate calculation.

DERECOGNITION OF FINANCIAL LIABILITIES

Q40: On 1 January 20X0, XYZ Ltd. issues 10 year bonds for ₹ 10,00,000, bearing interest at 10% (payable annually on 31st December each year). The bonds are redeemable on 31 December 20X9 for ₹ 10,00,000. No costs or fees are incurred. The effective interest rate is therefore 10%. On 1 January 20X5 (i.e. after 5 years) XYZ Ltd. and the bondholders agree to a modification in accordance with which:

- the term is extended to 31 December 20Y1;
- interest payments are reduced to 5% p.a.;
- the bonds are redeemable on 31 December 20Y2 for ₹ 15,00,000; and
- legal and other fees of ₹1,00,000 are incurred.

XYZ Ltd. determines that the market interest rate on 1 January 20X5 for borrowings on similar terms is 11%.

Record journal entries in the books of XYZ Limited till 31 December 20X6, after giving effect of the changes in the terms of the loan on 1 January 20X5. [ICAI SM]

Ans: On 1 January 20X5, the discounted present value of the remaining cash flows of the original financial liability is ₹ 10,00,000.

On this date, XYZ Ltd. will compute the present value of:

cash flows under the new terms – i.e. ₹ 15,00,000 payable on 31 December 20Y1 and ₹ 50,000 payable for each of the 7 years ending 31 December 20Y1 any fee paid (net of any fee received) – i.e. ₹ 1,00,000 using the original effective interest rate of 10%.

The total of these amounts to ₹ 11,13,158 (Refer Working Note).

This differs from the discounted present value of the remaining cash flows of the original financial liability by 11.32% i.e. by more than 10%. Hence, extinguishment accounting applies.

The next step is to estimate the fair value of the modified liability. This is determined as the present value of the future cash flows (interest and principal), using an interest rate of 11% (the market rate at which XYZ Ltd. could issue new bonds with similar terms). The estimated fair value on this basis is ₹ 958,097 (Refer Working Note). A gain or loss on modification is then determined as:

Gain (loss) = carrying value of existing liability - fair value of modified liability - fees and costs incurred i.e. ₹ 10,00,000 – ₹ 9,58,097 – ₹ 1,00,000 = Loss of ₹ 58,097

Working Note:

Amount	Discounting factor @ 10%	Present value	Discounting factor @ 11%	Present value
15,00,000	0.513158	7,69,737	0.481658	7,22,487
1,00,000		1,00,000		
50,000 for 7 years	4.868419	<u>2,43,421</u>	4.712196	<u>2,35,610</u>
		11,13,158		<u>9,58,097</u>
PV of original cash flows @ original EIR		<u>(10,00,000)</u>		
Difference		<u>1,13,158</u>		
Difference %		11.32%		

Q41: On 1 January 20X0, XYZ Ltd. issues 10 year bonds for ₹ 1,000,000, bearing interest at 10% (payable annually on 31st December each year). The bonds are redeemable on 31 December 20X9 for ₹ 1,000,000. No costs or fees are incurred. The effective interest rate is therefore 10%. On 1 January 20X5 (i.e. after 5 years) XYZ Ltd. and the bondholders agree to a modification in accordance with which:

- no further interest payments are made
- the bonds are redeemed on the original due date (31 December 20X9) for ₹ 1,600,000;
- legal and other fees of ₹ 50,000 are incurred.

Give Accounting treatment.

[ICAI SM]

Ans: On 1 January 20X5, the discounted present value of the remaining cash flows of the original financial liability is ₹ 10,00,000.

On this date, XYZ Ltd. will compute the present value of:

- cash flows under the new terms – i.e. ₹ 16,00,000 payable on 31 December 20X9
- any fees paid (net of any fees received) – i.e. ₹ 50,000 using the original effective interest rate of 10%.

The total of these amounts to ₹ 10,43,474 (Refer Working Note). This differs from the discounted present value of the remaining cash flows of the original financial liability by 4.35% i.e. by less than 10%. Hence, modification accounting applies.

On this basis:

- the fees paid of ₹ 50,000 are netted against the existing liability of ₹ 10,00,000, resulting in an adjusted carrying amount of ₹ 9,50,000;
- the effective interest rate (EIR) is recalculated. This is the rate which discounts the future cash flows (₹ 16,00,000 in five years' time) to the adjusted carrying amount of ₹ 9,50,000. The adjusted EIR is 10.99%
- the adjusted EIR is used to determine the amortised cost and interest expense in future periods.

Working Note:**For testing extinguishment -**

Cash flows under new terms	16,00,000
PV as at 01 January 20x5	
Revised cash flows@ original EIR	9,93,474
Fees incurred	50,000
PV of revised cash flows @ original EIR	10,43,474
PV of original cash flows @ original EIR	(10,00,000)
Difference	43,474
Difference %	4%
Less than 10% - Indicates modification	

Accounting for revised cash flows @ original EIR

Year	Opening balance	Interest	Payment	Closing balance
0	10,00,000	-	-50,000	9,50,000
1	9,50,000	1,04,405	0	10,54,405
2	10,54,405	1,15,879	0	11,70,284
3	11,70,284	1,28,614	0	12,98,898
4	12,98,898	1,42,749	0	14,41,647
5	14,41,647	1,58,353*	-16,00,000	-
* Difference is due to approximation				

Q42: Wheel Co. Limited borrowed ₹ 500,000,000 from a bank on 1 January 20X1. The original terms of the loan were as follows:

- Interest rate: 11%
- Repayment of principal in 5 equal instalments
- Payment of interest annually on accrual basis
- Upfront processing fee: ₹ 5,870,096

Effective interest rate on loan: 11.50%

On 31 December 20X2, Wheel Co. Limited approached the bank citing liquidity issues in meeting the cash flows required for immediate instalments and re-negotiated the terms of the loan with banks as follows:

- Interest rate 15%
- Repayment of outstanding principal in 10 equal instalments starting 31 December 20X3
- Payment of interest on an annual basis

Record journal entries in the books of Wheel Co. Limited till 31 December 20X3, after giving effect of the changes in the terms of the loan on 31 December 20X2 [ICAI SM]

Ans: On the date of initial recognition, the effective interest rate of the loan shall be computed keeping in view the contractual cash flows and upfront processing fee paid. The following table shows the amortisation of loan based on effective interest rate:

Date	Cash flows (principal)	Cash flows (interest and fee)	Amortised cost (opening + interest – cash flows)	Interest @ EIR (11.50%)
1-Jan-20X1	(500,000,000)	5,870,096	494,129,904	
31-Dec-20X1	100,000,000	55,000,000	395,954,843	56,824,939
31-Dec-20X2	100,000,000	44,000,000	297,489,650	45,534,807
31-Dec-20X3	100,000,000	33,000,000	198,700,959	34,211,310
31-Dec-20X4	100,000,000	22,000,000	99,551,570	22,850,610
31-Dec-20X5	100,000,000	11,000,000	(0)	11,448,430

a. **1 January 20X1 –**

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Cash A/c Dr.	494,129,904	
To Loan from bank A/c (Being loan recorded at its fair value less transaction costs on the initial recognition date)		494,129,904

b. **31 December 20X1 –**

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan from bank A/c Dr.	98,175,061	
Interest expense (profit and loss) Dr.	56,824,939	
To Cash A/c (Being first instalment of loan and payment of interest accounted for as an adjustment to the amortised cost of loan)		155,000,000

c. **31 December 20X2 – Before Wheel Co. Limited approached the bank –**

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Interest expense (profit and loss) Dr.	45,534,807	
To Loan from bank A/c		1,534,807
To cash A/c (Being loan payment of interest recorded by the Company before it approached the Bank for deferment of principal)		44,000,000

Upon receiving the new terms of the loan, Wheel Co. Limited, re-computed the carrying value of the loan by discounting the new cash flows with the original effective interest rate and comparing the same with the current carrying value of the loan. As per requirements of Ind AS

109, any change of more than 10% shall be considered a substantial modification, resulting in fresh accounting for the new loan:

Date	Cash flows (principal)	Interest outflow @15%	Discount factor	PV of cash flows
31-Dec-20X2	(400,000,000)			
31-Dec-20X3	40,000,000	60,000,000	0.8969	89,686,099
31-Dec-20X4	40,000,000	54,000,000	0.8044	75,609,805
31-Dec-20X5	40,000,000	48,000,000	0.7214	63,483,092
31-Dec-20X6	40,000,000	42,000,000	0.6470	53,053,542
31-Dec-20X7	40,000,000	36,000,000	0.5803	44,100,068
31-Dec-20X8	40,000,000	30,000,000	0.5204	36,429,133
31-Dec-20X9	40,000,000	24,000,000	0.4667	29,871,422
31-Dec-20Y0	40,000,000	18,000,000	0.4186	24,278,903
31-Dec-20Y1	40,000,000	12,000,000	0.3754	19,522,235
31-Dec-20Y3	40,000,000	6,000,000	0.3367	15,488,493
PV of new contractual cash flows discounted at 11.50%				451,522,791
Carrying amount of loan				397,489,650
Difference				54,033,141
Percentage of carrying amount				13.59%

Note: Calculation above done on full decimal, though in the table discount factor is limited to 4 decimals.

Considering a more than 10% change in PV of cash flows compared to the carrying value of the loan, the existing loan shall be considered to have been extinguished and the new loan shall be accounted for as a separate financial liability. The accounting entries for the same are included below:

d. 31 December 20X2 – accounting for extinguishment

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan from bank (old) A/c Dr	397,489,650	
Finance cost (profit and loss) Dr	2,510,350	
To Loan from bank (new) A/c		400,000,000
(Being new loan accounted for at its principal amount in absence of any transaction costs directly related to such loan and correspondingly a de-recognition of existing loan)		

e. 31 December 20X3

Particulars	Dr. Amount (₹)	Cr. Amount (₹)
Loan from bank A/c Dr.	40,000,000	
Interest expense (profit and loss) Dr.	60,000,000	
To cash A/c		100,000,000
(Being first instalment of the new loan and payment)		

of interest accounted for as an adjustment to the amortised cost of loan)		
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Q43: JK Ltd. has an outstanding unsecured loan of ₹ 90 crores to a bank. The effective interest rate (EIR) of this loan is 10%. Owing to financial difficulties, JK Ltd. is unable to service the debt and approaches the bank for a settlement.

The bank offers the following terms which are accepted by JK Ltd.:

2/3rd of the debt is unsustainable and hence will be converted into 70% equity interest in JK Ltd. The fair value of net assets of JK Ltd. is ₹ 80 crores.

1/3rd of the debt is sustainable and the bank agrees to certain moratorium period and decrease in interest rate in initial periods. The present value of cash flows as per these revised terms calculated using original EIR is ₹ 25 crores. The fair value of the cash flows as per these revised terms is ₹ 28 crores.

Record journal entries in the books of JK Limited after giving effect of the changes in the terms of the loan. ICAI SM]

Ans: Fair value of the consideration paid is ₹ 56 crores (70% of ₹ 80 crores) plus ₹ 28 crores i.e. ₹ 84 crores.

Accordingly, 2/3rd of the original financial liability is extinguished through issue of equity shares and terms of 1/3rd of the original financial liability have been modified. JK Ltd. will need to evaluate if this modification tantamount to “substantial modification” or not.

Applying the guidance contained in Appendix D to Ind AS 109:

Difference between the fair value of equity instruments (₹ 56 crores) and 2/3rd of the original financial liability (2/3rd of ₹ 90 crores = ₹ 60 crores) i.e. ₹ 4 crores will be recognised as a gain in the statement of profit or loss

Carrying amount of original financial liability which is not extinguished (1/3rd of ₹ 90 crores = ₹ 30 crores) is compared with the present value of cash flows as per these revised terms (₹ 25 crores)

As the difference is more than 10%, this results in substantial modification of the original financial liability. Resultantly, the existing financial liability (₹ 30 crores) will be extinguished and the new financial liability will be recognised at its fair value i.e. ₹ 28 crores.

The difference i.e. ₹ 2 crores will be recognised as a gain in the statement of profit or loss

IMPAIRMENT OF FINANCIAL ASSETS

Q44: Entity A originates a single 10 year amortising loan for CU1 million. Taking into consideration the expectations for instruments with similar credit risk (using reasonable and supportable information that is available without undue cost or effort), the credit risk of the borrower, and the economic outlook for the next 12 months, Entity A estimates that the loan at initial recognition has a probability of default (POD) of 0.5 per cent over the next 12 months. Entity A

also determines that changes in the 12-month PoD are a reasonable approximation of the changes in the lifetime POD for determining whether there has been a significant increase in credit risk since initial recognition. Loss given default (LGD) is estimated as 25% of the balance outstanding. Calculate loss allowance. **[ICAI SM]**

Ans: At reporting date, no change in 12-month POD and entity assesses that there is no significant increase in credit risk since initial recognition – therefore lifetime ECL is not required to be recognised.

Particulars	Details
Loan	₹1,000,000 (A)
LGD	25% (B)
POD – 12 months	0.5% (C)
Loss allowance (for 12-months ECL)	₹1,250 (A*B*C)

Q45: Bank A originates 2,000 bullet loans with a total gross carrying amount of CU 500,000. Bank A segments its portfolio into borrower groups (Groups X and Y) on the basis of shared credit risk characteristics at initial recognition. Group X comprises 1,000 loans with a gross carrying amount per client of CU 200, for a total gross carrying amount of CU 200,000. Group Y comprises 1,000 loans with a gross carrying amount per client of CU 300, for a total gross carrying amount of CU 300,000. There are no transaction costs and the loan contracts include no options (for example, prepayment or call options), premiums or discounts, points paid, or other fees. Calculate loss rate when

Group	Historic per annum average defaults	Present value of observed loss assumed
X	4	CU 600
Y	2	CU 450

[ICAI SM]

Ans: Bank A measures expected credit losses on the basis of a loss rate approach for Groups X and Y. In order to develop its loss rates, Bank A considers samples of its own historical default and loss experience for those types of loans.

In addition, Bank A considers forward-looking information, and updates its historical information for current economic conditions as well as reasonable and supportable forecasts of future economic conditions. Historically, for a population of 1,000 loans in each group, Group X's loss rates are 0.3 per cent, based on four defaults, and historical loss rates for Group Y are 0.15 per cent, based on two defaults.

	Number of clients in sample	Estimated per client gross carrying amount at	Total estimated gross carrying amount at	Historic per annum average defaults	Estimated total gross carrying amount at	Present value of observed loss assumed	Loss rate

		default	default		default		
Group	A	B	C = A × B	D	E = B × D	F	G = F ÷ C
X	1,000	CU200	CU2,00,000	4	CU800	CU600	0.3%
Y	1,000	CU300	CU3,00,000	2	CU600	CU450	0.15%

Q46: Company M, a manufacturer, has a portfolio of trade receivables of CU30 million in 20X1 and operates only in one geographical region. The customer base consists of a large number of small clients and the trade receivables are categorised by common risk characteristics that are representative of the customers' abilities to pay all amounts due in accordance with the contractual terms. The trade receivables do not have a significant financing component in accordance with Ind AS 115. In accordance with paragraph 5.5.15 of Ind AS 109 the loss allowance for such trade receivables is always measured at an amount equal to lifetime expected credit losses.

Please use the following information of debtors outstanding:

	Gross carrying amount
Current	CU 15,000,000
1–30 days past due	CU 7,500,000
31–60 days past due	CU 4,000,000
61–90 days past due	CU 2,500,000
More than 90 days past due	CU 1,000,000
	CU 30,000,000

Company M uses following default rates for making provisions:

	Current	1–30 days past due	31–60 days past due	61–90 days past due	More than 90 days past due
Default rate	0.3%	1.6%	3.6%	6.6%	10.6%

Determine the expected credit losses for the portfolio.

[ICAI SM]

Ans: To determine the expected credit losses for the portfolio, Company M uses a provision matrix. The provision matrix is based on its historical observed default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. At every reporting date the historical observed default rates are updated and changes in the forward-looking estimates are analysed. In this case it is forecast that economic conditions will deteriorate over the next year.

On that basis, Company M estimates the following provision matrix:

	Current	1–30 days past due	31–60 days past due	61–90 days past due	More than 90 days past due
Default rate	0.3%	1.6%	3.6%	6.6%	10.6%

The trade receivables from the large number of small customers amount to CU 30 million and are measured using the provision matrix.

	Gross carrying amount	Lifetime expected credit loss allowance (Gross carrying amount x lifetime expected credit loss rate)
Current	CU 15,000,000	CU 45,000
1–30 days past due	CU 7,500,000	CU 120,000
31–60 days past due	CU 4,000,000	CU 144,000
61–90 days past due	CU 2,500,000	CU 165,000
More than 90 days past due	CU 1,000,000	CU 106,000
	CU 30,000,000	CU 580,000

Q47: On 1st April 2017, A Ltd. lent ₹ 2 crores to a supplier in order to assist them with their expansion plans. The arrangement of the loan cost the company ₹ 10 lakhs. The company has agreed not to charge interest on this loan to help the supplier's short-term cash flow but expected the supplier to repay ₹ 2.40 crores on 31st March 2019. As calculated by the finance team of the company, the effective annual rate of interest on this loan is 6.9% On 28th February 2018, the company received the information that poor economic climate has caused the supplier significant problems and in order to help them, the company agreed to reduce the amount repayable by them on 31st March 2019 to ₹ 2.20 crores. Suggest the accounting entries as per applicable Ind AS **[RTP Nov 2018]**

Ans: The loan to the supplier would be regarded as a financial asset. The relevant accounting standard Ind AS 109 provides that financial assets are normally measured at fair value.

If the financial asset in which the only expected future cash inflows are the receipts of principal and interest and the investor intends to collect these inflows rather than dispose of the asset to a third party, then Ind AS 109 allows the asset to be measured at amortised cost using the effective interest method.

If this method is adopted, the costs of issuing the loan are included in its initial carrying value rather than being taken to profit or loss as an immediate expense. This makes the initial carrying value ₹ 2,10,00,000.

Under the effective interest method, part of the finance income is recognised in the current period rather than all in the following period when repayment is due. The income recognised in the current period is ₹ 14,49,000 (₹ 2,10,00,000 x 6.9%) evidence that the financial asset suffered impairment at 31st March 2018.

The asset is re-measured at the present value of the revised estimated future cash inflows, using the original effective interest rate. Under the revised estimates the closing carrying amount of the asset would be ₹ 2,05,79,981 (₹ 2,20,00,000 / 1.069). The reduction in carrying value of ₹ 18,69,019 (₹ 2,24,49,000 – 2,05,79,981) would be charged to profit or loss in the current period as an impairment of a financial asset.

Therefore, the net charge to profit or loss in respect of the current period would be ₹ 4,20,019 (18,69,019 – 14,49,000).

Q48: An entity purchases a debt instrument with a fair value of ₹ 1,000 on 15th March, 20X1 and measures the debt instrument at fair value through other comprehensive income. The instrument has an interest rate of 5% over the contractual term of 10 years, and has a 5% effective interest rate. At initial recognition, the entity determines that the asset is not a purchased or original credit-impaired asset.

On 31st March 20X1 (the reporting date), the fair value of the debt instrument has decreased to ₹ 950 as a result of changes in market interest rates. The entity determines that there has not been a significant increase in credit risk since initial recognition and that ECL should be measured at an amount equal to 12 month ECL, which amounts to ₹ 30.

On 1st April 20X1, the entity decides to sell the debt instrument for ₹ 950, which is its fair value at that date.

Pass journal entries for recognition, impairment and sale of debt instruments as per Ind AS 109. Entries relating to interest income are not to be provided. **[RTP May 2019]**

Ans: **On Initial recognition**

	Debit (₹)	Credit (₹)
Financial asset-FVOCI	Dr. 1,000	
To Cash		1,000

On Impairment of debt instrument

Impairment expense (P&L)	Dr. 30	
Other comprehensive income	Dr. 20	
To Financial asset-FVOCI		50

The cumulative loss in other comprehensive income at the reporting date was ₹ 20. That amount consists of the total fair value change of ₹ 50 (that is, ₹ 1,000-₹ 950) offset by the change in the accumulated impairment amount representing 12-month ECL, that was recognized (₹ 30).

On Sale of debt instrument

Cash	950
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To Financial asset –FVOCI	950
Loss on sale (P&L)	20
To Other comprehensive income	20

DERIVATIVES HELD FOR TRADING

Q49: A Ltd. buys the following Equity Stock Options and the seller/writer of the options is B Ltd.

Date of Purchase	Type of Options	Expiry date	Market Lot	Premium per unit	Strike Price (₹)
29 June, 2001	XYZ Co. Ltd. Call	Aug. 30, 2001	100	30	460
30 June, 2001	ABC Co. Ltd. Put	Aug. 30, 2001	200	40	550

Journalize assuming price of XYZ Co. Ltd. and ABC Co. Ltd. on 30th August, 2001 is ₹ 470 and 500 respectively. **[Other Source]**

Ans: Journal Entries

Date	Books of A Ltd.		Books of B Ltd.	
29/06/01	Derivative Financial Asset Dr. To Bank account (Being premium paid to buy a call option)	3,000 3,000	Bank account Dr. To Derivative Financial Liability (Being premium received to sell a call option)	3,000 3,000
30/06/01	Derivative Financial Asset Dr. To Bank account (Being premium paid to buy a put option)	8,000 8,000	Bank account Dr. To Derivative Financial Liability (Being premium received to sell a put option)	8,000 8,000
30/08/01	Cash Dr. Fair Value Loss (PL) Dr. To Derivative Financial Asset (Being Call option settled at its Fair Value)	1,000 2,000 3,000	Derivative Financial Liability Dr. To Fair Value Gain (PL) To Cash (Being Call option settled at its Fair Value)	3,000 2,000 1,000
	Fair Value as 30/08/01 (470 -460) x 100 Lot Fair Value as 29/06/01 (Premium Paid) Fair Value Loss for Holder			1,000 3,000 2,000

30/08 /01	Cash	Dr.	10,000	Derivative Financial Liability	Dr.	8,000
	To Fair Value Gain (PL)		2,000	Fair Value loss (PL)		2,000
	To Derivative Financial Asset		8,000	To Cash		10,000
	(Being Put option settled at its Fair Value)			(Being Call option settled at its Fair Value)		
	Fair Value as 30/08/01 (550 -500) x 100 Lot					10,000
	Fair Value as 30/06/01 (Premium Paid)					8,000
	Fair Value Gain for Holder					2,000

Q50: Mr. Investor buys a stock option of ABC Co. Ltd. in July, 2003 with a strike price on 30.7.2003 ₹ 250 to be expired on 30.8.03. The premium is ₹ 20 per unit and the market lot is 100. The margin to be paid is ₹ 120 per unit. Show the accounting treatment in the books of Buyer and seller when:

- The option is settled by delivery of the asset, and
- The option is settled in cash and the index price is ₹ 260 per unit. [Other Source]

Ans: Accounting entries in the books of buyer

2003	At the time of inception	Rs.	Rs.
July	Deposit for margin money account	Dr.	12,000
	To Bank account		12,000
	(Being margin money paid on stock option)		
	Derivative Financial Asset	Dr.	2,000
	To Bank account		2,000
	(Being premium paid to buy a stock option)		
August	At the time of settlement		
(i)	Option is settled by delivery of the asset		
	Profit and loss account	Dr.	1,000
	To Derivative Financial Asset		1,000
	(Being recognition of financial assets at fair value and fair value loss recognised on settlement)		
	Investment in Shares of ABC Ltd. account	Dr.	26,000
	To Derivative Financial Asset		1,000
	To Deposit for margin money account		12,000

	To Bank account		13,000
	(Being option exercised and shares acquired, Rs. 12,000 margin money adjusted and the balance amount was paid)		
(ii)	Option is settled in cash		
	Profit and loss account	Dr.	1,000
	To Derivative Financial Asset		1,000
	(Being recognition of financial assets at fair value and fair value loss recognised on settlement)		
	Bank account (Rs. 100 × 10)	Dr.	1,000
	To Derivative Financial Asset		1,000
	(Being net cash received on exercise of option)		
	Bank account	Dr.	12,000
	To Deposit for margin money account		12,000
	(Being margin on equity stock option received back on exercise of option)		

Working Notes:

Calculation of fair value gain or loss on settlement

Exercise Price per option	250
Market Price on settlement	260
Fair value per option on settlement	10
Total Fair Value of Call option on settlement (10 x 100)	1000
Initial Value of Call option	2,000
Fair Value loss to be recognised in PL	1,000

Q51: On 1st January 20X1, SamCo. Ltd. agreed to purchase USD (\$) 20,000 from JT Bank in future on 31st December 20X1 for a rate equal to ₹ 68 per USD. SamCo. Ltd. did not pay any amount upon entering into the contract. SamCo Ltd. is a listed company in India and prepares its financial statements on a quarterly basis.

Following the principles of recognition and measurement as laid down in Ind AS 109, you are required to record the entries for each quarter ended till the date of actual purchase of USD.

For the purposes of accounting, please use the following information representing marked to market fair value of forward contracts at each reporting date:

As at 31st March 20X1 – ₹ (25,000)

As at 30th June 20X1 - ₹ (15,000)

As at 30th September 20X1 - ₹ 12,000

Spot rate of USD on 31st December 20X1 - ₹ 66 per USD

[ICAI SM; May 2018]

Ans:

(i) **Assessment of the arrangement using the definition of derivative included under Ind AS 109.**

Derivative is a financial instrument or other contract within the scope of this Standard with all three of the following characteristics:

- its value changes in response to the change in a Specified 'underlying'.
- it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- it is settled at a future date.

Upon evaluation of contract in question it is noted that the contract meets the definition of a derivative as follows:

- the value of the contract to purchase USD at a fixed price changes in response to changes in foreign exchange rate.
- the initial amount paid to enter into the contract is zero. A contract which would give the holder a similar response to foreign exchange rate changes would have required an investment of USD 20,000 on inception.
- the contract is settled in future

The derivative is a forward exchange contract.

As per Ind AS 109, derivatives are measured at fair value upon initial recognition and are subsequently measured at fair value through profit and loss.

(ii) Accounting on 1st January 20X1:

As there was no consideration paid and without evidence to the contrary the fair value of the contract on the date of inception is considered to be zero. Accordingly, no accounting entries shall be recorded on the date of entering into the contract.

(iii) Accounting on 31st March 20X1:

Profit and loss A/c	Dr.	25,000	
To derivative financial liability			25,000
(Being mark to market loss on forward contract recorded)			

(iv) Accounting on 30th June 20X1:

The change in value of the derivative forward contract shall be recorded as a derivative financial liability in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr.	10,000	
To Profit and loss A/c			10,000
(being partial reversal of mark to market loss on forward contract recorded)			

(v) Accounting on 30th September 20X1:

The value of the derivative forward contract shall be recorded as a derivative financial asset in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr	15,000	
Derivative financial asset A/c	Dr	12,000	
To Profit and loss A/c			27,000

(being gain on mark to market of forward contract booked as derivative financial asset and reversal of derivative financial liability)

(vi) Accounting on 31st December 20X1:

The settlement of the derivative forward contract by actual purchase of USD 20,000 shall be recorded in the books of SamCo Ltd. by recording the following journal entry:

Cash (USD Account) @ 20,000 * 66	Dr.	13,20,000	
Profit and loss A/c	Dr.	52,000	
To Cash @ 20,000 x 68			13,60,000
To Derivative financial asset A/c			12,000

(being loss on settlement of forward contract booked on actual purchase of USD)

Q52: On April 1, 2006, A Ltd. borrowed ₹ 10 lakh at annual fixed interest rate of 7% payable half yearly. The life of the loan is 4 years with no pre-payment permitted. The company expected the interest rate to fall and on the same day, it entered into an interest rate swap arrangement, whereby the company would pay 6-month LIBOR and would receive annual fixed interest of 7% every half-year. The swap effectively converted the company's fixed rate obligation to floating rate obligation. The follow value of swap and debt are available

	Value of swap	Value of debt
	₹ lakh	₹ lakh
September 30, 2006	+ 0.2	10.2
March 31, 2007	- 0.1	9.9

Six-month LIBOR on April 1, 2006 was 6% and that on October 1, 2006 was 8%.

Show important accounting entries in respect of the swap arrangement.

[ICAI SM – Old Syllabus]

Ans: The interest rate swap is used to hedge fair value of fixed-rate debt. This is a case of fair value hedge. **Books of A Ltd.**

	₹	₹
	Lakh	lakh
Interest [10 × 7% × 6/12]	0.35	
To Cash		0.35

(Interest on fund borrowed for first half-year 2006-07)		
Loss on valuation of debt [10.2 – 10]	0.20	
To Loan		0.20
(Increase in value of debt recognised)		
Swap Hedge	0.20	
To Gain on Swap Hedge		0.20
(Increase in value of swap recognised)		
Cash [10 (7% – 6%) × 6/12]	0.05	
To Interest		0.05
(Swap settlement received for first half-year 2006-07)		
Interest [10 × 7% × 6/12]	0.35	
To Cash		0.35
(Interest on fund borrowed for second half-year 2006-07)		
Loan [10.2 – 9.9]	0.30	
To Gain on valuation of debt		0.30
(Decrease in value of debt recognised)		
Loss on Swap Hedge [0.2 – (– 0.1)]	0.30	
To Swap Hedge		0.30
(Cumulative loss on swap recognised)		
Interest [10 (8% – 7%) × 6/12]	0.05	
To Cash		0.05
(Swap settlement paid for second half-year 2006-07)		

Q53: Entity A has the INR as its functional currency. It expects to purchase a machine for \$ 10,000 on October 31, 20X6. Accordingly, it is exposed to the risk of increases in the dollar rate. If the dollar rate increases before the purchase takes place, the entity will have to pay more INR to obtain the \$10,000 that it will have to pay for the machine. To offset the risk of increases in the dollar rate, the entity enters into a forward contract on April 30, 20X6, to purchase \$10,000 in six months for a fixed amount (₹ 60,000). Entity A designates the forward contract as a hedging instrument in a cash flow hedge of its exposure to increases in the dollar rate.

On July 31 the dollar has appreciated, such that \$10,000 for delivery on October 31, 20X6, costs ₹ 65,000 on the market. Therefore, the forward contract has increased in fair value to ₹ 5,000 (i.e., the difference between the committed price of ₹ 60,000 and the current price of ₹ 65,000). Entity A still expects to purchase the machine for \$10,000, so it concludes that the hedge is 100% effective.

On October 31, 20X6, the dollar rate has further increased, such that \$10,000 cost ₹ 66,000 in the spot market. Therefore, the fair value of the forward contract has increased to ₹ 6,000 (i.e., the difference between the committed price of ₹ 60,000 and the spot price of ₹ 66,000). It still expects to purchase the machine for \$10,000. Give necessary journal entry.

[Other Sources]

Ans: On 30 April, 2016

At inception, the forward contract has a fair value of zero, so no journal entry is required.

On 31st July 2016

Because the hedge is fully effective, the entire change in the fair value of the hedging instrument is recognized directly in equity. Entity A makes this entry:

Dr Forward asset	5,000
Cr OCI	5,000

On 31st Oct 2016

As entity still expects to purchase the machine for \$10,000, Entity A makes following entry

Dr Forward asset	1000
Cr OCI	1000

The forward contract is settled and Entity A makes this entry:

Dr Cash	6,000
Cr Forward asset	6,000

Entity A purchases the machine for \$10,000 (₹ 66,000) and makes this journal entry:

Dr Machine	66,000
Cr Accounts Payable	66,000

Depending on Entity A's accounting policy, the deferred gain or loss remaining in equity of ₹ 6,000 should either (1) remain in equity and be released from equity as the machine is depreciated or otherwise affects profit or loss or (2) be deducted from the initial carrying amount of the machine. Assuming the latter treatment, Entity A would make this journal entry:

Dr Equity	6,000
Cr Machine	6,000

The net effect of the cash flow hedge is to lock in a price of ₹ 60,000 for the machine.

Q54: Entity A is a producer of widgets. To hedge the risk of declines in the price of 100 widgets that it expects to sell on December 31, 20X8, Entity A on January 1, 20X7, enters into a net-settled forward contract on 100 widgets for delivery on December 31, 20X8. During 20X7, the change in the fair value of the forward contract is a decrease of \$8,000. During 20X8, the change in the fair value of the forward contract is an increase of \$2,000. On December 31, 20X8, Entity A settles the forward contract by paying \$6,000. At the same time, it sells 100 widgets to customers for \$93,000.

Required

Prepare the appropriate journal entries on January 1, 20X7, December 31, 20X7, and December 31, 20X8. Assume that all conditions for hedge accounting are met and that the hedging

relationship is fully effective (100%).

[Other Sources]

Ans: January 1, 20X7

No entry required.

December 31, 20X

Dr	Equity	8,000	
Cr	Derivative liability		8,000

(To record the decrease in fair value of the hedging instrument)

December 31, 20X8

Dr	Derivative liability	2,000	
Cr	Equity		2,000

(To record the increase in fair value of the hedging instrument)

Dr	Derivative liability	6,000	
Cr	Cash		6,000

(To record the settlement of the hedging instrument)

Dr	Cash	93,000	
Cr	Equity		6,000
Cr	Sales revenue		87,000

(To record the sale and the associated amount deferred in equity related to the hedge of the sale)

Q55: On 1 January 20X1, Company D issues a three-year 5.5% fixed rate bond of USD 15 million at par. D's functional currency is sterling. As part of its risk management policy, D decides to eliminate the exposure arising from movements in the US dollar/GBP exchange rates on the principal amount of the bond for three years. G enters into a foreign currency forward contract to buy USD 15 million and sell GBP 9,835,389 at 31 December 20X3.

D designates and documents the forward contract as the hedging instrument in a cash flow hedge of the variability in cash flows arising from the repayment of the principal amount of the bond due to movements in forward US dollar/sterling exchange rates.

D states in its hedge documentation that it will use the hypothetical derivative method to assess hedge effectiveness. G identifies the hypothetical derivative as a forward contract under which it buys USD 15 million and sells GBP 9,835,389 at 31 December 20X3 (the repayment date of the bond). The hypothetical foreign currency forward contract has a fair value of zero at 1 January 20X1. The spot and the forward exchange rates and the fair value of the foreign currency forward contract are as follows:

Date	Spot rate	FWD rate	FV of forward	FWD points		
------	-----------	----------	---------------	------------	--	--

1-Jan-20X1	0.6213	0.6557	-	0.0344	USD	15,000,000
31-Dec-20X1	0.5585	0.5858	(957,205)	0.0273	Forward points	516,000
31-Dec-20X2	0.5209	0.528	(1,833,346)	0.0071		
30-Dec-20X3	0.5825	0.5825	(1,097,789)	-		

Pass necessary journal entries.

[ICAI SM - Deleted]

[For Answer – Refer Class Notes]

SEPARATION OF NON-EQUITY EMBEDDED DERIVATIVES

Q56: D Ltd. issues callable preference shares to G Ltd. for a consideration of ₹ 10 lakhs. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer anytime up to a period of 3 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 3 years. The preference shares carry a coupon of RBI base rate plus 1% p.a.

The prevailing market rate for similar preference shares, without the conversion feature or issuer's redemption option, is RBI base rate plus 4% p.a. On the date of contract, RBI base rate is 9% p.a. The value of call as determined using Black and Scholes model for option pricing is ₹ 29,165

Calculate the value of the liability and equity components.

[ICAI SM]

Ans: The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 3 years (₹ 10 lakhs discounted at 13% for 3 years) = ₹ 6,93,050

Present value of interest payable in arrears for 3 years (₹ 100,000 discounted at 13% for each of 3 years) = ₹ 2,36,115

The issuer's right to call the instrument in the event that interest rates go up makes a callable instrument less attractive to the holder than a plain vanilla instrument. This results in a derivative asset. The value of that early redemption option is ₹ 29,165

Net financial liability (A + B – C) = ₹ 9,00,000

Therefore, equity component = fair value of compound instrument, say, ₹ 1,000,000 less net financial liability component i.e. ₹ 9,00,000 = ₹ 1,00,000.

In subsequent years, the profit and loss account is charged with interest of RBI base rate plus 4% p.a. on the liability component at (A) above.

Q57: Certain callable convertible debentures are issued at ₹ 60. The value of similar debentures without call or equity conversion option is ₹ 57. The value of call as determined using Black and Scholes model for option pricing is ₹ 2. Determine values of liability and equity component.

[ICAI SM – Old Syllabus]

Ans: A callable bond is one that gives the issuer a right to buy the bond from the bondholders at a specified price. This feature in effect is a call option written by the bondholder. The option premium (value of call) is payable by the issuer.

Liability component (disregarding the call) = ₹ 57

Value of call payable by issuer = ₹ 2

Liability component = ₹ 57 – ₹ 2 = ₹ 55

Equity component = ₹ 60 – ₹ 55 = ₹ 5

Q58: Entity A (an INR functional currency entity) enters into a USD 1,000,000 sale contract on 1 January 20X1 with Entity B (an INR functional currency entity) to sell equipment on 30 June 20X1.

Spot rate on 1 January 20X1: INR/USD 45

Spot rate on 31 March 20X1: INR/USD 57

Three month forward rate on 31 March 20X1: INR/USD 45

Six month forward rate on 1 January 20X1: INR/USD 55

Spot rate on 30 June 20X1: INR/USD 60

Let's assume that this contract has an embedded derivative that is not closely related and requires separation. Please provide detailed journal entries in the books of Entity A for accounting of such embedded derivative until sale is actually made. **[ICAI SM]**

Ans: The contract should be separated using the 6 month USD/INR forward exchange rate, as at the date of the contract (INR/USD = 55). The two components of the contract are therefore:

- A sale contract for INR 55 Million
- Forward contract to receive US Dollars and pay INR i.e. a notional payment in INR. In other words, a six-month currency forward contract to buy US Dollars 1 Million at INR 55 per US Dollar
- This gives rise to a gain or loss on the derivative, and a corresponding derivative asset or liability.

On delivery

1. Entity A records the sales at the amount of the host contract = INR 55 Million
2. The embedded derivative is considered to expire.
3. The derivative asset or liability (i.e. the cumulative gain or loss) is settled by becoming part of the financial asset on delivery.
4. In this case the carrying value of the currency forward at 30 June 20X1 on maturity is = INR (1,000,000*60-55*1,000,000)=₹ 5,000,000 (profit/asset)

Journal Entries to be recorded at every period end

- a. 01 January 20X1 – No entry to be made

- b. 31 March 20X1 –
- | | | |
|---------------------------------------|----------------|------------|
| Profit and loss A/c | Dr. 10,000,000 | |
| To Derivative financial liability A/c | | 10,000,000 |
- (being loss on mark to market of embedded derivative booked)
- c. 30 June 20X1 –
- | | | |
|------------------------------------|----------------|------------|
| Derivative financial asset A/c | Dr. 5,000,000 | |
| Derivative financial liability A/c | Dr. 10,000,000 | |
| To Profit and loss A/c | | 15,000,000 |
- (being gain on embedded derivative based on spot rate at the date of settlement booked)
- d. 30 June 20X1 –
- | | | |
|----------------------|----------------|------------|
| Trade receivable A/c | Dr. 55,000,000 | |
| To Sales A/c | | 55,000,000 |
- (being sale booked at forward rate on the date of transaction)
- e. 30 June 20X1 –
- | | | |
|-----------------------------------|--------------|-----------|
| Trade receivable A/c | Dr 5,000,000 | |
| To Derivative financial asset A/c | | 5,000,000 |
- (being derivative asset re-classified as a part of trade receivables, bringing it to spot rate on the date of sale)

Q59: On 1 January 20X1, ABG Pvt. Ltd., a company incorporated in India enters into a contract to buy solar panels from A&A Associates, a firm domiciled in UAE, for which delivery is due after 6 months i.e. on 30 June 20X1

The purchase price for solar panels is US\$ 50 million.

The functional currency of ABG is Indian Rupees (INR) and of A&A is Dirhams.

The obligation to settle the contract in US Dollars has been evaluated to be an embedded derivative which is not closely related to the host purchase contract.

Exchange rates:

1. Spot rate on 1 January 20X1: USD 1 = INR 60
2. Six-month forward rate on 1 January 20X1: USD 1 = INR 65
3. Spot rate on 30 June 20X1: USD 1 = INR 66

Analyse

[ICAI SM]

Ans: This contract comprises of two components:

- Host contract to purchase solar panels denominated in INR i.e. a notional payment in INR at 6-month forward rate (INR 3,250 million or INR 325 crores)
- Forward contract to pay US Dollars and receive INR i.e. a notional receipt in INR. In other words, a forward contract to sell US Dollars at INR 65 per US Dollar

It may be noted that the notional INR payment in respect of host contract and the notional INR receipt in respect of embedded derivative create an offsetting position.

Subsequently, the host contract is not accounted for until delivery. The embedded derivative is recorded at fair value through profit or loss. This gives rise to a gain or loss on the derivative, and a corresponding derivative asset or liability.

On delivery ABG records the inventory at the amount of the host contract (INR 325 crores). The embedded derivative is considered to expire. The derivative asset or liability (i.e. the cumulative gain or loss) is settled by becoming part of the financial liability that arises on delivery.

In this case the carrying value of the currency forward at 30 June 20X1 on maturity is INR 50 million X (66 minus 65) = INR 5 crores (liability/loss). The loss arises because ABG has agreed to sell US Dollars at ₹ 65 per US Dollar whereas in the open market, US Dollar can be sold at ₹ 66 per US Dollar.

No accounting entries are passed on the date of entering into purchase contract. On that date, the forward contract has a fair value of zero (refer section “option and non-option based derivatives” below)

Subsequently, say at 30 June 20X1, the accounting entries are as follows (all in INR crores):

1.	Loss on derivative contract	5
	To Derivative liability	5
	(Being loss on currency forward)	
2.	Inventory	325
	To Trade payables (financial liability)	325
	(Being inventory recorded at forward exchange rate determined on date of contract)	
3.	Derivative liability	5
	To Trade payables (financial liability)	5
	(Being reclassification of derivative liability to trade payables upon settlement)	

The effect is that the financial liability at the date of delivery is INR 330 crores (= INR 325 crores + INR 5 crores), equivalent to US\$ 50 million at the spot rate on 30 June 20X1.

Going forward, the financial liability is a US\$ denominated financial instrument. It is retranslated at the dollar spot rate in the normal way, until it is settled.

Q60: On 1 January 2018, Entity X writes a put option for 1,00,000 of its own equity shares for which it receives a premium of ₹ 5,00,000.

Under the terms of the option, Entity X may be obliged to take delivery of 1,00,000 of its own shares in one year's time and to pay the option exercise price of ₹ 22,000,000. The option can only be settled through physical delivery of the shares (gross physical settlement). Examine the nature of the financial instrument and how it will be accounted assuming that the present value of option exercise price is ₹ 20,000,000? [ICAI SM]

Ans: This derivative involves Entity X taking delivery of a fixed number of equity shares for a fixed amount of cash. Even though the obligation for Entity X to purchase its own equity shares for ₹ 22,000,000 is conditional on the holder of the option exercising the option, Entity X has an obligation to deliver cash which it cannot avoid.

As per para 23 of Ind AS 32 'Financial Instruments: Presentation', the accounting for financial instrument will be as below:

- The financial liability is recognised initially at the present value of the redemption amount, and is reclassified from equity. This would imply that a financial liability for an amount of present value of ₹ 22,000,000, say ₹ 20,000,000 will be recognised through a debit to equity. The initial premium received (₹ 5,00,000) is credited to equity.
- Subsequently, the financial liability is measured in accordance with Ind AS 109. While a subsequent paragraph will deal with measurement of financial liabilities. The financial liability of ₹ 20,000,000 will be measured at amortised cost as per Ind AS 109 and finance cost of ₹ 2,000,000 will be recognised over the exercise period.
- If the contract expires without delivery, the carrying amount of the financial liability is reclassified to equity ie. an amount of ₹ 22,000,000 will be reclassified from financial liability to equity.

QUESTIONS FROM ICAI RTP/MTP/EXAMS/GFRS

Q61: QA Ltd. has also issued 10,00,000 of 8% Long Term Bond-B Series of ₹ 1 each on 1st April, 2016. The bond tenure is 3 years. Interest is payable annually on 1st April each year. However, the bond holders of this series are entitled to convert the bonds to shares of ₹ 1 each on the date of maturity, instead of receiving the principal repayment. Interest rate on the similar bond without conversion option is 10%. QA Ltd. has requested you to suggest the following for this type of instrument:

- (a) What is entry to be passed at the date of issuance of the bond as per applicable Ind AS?
- (b) What is entry to be passed at the date of conversion of the bond as per applicable Ind AS? [MTP May 2019]

Ans:

(a)	Cash/Bank A/c	Dr. ₹ 10,00,000
	To 8% LT Bond Series B A/c	₹ 9,50,263
	To Share Option A/c	₹ 49,737

Workings for the above

It is a compound instrument.

Calculation of initial recognition amount of 8% Long term Loan Bond B Series liability and equity component

Particulars		₹
Present value of the principal repayable after 3 years (10,00,000 x .751315)		7,51,315
Present value of Interest [(10,00,000 x 8%) x 2.48685]		1,98,948
Total Present Value of Long term Loan Bond B	I	9,50,263
Issue proceeds from convertible bond	II	10,00,000
Value of equity component	(II – I)	49,737
(b) 8% LT Bond Series B A/c		₹ 10,00,000
Share Option A/c		₹ 49,737
To Share Capital A/c		₹ 10,00,000
To Other Equity A/c		₹ 49,737

Reasoning:

As per para AG32 of Ind AS 32, on conversion of a convertible instrument at maturity, the entity derecognises the liability component and recognises it as equity. The original equity component remains as equity (although it may be transferred from one line item within equity to another). There is no gain or loss on conversion at maturity.

Q62: XYZ issued ₹ 4,80,000 4% redeemable preference shares on 1st April 20X5 at par. Interest is paid annually in arrears, the first payment of interest amounting ₹ 19,200 was made on 31st March 20X6 and it is debited directly to retained earnings by accountant. The preference shares are redeemable for a cash amount of ₹ 7,20,000 on 31st March 20X8. The effective rate of interest on the redeemable preference shares is 18% per annum. The proceeds of the issue have been recorded within equity by accountant as this reflects the legal nature of the shares. Board of directors intends to issue new equity shares over the next two years to build up cash resources to redeem the preference shares.

Mukesh, Accounts manager of XYZ has been told to review the accounting of aforesaid issue. CFO has asked from Mukesh the closing balance of preference shares at the year end. If you were Mukesh, then how much balance you would have shown to CFO on analysis of the stated issue. Prepare necessary adjusting journal entry in the books of account, if required.

[RTP May 2020]

Ans: The preference shares provide the holder with the right to receive a predetermined amount of annual dividend out of profits of the company, together with a fixed amount on redemption.

Whilst the legal form is equity, the shares are in substance debt. The fixed level of dividend is interest and the redemption amount is equivalent to the repayment of a loan.

Under Ind AS 32 'Financial Instruments: Presentation' these instruments should be classified as financial liabilities because there is a contractual obligation to deliver cash. The preference shares should be accounted for at amortised cost using the effective interest rate of 18%.

Year	1 April, 20X5 ₹	Interest @18% ₹	Paid at 4% ₹	31 March, 20X6 ₹
20X5-20X6	480,000	86,400	(19,200)	547,200

Accordingly, the closing balance of Preference shares at year end i.e. 31 st March, 20X6 would be ₹ 5,47,200.

Accountant has inadvertently debited interest of ₹ 19,200 in the profit and loss. However, the interest of ₹ 86,400 should have been debited to profit and loss as finance charge.

Similarly, amount of ₹ 5,47,200 should be included in borrowings (non-current liabilities) and consequently, Equity should be reduced by ₹ 480,000 proceeds of issue and

₹ 67,200 (86,400 – 19,200) i.e. total by 5,47,200.

Necessary adjusting journal entry to rectify the books of accounts will be:

	₹	₹
Preference share capital (equity) (Balance sheet) Dr.	4,80,000	
Finance costs (Profit and loss) Dr.	86,400	
To Equity – Retained earnings (Balance sheet)		19,200
To Preference shares (Long-term Borrowings) (Balance sheet)		5,47,200

Q63: Blueberry Ltd entered into the following transactions during the year ended 31st March,20X2:

Entered into a speculative interest rate option costing ₹ 10,000 on 1stApril,20X0 to borrow ₹ 6,000,000 from Exon Bank commencing 30th June,20X2 for 6 months at 4%.

The value of the option at 31stMarch.20X2 was ₹15,250.

Purchased 6% debentures in Fox Ltd on 1stApril,20X1 (their issue date) for ₹ 150,000 as an investment. Blueberry Ltd. intends to hold the debentures, until their redemption at a premium, in 5 years' time. The effective rate of interest of the bond is 8%.

Purchased 50,000 shares in Cox Ltd on 1stOctober,20X2 for ₹3.50 each as an investment. The share price on 31st March,20X2 was ₹ 3.75.

Show the accounting treatment and relevant extracts from the financial statements for the year ended 31st March,20X2 of transactions related to financial instruments. Blueberry Ltd designates financial assets at fair value through Profit or loss only when this is unavoidable.

[MTP May 2020]

Ans: Balance Sheet as at 31st March, 20X2 (Extracts)

Interest rate option (W.N.1)	15,250
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6% Debentures in Fox Ltd. (W.N.2)	1,53,000
Shares in Cox Ltd. (W.N.3)	1,87,500
Statement of Profit and Loss (Extracts)	
Finance Income:	
Gain on interest rate option (W.N.1)	5,250
Effective interest on 6% Debentures (W.N.2)	12,000

Working Notes:**1. Interest rate option**

This is a derivative and so it must be treated as at fair value through profit or loss

Particulars		₹	₹
Initial measurement (at cost)			
Financial Asset	Dr.	10,000	
To Cash A/c			10,000

At 31st March, 20X2

Particulars		₹	₹
(Re-measured to fair value)			
Financial Asset (₹ 15,250 - ₹10,000)	Dr.	5,250	
To Profit and loss A/c			5,250

Financial Assets (₹10,000 + ₹5,250)= ₹15,250 (Balance Sheet)

Gain on interest option= ₹5,250 (Statement of Profit and Loss)

2. Debentures

On the basis of information provided, this can be treated as a held-to-maturity investment

Particulars		₹	₹
Initial measurement (at cost)			
Financial Asset	Dr.	1,50,000	
To Cash A/c			1,50,000

At 31st March, 20X2 (Amortized cost)

Particulars		₹	₹
Financial Asset (₹1,50,000 x 8%)	Dr.	12,000	
To Finance Income			12,000

Cash (₹ 1,50,000 x 6%)	Dr.	9,000	
To Financial asset			9,000

Amortized cost at 31st March, 20X2

(₹ 150,000 + ₹ 12,000 – ₹ 9,000) = ₹ 153,000 (Balance Sheet)

Effective interest on 6% debenture = ₹ 12,000 (Statement of Profit and Loss)

3. Shares in Cox Ltd.

These are treated as an available for sale financial asset (shares cannot normally be held to maturity and they are clearly not loans or receivables)

Particulars	₹	₹
Initial measurement (at cost)		
Financial Asset (₹50,000 x ₹3.50) Dr.	1,75,000	
To Cash A/c		1,75,000

At 31st March, 20X2 (Re-measured at fair value)

Particulars	₹	₹
Financial Asset [(₹50,000 x 3.75) – 1,75,000] Dr.	12,500	
To Other Equity A/c		12,500

Shares in Cox Ltd (₹1,75,000 + ₹12,500) = ₹1,87,500 (Balance Sheet)

Q64: A Ltd. has a wholly owned subsidiary D Ltd. D Ltd. faces financial crisis now and then. A Ltd. being a parent company, often helps D Ltd. by providing interest free loan. During the year, A Ltd. has provided INR 10 Lakhs interest-free loan to D Ltd. The current market rate of interest for similar loan is 10% p.a. These loans are provided by A Ltd. either to be repaid on demand or after fixed term depending upon the agreement.

How the interest-free loan should be accounted for under IFRS financial statements of A Ltd. and D Ltd. in the following scenarios:

- The loan is repayable on demand.
- The loan is repayable after 3 years. Provide necessary journal entries in both cases.

[GFRS]

Ans: According to IND AS 109 criteria, A Ltd. and D Ltd. will classify the loan asset and liability, respectively, at amortised cost.

Scenario (a)

Since the loan is repayable on demand, it has fair value equal to cash consideration given. A Ltd. and D Ltd. should recognize financial asset and liability, respectively, at the amount of loan given. Upon, repayment, both the entities should reverse the entries that were made at the origination. It may be noted that this accounting outcome will not apply when there is evidence that the loan is repayable after a period of time, but is disguised as being repayable on demand. Consideration should be given to the substance of the arrangement.

JOURNAL ENTRIES IN THE BOOKS OF A LTD.

At origination

Loan to D Ltd. A/c	Dr.	INR 10,00,000
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Bank A/c	Cr.	INR 10,00,000
----------	-----	---------------

On repayment

Bank A/c	Dr.	INR 10,00,000
----------	-----	---------------

Loan to D Ltd. A/c	Cr.	INR 10,00,000
--------------------	-----	---------------

JOURNAL ENTRIES IN THE BOOKS OF D LTD.

At origination

Bank A/c	Dr.	INR 10,00,000
----------	-----	---------------

Loan from A Ltd. A/c	Cr.	INR 10,00,000
----------------------	-----	---------------

On repayment

Loan from A Ltd. A/c	Dr.	INR 10,00,000
----------------------	-----	---------------

Bank A/c	Cr.	INR 10,00,000
----------	-----	---------------

SCENARIO (B)

Both A Ltd. and D Ltd. should recognise financial asset and liability, respectively, at fair value on initial recognition, i.e., the present value of INR 10,00,000 payable at the end of 3 years using discounting factor of 10%, i.e., INR 7,51,310. The difference between the loan amount and its fair value is treated as an equity contribution to the subsidiary. This represents a further investment by the parent in the subsidiary.

JOURNAL ENTRIES IN THE BOOKS OF A LTD.

At origination

Loan to D Ltd. A/c	Dr.	INR 7,51,315
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Investment in A Ltd. A/c	Dr.	INR 2,48,685
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Bank A/c	Cr.	INR 10,00,000
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During periods to repayment- to recognise interest

Year 1

Loan to D Ltd. A/c	Dr.	INR 75,130
--------------------	-----	------------

Interest income A/c	Cr.	INR 75,130
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Year 2

Loan to D Ltd. A/c	Dr.	INR 82,645
--------------------	-----	------------

Interest income A/c	Cr.	INR 82,645
---------------------	-----	------------

Year 3

Loan to D Ltd. A/c Dr. INR 90,909

Interest income A/c Cr. INR 90,909

Note:- Interest needs to be recognised in statement of profit and loss. The same cannot be adjusted against capital contribution recognised at origination.

On repayment

Bank A/c Dr. INR 10,00,000

Loan to D Ltd. A/c Cr. INR 10,00,000

JOURNAL ENTRIES IN THE BOOKS OF D LTD.

At origination

Bank A/c Dr. INR 10,00,000

Loan from A Ltd. A/c Cr. INR 7,51,130

Equity Contribution in A Ltd. A/c Cr. INR 2,48,690

During periods to repayment- to recognise interest

Year 1

Interest expense A/c Dr. INR 75,131

Loan from A Ltd. A/c Cr. INR 75,131

Year 2

Interest expense A/c Dr. INR 82,645

Loan from A Ltd. A/c Cr. INR 82,645

Year 3

Interest expense A/c Dr. INR 90,909

Loan from A Ltd. A/c Cr. INR 90,909

On repayment

Loan from A Ltd. A/c Dr. INR 10,00,000

Bank A/c Cr. INR 10,00,000

WORKING NOTE:

Years	Amount outstanding (opening)	Interest	Amount outstanding (closing)
Beginning of year 1		-	INR 7,51,315
End of year 1	INR 7,51,315	INR 75,131	INR 8,26,446

End of year 2	INR 8,26,446	INR 82,645	INR 9,09,091
End of year 3	INR 9,09,091	INR 90,909	INR 10,00,000

Q65: F Ltd. (subsidiary of A Ltd.) had entered into a loan agreement with UV Bank on 18th December 2014 to borrow a sum of INR 100 Crores at the rate of 12% per annum compounded monthly. As per the agreement, A Ltd. had provided a guarantee to the bank in respect of the loan facility extended by the bank to F Ltd. for which no consideration was charged by A Ltd. from its subsidiary. F Ltd. has defaulted on repayment of an instalment to UV Bank pending on 31 March 2016, however, as explained by the management of F Ltd. and as per the communication with UV Bank, F Ltd. has made good the default on loan after payment of penal interest and there has been no financial impact on the guarantee extended by A Ltd. A Ltd. in its financial statements based on Indian GAAP has disclosed the guarantee given as 'contingent liability'. Fair value of financial guarantee obligation is INR 2 Crores.

What should be the accounting treatment of corporate guarantees in the separate financial statements of A Ltd. and F Ltd. and consolidated financial statements of group prepared under IND AS? **[GFRS]**

Ans: In accordance with IND AS 109, a financial guarantee contract meets the definition of an insurance contract and if an issuer applies accounting to such contracts which is applicable to insurance contracts, in such a case issuer may elect to apply either the requirements of IND AS 104 or IND AS 109 to such financial guarantee contracts.

A Ltd. in its Indian GAAP financial statements has disclosed the contract as corporate guarantees under contingent liabilities. Hence, the criteria of previous assertion of this contract as an insurance contract is not met. Hence, as provided above, since the criteria of insurance contract is not met, the said transaction will be covered under IND AS 109 and not under IND AS 104 and the company needs to measure the financial guarantee given by at its fair value.

MEASUREMENT OF FINANCIAL GUARANTEE UNDER IND AS 109

Evaluation is required with regards to guarantee given by A Ltd., i.e., whether it is an integral part of the loan or not.

Guarantee is an integral part of the loan if the guarantee provided to the lender forms part of the overall terms of the loan (i.e., if the loan were to be assigned by the lender to a third party, the guarantee would transfer with it). If the guarantee is provided to the lender separate and apart from the original borrowing such that it does not form part of the overall terms of the loan (i.e., if the loan were to be assigned by the lender to a third party, the guarantee would not transfer with it), then such guarantee is a separate unit of account.

I. ACCOUNTING IN THE BOOKS OF A LTD.

The same will not affect the recognition in the books of A Ltd. The recognition of financial guarantee is independent to the fact whether the guarantee is a separate unit of account or is not a separate unit of account. Therefore, irrespective of whether the guarantee is considered a separate unit of account, A Ltd. recognises the fair value of the financial guarantee in its separate financial statements as follows:

Investment in subsidiary A/c Dr. INR 2 crores

Financial guarantee obligation A/c	Cr.	INR 2 crores
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II. ACCOUNTING IN THE BOOKS OF F LTD.

With respect to the recognition of financial guarantee contracts, F Ltd. has an accounting policy choice to be applied consistently:

- (a) View I- Guarantee is not an integral part of the loan and F Ltd. should perform mirror accounting of what has been done by A Ltd. in its separate financial statements.
- (b) View II- Guarantee is an integral part of the loan

If the guarantee is integral to loan, the subsidiary is not required to recognise the value of guarantee separately, instead it will be included in the loan liability. However, if the guarantee is not an integral part of the loan, then the subsidiary is required to recognize the value of guarantee separately as a capital contribution.

- A. If the guarantee is an integral part of the loan: If the guarantee provided to the lender forms part of the overall terms of the loan (i.e., if the loan were to be assigned by the lender to a third party, the guarantee would transfer with it), F Ltd. should recognise the liability at fair value, including the value of the guarantee provided by the parent (INR 100 crores) as follows:

Cash A/c	Dr.	INR 100 crores
Loan liability A/c	Cr.	INR 100 crores

- B. If the guarantee is not an integral part of the loan: If the guarantee is provided to the lender separate and apart from the original borrowing such that it does not form part of the overall terms of the loan (i.e., if the loan were to be assigned by the lender to a third party, the guarantee would not transfer with it), F Ltd. should recognise the liability at fair value without the guarantee (assumed INR 98 crores) with the difference being recognised as a capital contribution, as follows:

Cash A/c	Dr.	INR 100 crores
Loan liability A/c	Cr.	INR 98 crores
Capital contribution A/c	Cr.	INR 2 crores

III. ACCOUNTING IN THE CONSOLIDATED FINANCIAL STATEMENTS

Irrespective of whether the guarantee is considered a separate unit of account, the financial guarantee is not separately recognised in the consolidated financial statements of A Ltd.

In consolidated financial statements, the entry passed in separate financial statements of the parent will be reversed.

Financial guarantee obligation A/c	Dr.	INR 2 crores
Investment in subsidiary A/c	Cr.	INR 2 crores

The consolidated group incurred a financial liability with a fair value of INR 100 crores (due to the guarantee of the parent) and therefore, the consolidated statement of financial position includes only that liability, measured on an amortised cost basis.

In case F Ltd. (subsidiary) has accounted the loan considering the guarantee as not an integral part of the loan, then in consolidated financial statements, besides reversal of the entry passed by the parent company, the entry passed in F Ltd. (subsidiary company) with respect to capital contribution by A Ltd. for INR 2 crores shall be eliminated by transferring the same to loan liability as follows:

Capital contribution A/c	Dr.	INR 2 crores
Loan liability A/c	Cr.	INR 2 crores

Q66: On 1st April, 2016, QA Ltd. purchased 10 Lakhs options to acquire shares in KS Ltd., a listed entity. The Company paid ₹ 0.25 per option which allows the Company to purchase shares in KS Ltd. for a price of ₹ 2 per share. The exercise date for the option was 31st December, 2016. On 31st December, 2016, when the market value of a share in KS Ltd. was ₹ 2.6 per share, the Company exercised all its options to acquire shares in KS Ltd.

In addition to the purchase price, the Company has also incurred directly attributable cost of ₹ 1,00,000 for purchase of 10 lakhs shares in KS Ltd. The Company has classified these shares as trading portfolio. However, the Company has not disposed of any of the shares in KS Ltd. between 31st December, 2016 to 31st March, 2017.

The market value of the shares of KS Ltd. as on 31st March, 2017 is ₹ 2.90 per share.

The Company has requested you to suggest the accounting treatment of the above arrangement and transaction of acquisition of shares in KS Ltd. **[GFRS]**

Ans: The option to acquire shares in KS Ltd. would be regarded as a derivative financial instrument. This is because the value of the option depends on the value of an underlying variable (KS Ltd.'s share price). As per paragraph 4.1.4 and 4.2.1 of IND AS 109 'Financial Instruments', all derivatives are measured at fair value. On 1 April 2016, when QA purchased 10 lakh options to acquire shares in KS Ltd. at ₹ 0.25 per option, QA will recognise Option Asset for ₹ 2.5lac by passing the following journal entry:

Option on KS Ltd. shares	Dr.	₹ 2.5 lakhs	
To Bank			₹ 2.5 lakhs

QA shall measure the option at fair value at the end of every reporting period and also before exercise. The increase in share price on exercise date represents fair value of the option as the time value is zero on exercise date. Therefore, QA will measure the option at ₹ 6 lac (10 lac option x (2.6 – 2)) and recognise fair value gain of ₹ 3.5 lac in profit or loss.

The following journal entry will be passed:

Option on KS Ltd. shares	Dr.	₹ 3.5 lakhs	
To Fair value gain			₹ 3.5 lakhs

On exercise of the option on 31st December, 2016, QA will pay ₹20 lac for 10 lac shares of KS Ltd and the option derivative will be converted to shares of KS Ltd. Therefore, QA will pass the following entry:

Investment in KS Ltd. Equity shares	Dr.	₹ 26 lakhs	
To Bank			₹ 20 lakhs
To Option on KS Ltd. shares			₹ 6 lakhs

Paragraph 5.1.1 of IND AS 109 Financial Instruments requires that the transaction costs shall be added to fair value if the financial asset is measured at other than fair value through profit or loss.

In the given case, ₹ 1 lac incurred by QA for acquiring equity shares of KS Ltd. will not be added to the fair value of the equity shares of KS Ltd. This is because equity shares of KS Ltd. are classified at fair value through profit or loss in accordance with paragraph 4.1.4 of IND AS 109 Financial Instruments. Therefore, QA shall recognise ₹ 1 lac incurred on acquisition of equity shares of KS Ltd. in profit or loss as on 31st March, 2017.

The investment is included in the statement of financial position at 31st March, 2017 as a current asset at its fair value of ₹ 29 lac. The increase in fair value of ₹ 3 lac is taken to the profit and loss.

Q67: Company A, an Indian company whose functional currency is ₹, enters into a contract to purchase machinery from an unrelated local supplier, company B. The functional currency of company B is also ₹ However, the contract is denominated in USD, since the machinery is sourced by company B from a US based supplier. Payment is due to company B on delivery of the machinery. Key terms of the contract:

Contractual features	Details
Contract/order date	9 September 20X1
Delivery/payment date	31 December 20X1
Purchase price	USD 1,000,000
USD/₹ Forward rate on 9 September 20X1 for 31 December 20X1 maturity	67.8
USD/₹ Spot rate on 9 September 20X1	66.4
USD/₹ Forward rates for 31 December, on: 30 September	67.5
31 December (spot rate)	67.0

Company A is required to analyse if the contract for purchase of machinery (a capital asset) from company B contains an embedded derivative and whether this should be separately

accounted for on the basis of the guidance in Ind AS 109. Also give necessary journal entries for accounting the same.

Ans:

- Based on the guidance above, the USD contract for purchase of machinery entered into by company A includes an embedded foreign currency derivative due to the following reasons:
- The host contract is a purchase contract (non-financial in nature) that is not classified as, or measured at FVTPL.
- The embedded foreign currency feature (requirement to settle the contract by payment of USD at a future date) meets the definition of a stand-alone derivative – it is akin to a USD-₹ forward contract maturing on 31 December 20X1.
- USD is not the functional currency of either of the substantial parties to the contract (i.e., neither company A nor company B).
- Machinery is not routinely denominated in USD in commercial transactions around the world. In this context, an item or a commodity may be considered 'routinely denominated' in a particular currency only if such currency was used in a large majority of similar commercial transactions around the world. For example, transactions in crude oil are generally considered routinely denominated in USD. A transaction for acquiring machinery in this illustration would generally not qualify for this exemption.
- USD is not a commonly used currency for domestic commercial transactions in the economic environment in which either company A or B operate. This exemption generally applies when the business practice in a particular economic environment is to use a more stable or liquid foreign currency (such as the USD), rather than the local currency, for a majority of internal
- or cross-border transactions, or both. In the illustration above, companies A and B are companies operating in India and the purchase contract is an internal/domestic transaction. USD is not a commonly used currency for internal trade within this economic environment and therefore the contract would not qualify for this exemption.
- Accordingly, company A is required to separate the embedded foreign currency derivative from the host purchase contract and recognise it separately as a derivative.
- The separated embedded derivative is a forward contract entered into on 9 September 20X1, to exchange USD 10,00,000 for ₹ at the USD/₹ forward rate of 67.8 on 31 December 20X1. Since the forward exchange rate has been deemed to be the market rate on the date of the contract, the embedded forward contract has a fair value of zero on initial recognition.

- Subsequently, company A is required to measure this forward contract at its fair value, with changes in fair value recognised in the statement of profit and loss. The following is the accounting treatment at quarter-end and on settlement: Accounting treatment:

Date	Particulars	Amount (₹)	Amount (₹)
09-Sep-X1	On initial recognition of the forward contract (No accounting entry recognised since initial fair value of the forward contract is considered to be nil)	Nil	Nil
30-Sep-X1			
31-Dec-X1	Fair value change in forward contract Derivative asset (company B) Dr. [(67.8-67.5) x10,00,000] To Profit or loss	3,00,000	3,00,000
31-Dec-X1	Fair value change in forward contract Forward contract asset (company B) Dr. [{(67.8-67) x 10,00,000} - 3,00,000] To Profit or loss	5,00,000	5,00,000
	Recognition of machinery acquired and on settlement Property, plant and equipment Dr. (at forward rate) To Forward contract asset (company B) To Creditor (company B) / Bank	6,78,00,000	8,00,000 6,70,00,000

Q68: On 1 April 20X1, Sun Limited guarantees a ₹10,00,000 loan of Subsidiary – Moon Limited, which Bank STDK has provided to Moon Limited for three years at 8%.

Interest payments are made at the end of each year and the principal is repaid at the end of the loan term.

If Sun Limited had not issued a guarantee, Bank STDK would have charged Moon Limited an interest rate of 11%. Sun Limited does not charge Moon Limited for providing the guarantee.

On 31 March 20X2, there is 1% probability that Moon Limited may default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited.

On 31 March 20X3, there is 3% probability that Moon Limited may default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited.

Provide the accounting treatment of financial guarantee as per Ind AS 109 in the books of Sun Ltd., on initial recognition and in subsequent periods till 31 March 20X3.

RTP May 2021

Ans: 1 April 20X1

A financial guarantee contract is initially recognised at fair value. The fair value of the guarantee will be the present value of the difference between the net contractual cash flows required under the loan, and the net contractual cash flows that would have been required without the guarantee.

Particulars	Year 1 (₹)	Year 2 (₹)	Year 3 (₹)	Total (₹)
Cash flows based on interest rate of 11% (A)	1,10,000	1,10,000	1,10,000	3,30,000
Cash flows based on interest rate of 8% (B)	80,000	80,000	80,000	2,40,000
Interest rate differential (A-B)	30,000	30,000	30,000	90,000
Discount factor @ 11%	0.901	0.812	0.731	
Interest rate differential discounted at 11%	27,030	24,360	21,930	73,320
Fair value of financial guarantee contract (at inception)				73,320

Journal Entry

Particulars		Debit (₹)	Credit (₹)
Investment in subsidiary	Dr.	73,320	
To Financial guarantee (liability)			73,320
(Being financial guarantee initially recorded)			

31 March 20X2

Subsequently at the end of the reporting period, financial guarantee is measured at the higher of:

- the amount of loss allowance; and
- the amount initially recognised less cumulative amortization, where appropriate.

At 31 March 20X2, there is 1% probability that Moon Limited may default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited. The 12-month expected credit losses are therefore ₹10,000 (₹10,00,000 x 1%).

The initial amount recognised less amortisation is ₹51,385 (₹73,320 + ₹8,065 (interest accrued based on EIR)) – ₹30,000 (benefit of the guarantee in year 1) Refer table below. The unwound amount is recognised as income in the books of Sun Limited, being the benefit derived by Moon Limited not defaulting on the loan during the period.

Year	Opening balance	EIR @ 11%	Benefits provided	Closing balance
	₹		₹	₹
1	73,320	8,065	(30,000)	51,385
2	51,385	5,652	(30,000)	27,037
3	27,037	2,963*	(30,000)	-

* Difference is due to approximation

The carrying amount of the financial guarantee liability after amortisation is therefore ₹ 51,385, which is higher than the 12-month expected credit losses of ₹ 10,000. The liability is therefore adjusted to ₹ 51,385 (the higher of the two amounts) as follows:

Particulars		Debit (₹)	Credit (₹)
Financial guarantee (liability)	Dr.	21,935	
To Profit or loss			21,935
(Being financial guarantee subsequently adjusted)			

31 March 20X3

At 31 March 20X3, there is 3% probability that Moon Limited will default on the loan in the next 12 months. If Moon Limited defaults on the loan, Sun Limited does not expect to recover any amount from Moon Limited. The 12-month expected credit losses are therefore ₹ 30,000 (₹ 10,00,000 x 3%).

The initial amount recognised less accumulated amortisation is ₹ 27,037, which is lower than the 12-month expected credit losses (₹ 30,000). The liability is therefore adjusted to ₹ 30,000 (the higher of the two amounts) as follows:

Particulars		Debit (₹)	Credit (₹)
Financial guarantee (liability)	Dr.	21,385*	
To Profit or loss (Note)			21,385
(Being financial guarantee subsequently adjusted)			

* The carrying amount at the end of 31 March 20X2 = ₹ 51,385 less 12-month expected credit losses of ₹ 30,000.

Q69 Jewels Ltd. entered into a transaction to purchase 1,000 gms of platinum on 15th January, 2020. The transaction provides for a price payable which is equal to market value of 1,000 gms of platinum on 15th April 2020 and shall be settled by issue of such number of equity shares as

is required to settle the aforementioned transaction, at a price of ₹ 100 per share on 15th April 2020. Whether this is to be classified as liability or equity as on 31st March 2020 as per Ind AS 109?

You are required to explain with reasons.

Exam Paper January 2021 (5 Marks)

Ans: There is a contract for purchase of 1,000 gms of platinum whose consideration varies in response to changing value of platinum. Analysing this contract as a derivative with all three of the following characteristics:

- Value of contract changes in response to change in market value of platinum ;
- There is no initial net investment
- It will be settled at a future date, i.e. 15th April 2020.

Since the above criteria are met, this is a derivative contract.

Now, a derivative contract that is settled in own equity other than exchange of fixed amount of cash for fixed number of shares is classified as 'liability'. In this case, since the contract results in issue of variable number of shares based on transaction price to be determined in future, hence, this shall be classified as 'derivative financial liability' as per Ind AS 109.

Q70. Besides construction activity, Buildings & Co. Limited is also engaged in the trading of Copper. On 1st April, 20X1, it had 100 kg of copper costing Rs. 70 per kg - totalling Rs. 7000. The Company has a scheduled delivery of these 100 kgs of copper to its customer on 30th September, 20X1 at the rate of USD 100 on that date. To protect itself from decline in currency exchange rate (USD to Rs.), the entity hedges its position by entering into currency futures contract for equivalent currency units at Rs. 76 / USD. The future contract mature on 30th September, 20X1. The management performed an assessment of hedge effectiveness and concluded that the hedging relationship qualifies for cash flow hedge accounting. The entity determines and documents that changes in fair value of the currency futures contract will be highly effective in offsetting variability in cash flow of currency exchange. On 30th September, 20X1, the entity closes out its currency futures contract. On the same day, it also sells its inventory of copper at USD 100 when the spot rate is Rs. 72 / USD.

You are required to prepare detailed working and pass necessary journal entries for the sale of copper and the corresponding hedge instrument taken by the company. Pass the journal entries as on the initial date (i.e. 1st April 20X1), first quarter end reporting (i.e. 30th June 20X1) and date of sale of copper and settlement of forward contract (i.e. 30 th September 20X1).

Assume the exchange rates as follows and yield @ 6% per annum.

Date	Future price for 30th September 20X1 delivery (Rs. / USD)
1st April, 20X1	76
30th June, 20X1	74
30th September, 20X1	71

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Ans: Calculation of discounting factor based on yield @ 6% p.a.

Date	Spot rate at indicated date	Forward rate for 30th September 20X1	Discount factor @ 6% p.a. on quarter basis
1st April, 20X1		76	0.971
30th June 20X1		74	0.985
30th September, 20X1	72	71	1

Determination of fair value change

		1st April, 20X1	30th June, 20X1	30th September, 20X1
a	Nominal value in Rs. @ Rs. 76 / USD	7,600	7,600	7,600
b	Nominal value in USD (100 kg for USD 100)	100	100	100
c	Forward rate for 30th September, 20X1	76	74	71
d	Value in Rs. (b x c)	7,600	7,400	7,100
e	Difference (a-d)	0	200	500
f	Discount factor (as calculated in the above table)	0.971	0.985	1
g	Fair value (e x f)	0	197	500
h	Fair value change for the period	0	197	303*

* 500 – 197= 303

Journal Entries

Date	Particulars	Dr.	Cr.
1st April, 20X1	No entry as initial fair value is zero		
30th June, 20X1	Future Contract Dr. To Cash Flow Hedge Reserve (Other Equity)- OCI (Being Change in Fair Value of Hedging Instrument recognised in OCI accumulated in a separate component in Equity)	197	197
30th September, 20X1	Future Contract Dr. To Cash Flow Hedge Reserve (Other Equity) - OCI (Being change in fair value of the hedging instrument recognised in OCI)	303	303
30th	Bank/Trade Receivable Dr.	7,200	

September, 20X1	To Revenue from Contracts with Customers (Being sale of 100 kgs. of copper for USD 100 recognised at spot rate of Rs. 72 for USD 1)		7,200
30th September, 20X1	Cash Flow Hedge Reserve (Other Equity) – OCI Dr. To Revenue from Contracts with Customers (Being fair value change in forward contract reclassified to profit and loss and recognised in the line item affected by the hedge item)	500	500
30th September, 20X1	Bank / Cash Dr. To Future Contract	500	500

NOTES

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CHAPTER 23

REVENUE FROM CONTRACT WITH CUSTOMERS (IND AS 115)

QUESTIONS FROM ICAI STUDY MATERIAL

Collectibility Assessment

Q1: New way limited decides to enter a new market that is currently experiencing economic difficulty and expects that in future economy will improve. New way enters into an arrangement with a customer in the new region for networking products for promised consideration of ₹ 1,250,000. At contract inception, New way expects that it may not be able to collect the full amount from the customer.

Determine how New way will recognise this transaction?

Ans: Assuming the contract meets the other criteria covered within the scope of the model in Ind AS 115, New way need to assesses whether collectability is probable. In making this assessment, New way considers whether the customer has the ability and intent to pay the estimated transaction price, which may be an amount less than the contract price.

Contract Term

Q2: A gymnasium enters into a contract with a new member to provide access to its gym for a 12 – month period at ₹ 4,500 per month. The member can cancel his or her membership without penalty after three months. Specify the contract term.

Ans: The enforceable rights and obligations of this contract are for three months, and therefore the contract term is three months.

Contract Term

Q3: Contractor P enters into a manufacturing contract to produce 100 specialised CCTV Cameras for Customer Q for a fixed price of ₹ 1,000 per sensor. Customer Q can cancel the contract without a penalty after receiving 10 CCTV Cameras. Specify the contract units.

Ans: P determines that because there is no substantive compensation amount payable by Q on termination of the contract – i.e. no termination penalty in the contract – it is akin to a contract to produce 10 CCTV Cameras that gives Customer Q an option to purchase an additional 90 CCTV Cameras. Hence, contract is for 10 units.

Combining contracts

Q4: Manufacturer of airplanes for the air force negotiates a contract to design and manufacture new fighter planes for a Kashmir air base. At the same meeting, the manufacturer enters into a separate contract to supply parts for existing planes at other bases.

Would these contracts be combined?

Ans: Contracts were negotiated at the same time, but they appear to have separate commercial objectives. Manufacturing and supply contracts are not dependent on one another, and the planes and the parts are not a single performance obligation. Therefore, contracts for supply of fighter planes and supply of parts shall not be combined and instead, they shall be accounted separately.

Q5: Software Company S enters into a contract to license its customer relationship management software to Customer B. Three days later, in a separate contract, S agrees to provide consulting services to significantly customise the licensed software to function in B's IT environment. B is unable to use the software until the customisation services are complete.

Would these contracts be combined?

Ans: S determines that the two contracts should be combined because they were entered into at nearly the same time with the same customer, and the goods or services in the contracts are a single performance obligation.

Q6: Manufacturer M enters into a contract to manufacture and sell a cyber security system to Government-related Entity P. One week later, in a separate contract, M enters into a contract to sell the same system to Government-related Entity Q. Both entities are controlled by the same government. During the negotiations, M agrees to sell the systems at a deep discount if both P and Q purchases the security system.

Should these contracts be combined or separately accounted?

Ans: M concludes that the said two contracts should be combined because, among other things, P is a related party of Q, the contracts were entered into at nearly the same time and the contracts were negotiated as a single commercial package, which is clearly evident from the fact that discount is being offered if both the parties purchases the security system, thereby also making the consideration in one contract dependent on the other contract.

Modifications that constitute separate contracts

Q7: An entity promises to sell 120 products to a customer for ₹ 120,000 (₹ 1,000 per product). The products are transferred to the customer over a six-month period. The entity transfers control of each product at a point in time. After the entity has transferred control of 60 products to the customer, the contract is modified to require the delivery of an additional 30 products (a total of 150 identical products) to the customer at a price of ₹ 950 per product which is the standalone selling price for such additional products at the time of placing this additional order. The additional 30 products were not included in the initial contract. It is assumed that additional products are contracted for a price that reflects the stand-alone selling price.

Determine the accounting for the modified contract?

Ans: When the contract is modified, the price of the contract modification for the additional 30 products is an additional ₹ 28,500 or ₹ 950 per product. The pricing for the additional products reflects the stand-alone selling price of the products at the time of the contract modification and the additional products are distinct from the original products.

Accordingly, the contract modification for the additional 30 products is, in effect, a new and separate contract for future products that does not affect the accounting for the existing contract and ₹ 950 per product for the 30 products in the new contract.

Modifications that do not constitute separate contracts

Q8: On 1 April, 20X1, KLC Ltd. enters into a contract with Mr. K to provide

- A machine for ₹ 2.5 million
- One year of maintenance services for ₹ 55,000 per month

On 1 October 20X1, KLC Ltd. and Mr. K agree to modify the contract to reduce the amount of services from ₹ 55,000 per month to ₹ 45,000 per month.

Determine the effect of change in the contract?

Ans: The next six months of services are distinct from the services provided in the first six months before modification in contract,

Therefore, KLC Ltd. will account for the contract modification as if it were a termination of the existing contract and the creation of a new contract.

The consideration allocated to remaining performance obligation is ₹ 270,000, which is the sum of

- The consideration promised by the customer (including amounts already received from the customer) that was included in the estimate of the transaction price and had not yet been recognized as revenue. This amount is zero.
- The consideration promised as part of the contract modification ie ₹ 270,000.

Modifications that do not constitute separate contracts

Q9: Growth Ltd enters into an arrangement with a customer for infrastructure outsourcing deal.

Based on its experience, Growth Ltd determines that customising the infrastructure will take approximately 200 hours in total to complete the project and charges ₹ 150 per hour.

After incurring 100 hours of time, Growth Ltd and the customer agree to change an aspect of the project and increases the estimate of labour hours by 50 hours at the rate of ₹ 100 per hour.

Determine how contract modification will be accounted as per Ind AS 115?

Ans: Considering that the remaining goods or services are not distinct, the modification will be accounted for on a cumulative catch up basis, as given below:

Particulars	Hours	Rate (₹)	Amount (₹)
Initial contract amount	200	150	30,000
Modification in contract	50	100	5,000
Contract amount after modification	250	140*	35,000
Revenue to be recognised	100	140	14,000

Revenue already booked	100	150	15,000
Adjustment in revenue			(1,000)
$*35,000 / 250 = 140$			

Distinct performance obligations

Q10: A construction services company enters into a contract with a customer to build a water purification plant. The company is responsible for all aspects of the plant including overall project management, engineering and design services, site preparation, physical construction of the plant, procurement of pumps and equipment for measuring and testing flow volumes and water quality, and the integration of all components.

Determine whether the company has a single or multiple performance obligations under the contract

Ans: Determining whether a good or service represents a performance obligation on its own or is required to be aggregated with other goods or services can have a significant impact on the timing of revenue recognition. In order to determine how many performance obligations are present in the contract, the company applies the guidance above. While the customer may be able to benefit from each promised good or service on its own (or together with other readily available resources), they do not appear to be separately identifiable within the context of the contract. That is, the promised goods and services are subject to significant integration, and as a result will be treated as a single performance obligation.

This is consistent with a view that the customer is primarily interested in acquiring a single asset (a water purification plant) rather than a collection of related components and services.

Distinct performance obligations

Q11: An entity provides broadband services to its customers along with voice call service.

Customer buys modem from the entity. However, customer can also get the connection from the entity and modem from any other vendor. The installation activity requires limited effort and the cost involved is almost insignificant. It has various plans where it provides either broadband services or voice call services or both.

Are the performance obligations under the contract distinct?

Ans: Entity promises to customer to provide

- Broadband Service
- Voice Call services
- Modem

Entity's promise to provide goods and services is distinct

- if customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer, and
- entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract

For broadband and voice call services –

- Broadband and voice services are separately identifiable from other promises as company has various plans to provide the two services separately. These two services are not dependant or interrelated. Also the customer can benefit on its own from the services received.

For sale of modem –

- Customer can either buy product from entity or third party. No significant customisation or modification is required for selling product.

Based on the evaluation we can say that there are three separate performance obligation: -

- Broadband Service
- Voice Call services
- Modem

Distinct performance obligations

Q12: An entity enters into a contract to build a power plant for a customer. The entity will be responsible for the overall management of the project including services to be provided like engineering, site clearance, foundation, procurement, construction of the structure, piping and wiring, installation of equipment and finishing.

Determine how many performance obligations does the entity have?

Ans: Based on the discussion above it needs to be determined that the promised goods and services are capable of being distinct as per the principles of Ind AS 115. That is, whether the customer can benefit from the goods and services either on their own or together with other readily available resources. This is evidenced by the fact that the entity, or competitors of the entity, regularly sells many of these goods and services separately to other customers. In addition, the customer could generate economic benefit from the individual goods and services by using, consuming, selling or holding those goods or services.

However, the goods and services are not distinct within the context of the contract. That is, the entity's promise to transfer individual goods and services in the contract are not separately identifiable from other promises in the contract. This is evidenced by the fact that the entity provides a significant service of putting together the various inputs or goods and services into the power plant or the output for which the customer has contracted.

Since both the criteria has not met, the goods and services are not distinct. The entity accounts for all of the goods and services in the contract as a single performance obligation.

Promise to transfer a series of distinct goods or services:

Q13: Could the series requirement apply to hotel management services where day to day activities vary, involve employee management, procurement, accounting, etc?

Ans: The series guidance requires each distinct good or service to be “substantially the same.” Management should evaluate this requirement based on the nature of its promise to customer. For example, a promise to provide hotel management services for a specified

contract term may meet the series criteria. This is because the entity is providing the same service of “hotel management” each period, even though some on underlying activities may vary each day. The underlying activities for e.g. reservation services, property maintenance services are activities to fulfil the hotel management service rather than separate promises. The distinct service within the series is each time increment of performing the service.

Distinct performance obligations

Q14: Entity A, a specialty construction firm, enters into a contract with Entity B to design and construct a multi-level shopping centre with a customer car parking facility located in sub-levels underneath the shopping centre. Entity B solicited bids from multiple firms on both phases of the project — design and construction.

The design and construction of the shopping centre and parking facility involves multiple goods and services from architectural consultation and engineering through procurement and installation of all of the materials. Several of these goods and services could be considered separate performance obligations because Entity A frequently sells the services, such as architectural consulting and engineering services, as well as standalone construction services based on third party design, separately. Entity A may require to continually alter the design of the shopping centre and parking facility during construction as well as continually assess the propriety of the materials initially selected for the project.

Determine how many performance obligations does the entity A have?

Ans: Entity A analyses that it will be required to continually alter the design of the shopping centre and parking facility during construction as well as continually assess the propriety of the materials initially selected for the project. Therefore, the design and construction phases are highly dependent on one another (i.e., the two phases are highly interrelated). Entity A also determines that significant customisation and modification of the design and construction services is required in order to fulfil the performance obligation under the contract. As such, Entity A concludes that the design and construction services will be bundled and accounted for as one performance obligation.

Distinct performance obligations

Q15: An entity, a software developer, enters into a contract with a customer to transfer a software license, perform an installation service and provide unspecified software updates and technical support (online and telephone) for a two-year period. The entity sells the license, installation service and technical support separately. The installation service includes changing the web screen for each type of user (for example, marketing, inventory management and information technology). The installation service is routinely performed by other entities and does not significantly modify the software. The software remains functional without the updates and the technical support.

Determine how many performance obligations does the entity have?

Ans: The entity assesses the goods and services promised to the customer to determine which goods and services are distinct. The entity observes that the software is delivered before the other goods and services and remains functional without the updates and the technical support.

Thus, the entity concludes that the customer can benefit from each of the goods and services either on their own or together with the other goods and services that are readily available.

The entity also considers the factors of Ind AS 115 and determines that the promise to transfer each good and service to the customer is separately identifiable from each of the other promises. In particular, the entity observes that the installation service does not significantly modify or customise the software itself and, as such, the software and the installation service are separate outputs promised by the entity instead of inputs used to produce a combined output.

On the basis of this assessment, the entity identifies four performance obligations in the contract for the following goods or services:

- The software license
- An installation service
- Software updates
- Technical support

Distinct performance obligations - Significant customisation

Q16: The promised goods and services are the same as in the above Illustration, except that the contract specifies that, as part of the installation service, the software is to be substantially customised to add significant new functionality to enable the software to interface with other customised software applications used by the customer. The customised installation service can be provided by other entities.

Determine how many performance obligations does the entity have?

Ans: The entity assesses the goods and services promised to the customer to determine which goods and services are distinct. The entity observes that the terms of the contract result in a promise to provide a significant service of integrating the licensed software into the existing software system by performing a customised installation service as specified in the contract. In other words, the entity is using the license and the customised installation service as inputs to produce the combined output (i.e. a functional and integrated software system) specified in the contract. In addition, the software is significantly modified and customised by the service. Although the customised installation service can be provided by other entities, the entity determines that within the context of the contract, the promise to transfer the license is not separately identifiable from the customised installation service and, therefore, the criterion on the basis of the factors is not met. Thus, the software license and the customised installation service are not distinct.

The entity concludes that the software updates and technical support are distinct from the other promises in the contract. This is because the customer can benefit from the updates and technical support either on their own or together with the other goods and services that are readily available and because the promise to transfer the software updates and the technical support to the customer are separately identifiable from each of the other promises.

On the basis of this assessment, the entity identifies three performance obligations in the contract for the following goods or services:

- a) customised installation service (that includes the software license);
- b) software updates; and
- c) technical support.

Q17: Telco T Ltd. enters into a two-year contract for internet services with Customer C. C also buys a modem and a router from T Ltd. and obtains title to the equipment. T Ltd. does not require customers to purchase its modems and routers and will provide internet services to customers using other equipment that is compatible with T Ltd.'s network. There is a secondary market in which modems and routers can be bought or sold for amounts greater than scrap value.

Determine how many performance obligations does the entity T Ltd. have?

Ans: T Ltd. concludes that the modem and router are each distinct and that the arrangement includes three performance obligations (the modem, the router and the internet services) based on the following evaluation:

Criterion 1: Capable of being distinct

- C can benefit from the modem and router on their own because they can be resold for more than scrap value.
- C can benefit from the internet services in conjunction with readily available resources – i.e. either the modem and router are already delivered at the time of contract set – up, they could be bought from alternative retail vendors or the internet service could be used with different equipment.

Criterion 2: Distinct within the context of the contract

T Ltd. does not provide a significant integration service.

The modem, router and internet services do not modify or customise one another

C could benefit from the internet services using routers and modems that are not sold by T Ltd. Therefore, the modem, router and internet services are not highly dependent on or highly inter-related with each other.

Q18: V Ltd. grants Customer C a three-year licence for anti-virus software. Under the contract, V Ltd. promises to provide C with when-and-if-available updates to that software during the licence period. The updates are critical to the continued use of the anti-virus software.

Determine how many performance obligations does the entity have?

Ans: V Ltd. concludes that the licence and the updates are capable of being distinct because the anti - virus software can still deliver its original functionality during the licence period without the updates. C can also benefit from the updates together with the licence transferred when the contract is signed.

However, V Ltd. concludes that the licence and the updates are not separately identifiable because the software and the service are inputs into a combined item in the contract – i.e. the nature of V Ltd.'s promise is to provide continuous anti-virus protection for the term of the contract. Therefore, V Ltd. accounts for the licence and the updates as a single performance obligation

Q19: Media Company P Ltd. offers magazine subscriptions to customers. When customers subscribe, they receive a printed copy of the magazine each month and access to the magazine's online content.

Determine how many performance obligations does the entity have?

Ans: P evaluates whether the promises to provide printed copies and online access are separate performance obligations. P determines that the arrangement includes two performance obligations for the following reasons:

The printed copies and online access are both capable of being distinct because the customer could use them on their own.

The printed copies and online access are distinct within the context of the contract because they are different formats so they do not significantly customise or modify each other, nor is there any transformative relationship into a single output.

Implied promise to reseller's customers

Q20: Software Company K Ltd. enters into a contract with reseller D, which then sells software products to end users. K Ltd. has a customary business practice of providing free telephone support to end users without involving the reseller, and both reseller and the customer expect K Ltd. to continue to provide this support.

Determine how many performance obligations does the entity K Ltd. have?

Ans: In evaluating whether the telephone support is a separate performance obligation, K Ltd. notes that the promise to provide telephone support free of charge to end users is considered a service that meets the definition of a performance obligation when control of the software product transfers to D. As a result, K Ltd. accounts for the telephone support as a separate performance obligation in the transaction with D.

Implied performance obligation

Q21: Carmaker N Ltd. has a historical practice of offering free maintenance services – e.g. oil changes and tyre rotation – for two years to the end customers of dealers who buy its vehicles. However, the two years' free maintenance is not explicitly stated in the contract with its dealers, but it is typically stated in N's advertisements for the vehicles.

Determine how many performance obligations does the entity have?

Ans: The maintenance is treated as a separate performance obligation in the sale of the vehicle to the dealer. Revenue from the sale of the vehicle is recognised when control of the vehicle is transferred to the dealer. Revenue from the maintenance services is recognised separately as and when the maintenance services are provided to the retail customer.

Q22: Entity sells gym memberships for ₹ 7,500 per year to 100 customers, with an option to renew at a discount in 2nd and 3rd years at ₹ 6,000 per year. Entity estimates an annual attrition rate of 50% each year.

Determine the amount of revenue to be recognised in the first year and the amount of contract liability against the option given to the customer for renewing the membership at discount.

Ans: Allocated price per unit (year) is calculated as follows:

Total estimated memberships is 175 members (Year 1 = 100; Year 2 = 50; Year 3 = 25) = 175

Total consideration is ₹ 12,00,000 $\{(100 \times 7,500) + (50 \times 6,000) + (25 \times 6,000)\}$ Allocated price per membership is ₹ 6,857 approx. $(12,00,000 / 175)$

Basis on above, it is to be noted that although entity has collected ₹ 7,500 but revenue can be recognised at ₹ 6,857 approx. per membership and remaining ₹ 643 should be recorded as contract liability against option given to customer for renewing their membership at discount.

Customer options for additional goods or services

Q23: An entity enters into a contract for the sale of Product A for ₹ 1,000. As part of the contract, the entity gives the customer a 40% discount voucher for any future purchases up to ₹ 1,000 in the next 30 days. The entity intends to offer a 10% discount on all sales during the next 30 days as part of a seasonal promotion. The 10% discount cannot be used in addition to the 40% discount voucher.

The entity believes there is 80% likelihood that a customer will redeem the voucher and on an average, a customer will purchase ₹ 500 of additional products.

Determine how many performance obligations does the entity have and their stand-alone selling price and allocated transaction price? **[MTP May 2020]**

Ans: Since all customers will receive a 10% discount on purchases during the next 30 days, the only additional discount that provides the customer with a material right is the incremental discount of 30% on the products purchased. The entity accounts for the promise to provide the incremental discount as a separate performance obligation in the contract for the sale of Product A.

The entity believes there is 80% likelihood that a customer will redeem the voucher and on an average, a customer will purchase ₹ 500 of additional products. Consequently, the entity's estimated stand-alone selling price of the discount voucher is ₹ 120 $(₹ 500 \text{ average purchase price of additional products} \times 30\% \text{ incremental discount} \times 80\% \text{ likelihood of exercising the option})$. The stand-alone selling prices of Product A and the discount voucher and the resulting allocation of the ₹ 1,000 transaction price are as follows:

Performance obligations	Stand-alone selling price
Product A	₹ 1000
Discount voucher	₹ 120
Total	₹ 1120
Performance obligations	Allocated transaction price (to nearest ₹10)
Product A $(₹ 1000 \div ₹ 1120 \times ₹ 1000)$	₹ 890
Discount voucher $(₹ 120 \div ₹ 1120 \times ₹ 1000)$	₹ 110
Total	₹ 1000

The entity allocates ₹ 890 to Product A and recognises revenue for Product A when control transfers. The entity allocates ₹ 110 to the discount voucher and recognises revenue for the voucher when the customer redeems it for goods or services or when it expires.

Long term arrangements

Q24: A cable company provides television services for a fixed rate fee of ₹ 800 per month for a period of 3 years. Cable services is satisfied overtime because customer consumes and receives benefit from services as it is provided i.e. customer generally benefits each day that they have access to cable service.

Determine how many performance obligations does the cable company have?

Ans: Cable company determines that each increment of its services e.g. day or month, is a distinct performance obligation because customer benefits from that period of services on its own. Additionally, each increment of service is separately identifiable from those preceding and following it i.e. one service period does not significantly affect, modify or customise another. Therefore, it can be concluded that its contract with customer is a single performance obligation to provide three years of cable service because each of the distinct increments of service is satisfied over time. Also, cable company uses the same measure of progress to recognise revenue on its cable television service regardless of the contract's time period.

Consignment Arrangements

Q25: Manufacturer M enters into a 60-day consignment contract to ship 1,000 dresses to Retailer A's stores. Retailer A is obligated to pay Manufacturer M ₹ 20 per dress when the dress is sold to an end customer.

During the consignment period, Manufacturer M has the contractual right to require Retailer A to either return the dresses or transfer them to another retailer. Manufacturer M is also required to accept the return of the inventory. State when the control is transferred.

Ans: Manufacturer M determines that control has not been transferred to Retailer A on delivery, for the following reasons:

- (a) Retailer A does not have an unconditional obligation to pay for the dresses until they have been sold to an end customer;
- (b) Manufacturer M is able to require that the dresses be transferred to another retailer at any time before Retailer A sells them to an end customer; and
- (c) Manufacturer M is able to require the return of the dresses or transfer them to another retailer.

Manufacturer M determines that control of the dresses transfers when they are sold to an end customer i.e. when Retailer A has an unconditional obligation to pay Manufacturer M and can no longer return or otherwise transfer the dresses.

Manufacturer M recognises revenue as the dresses are sold to the end customer.

Principal vs agent consideration

Q26: An entity negotiates with major airlines to purchase tickets at reduced rates compared with the price of tickets sold directly by the airlines to the public. The entity agrees to buy a specific number of tickets and will pay for those tickets even if it is not able to resell them. The reduced rate paid by the entity for each ticket purchased is negotiated and agreed in advance. The entity determines the prices at which the airline tickets will be sold to its customers. The entity sells the tickets and collects the consideration from customers when the tickets are purchased; therefore, there is no credit risk.

The entity also assists the customers in resolving complaints with the service provided by airlines. However, each airline is responsible for fulfilling obligations associated with the ticket, including remedies to a customer for dissatisfaction with the service.

Determine whether the entity is a principal or an agent.

Ans: To determine whether the entity's performance obligation is to provide the specified goods or services itself (i.e. the entity is a principal) or to arrange for another party to provide those goods or services (i.e. the entity is an agent), the entity considers the nature of its promise. The entity determines that its promise is to provide the customer with a ticket, which provides the right to fly on the specified flight or another flight if the specified flight is changed or cancelled. The entity considers the following indicators for assessment as principal or agent under the contract with the customers:

- (a) the entity is primarily responsible for fulfilling the contract, which is providing the right to fly. However, the entity is not responsible for providing the flight itself, which will be provided by the airline.
- (b) the entity has inventory risk for the tickets because they are purchased before they are sold to the entity's customers and the entity is exposed to any loss as a result of not being able to sell the tickets for more than the entity's cost.
- (c) the entity has discretion in setting the sales prices for tickets to its customers.

The entity concludes that its promise is to provide a ticket (i.e. a right to fly) to the customer. On the basis of the indicators, the entity concludes that it controls the ticket before it is transferred to the customer. Thus, the entity concludes that it is a principal in the transaction and recognises revenue in the gross amount of consideration to which it is entitled in exchange for the tickets transferred.

Q27: Company D Ltd. provides advertising services to customers. D Ltd. enters into a sub-contract with a multinational online video sharing company, F Ltd. Under the sub-contract, F Ltd. places all of D Ltd.'s customers' adverts.

D Ltd. notes the following:

- D Ltd. works directly with customers to understand their advertising needs before placing adverts.
- D Ltd. is responsible for ensuring that the advert meets the customer's needs after the advert is placed.

- D Ltd. directs F Ltd. over which advert to place and when to place it.
- D Ltd. does not bear inventory risk because there is no minimum purchase requirement with F Ltd.
- D Ltd. does not have discretion in setting the price because fees are charged based on F Ltd.'s scheduled rates.

D is Principal or an agent?

Ans: D Ltd. is primarily responsible for fulfilling the promise to provide advertising services. Although F Ltd. delivers the placement service, D Ltd. directly works with customers to ensure that the services are performed to their requirements. Even though D Ltd. does not bear inventory risk and does not have discretion in setting the price, it controls the advertising services before they are provided to the customer. Therefore, D Ltd. is a principal in this case.

Non-refundable upfront fees

Q28: Customer buy a new data connection from the telecom entity. It pays one-time registration and activation fees at the time of purchase of new connection.

The customer will be charged based on the usage of the data services of the connection on monthly basis.

Are the performance obligations under the contract distinct?

Ans: By selling a new connection, the entity promises to supply data services to customer. Customer will not be able to benefit from just buying a data card and data services from third party. The activity of registering and activating connection is not a service to customer and therefore does not represent satisfaction of performance obligation.

Entity's obligation is to provide data service and hence activation is not a separate performance obligation.

Estimating variable consideration

Q29: XYZ Limited enters into a contract with a customer to build a sophisticated machinery. The promise to transfer the asset is a performance obligation that is satisfied over time. The promised consideration is ₹ 2.5 crores, but that amount will be reduced or increased depending on the timing of completion of the asset. Specifically, for each day after 31 March 20X1 that the asset is incomplete, the promised consideration is reduced by ₹ 1 lakh. For each day before 31 March 20X1 that the asset is complete, the promised consideration increases by ₹ 1 lakh.

In addition, upon completion of the asset, a third party will inspect the asset and assign a rating based on metrics that are defined in the contract. If the asset receives a specified rating, the entity will be entitled to an incentive bonus of ₹ 15 lakhs.

Determine the transaction price.

Ans: In determining the transaction price, the entity prepares a separate estimate for each element of variable consideration to which the entity will be entitled using the estimation methods described in paragraph 53 of Ind AS 115:

- a) the entity decides to use the expected value method to estimate the variable consideration associated with the daily penalty or incentive (i.e. ₹ 2.5 crores, plus or minus ₹ 1 lakh per day). This is because it is the method that the entity expects to better predict the amount of consideration to which it will be entitled.
- b) the entity decides to use the most likely amount to estimate the variable consideration associated with the incentive bonus. This is because there are only two possible outcomes (₹ 15 lakhs or ₹ Nil) and it is the method that the entity expects to better predict the amount of consideration to which it will be entitled.

Estimating variable consideration

Q30: AST Limited enters into a contract with a customer to build a manufacturing facility. The entity determines that the contract contains one performance obligation satisfied over time.

Construction is scheduled to be completed by the end of the 36 th month for an agreed-upon price of ₹ 25 crores.

The entity has the opportunity to earn a performance bonus for early completion as follows:

- 15 percent bonus of the contract price if completed by the 30th month (25% likelihood)
- 10 percent bonus if completed by the 32nd month (40% likelihood)
- 5 percent bonus if completed by the 34th month (15% likelihood)

In addition to the potential performance bonus for early completion, AST Limited is entitled to a quality bonus of ₹ 2 crores if a health and safety inspector assigns the facility a gold star rating as defined by the agency in the terms of the contract. AST Limited concludes that it is 60% likely that it will receive the quality bonus.

Determine the transaction price.

Ans: In determining the transaction price, AST Limited separately estimates variable consideration for each element of variability ie the early completion bonus and the quality bonus.

AST Limited decides to use the expected value method to estimate the variable consideration associated with the early completion bonus because there is a range of possible outcomes and the entity has experience with a large number of similar contracts that provide a reasonable basis to predict future outcomes. Therefore, the entity expects this method to best predict the amount of variable consideration associated with the early completion bonus. AST's best estimate of the early completion bonus is ₹ 2.13 crores, calculated as shown in the following table:

Bonus %	Amount of bonus (₹ in crores)	Probability	Probability-weighted amount (₹ in crores)
15%	3.75	25%	0.9375
10%	2.50	40%	1.00
5%	1.25	15%	0.1875

0%	-	20%	-
			2.125

AST Limited decides to use the most likely amount to estimate the variable consideration associated with the potential quality bonus because there are only two possible outcomes (₹ 2 crores or ₹ Nil) and this method would best predict the amount of consideration associated with the quality bonus. AST Limited believes the most likely amount of the quality bonus is ₹ 2 crores.

Volume discount incentive

Q31: HT Limited enters into a contract with a customer on 1 April 20X1 to sell Product X for ₹ 1,000 per unit. If the customer purchases more than 100 units of Product A in a financial year, the contract specifies that the price per unit is retrospectively reduced to ₹ 900 per unit. Consequently, the consideration in the contract is variable.

For the first quarter ended 30 June 20X1, the entity sells 10 units of Product A to the customer. The entity estimates that the customer's purchases will not exceed the 100 unit threshold required for the volume discount in the financial year. HT Limited determines that it has significant experience with this product and with the purchasing pattern of the customer. Thus, HT Limited concludes that it is highly probable that a significant reversal in the cumulative amount of revenue recognised (i.e. ₹ 1,000 per unit) will not occur when the uncertainty is resolved (i.e. when the total amount of purchases is known).

Further, in May 20X1, the customer acquires another company and in the second quarter ended 30 September 20X1 the entity sells an additional 50 units of Product A to the customer. In the light of the new fact, the entity estimates that the customer's purchases will exceed the 100 unit threshold for the financial year and therefore it will be required to retrospectively reduce the price per unit to ₹ 900.

Determine the amount of revenue to be recognise by HT Ltd. for the quarter ended 30 June 20X1 and 30 September 20X1.

Ans: The entity recognises revenue of ₹ 10,000 (10 units × ₹ 1,000 per unit) for the quarter ended 30 June 20X1.

HT Limited recognises revenue of ₹ 44,000 for the quarter ended 30 September 20X1. That amount is calculated from ₹ 45,000 for the sale of 500 units (50 units × ₹ 900 per unit) less the change in transaction price of ₹ 1,000 (10 units × ₹ 100 price reduction) for the reduction of revenue relating to units sold for the quarter ended 30 June 20X1.

Measurement of variable consideration

Q32: An entity has a fixed fee contract for ₹ 1 million to develop a product that meets specified performance criteria. Estimated cost to complete the contract is ₹ 950,000. The entity will transfer control of the product over five years, and the entity uses the cost-to-cost input method

to measure progress on the contract. An incentive award is available if the product meets the following weight criteria:

Weight (kg)	Award % of fixed fee	Incentive fee
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951 or greater	0%	—
701–950	10%	₹ 100,000
700 or less	25%	₹ 250,000

The entity has extensive experience creating products that meet the specific performance criteria. Based on its experience, the entity has identified five engineering alternatives that will achieve the 10 percent incentive and two that will achieve the 25 percent incentive. In this case, the entity determined that it has 95 percent confidence that it will achieve the 10 percent incentive and 20 percent confidence that it will achieve the 25 percent incentive.

Based on this analysis, the entity believes 10 percent to be the most likely amount when estimating the transaction price. Therefore, the entity includes only the 10 percent award in the transaction price when calculating revenue because the entity has concluded it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved due to its 95 percent confidence in achieving the 10 percent award.

The entity reassesses its production status quarterly to determine whether it is on track to meet the criteria for the incentive award. At the end of the year four, it becomes apparent that this contract will fully achieve the weight-based criterion. Therefore, the entity revises its estimate of variable consideration to include the entire 25 percent incentive fee in the year four because, at this point, it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when including the entire variable consideration in the transaction price.

Evaluate the impact of changes in variable consideration when cost incurred is as follows:

Year	₹
1	50,000
2	1,75,000
3	4,00,000
4	2,75,000
5	50,000

Ans: [Note: For simplification purposes, the table calculates revenue for the year independently based on costs incurred during the year divided by total expected costs, with the assumption that total expected costs do not change.]

Fixed consideration	A	1,000,000
Estimated costs to complete*	B	950,000

		Year 1	Year 2	Year 3	Year 4	Year 5
Total estimated variable consideration	C	100,000	100,000	100,000	250,000	250,000
Fixed revenue	D=A x H/B	52,632	184,211	421,053	289,474	52,632

Variable revenue	$E=C \times H/B$	5,263	18,421	42,105	72,368	13,158
Cumulative revenue adjustment	F (see below)	—	—	—	99,370	—
Total revenue	$G=D+E+F$	57,895	202,632	463,158	461,212	65,790
Costs	H	50,000	175,000	400,000	275,000	50,000
Operating profit	$I=G-H$	7,895	27,632	63,158	186,212	15,790
Margin (rounded off)	$J=I/G$	14%	14%	14%	40%	24%

- * For simplicity, it is assumed there is no change to the estimated costs to complete throughout the contract period.
- * In practice, under the cost-to-cost measure of progress, total revenue for each period is determined by multiplying the total transaction price (fixed and variable) by the ratio of cumulative cost incurred to total estimated costs to complete, less revenue recognized to date.

Calculation of cumulative catch-up adjustment:

Updated variable consideration	L	250,000
Percent complete in Year 4: (rounded off)	$M=N/O$	95%
Cumulative costs through Year 4	N	900,000
Estimated costs to complete	O	950,000
Cumulative variable revenue through Year 4:	P	138,130
Cumulative catch-up adjustment	$F=L \times M-P$	99,370

Management fees subject to the constraint

Q33: On 1 April 20X1, an entity enters into a contract with a client to provide asset management services for five years. The entity receives a two per cent quarterly management fee based on the client's assets under management at the end of each quarter. At 31 March 20X2, the client's assets under management are ₹ 100 crores. In addition, the entity receives a performance-based incentive fee of 20 per cent of the fund's return in excess of the return of an observable market index over the five-year period. Consequently, both the management fee and the performance fee in the contract are variable consideration.

Analyse the revenue to be recognised on 31 March, 20X2

Ans: The entity accounts for the services as a single performance obligation because it is providing a series of distinct services that are substantially the same and have the same pattern of transfer (the services transfer to the customer over time and use the same method to measure progress—that is, a time-based measure of progress).

The entity observes that the promised consideration is dependent on the market and thus is highly susceptible to factors outside the entity's influence. In addition, the incentive fee has a large number and a broad range of possible consideration amounts. The entity also observes that although it has experience with similar contracts, that experience is of little predictive value in determining the future performance of the market. Therefore, at contract inception,

the entity cannot conclude that it is highly probable that a significant reversal in the cumulative amount of revenue recognised would not occur if the entity included its estimate of the management fee or the incentive fee in the transaction price.

At each reporting date, the entity updates its estimate of the transaction price. Consequently, at the end of each quarter, the entity concludes that it can include in the transaction price the actual amount of the quarterly management fee because the uncertainty is resolved. However, the entity concludes that it cannot include its estimate of the incentive fee in the transaction price at those dates. This is because there has not been a change in its assessment from contract inception—the variability of the fee based on the market index indicates that the entity cannot conclude that it is highly probable that a significant reversal in the cumulative amount of revenue recognised would not occur if the entity included its estimate of the incentive fee in the transaction price.

At 31 March 20X2, the client's assets under management are ₹ 100 crores. Therefore, the resulting quarterly management fee and the transaction price is ₹ 2 crores.

At the end of each quarter, the entity allocates the quarterly management fee to the distinct services provided during the quarter. This is because the fee relates specifically to the entity's efforts to transfer the services for that quarter, which are distinct from the services provided in other quarters.

Consequently, the entity recognises ₹ 2 crores as revenue for the quarter ended 31 March 20X2.

Right of return

Q34: An entity enters into 1,000 contracts with customers. Each contract includes the sale of one product for ₹ 50 (1,000 total products × ₹ 50 = ₹ 50,000 total consideration). Cash is received when control of a product transfers. The entity's customary business practice is to allow a customer to return any unused product within 30 days and receive a full refund. The entity's cost of each product is ₹ 30.

Since the contract allows a customer to return the products, the consideration received from the customer is variable. To estimate the variable consideration to which the entity will be entitled, the entity decides to use the expected value. Using the expected value method, the entity estimates that 970 products will not be returned.

The entity estimates that the costs of recovering the products will be immaterial and expects that the returned products can be resold at a profit.

Determine the amount of revenue, refund liability and the asset to be recognised by the entity for the said contracts. **[MTP MAY 2020]**

Ans: The entity also considers the requirements in paragraphs 56–58 of Ind AS 115 on constraining estimates of variable consideration to determine whether the estimated amount of variable consideration of ₹ 48,500 (₹ 50 × 970 products not expected to be returned) can be included in the transaction price. The entity considers the factors in paragraph 57 of Ind AS 115 and determines that although the returns are outside the entity's influence, it has significant experience in estimating returns for this product and customer class. In addition, the uncertainty will be resolved within a short time frame (ie the 30-day return period). Thus, the

entity concludes that it is highly probable that a significant reversal in the cumulative amount of revenue recognised (i.e. ₹ 48,500) will not occur as the uncertainty is resolved (i.e. over the return period).

The entity estimates that the costs of recovering the products will be immaterial and expects that the returned products can be resold at a profit.

Upon transfer of control of the 1,000 products, the entity does not recognise revenue for the 30 products that it expects to be returned. Consequently, in accordance with paragraphs 55 and B21 of Ind AS 115, the entity recognises the following:

- revenue of ₹ 48,500 (₹ 50 × 970 products not expected to be returned);
- a refund liability of ₹ 1,500 (₹ 50 refund × 30 products expected to be returned); and
- an asset of ₹ 900 (₹ 30 × 30 products for its right to recover products from customers on settling the refund liability).

Warranty

Q35: An entity manufactures and sells computers that include an assurance-type warranty for the first 90 days. The entity offers an optional 'extended coverage' plan under which it will repair or replace any defective part for three years from the expiration of the assurance-type warranty. Since the optional 'extended coverage' plan is sold separately, the entity determines that the three years of extended coverage represent a separate performance obligation (i.e. a service-type warranty). The total transaction price for the sale of a computer and the extended warranty is ₹ 36,000. The entity determines that the stand-alone selling prices of the computer and the extended warranty are ₹ 32,000 and ₹ 4,000, respectively. The inventory value of the computer is ₹ 14,400. Furthermore, the entity estimates that, based on its experience, it will incur ₹ 2,000 in costs to repair defects that arise within the 90-day coverage period for the assurance-type warranty.

Pass required journal entries.

Ans: The entity will record the following journal entries:

		₹	₹
Cash / Trade receivables	Dr.	36,000	
Warranty expense	Dr.	2,000	
To Accrued warranty costs (assurance-type warranty)			2,000
To Contract liability (service-type warranty)			4,000
To Revenue			32,000
(To record revenue and contract liabilities related to warranties)			
Cost of goods sold	Dr.	14,400	
To Inventory			14,400

(To derecognise inventory and recognise cost of goods sold)			
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The entity derecognises the accrued warranty liability associated with the assurance-type warranty as actual warranty costs are incurred during the first 90 days after the customer receives the computer. The entity recognises the contract liability associated with the service-type warranty as revenue during the contract warranty period and recognises the costs associated with providing the service-type warranty as they are incurred. The entity had to determine whether the repair costs incurred are applied against the warranty reserve already established for claims that occur during the first 90 days or recognised as an expense as incurred.

Warranty

Q36: Entity sells 100 ultra-life batteries for ₹ 2,000 each and provides the customer with a five-year guarantee that the batteries will withstand the elements and continue to perform to specifications. The entity, which normally provides a one-year guarantee to customer purchasing ultra-life batteries, determines that years two through five represent a separate performance obligation. The entity determines that ₹ 1,70,000 of the ₹ 2,00,000 transaction price should be allocated to the batteries and ₹ 30,000 to the service warranty (based on estimated stand-alone selling prices and a relative selling price allocation). The entity's normal one-year warranty cost is ₹ 1 per battery.

Pass required journal entries.

Ans: The entity will record the following journal entries:

Upon delivery of the batteries, the entity records the following entry:

Cash/Receivables To Revenue	Dr.	2,00,000	
To Contract liability (service warranty)			1,70,000
			30,000
Warranty expense	Dr.	10,000	
To Accrued warranty costs (assurance warranty)			10,000

The contract liability is recognised as revenue over the service warranty period (years 2 - 5). The costs of providing the service warranty are recognised as incurred. The assurance warranty obligation is used / derecognised as defective units are replaced / repaired during the initial year of the warranty. Upon expiration of the assurance warranty period, any remaining assurance warranty obligation is reversed.

Financing component: significant or insignificant?

Q37: A commercial airplane component supplier enters into a contract with a customer for promised consideration of ₹ 7,000,000. Based on an evaluation of the facts and circumstances, the supplier concluded that ₹ 140,000 represented a insignificant financing component because of an advance payment received in excess of a year before the transfer of control of the product.

State whether company needs to make any adjustment in determining the transaction price.

What if the advance payment was larger and received further in advance, such that the entity concluded that ₹ 1,400,000 represented the financing component based on an analysis of the facts and circumstances.

Ans: The entity may conclude that ₹ 140,000, or 2 percent of the contract price, is not significant, and the entity may not need to adjust the consideration promised in determining the transaction price.

However, when the advance payment was larger and received further in advance, such that the entity may conclude that ₹ 1,400,000 represents the financing component based on an analysis of the facts and circumstances. In such a case, the entity may conclude that ₹ 1,400,000, or 20 percent of the contract price, is significant, and the entity should adjust the consideration promised in determining the transaction price.

Note: In this illustration, the entity's conclusion that 2 percent of the transaction price was not significant and 20 percent was significant is a judgment based on the entity's facts and circumstances. An entity may reach a different conclusion based on its facts and circumstances.

Accounting for significant financing component

Q38: NKT Limited sells a product to a customer for ₹ 121,000 that is payable 24 months after delivery. The customer obtains control of the product at contract inception. The contract permits the customer to return the product within 90 days. The product is new and the entity has no relevant historical evidence of product returns or other available market evidence.

The cash selling price of the product is ₹ 100,000 which represents the amount that the customer would pay upon delivery for the same product sold under otherwise identical terms and conditions as at contract inception. The entity's cost of the product is ₹ 80,000. The contract includes an implicit interest rate of 10 per cent (i.e. the interest rate that over 24 months discounts the promised consideration of ₹ 121,000 to the cash selling price of ₹ 100,000). Analyse the above transaction with respect to its financing component.

Ans: The contract includes a significant financing component. This is evident from the difference between the amount of promised consideration of ₹ 121,000 and the cash selling price of ₹ 100,000 at the date that the goods are transferred to the customer.

The contract includes an implicit interest rate of 10 per cent (i.e. the interest rate that over 24 months discounts the promised consideration of ₹ 121,000 to the cash selling price of ₹ 100,000). The entity evaluates the rate and concludes that it is commensurate with the rate that would be reflected in a separate financing transaction between the entity and its customer at contract inception.

Until the entity receives the cash payment from the customer, interest revenue would be recognised in accordance with Ind AS 109. In determining the effective interest rate in accordance with Ind AS 109, the entity would consider the remaining contractual term.

Determining the discount rate

Q39: VT Limited enters into a contract with a customer to sell equipment. Control of the equipment transfers to the customer when the contract is signed. The price stated in the contract is

₹ 1 crore plus a 10% contractual rate of interest, payable in 60 monthly instalments of ₹ 212,470. Determine the discounting rate and the transaction price when

Case A—Contractual discount rate reflects the rate in a separate financing transaction

Case B—Contractual discount rate does not reflect the rate in a separate financing transaction ie 14%.

Ans: Case A—Contractual discount rate reflects the rate in a separate financing transaction

In evaluating the discount rate in the contract that contains a significant financing component, VT Limited observes that the 10% contractual rate of interest reflects the rate that would be used in a separate financing transaction between the entity and its customer at contract inception (i.e. the contractual rate of interest of 10% reflects the credit characteristics of the customer).

The market terms of the financing mean that the cash selling price of the equipment is ₹ 1 crore. This amount is recognised as revenue and as a loan receivable when control of the equipment transfers to the customer. The entity accounts for the receivable in accordance with Ind AS 109.

Case B—Contractual discount rate does not reflect the rate in a separate financing transaction

In evaluating the discount rate in the contract that contains a significant financing component, the entity observes that the 10% contractual rate of interest is significantly lower than the 14% interest rate that would be used in a separate financing transaction between the entity and its customer at contract inception (i.e. the contractual rate of interest of 10% does not reflect the credit characteristics of the customer). This suggests that the cash selling price is less than ₹ 1 crore.

VT Limited determines the transaction price by adjusting the promised amount of consideration to reflect the contractual payments using the 14% interest rate that reflects the credit characteristics of the customer. Consequently, the entity determines that the transaction price is ₹ 9,131,346 (60 monthly payments of ₹ 212,470 discounted at 14%). The entity recognises revenue and a loan receivable for that amount. The entity accounts for the loan receivable in accordance with Ind AS 109.

Advance payment and assessment of discount rate

Q40: ST Limited enters into a contract with a customer to sell an asset. Control of the asset will transfer to the customer in two years (i.e. the performance obligation will be satisfied at a point in time). The contract includes two alternative payment options:

Payment of ₹ 5,000 in two years when the customer obtains control of the asset or Payment of ₹ 4,000 when the contract is signed. The customer elects to pay ₹ 4,000 when the contract is signed.

ST Limited concludes that the contract contains a significant financing component because of the length of time between when the customer pays for the asset and when the entity transfers the asset to the customer, as well as the prevailing interest rates in the market.

The interest rate implicit in the transaction is 11.8 per cent, which is the interest rate necessary to make the two alternative payment options economically equivalent. However, the entity determines that, the rate that should be used in adjusting the promised consideration is 6%, which is the entity's incremental borrowing rate.

Pass journal entries showing how the entity would account for the significant financing component. [MTP May 2020]

Ans: Journal Entries showing accounting for the significant financing component:

- (a) Recognise a contract liability for the ₹ 4,000 payment received at contract inception:

Cash	Dr. ₹ 4,000	
To Contract liability		₹ 4,000

- (b) During the two years from contract inception until the transfer of the asset, the entity adjusts the promised amount of consideration and accretes the contract liability by recognising interest on ₹ 4,000 at 6% for two years:

Interest expense	Dr. ₹ 494*	
To Contract liability		₹ 494

* ₹ 494 = ₹ 4,000 contract liability × (6% interest per year for two years).

- (c) Recognise revenue for the transfer of the asset:

Contract liability	Dr. ₹ 4,494	
To Revenue		₹ 4,494

Withheld payments on a long-term contract

Q41: ABC Limited enters into a contract for the construction of a power plant that includes scheduled milestone payments for the performance by ABC Limited throughout the contract term of three years. The performance obligation will be satisfied over time and the milestone payments are scheduled to coincide with the expected performance by ABC Limited. The contract provides that a specified percentage of each milestone payment is to be withheld as retention money by the customer throughout the arrangement and paid to the entity only when the building is complete.

Analyse whether the contract contains any financing component.

Ans: ABC Limited concludes that the contract does not include a significant financing component since the milestone payments coincide with its performance and the contract requires amounts to be retained for reasons other than the provision of finance. The withholding of a specified percentage of each milestone payment is intended to protect the customer from the contractor failing to adequately complete its obligations under the contract.

Advance payment

Q42: XYZ Limited, a personal computer (PC) manufacturer, enters into a contract with a customer to provide global PC support and repair coverage for three years along with its PC. The customer purchases this support service at the time of buying the product. Consideration for the service

is an additional ₹ 3,000. Customers electing to buy this service must pay for it upfront (i.e. a monthly payment option is not available).

Analyse whether there is any significant financing component in the contract or not.

Ans: To determine whether there is a significant financing component in the contract, the entity considers the nature of the service being offered and the purpose of the payment terms. The entity charges a single upfront amount, not with the primary purpose of obtaining financing from the customer but, instead, to maximise profitability, taking into consideration the risks associated with providing the service. Specifically, if customers could pay monthly, they would be less likely to renew and the population of customers that continue to use the support service in the later years may become smaller and less diverse over time (i.e. customers that choose to renew historically are those that make greater use of the service, thereby increasing the entity's costs). In addition, customers tend to use services more if they pay monthly rather than making an upfront payment. Finally, the entity would incur higher administration costs such as the costs related to administering renewals and collection of monthly payments.

In assessing whether or not the contract contains a significant financing component, XYZ Limited determines that the payment terms were structured primarily for reasons other than the provision of finance to the entity. XYZ Limited charges a single upfront amount for the services because other payment terms (such as a monthly payment plan) would affect the nature of the risks it assumes to provide the service and may make it uneconomical to provide the service. As a result of its analysis, XYZ Limited concludes that there is not a significant financing component.

Advance payment

Q43: A computer hardware vendor enters into a three-year arrangement with a customer to provide support services. For customers with low credit ratings, the vendor requires the customer to pay for the entire arrangement in advance of the provision of service. Other customers pay over time.

Analyse whether there is any significant financing component in the contract or not.

Ans: Due to this customer's credit rating, the customer pays in advance for the three-year term. Because there is no difference between the amount of promised consideration and the cash selling price (that is, the customer does not receive a discount for paying in advance), the vendor requires payment in advance only to protect against customer non-payment, and no other factors exist to suggest the arrangement contains a financing, the vendor concludes this contract does not provide the customer or the entity with a significant benefit of financing.

Sales based royalty

Q44: A software vendor enters into a contract with a customer to provide a license solely in exchange for a sales-based royalty.

Analyse whether there is any significant financing component in the contract or not.

Ans: Although the payment will be made in arrears, because the total consideration varies based on the occurrence or non-occurrence of a future event that is not within the control of the

customer or the entity, the software vendor concludes the contract does not provide the customer or the entity with a significant benefit of financing.

Payment in arrears

Q45: An EPC contractor enters into a two-year contract to develop customized machine for a customer. The contractor concludes that the goods and services in this contract constitute a single performance obligation.

Based on the terms of the contract, the contractor determines that it transfers control over time, and recognizes revenue based on an input method best reflecting the transfer of control to the customer. The customer agrees to provide the contractor monthly progress payments, with the final 25 percent payment (holdback payment) due upon contract completion. As a result of the holdback payment, there is a gap between when control transfers and when consideration is received, creating a financing component.

Analyse whether there is any significant financing component in the contract or not.

Ans: There is no difference between the amount of promised consideration and the cash selling price (that is, the customer did not pay a premium for paying a portion of the consideration in arrears). The payment terms included a holdback payment only to ensure successful completion of the project, and no other factors exist to suggest the arrangement contains a financing. Hence, the contractor concludes this contract does not provide the customer or the contractor with a significant benefit of financing.

Payment in arrears

Q46: Company Z is a developer and manufacturer of defence systems that is primarily a Tier-II supplier of parts and integrated systems to original equipment manufacturers (OEMs) in the commercial markets. Company Z enters into a contract with Company X for the development and delivery of 5,000 highly technical, specialized missiles for use in one of Company X's platforms.

As a part of the contract, Company X has agreed to pay Company Z for their cost plus an award fee up to ₹ 100 crores. The consideration will be paid by the customer related to costs incurred near the time Company Z incurs such costs. However, the ₹ 100 crores award fee is awarded upon successful completion of the development and test fire of a missile to occur in 16 months from the time the contract is executed.

The contract specifies Company Z will earn up to ₹ 100 crores based on Company X's assessment of Company Z's ability to develop and manufacture a missile that achieves multiple factors, including final weight, velocity, and accuracy. Partial award fees may be awarded based on a pre-determined scale based on their success.

Assume Company Z has assessed the contract under Ind AS 115 and determined the award fee represents variable consideration. Based on their assessment, Company Z has estimated a total of ₹ 80 crores in the transaction price related to the variable consideration pursuant to guidance within Ind AS 115. Further, the entity has concluded it should recognize revenue over time for a single performance obligation using a cost-to-cost input method.

Analyse whether there is any significant financing component in the contract or not.

Ans: Company Z will transfer control over time beginning shortly after the contract is executed, but will not receive the cash consideration related to the award fee component from Company X for more than one year in the future. Hence, Company Z should assess whether the award fee represents a significant financing component.

The intention of the parties in negotiating the award fee due upon completion of the test fire, and based on the results of that test fire, was to provide incentive to Company Z to produce high functioning missiles that achieved successful scoring from Company X. Therefore, it was determined the contract does not contain a significant financing component, and Company Z should not adjust the transaction price.

As per Ind AS 115.63, as a practical expedient, an entity need not adjust the promised amount of consideration for the effects of a significant financing component if the entity expects, at contract inception, that the period between:

- (a) when the entity transfers a promised good or service to a customer and
- (b) when the customer pays for that good or service

will be one year or less.

Applying practical expedient

Q47: Company H enters into a two-year contract to develop customized software for Company C. Company H concludes that the goods and services in this contract constitute a single performance obligation.

Based on the terms of the contract, Company H determines that it transfers control over time, and recognizes revenue based on an input method best reflecting the transfer of control to Company C.

Company C agrees to provide Company H monthly progress payments. Based on the expectation of the timing of costs to be incurred, Company H concludes that progress payments are being made such that the timing between the transfer of control and payment is never expected to exceed one year.

Analyse whether there is any significant financing component in the contract or not.

Ans: Company H concludes it will not need to further assess whether a significant financing component is present and does not adjust the promised consideration in determining the transaction price, as they are applying the practical expedient under Ind AS 115.

As per Ind AS 115.65, an entity shall present the effects of financing (interest revenue or interest expense) separately from revenue from contracts with customers in the statement of profit and loss. Interest revenue or interest expense is recognised only to the extent that a contract asset (or receivable) or a contract liability is recognised in accounting for a contract with a customer.

Entitlement to non-cash consideration

Q48: An entity enters into a contract with a customer to provide a weekly service for one year. The contract is signed on 1st April 20X1 and work begins immediately. The entity concludes that the service is a single performance obligation. This is because the entity is providing a series of

distinct services that are substantially the same and have the same pattern of transfer (the services transfer to the customer over time and use the same method to measure progress — that is, a time-based measure of progress).

In exchange for the service, the customer promises its 100 equity shares per week of service (a total of 5,200 shares for the contract). The terms in the contract require that the shares must be paid upon the successful completion of each week of service.

How should the entity decide the transaction price?

Ans: The entity measures its progress towards complete satisfaction of the performance obligation as each week of service is complete. To determine the transaction price (and the amount of revenue to be recognised), the entity has to measure the fair value of 100 shares that are received upon completion of each weekly service. The entity shall not reflect any subsequent changes in the fair value of the shares received (or receivable) in revenue.

Fair value of non-cash consideration varies for reasons other than the form of the consideration

Q49: RT Limited enters into a contract to build an office building for AT Limited over an 18-month period. AT Limited agrees to pay the construction entity ₹ 350 crores for the project. RT Limited will receive a bonus of 10 lakhs equity shares of AT Limited if it completes construction of the office building within one year. Assume a fair value of ₹ 100 per share at contract inception.

Determine the transaction price.

Ans: The ultimate value of any shares the entity might receive could change for two reasons:

- 1) the entity earns or does not earn the shares and
- 2) the fair value per share may change during the contract term.

When determining the transaction price, the entity would reflect changes in the number of shares to be earned. However, the entity would not reflect changes in the fair value per share. Said another way, the share price of ₹ 100 is used to value the potential bonus throughout the life of the contract.

As a result, if the entity earns the bonus, its revenue would be ₹ 350 crores plus 10 lakhs equity shares at ₹ 100 per share for total consideration of ₹ 360 crores.

Non-cash consideration - Free advertising

Q50: Production Company Y sells a television show to Television Company X. The consideration under the arrangement is a fixed amount of ₹ 1,000 and 100 advertising slots. Y determines that the stand-alone selling price of the show would be ₹ 1,500. Based on market rates, Y determines that the fair value of the advertising slots is ₹ 600.

Determine the transaction price.

Ans: Y determines that the transaction price is ₹ 1,600, comprising of ₹ 1,000 fixed amount plus the fair value of the advertising slots ie ₹ 600.

If the fair value of the advertising slots could not be reasonably estimated, then the transaction price would be ₹ 1,500 i.e. Y would use the stand-alone selling price of the goods or services promised for the non-cash consideration.

Customer-provided goods or services

Q51: MS Limited is a manufacturer of cars. It has a supplier of steering systems – SK Limited. MS Limited places an order of 10,000 steering systems on SK Limited. It also agrees to pay ₹ 25,000 per steering system and contributes tooling to be used in SK's production process.

The tooling has a fair value of ₹ 2 crores at contract inception. SK Limited determines that each steering system represents a single performance obligation and that control of the steering system transfers to MS Limited upon delivery.

SK Limited may use the tooling for other projects and determines that it obtains control of the tooling. Determine the transaction price?

Ans: As a result, at contract inception, SK Limited includes the fair value of the tooling in the transaction price at contract inception, which it determines to be ₹ 27 crores (₹ 25 crores for the steering systems and ₹ 2 crores for the tooling).

Consideration payable to a customer

Q52: An entity that manufactures consumer goods enters into a one-year contract to sell goods to a customer that is a large global chain of retail stores. The customer commits to buy at least ₹ 15 crores of products during the year. The contract also requires the entity to make a non-refundable payment of ₹ 1.5 crores to the customer at the inception of the contract. The ₹ 1.5 crores payment will compensate the customer for the changes it needs to make to its shelving to accommodate the entity's products. The entity does not obtain control of any rights to the customer's shelves.

Determine the transaction price.

Ans: The entity considers the requirements in paragraphs 70 – 72 of Ind AS 115 and concludes that the payment to the customer is not in exchange for a distinct good or service that transfers to the entity. This is because the entity does not obtain control of any rights to the customer's shelves. Consequently, the entity determines that, in accordance with paragraph 70 of Ind AS 115, the ₹ 1.5 crores payment is a reduction of the transaction price.

The entity applies the requirements in paragraph 72 of Ind AS 115 and concludes that the consideration payable is accounted for as a reduction in the transaction price when the entity recognises revenue for the transfer of the goods. Consequently, as the entity transfers goods to the customer, the entity reduces the transaction price for each good by 10 per cent $[(₹ 1.5 \text{ crores} \div ₹ 15 \text{ crores}) \times 100]$. Therefore, in the first month in which the entity transfers goods to the customer, the entity recognises revenue of ₹ 1.125 crores (₹ 1.25 crores invoiced amount less ₹ 0.125 crore of consideration payable to the customer).

Credits to a new customer

Q53: Customer C is in the middle of a two-year contract with Telco B Ltd., its current wireless service provider, and would be required to pay an early termination penalty if it terminated the

contract today. If C cancels the existing contract with B Ltd. and signs a two-year contract with Telco D Ltd. for ₹ 800 per month, then D Ltd. promises at contract inception to give C a one-time credit of ₹ 2,000 (referred to as a 'port-in credit'). The amount of the port-in credit does not depend on the volume of service subsequently purchased by C during the two-year contract.

Determine the transaction price.

Ans: D Ltd. determines that it should account for the port-in credit as consideration payable to a customer. This is because the credit will be applied against amounts owing to D Ltd. Since, D Ltd. does not receive any distinct goods or services in exchange for this credit, it will account for it as a reduction in the transaction price ₹ 17,200 [(₹ 800 x 24 month) – ₹ 2,000]. D Ltd. will recognise the reduction in the transaction price as the promised goods or services are transferred.

Allocation methodology

Q54: An entity enters into a contract with a customer to sell Products A, B and C in exchange for ₹ 10,000. The entity will satisfy the performance obligations for each of the products at different points in time. The entity regularly sells Product A separately and therefore the stand-alone selling price is directly observable. The stand-alone selling prices of Products B and C are not directly observable.

Because the stand-alone selling prices for Products B and C are not directly observable, the entity must estimate them. To estimate the stand-alone selling prices, the entity uses the adjusted market assessment approach for Product B and the expected cost plus a margin approach for Product C. In making those estimates, the entity maximises the use of observable inputs.

The entity estimates the stand-alone selling prices as follows:

Product	Stand-alone selling price	Method
	₹	
Product A	5,000	Directly observable
Product B	2,500	Adjusted market assessment approach
Product C	7,500	Expected cost plus a margin approach
Total	15,000	

Determine the transaction price allocated to each product.

Ans: The customer receives a discount for purchasing the bundle of goods because the sum of the stand-alone selling prices (₹ 15,000) exceeds the promised consideration (₹ 10,000). The entity considers that there is no observable evidence about the performance obligation to which the entire discount belongs. The discount is allocated proportionately across Products A, B and C. The discount, and therefore the transaction price, is allocated as follows:

Product	Allocated transaction price (to nearest ₹100)
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₹

Product A	3,300	(₹ 5,000 ÷ ₹ 15,000 × ₹ 10,000)
Product B	1,700	(₹ 2,500 ÷ ₹ 15,000 × ₹ 10,000)
Product C	5,000	(₹ 7,500 ÷ ₹ 15,000 × ₹ 10,000)
Total	10,000	

Allocating a discount

Q55: An entity regularly sells Products X, Y and Z individually, thereby establishing the following stand-alone selling prices:

Product	Stand-alone selling price
	₹
Product X	50,000
Product Y	25,000
Product Z	45,000
Total	1,20,000

In addition, the entity regularly sells Products Y and Z together for ₹ 50,000.

Case A—Allocating a discount to one or more performance obligations

The entity enters into a contract with a customer to sell Products X, Y and Z in exchange for ₹ 100,000. The entity will satisfy the performance obligations for each of the products at different points in time; or Product Y and Z at same point of time. Determine the allocation of transaction price to Product Y and Z.

Case B—Residual approach is appropriate

The entity enters into a contract with a customer to sell Products X, Y and Z as described in Case A. The contract also includes a promise to transfer Product Alpha. Total consideration in the contract is ₹ 130,000. The stand-alone selling price for Product Alpha is highly variable because the entity sells Product Alpha to different customers for a broad range of amounts (₹ 15,000 – ₹ 45,000). Determine the stand-alone selling price of Products, X, Y, Z and Alpha using the residual approach.

Case C—Residual approach is inappropriate

The same facts as in Case B apply to Case C except the transaction price is ₹ 1,05,000 instead of ₹ 130,000.

Ans: **Case A—Allocating a discount to one or more performance obligations**

The contract includes a discount of ₹ 20,000 on the overall transaction, which would be allocated proportionately to all three performance obligations when allocating the transaction price using the relative stand-alone selling price method.

However, because the entity regularly sells Products Y and Z together for ₹ 50,000 and Product X for ₹ 50,000, it has evidence that the entire discount should be allocated to the promises to transfer Products Y and Z in accordance with paragraph 82 of Ind AS 115.

If the entity transfers control of Products Y and Z at the same point in time, then the entity could, as a practical matter, account for the transfer of those products as a single performance obligation. That is, the entity could allocate ₹ 50,000 of the transaction price to the single performance obligation and recognise revenue of ₹ 50,000 when Products Y and Z simultaneously transfer to the customer.

If the contract requires the entity to transfer control of Products Y and Z at different points in time, then the allocated amount of ₹ 50,000 is individually allocated to the promises to transfer Product Y (stand-alone selling price of ₹ 25,000) and Product Z (stand-alone selling price of ₹ 45,000) as follows:

Product	Allocated transaction price
	₹
Product Y	17,857 (₹ 25,000 ÷ ₹ 70,000 total stand-alone selling price × ₹ 50,000)
Product Z	32,143 (₹ 45,000 ÷ ₹ 70,000 total stand-alone selling price × ₹ 50,000)
Total	50,000

Case B—Residual approach is appropriate

Before estimating the stand-alone selling price of Product Alpha using the residual approach, the entity determines whether any discount should be allocated to the other performance obligations in the contract.

As in Case A, because the entity regularly sells Products Y and Z together for ₹ 50,000 and Product X for ₹ 50,000, it has observable evidence that ₹ 100,000 should be allocated to those three products and a ₹ 20,000 discount should be allocated to the promises to transfer Products Y and Z in accordance with paragraph 82 of Ind AS 115.

Using the residual approach, the entity estimates the stand-alone selling price of Product Alpha to be ₹ 30,000 as follows:

Product	Stand-alone selling price	Method
		₹
Product X	50,000	Directly observable
Products Y and Z	50,000	Directly observable with discount
Product Alpha	30,000	Residual approach
Total	130,000	

The entity observes that the resulting ₹ 30,000 allocated to Product Alpha is within the range of its observable selling prices (₹ 15,000 – ₹ 45,000).

Case C—Residual approach is inappropriate

The same facts as in Case B apply to Case C except the transaction price is ₹ 105,000 instead of ₹ 130,000. Consequently, the application of the residual approach would result in a stand-alone selling price of ₹ 5,000 for Product Alpha (₹ 105,000 transaction price less ₹ 100,000 allocated to Products X, Y and Z).

The entity concludes that ₹ 5,000 would not faithfully depict the amount of consideration to which the entity expects to be entitled in exchange for satisfying its performance obligation to transfer Product Alpha, because ₹ 5,000 does not approximate the stand-alone selling price of Product Alpha, which ranges from ₹ 15,000 – ₹ 45,000.

Consequently, the entity reviews its observable data, including sales and margin reports, to estimate the stand-alone selling price of Product Alpha using another suitable method. The entity allocates the transaction price of ₹ 1,05,000 to Products X, Y, Z and Alpha using the relative stand-alone selling prices of those products in accordance with paragraphs 73–80 of Ind AS 115.

Allocation of variable consideration

Q56: An entity enters into a contract with a customer for two intellectual property licences (Licences A and B), which the entity determines to represent two performance obligations each satisfied at a point in time. The stand-alone selling prices of Licences A and B are ₹ 1,600,000 and ₹ 2,000,000, respectively. The entity transfers Licence B at inception of the contract and transfers Licence A one month later.

Case A—Variable consideration allocated entirely to one performance obligation

The price stated in the contract for Licence A is a fixed amount of ₹ 1,600,000 and for Licence B the consideration is three per cent of the customer's future sales of products that use Licence B. For purposes of allocation, the entity estimates its sales-based royalties (ie the variable consideration) to be ₹ 2,000,000. Allocate the transaction price.

Case B—Variable consideration allocated on the basis of stand-alone selling prices

The price stated in the contract for Licence A is a fixed amount of ₹ 600,000 and for Licence B the consideration is five per cent of the customer's future sales of products that use Licence B. The entity's estimate of the sales-based royalties (ie the variable consideration) is ₹ 3,000,000. Allocate the transaction price and determine the revenue to be recognised for each licence and the contract liability, if any.

Ans: **Case A—Variable consideration allocated entirely to one performance obligation**

To allocate the transaction price, the entity considers the criteria in paragraph 85 and concludes that the variable consideration (ie the sales-based royalties) should be allocated entirely to Licence B. The entity concludes that the criteria are met for the following reasons:

- (a) the variable payment relates specifically to an outcome from the performance obligation to transfer Licence B (ie the customer's subsequent sales of products that use Licence B).
- (b) allocating the expected royalty amounts of ₹ 2,000,000 entirely to Licence B is consistent with the allocation objective in paragraph 73 of Ind AS 115. This is because the entity's estimate of the amount of sales-based royalties (₹ 2,000,000) approximates the stand-alone selling price of Licence B and the fixed amount of ₹ 1,600,000 approximates the

stand-alone selling price of Licence A. The entity allocates ₹ 1,600,000 to Licence A. This is because, based on an assessment of the facts and circumstances relating to both licences, allocating to Licence B some of the fixed consideration in addition to all of the variable consideration would not meet the allocation objective in paragraph 73 of Ind AS 115.

The entity transfers Licence B at inception of the contract and transfers Licence A one month later. Upon the transfer of Licence B, the entity does not recognise revenue because the consideration allocated to Licence B is in the form of a sales-based royalty. Therefore, the entity recognises revenue for the sales-based royalty when those subsequent sales occur.

When Licence A is transferred, the entity recognises as revenue the ₹ 1,600,000 allocated to Licence A.

Case B—Variable consideration allocated on the basis of stand-alone selling prices

To allocate the transaction price, the entity applies the criteria in paragraph 85 of Ind AS 115 to determine whether to allocate the variable consideration (ie the sales-based royalties) entirely to Licence B.

In applying the criteria, the entity concludes that even though the variable payments relate specifically to an outcome from the performance obligation to transfer Licence B (ie the customer's subsequent sales of products that use Licence B), allocating the variable consideration entirely to Licence B would be inconsistent with the principle for allocating the transaction price. Allocating ₹ 600,000 to Licence A and ₹ 3,000,000 to Licence B does not reflect a reasonable allocation of the transaction price on the basis of the stand-alone selling prices of Licences A and B of ₹ 1,600,000 and ₹ 2,000,000, respectively. Consequently, the entity applies the general allocation requirements of Ind AS 115.

The entity allocates the transaction price of ₹ 600,000 to Licences A and B on the basis of relative stand-alone selling prices of ₹ 1,600,000 and ₹ 2,000,000, respectively. The entity also allocates the consideration related to the sales-based royalty on a relative stand-alone selling price basis. However, when an entity licenses intellectual property in which the consideration is in the form of a sales-based royalty, the entity cannot recognise revenue until the later of the following events: the subsequent sales occur or the performance obligation is satisfied (or partially satisfied).

Licence B is transferred to the customer at the inception of the contract and Licence A is transferred three months later. When Licence B is transferred, the entity recognises as revenue ₹ 333,333 $[(₹ 2,000,000 \div ₹ 3,600,000) \times ₹ 600,000]$ allocated to Licence B. When Licence A is transferred, the entity recognises as revenue ₹ 266,667 $[(₹ 1,600,000 \div ₹ 3,600,000) \times ₹ 600,000]$ allocated to Licence A.

In the first month, the royalty due from the customer's first month of sales is ₹ 400,000. Consequently, the entity recognises as revenue ₹ 222,222 $(₹ 2,000,000 \div ₹ 3,600,000 \times ₹ 400,000)$ allocated to Licence B (which has been transferred to the customer and is therefore a satisfied performance obligation). The entity recognises a contract liability for the ₹ 177,778 $(₹ 1,600,000 \div ₹ 3,600,000 \times ₹ 400,000)$ allocated to Licence A. This is because

although the subsequent sale by the entity's customer has occurred, the performance obligation to which the royalty has been allocated has not been satisfied.

Allocating a change in transaction price

Q57: On 1 April 20X0, a consultant enters into an arrangement to provide due diligence, valuation, and software implementation services to a customer for ₹ 2 crores. The consultant can earn ₹ 20 lakhs bonus if it completes the software implementation by 30 September 20X0 or ₹ 10 lakhs bonus if it completes the software implementation by 31 December 20X0.

The due diligence, valuation, and software implementation services are distinct and therefore are accounted for as separate performance obligations. The consultant allocates the transaction price, disregarding the potential bonus, on a relative stand-alone selling price basis as follows:

- Due diligence – ₹ 80 lakhs
- Valuation – ₹ 20 lakhs
- Software implementation – ₹ 1 crore

At contract inception, the consultant believes it will complete the software implementation by 30 January 20X1. After considering the factors in Ind AS 115, the consultant cannot conclude that a significant reversal in the cumulative amount of revenue recognized would not occur when the uncertainty is resolved since the consultant lacks experience in completing similar projects. As a result, the consultant does not include the amount of the early completion bonus in its estimated transaction price at contract inception.

On 1 July 20X0, the consultant notes that the project has progressed better than expected and believes that implementation will be completed by 30 September 20X0 based on a revised forecast. As a result, the consultant updates its estimated transaction price to reflect a bonus of ₹ 20 lakhs.

After reviewing its progress as of 1 July 20X0, the consultant determines that it is 100 percent complete in satisfying its performance obligations for due diligence and valuation and 60 percent complete in satisfying its performance obligation for software implementation.

Determine the transaction price.

Ans: On 1 July 20X0, the consultant allocates the bonus of ₹ 20 lakhs to the software implementation performance obligation, for total consideration of ₹ 1.2 crores allocated to that performance obligation, and adjusts the cumulative revenue to date for the software implementation services to ₹ 72 lakhs (60 percent of ₹ 1.2 crores)

Discretionary credit

Q58: Telco G Ltd. grants a one-time credit of ₹ 50 to a customer in Month 14 of a two-year contract. The credit is discretionary and is granted as a commercial gesture, not in response to prior service issues (often referred to as a 'retention credit'). The contract includes a subsidised handset and a voice and data plan. G Ltd. does not regularly provide these credits and therefore customers do not expect them to be granted.

How this will be accounted for under Ind AS 115?

Ans: G Ltd. concludes that this is a change in the transaction price and not a variable consideration. Since, the credit does not relate to a satisfied performance obligation, the change in transaction price resulting from the credit is accounted for as a contract modification and recognised over the

remaining term of the contract. If, in this example, rather than providing a one-time credit, G Ltd. granted a discount of ₹ 5 per month for the remaining contract term, then also G Ltd. would conclude that it was a change in the transaction price. It would apply the contract modification guidance and recognise the credit over the remaining term of the contract.

Criteria (a) – Transfer of control over a period of time

Q59: Minitex Ltd. is a payroll processing company. Minitex Ltd. enters into a contract to provide monthly payroll processing services to ABC limited for one year. Determine how entity will recognise the revenue?

Ans: Payroll processing is a single performance obligation. On a monthly basis, as Minitex Ltd carries out the payroll processing –

- The customer, ie, ABC Limited simultaneously receives and consumes the benefits of the entity's performance in processing each payroll transaction.
- Further, once the services have been performed for a particular month, in case of termination of the agreement before maturity and contract is transferred to another entity, then such new entity will not need to re-perform the services for expired months.

Therefore, it satisfies the first criterion, ie, services completed on a monthly basis are consumed by the entity at the same time and hence, revenue shall be recognised over the period of time.

Criteria (a) – Transfer of control over a period of time:

Q60: T&L Limited ('T&L') is a logistics company that provides inland and sea transportation services. A customer – Horizon Limited ('Horizon') enters into a contract with T&L for transportation of its goods from India to Sri Lanka through sea. The voyage is expected to take 20 days from Mumbai to Colombo. T&L is responsible for shipping the goods from Mumbai port to Colombo port.

Whether T&L's performance obligation is met over period of time?

Ans: T&L has a single performance obligation to ship the goods from one port to another. The following factors are critical for assessing how services performed by T&L are consumed by the customer –

- As the voyage is performed, the service undertaken by T&L is progressing, such that no other entity will need to re-perform the service till so far as the voyage has been performed, if T&L was to deliver only part-way.
- The customer is directly benefitting from the performance of the voyage as & when it progresses.

Therefore, such performance obligation is said to be met over a period of time.

Criteria (c) – Transfer of control over a period of time:

Q61: AFS Ltd. is a risk advisory firm and enters into a contract with a company – WBC Ltd to provide audit services that results in AFS issuing an audit opinion to the Company. The professional opinion relates to facts and circumstances that are specific to the company. If the Company was to terminate the consulting contract for reasons other than the entity's failure to perform as promised, the contract requires the Company to compensate the risk advisory firm for its costs incurred plus a 15 per cent margin. The 15 per cent margin approximates the profit margin that the entity earns from similar contracts.

Whether risk advisory firm's performance obligation is met over period of time?

Ans: AFS has a single performance to provide an opinion on the professional audit services proposed to be provided under the contract with the customer. Evaluating the criterion for recognising revenue over a period of time or at a point in time, Ind AS 115 requires one of the following criterion to be met –

- Criterion (a) – whether the customer simultaneously receives and consumes the benefits from services provided by AFS: Company shall benefit only when the audit opinion is provided upon completion. And in case the contract was to be terminated, any other firm engaged to perform similar services will have to substantially re-perform.

Hence, this criterion is not met.

- Criterion (b) – An asset created that customer controls: This is service contract and no asset created, over which customer acquires control.
- Criterion (c) – no alternate use to entity and right to seek payment:
 - The services provided by AFS are specific to the company – WBC and do not have any alternate use to AFS
 - Further, AFS has a right to enforce payment if contract was early terminated, for reasons other than AFS's failure to perform. And the profit margin approximates what entity otherwise earns.

Therefore, criterion (c) is met and such performance obligation is said to be met over a period of time.

Criteria (c) – Transfer of control over a period of time:

Q62: Space Ltd. enters into an arrangement with a government agency for construction of a space satellite. Although Space Ltd is in this business for building such satellites for various customers across the world, however the specifications for each satellite may vary based on technology that is incorporated in the satellite. In the event of termination, Company has right to enforce payment for work completed to date.

Evaluate if contract will qualify for satisfaction of performance obligation over a period of time.

Ans: While evaluating the pattern of transfer of control to the customer, the Company shall evaluate conditions laid in para 35 of Ind AS 115 as follows:

- Criterion (a) – whether the customer simultaneously receives and consumes the benefits: Customer can benefit only when the satellite is fully constructed and no benefits are consumed as its constructed. Hence, this criterion is not met.
- Criterion (b) – An asset created that customer controls: Per provided facts, the customer does not acquire control of the asset as its created.
- Criterion (c) – no alternate use to entity and right to seek payment:

The asset is being specifically created for the customer. The asset is customised to customer's requirements, such that any diversion for a different customer will require significant work. Therefore, the asset has practical limitation in being put to alternate use.

Further, Space Ltd. has a right to enforce payment if contract was early terminated, for reasons other than Space Ltd.'s failure to perform.

Therefore, criterion (c) is met and such performance obligation is said to be met over a period of time.

Criteria (c) – Transfer of control over a period of time:

Q52: ABC enters into a contract with a customer to build an item of equipment. The customer pays 10% advance and then 80% in instalments of 10% each over the period of construction with balance 10% payable at the end of construction period. The payments are non-refundable unless the company fails to perform as per the contract. Further, if the customer terminates the contract, then entity is entitled to retain payments made. The company will have no further right to compensation from the customer.

Evaluate if contract will qualify for satisfaction of performance obligation over a period of time.

Ans: The Company shall evaluate conditions laid in para 35 of Ind AS 115 as follows:

- Criterion (a) – whether the customer simultaneously receives and consumes the benefits: Customer can benefit only when the asset is fully constructed and no benefits are consumed as its constructed. Hence, this criterion is not met.
- Criterion (b) – An asset created that customer controls: Per provided facts, the customer does not acquire control of the asset as its created.
- Criterion (c) – no alternate use to entity and right to seek payment:
 - The customer has specific right over the asset and company does not have right to divert it for any alternate use. In other words, there is contractual restriction to use the asset for any alternate purpose.
 - In the event of early termination, Company has a right to retain any payments made by the customer. However, such payments need not necessarily compensate the selling price of the partially constructed asset, if the customer was to stop making payments.

Therefore, Company does not have a legally enforceable right to payment for work completed to date and the criterion under para 35 is not. Thus, revenue cannot be recognised over a period of time.

Measuring progress on straight line basis

Q64: An entity, an owner and manager of health clubs, enters into a contract with a customer for one year of access to any of its health clubs. The customer has unlimited use of the health clubs and promises to pay CU100 per month. The entity's promise to the customer is to provide a service of making the health clubs available for the customer to use as and when the customer wishes.

Evaluate if contract will qualify for satisfaction of performance obligation over a period of time. If yes, how should an entity measure its progress of service provided?

Ans: The entity shall determine if revenue should be recognised over a period of time by evaluating the conditions laid in para 35 of Ind AS 115.

- Applying the first criterion of para 35 to establish if the customer simultaneously receives and consumes the benefits, as the entity provides service – The health club provides access to services uniformly through the year. The extent to which the customer uses the health clubs does not affect the amount of the remaining goods and services to which the customer is entitled. The customer therefore simultaneously receives and consumes the benefits of the entity's performance as it performs by making the health clubs available.
- Consequently, the entity's performance obligation is satisfied over time
- Once the pattern of satisfying performance obligation is defined, the Company then determines how progress should be measured. The services are uniformly provided to the customer through the year. Therefore, the best measure of progress is to recognise revenue on a straight line basis over the year.

Uninstalled materials

Q65: On 01 January 20X1, an entity contracts to renovate a building including the installation of new elevators. The entity estimates the following with respect to the contract:

Particulars	Amount (₹)
Transaction price	5,000,000
Expected costs:	
(a) Elevators	1,500,000
(b) Other costs	2,500,000
Total	4,000,000

The entity purchases the elevators and they are delivered to the site six months before they will be installed. The entity uses an input method based on cost to measure progress towards completion. The entity has incurred actual other costs of 500,000 by March 31, 20 X1.

How will the Company recognize revenue, if performance obligation is met over a period of time?

Ans: Costs to be incurred comprise two major components – elevators and cost of construction service.

- The elevators are part of the overall construction project and are not a distinct performance obligation
- The cost of elevators is substantial to the overall project and are incurred well in advance.
- Upon delivery at site, customer acquires control of such elevators.
- And there is no modification done to the elevators, which the company only procures and delivers at site. Nevertheless, as part of materials used in overall construction project, the company is a principal in the transaction with the customer for such elevators also.

Therefore, applying the guidance on Input method –

- The measure of progress should be made based on percentage of costs incurred relative to the total budgeted costs.
- The cost of elevators should be excluded when measuring such progress and revenue for such elevators should be recognized to the extent of costs incurred.

The revenue to be recognized is measured as follows:

Particulars	Amount (₹)
Transaction price	5,000,000
Costs incurred:	
(a) Cost of elevators	1,500,000
(b) Other costs	500,000

Measure of progress: $500,000 / 2,500,000 = 20\%$

Revenue to be recognised:

- For costs incurred (other than elevators) Total attributable revenue = 3,500,000
% of work completed = 20% Revenue to be recognised = 700,000
- Revenue for elevators 1,500,000 (equal to costs incurred)
Total revenue to be recognised $1,500,000 + 700,000 = 2,200,000$

Therefore, for the year ended 31 March 20X1, the Company shall recognize revenue of ₹ 2,200,000 on the project.

Repurchase agreements

Q66: An entity enters into a contract with a customer for the sale of a tangible asset on 1 January 20X1 for ₹ 1 million. The contract includes a call option that gives the entity the right to repurchase the asset for ₹ 1.1 million on or before December 31, 20X1.

How would the entity account for this transaction?

Ans: In the above case, where the entity has a right to call back the goods upto a certain date –

- The customer cannot be said to have acquired control, owing to the repurchase right with the seller entity

- Since the original selling price (₹ 1 million) is lower than the repurchase price (₹ 1.1 million), this is construed to be a financing arrangement and accounted as follows:
 - (a) Amount received shall be recognized as 'liability'
 - (b) Difference between sale price and repurchase price to be recognised as 'finance cost' and recognised over the repurchase term.

Repurchase agreements

Q67: An entity enters into a contract with a customer for the sale of a tangible asset on 1 January 20X1 for ₹ 1,000,000. The contract includes a put option that gives the customer the right to sell the asset for ₹ 900,000 on or before December 31, 20X1. The market price for such goods is expected to be ₹ 750,000

How would the entity account for this transaction?

Ans: In the above case, where the entity has an obligation to buy back the goods upto a certain date –

- The entity shall evaluate if the customer has a significant economic incentive to return the goods. Since the repurchase price is significantly higher than market price, therefore, customer has a significant economic incentive to return the goods. There are no other factors which entity may affect this assessment.
- Therefore, company determines that 'control' of goods is not transferred to the customer till 31 December 20X1, ie, till the put option expires.
- Against payment of ₹ 1,000,000; the customer only has a right to use the asset and put it back to the entity for ₹ 900,000. Therefore, this will be accounted as a lease transaction in which difference between original selling price (ie, ₹ 1,000,000) and repurchase price (ie, ₹ 900,000) shall be recognized as lease income over the period of lease.
- At the end of repurchase term, ie, 31 December 20X1, if the customer does not exercise such right, then the control of goods would be passed to the customer at that time and revenue shall be recognized for sale of goods for repurchase price (ie, ₹ 900,000).

Bill and Hold

Q68: An entity enters into a contract with a customer on 1 April 20 X1 for the sale of a machine and spare parts. The manufacturing lead time for the machine and spare parts is two years.

Upon completion of manufacturing, the entity demonstrates that the machine and spare parts meet the agreed-upon specifications in the contract. The promises to transfer the machine and spare parts are distinct and result in two performance obligations that each will be satisfied at a point in time. On 31 March 20X3, the customer pays for the machine and spare parts, but only takes physical possession of the machine. Although the customer inspects and accepts the spare parts, the customer requests that the spare parts be stored at the entity's warehouse because of its close proximity to the customer's factory. The customer has legal title to the spare parts and the parts can be identified as belonging to the customer. Furthermore, the entity stores the spare parts in a separate section of its warehouse and the parts are ready for immediate shipment at the customer's request. The entity expects to hold the spare parts for

two to four years and the entity does not have the ability to use the spare parts or direct them to another customer.

How will the Company recognise revenue for sale of machine and spare parts? Is there any other performance obligation attached to this sale of goods?

Ans: In the facts provided above, the entity has made sale of two goods – machine and space parts, whose control is transferred at a point in time. Additionally, company agrees to hold the spare parts for the customer for a period of 2-4 years, which is a separate performance obligation. Therefore, total transaction price shall be divided amongst 3 performance obligations –

- (i) Sale of machinery
- (ii) Sale of spare parts
- (iii) Custodial services for storing spare parts.

Recognition of revenue for each of the three performance obligations shall occur as follows:

- **Sale of machinery:** Machine has been sold to the customer and physical possession as well as legal title passed to the customer on 31 March 20 X3. Accordingly, revenue for sale of machinery shall be recognised on 31 March 20X3.
- **Sale of spare parts:** The customer has made payment for the spare parts and legal title has been passed to specifically identified goods, but such spares continue to be physically held by the entity. In this regard, the company shall evaluate if revenue can be recognized on bill-n-hold basis if all below criteria are met:
 - a) the reason for the bill-and-hold arrangement must be substantive (for example, the customer has requested the arrangement);

The customer has specifically requested for entity to store goods in their warehouse, owing to close proximity to customer's factory.
 - b) the product must be identified separately as belonging to the customer;

The spare parts have been specifically identified and inspected by the customer.
 - c) the product currently must be ready for physical transfer to the customer; and

The spares are identified and segregated, therefore, read for delivery.
 - d) the entity cannot have the ability to use the product or to direct it to another customer

Spares have been segregated and cannot be redirected to any other customer.

Therefore, all conditions of bill-and-hold are met and hence, company can recognize revenue for sale of spare parts on 31 March 20X3.

- **Custodial services:** Such services shall be given for a period of 2 to 4 years from 31 March 20X3. Where services are given uniformly and customer receives & consumes benefits simultaneously, revenue for such service shall be recognized on a straight line basis over a period of time.

Q69: An entity, a music record label, licenses to a customer a 1975 recording of a classical symphony by a noted orchestra. The customer, a consumer products company, has the right to use the recorded symphony in all commercials, including television, radio and online advertisements for two years in Country A. In exchange for providing the licence, the entity receives fixed consideration of ₹ 50,000 per month. The contract does not include any other goods or services to be provided by the entity. The contract is non-cancellable.

Determine how the revenue will be recognised?

Ans: The entity assesses the goods and services promised to the customer to determine which goods and services are distinct in accordance with paragraph 27 of Ind AS 115. The entity concludes that its only performance obligation is to grant the licence. The entity does not have any contractual or implied obligations to change the licensed recording. The licensed recording has

significant stand-alone functionality (i.e. the ability to be played) and, therefore, the ability of the customer to obtain the benefits of the recording is not substantially derived from the entity's ongoing activities. The entity therefore determines that the contract does not require, and the customer does not reasonably expect, the entity to undertake activities that significantly affect the licensed recording. Consequently, the entity concludes that the nature of its promise in transferring the licence is to provide the customer with a right to use the entity's intellectual property as it exists at the point in time that it is granted. Therefore, the promise to grant the licence is a performance obligation satisfied at a point in time. The entity recognises all of the revenue at the point in time when the customer can direct the use of, and obtain substantially all of the remaining benefits from, the licensed intellectual property.

Assessing the nature of a software licence with unspecified upgrades

Q70: Software Company X licenses its software application to Customer Y. Under the agreement, X will provide updates or upgrades on a when-and-if-available basis; Y can choose whether to install them. Y expects that X will undertake no other activities that will change the functionality of the software.

Determine the nature of licence.

Ans: Basis on the facts given in question it can be concluded that, although the updates and upgrades will change the functionality of the software, they are not activities considered in determining the nature of the entity's promise in granting the licence. The activities of X to provide updates or upgrades are not considered because they transfer a promised good or service to Y – i.e. updates

or upgrades are distinct from the licence. Therefore, the software licence provides a right to use the IP that is satisfied at a point in time.

Assessing the nature of a software licence with unspecified upgrades

Assessing the nature of a film licence and the effect of marketing activities

Q71: Film Studio C grants a licence to Customer D to show a completed film. C plans to undertake significant marketing activities that it expects will affect box office receipts for the film. The marketing activities will not change the functionality of the film, but they could affect its value.

Determine the nature of license.

Ans: C would probably conclude that the licence provides a right to use its IP and, therefore, is transferred at a point in time. There is no expectation that C will undertake activities to change the form or functionality of the film. Because the IP has significant stand-alone functionality, C's marketing activities do not significantly affect D's ability to obtain benefit from the film, nor do they affect the IP available to D.

Assessing the nature of a team name and logo

Q72: Sports Team D enters into a three-year agreement to license its team name and logo to Apparel Maker M. The licence permits M to use the team name and logo on its products, including display products, and in its advertising or marketing materials.

1. Determine the nature of license in the above case.
2. Modifying above facts that, Sports Team D has not played games in many years and the licensor is Brand Collector B, an entity that acquires IP such as old team or brand names and logos from defunct entities or those in financial distress. B's business model is to license the IP, or obtain settlements from entities that use the IP without permission, without undertaking any ongoing activities to promote or support the IP

Would the answer be different in this situation?

Ans:

1. The nature of D's promise in this contract is to provide M with the right to access the sports team's IP and, accordingly, revenue from the licence will be recognised over time. In reaching this conclusion, D considers all of the following facts:
 - M reasonably expects D to continue to undertake activities that support and maintain the value of the team name and logo by continuing to play games and field a competitive team throughout the licence period. These activities significantly affect the IP's ability to provide benefit to M because the value of the team name and logo is substantially derived from, or dependent on, those ongoing activities.

The activities directly expose M to positive or negative effects (i.e. whether D plays games and fields a competitive team will have a direct effect on how successful M is in selling its products featuring the team's name and logo)
 - D's ongoing activities do not result in the transfer of a good or a service to M as they occur (i.e. the team playing games does not transfer a good or service to M).
2. Based on B's customary business practices, Apparel Maker M probably does not reasonably expect B to undertake any activities to change the form of the IP or to support or maintain the IP. Therefore, B would probably conclude that the nature of its

promise is to provide M with a right to use its IP as it exists at the point in time at which the licence is granted.

Contract Cost

Q73: Customer outsources its information technology data centre Term = 5 years plus two 1-yr renewal options

Average customer relationship is 7 years

Entity spends ₹ 400,000 designing and building the technology platform needed to accommodate out-sourcing contract:

Design services	₹ 50,000	
Hardware	₹ 140,000	
Software		₹ 100,000
Migration and testing of data centre	₹ 110,000	
TOTAL		₹ 400,000

How should such costs be treated?

Ans:

Design services	₹ 50,000	Assess under Ind AS 115. Any resulting asset would be amortised over 7 years (i.e. include renewals)
Hardware	₹ 140,000	Account for asset under Ind AS 16
Software	₹ 100,000	Account for asset under Ind AS 38
Migration and testing of data centre	₹ 110,000	Assess under Ind AS 115. Any resulting asset would be amortised over 7 years (i.e. include renewals)
TOTAL	₹ 400,000	

Amortisation

Q74: An entity enters into a service contract with a customer and incurs incremental costs to obtain the contract and costs to fulfil the contract. These costs are capitalised as assets in accordance with Ind AS 115. The initial term of the contract is five years but it can be renewed for subsequent one-year periods up to a maximum of 10 years. The average contract term for similar contracts entered into by entity is seven years.

Determine appropriate method of amortisation?

Ans: The most appropriate amortisation period is likely to be seven years (i.e. the initial term of five years plus two anticipated one year renewals) because that is the period over which the entity expects to provide services under the contract to which the capitalised costs relate.

Service Concession Arrangement

Q75: A Ltd. is in the business of the infrastructure and has two divisions under the same; (I) Toll Roads and (II) Wind Power. The brief details of these business and underlying project details are as follows:

- I. **Bhilwara-Jabalpur Toll Project** - The Company has commenced the construction of the project in the current year and has incurred total expenses aggregating to ₹ 50 crores as on 31st December, 20X1. Under IGAAP, the Company has recorded such expenses as Intangible Assets in the books of account. The brief details of the Concession Agreement are as follows:
 - Total Expenses estimated to be incurred on the project ₹ 100 crores;
 - Fair Value of the construction services is ₹ 110 crores;
 - Total Cash Flow guaranteed by the Government under the concession agreement is ₹ 200 crores;
 - Finance revenue over the period of operation phase is ₹ 15 crores;
 - Other income relates to the services provided during the operation phase.
- II. **Kolhapur- Nagpur Expressway** - The Company has also entered into another concession agreement with Government of Maharashtra in the current year. The construction cost for the said project will be ₹ 110 crores. The fair value of such construction cost is approximately ₹ 200 crores. The said concession agreement is Toll based project and the Company needs to collect the toll from the users of the expressway. Under IGAAP, UK Ltd. has recorded the expenses incurred on the said project as an Intangible Asset.

Required

- (i) What would be the classification of Bhilwara-Jabalpur Toll Project as per applicable Ind AS? Give brief reasoning for your choice.
- (ii) What would be the classification of Kolhapur-Nagpur Expressway Toll Project as per applicable Ind AS? Give brief reasoning for your choice.
- (iii) Also, suggest suitable accounting treatment for preparation of financial statements as per Ind AS for the above 2 projects.

Ans:

- (i) Here the operator has a contractual right to receive cash from the grantor. The grantor has little, if any, discretion to avoid payment, usually because the agreement is enforceable by law. The operator has an unconditional right to receive cash if the grantor contractually guarantees to pay the operator. Hence, operator recognizes a financial asset to the extent it has a contractual right to receive cash.
- (ii) Here the operator has a contractual right to charge users of the public services. A right to charge users of the public service is not an unconditional right to receive cash because the amounts are contingent on the extent that the public uses the service. Therefore,

the operator shall recognise an intangible asset to the extent it receives a right (a licence) to charge users of the public service.

(iii) Accounting treatment for preparation of financial statements

Bhilwara-Jabalpur Toll Project

Journal Entries

	Particulars	Dr. (₹ in crores)	Cr. (₹ in crores)
	During construction:		
1	Financial asset A/c Dr. To Construction revenue [To recognise revenue relating to construction services, to be settled in case]	110	110
2	Cost of construction (profit or loss) Dr. To Bank A/c (As and when incurred) [To recognise costs relating to construction services]	100	100
	During the operation phase:		
3	Financial asset Dr. To Finance revenue (As and when received or due to receive) [To recognise interest income under the financial asset model]	15	15
4	Financial asset Dr. To Revenue [(200-110) – 15] [To recognise revenue relating to the operation phase]	75	75
5	Bank A/c Dr. To Financial asset [To recognise cash received from the grantor]	200	200

Kolhapur-Nagpur Expressway -Intangible asset Journal Entries

	Particulars	Dr. (₹ in crores)	Cr. (₹ in crores)
1	During construction: Cost of construction (profit or loss) Dr. To Bank A/c (As and when incurred) [To recognise costs relating to construction services]	110	110
2	Intangible asset Dr. To Revenue [To recognise revenue relating to construction]	200	200

	services provided for non-cash consideration] During the operation phase:			
3	Amortisation expense To Intangible asset (accumulated amortisation) [To recognise amortisation expense relating to the operation phase over the period of operation]	Dr.	200	200
4	Bank A/c To Revenue [To recognise revenue relating to the operation phase]	Dr.	?	?

Note: Amount in entry 4 is kept blank as no information in this regard is given in the question.

Q76: Q TV released an advertisement in Deshabandhu, a vernacular daily. Instead of paying for the same, Q TV allowed Deshabandhu a free advertisement spot, which was duly utilised by Deshabandhu. How revenue for these nonmonetary transactions in the area of advertising will be recognised and measured?

Ans: Paragraph 5(d) of Ind AS 115 excludes non-monetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers. For example, this Standard would not apply to a contract between two oil companies that agree to an exchange of oil to fulfil demand from their customers in different specified locations on a timely basis.

In industries with homogenous products, it is common for entities in the same line of business to exchange products in order to sell them to customers or potential customers other than parties to exchange. The current scenario, on the contrary, will be covered under Ind AS 115 since the same is exchange of dissimilar goods or services because both of the entities deal in different mode of media, i.e., one is print media and another is electronic media and both parties are acting as customers and suppliers for each other.

Further, in the current scenario, it seems it is for consumption by the said parties and hence it does not fall under paragraph 5(d). It may also be noted that, even if it was to facilitate sales to customers or potential customers, it would not be scoped out since the parties are not in the same line of business.

As per paragraph 47 of Ind AS 115, "An entity shall consider the terms of the contract and its customary business practices to determine the transaction price. The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both".

Paragraph 66 of Ind AS 115 provides that to determine the transaction price for contracts in which a customer promises consideration in a form other than cash, an entity shall measure the non-cash consideration (or promise of non-cash consideration) at fair value.

In accordance with the above, QTV and Deshabandhu should measure the revenue promised in the form of non-cash consideration as per the above referred principles of Ind AS 115.

Q77: A Ltd. a telecommunication company, entered into an agreement with B Ltd. which is engaged in generation and supply of power. The agreement provided that A Ltd. will provide 1,00,000 minutes of talk time to employees of B Ltd. in exchange for getting power equivalent to 20,000 units. A Ltd. normally charges Re.0.50 per minute and B Ltd. Charges ₹ 2.5 per unit. How should revenue be measured in this case?

Ans: Paragraph 5(d) of Ind AS 115 excludes non-monetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers. For example, this Standard would not apply to a contract between two oil companies that agree to an exchange of oil to fulfil demand from their customers in different specified locations on a timely basis.

However, the current scenario will be covered under Ind AS 115 since the same is exchange of dissimilar goods or services.

As per paragraph 47 of Ind AS 115, “an entity shall consider the terms of the contract and its customary business practices to determine the transaction price. The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both”.

Paragraph 66 of Ind AS 115 provides that to determine the transaction price for contracts in which a customer promises consideration in a form other than cash, an entity shall measure the non-cash consideration (or promise of noncash consideration) at fair value.

On the basis of the above, revenue recognised by A Ltd. will be the consideration in the form of power units that it expects to be entitled for talktime sold, i.e. ₹ 50,000 (20,000 units x ₹2.5). The revenue recognised by B Ltd. will be the consideration in the form of talk time that it expects to be entitled for the power units sold, i.e., ₹ 50,000 (1,00,000 minutes x Re. 0.50).

Q78: Company X enters into an agreement on January 1, 20 X1 with a customer for renovation of hospital and install new air-conditioners for total consideration of ₹ 50,00,000. The promised renovation service, including the installation of new air-conditioners is a single performance obligation satisfied over time. Total expected costs are ₹ 40,00,000 including ₹ 10,00,000 for the air conditioners.

Company X determines that it acts as a principal in accordance with paragraphs B34-B38 of Ind AS 115 because it obtains control of the air conditioners before they are transferred to the customer. The customer obtains control of the air conditioners when they are delivered to the hospital premises.

Company X uses an input method based on costs incurred to measure its progress towards complete satisfaction of the performance obligation.

As at March 31, 20X1, other costs incurred excluding the air conditioners are ₹6,00,000.

Whether Company X should include cost of the air conditioners in measure of its progress of performance obligation? How should revenue be recognised for the year ended March 20X1?

Ans: Paragraph B19 of Ind AS 115 inter alia, states that, “an entity shall exclude from an input method the effects of any inputs that, in accordance with the objective of measuring progress in paragraph 39, do not depict the entity’s performance in transferring control of goods or services to the customer”.

In accordance with the above, Company X assesses whether the costs incurred to procure the air conditioners are proportionate to the entity’s progress in satisfying the performance obligation. The costs incurred to procure the air conditioners (₹10,00,000) are significant relative to the total costs to completely satisfy the performance obligation (₹40,00,000). Also, Company X is not involved in manufacturing or designing the air conditioners.

Company X concludes that including the costs to procure the air conditioners in the measure of progress would overstate the extent of the entity’s performance. Consequently, in accordance with paragraph B19 of Ind AS 115, the entity adjusts its measure of progress to exclude the costs to procure the air conditioners from the measure of costs incurred and from the transaction price. The entity recognises revenue for the transfer of the air conditioners at an amount equal to the costs to procure the air conditioners (i.e., at a zero margin).

Company X assesses that as at March 20X1, the performance is 20 per cent complete (i.e., ₹ 6,00,000/₹ 30,00,000). Consequently, Company X recognises the following-

As at March 31, 20X1

	Amount in ₹
Revenue	18,00,000
Cost of goods sold	16,00,000
Profit	2,00,000

Revenue recognised is calculated as (20 per cent × ₹ 40,00,000) + ₹ 10,00,000.

(₹ 40,00,000 = ₹ 50,00,000 transaction price – ₹ 10,00,000 costs of air conditioners.)

Cost of goods sold is ₹ 6,00,000 of costs incurred + ₹ 10,00,000 costs of air conditioners.

NEW QUESTIONS IN SM (FOR MAY 21 ATTEMPT)

Q79: Entity I sells a piece of machinery to the customer for ₹ 2 million, payable in 90 days. Entity I is aware at contract inception that the customer might not pay the full contract price. Entity I estimates that the customer will pay atleast ₹ 1.75 million, which is sufficient to cover entity I's cost of sales (₹ 1.5 million) and which entity I is willing to accept because it wants to grow its presence in this market. Entity I has granted similar price concessions in comparable contracts.

Entity I concludes that it is highly probable that it will collect ₹ 1.75 million, and such amount is not constrained under the variable consideration guidance.

What is the transaction price in this arrangement?

Ans: Entity I is likely to provide a price concession and accept an amount less than ₹ 2 million in exchange for the machinery. The consideration is therefore variable. The transaction price in this arrangement is ₹ 1.75 million, as this is the amount which entity I expects to receive after providing the concession and it is not constrained under the variable consideration

guidance. Entity I can also conclude that the collectability threshold is met for ₹ 1.75 million and therefore contract exists.

Q80: On 1 January 20X8, entity J enters into a one-year contract with a customer to deliver water treatment chemicals. The contract stipulates that the price per container will be adjusted retroactively once the customer reaches certain sales volume, defined, as follows:

Price per container	Cumulative sales volume
₹ 100	1 - 1,000,000 containers
₹ 90	1,000,001 - 3,000,000 containers
₹ 85	3,000,001 containers and above

Volume is determined based on sales during the calendar year. There are no minimum purchase requirements. Entity J estimates that the total sales volume for the year will be 2.8 million containers, based on its experience with similar contracts and forecasted sales to the customer.

Entity J sells 700,000 containers to the customer during the first quarter ended 31st March 20X8 for a contract price of ₹ 100 per container.

How should entity J determine the transaction price?

Ans: The transaction price is ₹ 90 per container based on entity J's estimate of total sales volume for the year, since the estimated cumulative sales volume of 2.8 million containers would result in a price per container of ₹ 90. Entity J concludes that based on a transaction price of

₹ 90 per container, it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty is resolved. Revenue is therefore recognised at a selling price of ₹ 90 per container as each container is sold. Entity J will recognise a liability for cash received in excess of the transaction price for the first 1 million containers sold at ₹ 100 per container (that is, ₹ 10 per container) until the cumulative sales volume is reached for the next pricing tier and the price is retroactively reduced.

For the quarter ended 31st March, 20X8, entity J recognizes revenue of ₹ 63 million (700,000 containers x ₹ 90) and a liability of ₹ 7 million [700,000 containers x (₹ 100 - ₹ 90)].

Entity J will update its estimate of the total sales volume at each reporting date until the uncertainty is resolved.

Q81: Entity K sells electric razors to retailers for C 50 per unit. A rebate coupon is included inside the electric razor package that can be redeemed by the end consumers for C 10 per unit.

Entity K estimates that 20% to 25% of eligible rebates will be redeemed, based on its experience with similar programmes and rebate redemption rates available in the market for similar programmes. Entity K concludes that the transaction price should incorporate an assumption of 25% rebate redemption, as this is the amount for which it is highly probable that a significant reversal of cumulative revenue will not occur if estimates of the rebates change.

How should entity K determine the transaction price?

Ans: Entity K records sales to the retailer at a transaction price of ₹ 47.50 (₹ 50 less 25% of ₹ 10). The difference between the per unit cash selling price to the retailers and the transaction price is recorded as a liability for cash consideration expected to be paid to the end customer. Entity K will update its estimate of the rebate and the transaction price at each reporting date if estimates of redemption rates change.

Q82: A manufacturer enters into a contract to sell goods to a retailer for ₹ 1,000. The manufacturer also offers price protection, whereby it will reimburse the retailer for any difference between the sale price and the lowest price offered to any customer during the following six months. This clause is consistent with other price protection clauses offered in the past, and the manufacturer believes that it has experience which is predictive for this contract.

Management expects that it will offer a price decrease of 5% during the price protection period. Management concludes that it is highly probable that a significant reversal of cumulative revenue will not occur if estimates change.

How should the manufacturer determine the transaction price?

Ans: The transaction price is ₹ 950, because the expected reimbursement is ₹ 50. The expected payment to the retailer is reflected in the transaction price at contract inception, as that is the amount of consideration to which the manufacturer expects to be entitled after the price protection. The manufacturer will recognise a liability for the difference between the invoice price and the transaction price, as this represents the cash that it expects to refund to the retailer. The manufacturer will update its estimate of expected reimbursement at each reporting date until the uncertainty is resolved.

Q83: Electronics Manufacturer M sells 1,000 televisions to Retailer R for ₹ 50,00,000 (₹ 5,000 per television). M provides price protection to R by agreeing to reimburse R for the difference between this price and the lowest price that it offers for that television during the following six months. Based on M's extensive experience with similar arrangements, it estimates the following outcomes.

Price reduction in next six months (₹)	Probability
0	70%
500	20%
1000	10%

Determine the transaction price.

Ans: After considering all relevant facts and circumstances, M determines that the expected value method provides the best prediction of the amount of consideration to which it will be entitled. As a result, it estimates the transaction price to be ₹ 4,800 per television – i.e. (₹ 5,000 x 70%) + (₹ 4,500 x 20%) + (₹ 4,000 x 10%).

Q84: Construction Company C enters into a contract with Customer E to build an asset. Depending on when the asset is completed, C will receive either ₹ 1,10,000 or ₹ 1,30,000.

Outcome	Consideration (₹)	Probability
Project completes on time	1,30,000	90%
Project is delayed	1,10,000	10%

Determine the transaction price.

Ans: Because there are only two possible outcomes under the contract, C determines that using the most likely amount provides the best prediction of the amount of consideration to which it will be entitled. C estimates the transaction price to be ₹ 1,30,000, which is the single most likely amount.

Q85: Franchisor Y Ltd. licenses the right to operate a store in a specified location to Franchisee F. The store bears Y Ltd.'s trade name and F will have a right to sell Y Ltd.'s products for 10 years. F pays an up-front fixed fee. The franchise contract also requires Y Ltd. to maintain the brand through product improvements, marketing campaigns etc. Determine the nature of license.

Ans: The licence provides F access to the IP as it exists at any point in time in the licence period. This is because:

- Y Ltd. is required to maintain the brand, which will significantly affect the IP by affecting F's ability to obtain benefit from the brand;
- any action by Y Ltd. may have a direct positive or negative effect on F; and
- these activities do not transfer a good or service to F.

Therefore, Y Ltd. recognises the up-front fee over the 10-year franchise period.

QUESTIONS FROM ICAI RTP/MTP/EXAM/GFRS

Q86: KK Ltd. runs a departmental store which awards 10 points for every purchase of ₹ 500 which can be discounted by the customers for further shopping with the same merchant. Each point is redeemable on any future purchases of KK Ltd.'s products within 3 years. Value of each point is ₹ 0.50. During the accounting period 2017-2018, the entity awarded 1,00,00,000 points to various customers of which 18,00,000 points remained undiscounted (to be redeemed till 31st March, 2020). The management expects only 80% of the remaining will be discounted in future.

The Company has approached your firm with the following queries and has asked you to suggest the accounting treatment (Journal Entries) under the applicable Ind AS for these award points:

- How should the recognition be done for the sale of goods worth ₹ 10,00,000 on a particular day?
- How should the redemption transaction be recorded in the year 2017-2018? The Company has requested you to present the sale of goods and redemption as independent transaction. Total sales of the entity is ₹ 5,000 lakhs.

- (c) How much of the deferred revenue should be recognised at the year-end (2017- 2018) because of the estimation that only 80% of the outstanding points will be redeemed?
- (d) In the next year 2018-2019, 60% of the outstanding points were discounted Balance 40% of the outstanding points of 2017-2018 still remained outstanding. How much of the deferred revenue should the merchant recognize in the year 2018-2019 and what will be the amount of balance deferred revenue?
- (e) How much revenue will the merchant recognized in the year 2019-2020, if 3,00,000 points are redeemed in the year 2019-2020? **[RTP May 2019]**

Ansr:

- (a) Points earned on ₹ 10,00,000 @ 10 points on every ₹ 500 = $[(10,00,000/500) \times 10]$
= 20,000 points.

Value of points = 20,000 points x ₹ 0.5 each point = ₹ 10,000

Revenue recognized for sale of goods

₹ 9,90,099

$[10,00,000 \times (10,00,000/10,10,000)]$

Revenue for points deferred

₹ 9,901

$[10,00,000 \times (10,000/10,10,000)]$

Journal Entry

Bank A/c	Dr.	10,00,000	
To Sales A/c			9,90,099
To Liability under Customer Loyalty programme			9,901

- (b) Points earned on ₹ 50,00,00,000 @ 10 points on every ₹ 500 = $[(50,00,00,000/500) \times 10]$ = 1,00,00,000 points.

Value of points = 1,00,00,000 points x ₹ 0.5 each point = ₹ 50,00,000

Revenue recognized for sale of goods = ₹ 49,50,49,505

$[50,00,00,000 \times (50,00,00,000 / 50,50,00,000)]$

Revenue for points = ₹ 49,50,495 $[50,00,00,000 \times (50,00,000 / 50,50,00,000)]$

Journal Entries in the year 2017-18

Bank A/c	Dr.	50,00,00,000	
To Sales A/c			49,50,49,505
To Liability under Customer Loyalty programme			49,50,495

(On sale of Goods)

Liability under Customer Loyalty programme	Dr.	42,11,002	
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To Sales A/c 42,11,002

(On redemption of (100 lakhs -18 lakhs) points)

Revenue for points to be recognized

Undiscounted points estimated to be recognized next year $18,00,000 \times 80\%$

= 14,40,000 points

Total expected points to be redeemed in 2018-2019 and 2019-2020 = $[(1,00,00,000 - 18,00,000) + 14,40,000] = 96,40,000$

Revenue to be recognised with respect to discounted point = $49,50,495 \times (82,00,000/96,40,000) = 42,11,002$

(c) Revenue to be deferred with respect to undiscounted point in 2017-2018 = $49,50,495 - 42,11,002 = 7,39,493$

(d) In 2018-2019, KK Ltd. would recognize revenue for discounting of 60% of outstanding points as follows:

Outstanding points = $18,00,000 \times 60\% = 10,80,000$ points

Total points discounted till date = $82,00,000 + 10,80,000 = 92,80,000$ points

Revenue to be recognized in the year 2018-2019 = $[(49,50,495 \times (92,80,000 / 96,40,000)) - 42,11,002] = ₹ 5,54,620$.

Journal Entry in the year 2018-2019

Liability under Customer Loyalty programme Dr. 5,54,620

To Sales A/c 5,54,620

(On redemption of further 10,80,000 points)

The Liability under Customer Loyalty programme at the end of the year 2018 -2019 will be $₹ 7,39,493 - 5,54,620 = 1,84,873$.

(e) In the year 2019-2020, the merchant will recognized the balance revenue of ₹ 1,84,873 irrespective of the points redeemed as this is the last year for redeeming the points. Journal entry will be as follows:

Journal Entry in the year 2019-2020

Liability under Customer Loyalty programme Dr. 1,84,873

To Sales A/c 1,84,873

(On redemption of further 10,80,000 points)

Q87:

a) Entity I sells a piece of machinery to the customer for ₹ 2 million, payable in 90 days. Entity I is aware at contract inception that the customer might not pay the full contract price. Entity I estimates that the customer will pay atleast ₹ 1.75 million, which is

sufficient to cover entity I's cost of sales (₹ 1.5 million) and which entity I is willing to accept because it wants to grow its presence in this market. Entity I has granted similar price concessions in comparable contracts.

Entity I concludes that it is highly probable that it will collect ₹ 1.75 million, and such amount is not constrained under the variable consideration guidance.

What is the transaction price in this arrangement?

- b) On 1 January 20x8, entity J enters into a one-year contract with a customer to deliver water treatment chemicals. The contract stipulates that the price per container will be adjusted retroactively once the customer reaches certain sales volume, defined, as follows:

Price per container	Cumulative sales volume
₹ 100	1 - 1,000,000 containers
₹ 90	1,000,001 - 3,000,000 containers
₹ 85	3,000,001 containers and above

Volume is determined based on sales during the calendar year. There are no minimum purchase requirements. Entity J estimates that the total sales volume for the year will be 2.8 million containers, based on its experience with similar contracts and forecasted sales to the customer.

Entity J sells 700,000 containers to the customer during the first quarter ended 31 March 20X8 for a contract price of ₹ 100 per container.

How should entity J determine the transaction price?

- c) Entity K sells electric razors to retailers for C 50 per unit. A rebate coupon is included inside the electric razor package that can be redeemed by the end consumers for C 10 per unit.

Entity K estimates that 20% to 25% of eligible rebates will be redeemed, based on its experience with similar programmes and rebate redemption rates available in the market for similar programmes. Entity K concludes that the transaction price should incorporate an assumption of 25% rebate redemption, as this is the amount for which it is highly probable that a significant reversal of cumulative revenue will not occur if estimates of the rebates change.

How should entity K determine the transaction price?

- d) A manufacturer enters into a contract to sell goods to a retailer for ₹ 1,000. The manufacturer also offers price protection, whereby it will reimburse the retailer for any difference between the sale price and the lowest price offered to any customer during the following six months. This clause is consistent with other price protection clauses offered in the past, and the manufacturer believes that it has experience which is predictive for this contract.

Management expects that it will offer a price decrease of 5% during the price protection period. Management concludes that it is highly probable that a significant reversal of cumulative revenue will not occur if estimates change.

How should the manufacturer determine the transaction price?

[RTP May 2020]

Ans:

- a) Entity I is likely to provide a price concession and accept an amount less than ₹ 2 Million in Exchange for the machinery. The consideration is therefore variable. The transaction price in this arrangement is ₹ 1.75 Million, as this is the amount which entity I expects to receive after providing the concession and it is not constrained under the variable consider guidance. Entity I can also conclude that the collectability threshold is met for ₹ 1.75 Million and therefore contract exists.
- b) The transaction price is ₹ 90 per container based on entity J's estimate of total sales volume for the year, since the estimated cumulative sales volume of 2.8 million containers would result in a price per container of ₹ 90. Entity J concludes that based on a transaction price of ₹ 90 per container, it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur when the uncertainty is resolved. Revenue is therefore recognised at a selling price of ₹ 90 per container as each container is sold. Entity J will recognise a liability for cash received in excess of the transaction price for the first 1 million containers sold at ₹ 100 per container (that is, ₹ 10 per container) until the cumulative sales volume is reached for the next pricing tier and the price is retroactively reduced.

For the quarter ended 31st March, 20X8, entity J recognizes revenue of ₹ 63 million (700,000 containers x ₹ 90) and a liability of ₹ 7 million [700,000 containers x (₹ 100 - ₹ 90)].

Entity J will update its estimate of the total sales volume at each reporting date until the uncertainty is resolved.

- c) Entity K records sales to the retailer at a transaction price of ₹ 47.50 (₹ 50 less 25% of ₹ 10). The difference between the per unit cash selling price to the retailers and the transaction price is recorded as a liability for cash consideration expected to be paid to the end customer. Entity K will update its estimate of the rebate and the transaction price at each reporting date if estimates of redemption rates change.
- d) The transaction price is ₹ 950, because the expected reimbursement is ₹ 50. The expected payment to the retailer is reflected in the transaction price at contract inception, as that is the amount of consideration to which the manufacturer expects to be entitled after the price protection. The manufacturer will recognize a liability for the difference between the invoice price and the transaction price, as this represents the cash that it expects to refund to the retailer. The manufacturer will update its estimate of expected reimbursement at each reporting date until the uncertainty is resolved.

Q88: Nivaan Limited commenced work on two long-term contracts during the financial year ended on 31st March, 2019.

The first contract with A & Co. commences on 1st June, 2018 and had a total sales value of ₹ 40 lakh. It was envisaged that the contract would run for two years and that the total expected costs would be ₹ 32 lakh. On 31st March, 2019, Nivaan Limited revised its estimate of the total expected cost to ₹ 34 lakh on the basis of the additional rectification cost of ₹ 2 lakh incurred on the contract during the current financial year. An independent surveyor has estimated at 31st March, 2019 that the contract is 30% complete. Nivaan Limited has incurred costs up to 31st March, 2019 of ₹ 16 lakh and has received payments on account of ₹ 13 lakh.

The second contract with B & Co. commenced on 1st September, 2018 and was for 18 months. The total sales value of contract was ₹ 30 lakh and the total expected cost is

₹ 24 lakh. Payments on account already received were ₹ 9.50 lakh and total costs incurred to date were ₹ 8 lakh. Nivaan Limited has insisted on a large deposit from B & Co. because the companies had not traded together prior to the contract. The independent surveyor estimated that on 31st March, 2019 the contract was 20% complete.

The two contracts meet the requirement of Ind AS 115 'Revenue from Contracts with Customers' to recognize revenue over time as the performance obligations are satisfied over time.

The company also has several other contracts of between twelve and eighteen months in duration. Some of these contracts fall into two accounting periods and were not completed as at 31st March, 2019. In absence of any financial date relating to the other contracts, you are advised to ignore these other contracts while preparing the financial statements of the company for the year ended 31st March, 2019.

Prepare financial statement extracts for Nivaan Limited in respect of the two construction contracts for the year ending 31st March, 2019. [Exam NOV 2019]

Ans: Extracts of Balance Sheet of Nivaan Ltd. as on 31stMarch, 2019

	₹ in lakh
Current Assets	
Contract Assets- Work-in-progress (Refer W.N. 3)	<u>9.0</u>
Current Liabilities	
Contract Liabilities (Advance from customers) (Refer W.N. 2)	<u>4.5</u>

Extracts of Statement of Profit and Loss of Nivaan Ltd. as on 31stMarch, 2019

	₹ in lakh
Revenue from contracts (Refer W.N. 1)	18
Cost of Revenue (Refer W.N. 1)	<u>(16.4)</u>
Net Profit on Contracts (Refer W.N. 1)	<u>1.6</u>

Working Notes:

1. Table showing calculation of total revenue, expenses and profit or loss on contract for the year ₹ in lakh

	A & Co.	B & Co.	Total
Revenue from contracts	(40 x 30%) = 12	(30 x 20%) = 6	18
Expenses due for the year	(34* x 30%) = <u>10.2</u>	(24 x 20%) = <u>4.8</u>	<u>15</u>
Profit or loss on contract	<u>1.8</u>	<u>1.2</u>	<u>3</u>

***Note:** Additional rectification cost of ₹ 2 lakh has been treated as normal cost. Hence total expected cost has been considered as ₹ 34 lakh. However, in case this ₹ 2 lakh is treated as abnormal cost then expense due for the year would be ₹ 11.6 lakh (ie 30% of ₹ 32 lakh plus ₹ 2 lakh). Accordingly, with respect to A & Co., the profit for the year would be ₹ 0.4 lakh and work-in-progress recognised at the end of the year would be ₹ 4.4 lakh.

2. Calculation of amount due from / (to) customers ₹ in lakh

	A & Co.	B & Co.	Total
Billing on the basis of revenue recognised in the books	12	6	18
Payments received from the customers	<u>(13)</u>	<u>(9.5)</u>	<u>(22.5)</u>
Advance received from the customers	<u>1</u>	<u>3.5</u>	<u>4.5</u>

3. Work in Progress recognised as part of contract asset at the end of the year ₹ in lakh

	A & Co.	B & Co.	Total
Total actual cost incurred during the year	16	8	24
Less: Cost recognised in the books for the year 31.3.2019	<u>(10.2)</u>	<u>(4.8)</u>	<u>(15)</u>
Work-in-progress recognised at the end of the year	<u>5.8</u>	<u>3.2</u>	<u>9.0</u>

Q89: A contractor enters into a contract with a customer to build an asset for ₹ 1,00,000, with a performance bonus of ₹ 50,000 that will be paid based on the timing of completion. The amount of the performance bonus decreases by 10% per week for every week beyond the agreed-upon completion date. The contract requirements are similar to those of contracts that the contractor has performed previously, and management believes that such experience is predictive for this contract. The contractor concludes that the expected value method is most predictive in this case.

The contractor estimates that there is a 60% probability that the contract will be completed by the agreed-upon completion date, a 30% probability that it will be completed one week late, and a 10% probability that it will be completed two weeks late.

Determine the transaction price.

[RTP NOV 2020]

Ans: The transaction price should include management's estimate of the amount of consideration to which the entity will be entitled for the work performed.

Probability-weighted	Consideration
₹1,50,000(fixed fee plus full performance bonus) x 60%	₹90,000
₹1,45,000 (fixed fee plus 90% of performance bonus) x 30%	₹43,500
₹1,40,000 (fixed fee plus 80% of performance bonus) x 10%	₹14,000
Total probability-weighted consideration	₹1,47,500

The total transaction price is ₹ 1,47,500, based on the probability-weighted estimate. The contractor will update its estimate at each reporting date.

Q90: In 2008, ABC Limited won the bid to construct a 93 km long highway from Ahmedabad to Baroda from Government of Gujarat (GOG).

The terms of the arrangement require ABC Limited to construct a road—completing construction within two years—and maintain and operate the road to a specified standard for eight years (i.e. years 3–10).

The terms of the arrangement also require ABC Limited to resurface the road at the end of year 8.

At the end of year 10, the arrangement will end.

ABC Limited estimates that the costs it will incur to fulfill its obligations will be:

Particulars	Year	Cost (₹ Crores)
Construction services	1	500
	2	500
Operation services (per year)	3-10	10
Road resurfacing	8	100

The terms of the arrangement require the grantor to pay the operator ₹ 200 Crores per year in years 3–10 for making the road available to the public.

For the sake of simplicity, let us assume that all cash flows take place at the end of the year. IRR is determined as 6.18%.

The construction margin observed in markets for the obligations under the arrangement is given below:

Particulars	Margin on cost
Construction services	5%
Operation services (per year)	20%
Road resurfacing	10%

In respect of the infrastructure business, demonstrate the computation of below elements of the statement of comprehensive income (every year):

- i. Revenue and Contract costs.
- ii. Any other income under the arrangement with GOG.
- iii. Net effect of its accounting under Appendix D to IND AS 115.

[GFRS]

Ans: In respect of the infrastructure business, ABC Limited is first required to determine its contractual performance obligations. Those obligations are:

- Construction services during Year 1 and 2
- Operation services during Years 3 to 10
- Road surfacing in Year 8

As a consideration of the aforementioned services, ABC Limited is paid a consideration of ₹ 200 crores per annum. Since this represents an unconditional contractual right to receive cash, it is a financial asset recognised and measured as per IND AS 109.

Measurement of revenue

Contract to render construction services and carry out road resurfacing are construction contracts in accordance with IND AS 115. The contract to render operation services is accounted for in accordance with IND AS 115.

Accordingly, revenue to be recognised in respect of these performance obligations are as below:

Particulars	Year	Cost (₹ Crores)	Margin	Revenue (₹Crores)
Construction services	1	500	5%	525
	2	500	5%	525
Operation services (per year)	3-10	80	20%	96
		(10 x 8)		[(10x120%) x 8]
Road resurfacing	8	100	10%	110
Total		1,180		1,256

Revenue is recognised at the contract cost plus margin, with a corresponding debit to financial asset in each of the years mentioned above. The same is tabulated in column (A) below.

As the consideration for these performance obligations is received over a period of time, as tabulated in column (B) below, there is an inherent finance income element included in the consideration. In order to determine the same, the formula of IRR is applied on column (C) which represents the net cash flow i.e. creation of financial asset and its realisation.

In the present case, IRR is determined as 6.18%.

Applying the computed IRR of 6.18% on the financial asset balance as at the beginning of the year (i.e. previous year's column (E)), finance income for each of the years is determined.

The table after the next table summarises the net effect of accounting for these transactions as per Appendix D.

₹ Crores

Year	Financial Asset	Cash Inflow	Net Cash Flow	Finance Income @ IRR = 6.18%	Adjusted Financial Asset
	(A)	(B)	(C) = (A) + (B)	(D) = previous year's (E) X 6.18%	(E) = E of previous year + C + D
1	525		525	-	525.0
2	525		525	32.4	1,082.4
3	12	(200)	(188)	66.9	961.3
4	12	(200)	(188)	59.4	832.7
5	12	(200)	(188)	51.5	696.2
6	12	(200)	(188)	43.0	551.2
7	12	(200)	(188)	34.1	397.3
8	122	(200)	(78)	24.6	343.9
9	12	(200)	(188)	21.3	177.2
10	<u>12</u>	<u>(200)</u>	<u>(188)</u>	<u>10.8</u>	<u>0</u>
	1,256	(1,600)	(344)	344	

*Different is due to approximation.

Net effect of accounting under Appendix D:

₹ Crores

Year	Contract cost	Revenue				Total	
		Construction services	Operation services	Road resurfacing	Finance income		
1	500	525			-	525.0	25.0
2	500	525			32.4	557.4	57.4
3	10		12		66.9	78.9	68.9
4	10		12		59.4	71.4	61.4
5	10		12		51.5	63.5	53.5

6	10		12		43.0	55.0	45.0
7	10		12		34.1	46.1	36.1
8	110		12	110	24.6	146.6	36.6
9	10		12		21.3	33.3	23.3
10	<u>10</u>		<u>12</u>		<u>10.8</u>	<u>22.8</u>	<u>12.8</u>
	<u>1,180</u>	<u>1,050</u>	<u>96</u>	<u>110</u>	<u>344</u>	<u>1,599.9*</u>	<u>420</u>

*Difference is due to approximation.

Q91: A property sale contract includes the following:

- Common areas
- Construction services and building material
- Property management services
- Golf membership
- Car park
- Land entitlement

Analyse whether the above items can be considered as separate performance obligations as per the requirements of Ind AS 115?

RTP May 2021

Ans: Paragraph 22 of Ind AS 115 provides that at contract inception, an entity evaluates the promised goods or services to determine which goods or services (or bundle of goods or services) are distinct and therefore constitute a performance obligation.

A performance obligation is a promise in a contract to transfer to the customer either:

- a good or service (or a bundle of goods or services) that is distinct; and
- series of distinct goods or services that are substantially the same and that have the same pattern of transfer to the customer.

As per paragraph 27 of Ind AS 115, a good or service that is promised to a customer is distinct if both of the following criteria are met

- the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e. the good or service is capable of being distinct); and
- the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e. the promise to transfer the good or service is distinct within the context of the contract).

Each performance obligation is required to be accounted for separately.

Based on the above guidance, the following table discusses whether the common goods and services in property sale contract should be considered as separate performance obligation or not:

Goods / Services	Whether a separate Performance obligation (PO) or not	Reason
Common areas	Unlikely to be separate PO	Common areas are unlikely to be a separate performance obligation because the interests received in common areas are typically undivided interests that are not separable from the property itself. However, if the common areas were sold separately by the developer, then they could be considered as a separate performance obligation provided that it is distinct in the context of the contract.
Construction services and building material	Unlikely to be separate PO	Construction services and building materials can meet the first criterion as they are items that can be used in conjunction with other readily available goods or services. However, the developer would be considered to be providing a significant integration service as it is bringing together all the separate elements to deliver a complete building.
Property management services and Golf membership	Likely to be separate PO	Property management services and golf membership are likely to be separate performance obligations as they may be used in isolation or with the property already acquired, i.e., management services can be used with the property. These types of services are not significantly customised, integrated with, or dependent on the property. This is because there is no change in their function with or without the property. Also, a property management service could be undertaken by a third party.
Car park and Land entitlement	Analysis required	Items such as car parks and land entitlements generally meet the first criterion – i.e., capable of being distinct

		<p>– as the buyer benefits from them on their own.</p> <p>Whether the second criterion is met depends on the facts and circumstances. For example, if the land entitlement can be sold separately or pledged as security as a separate item, it may indicate that it is not highly dependent on, or integrated with, other rights received in the contract. In an apartment scenario, the customer can receive an undivided interest in the land on which the apartment block sits. This type of right is generally considered as highly inter-related with the apartment itself.*</p>
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* However, if title to the land is transferred to the buyer separately – for example in a single party development – then the separately identifiable criterion may be met.

PS: Other facts and circumstances of each contract should also be carefully examined to determine performance obligations.

Q92: A Ltd. is a company which is in the business of manufacturing engineering machines and providing after sales services. The company entered into a contract with Mr. Anik to supply and install a machine, namely 'model pi' on 1st April 2018 and to service this machine on 30th September 2018 and 1st April 2019. The cost of manufacturing the machine to A Ltd. was ₹ 1,60,000.

It is possible for a customer to purchase both the machine 'model pi' and the maintenance services separately. Mr. Anik is contractually obliged to pay A Ltd ₹ 4,00,000 on 1st April, 2019.

The prevailing rate for one-year credit granted to trade customers in the industry is 5 percent per six-month period.

As per the experience, the servicing of the machine 'model pi' sold to Mr. Anik is expected to cost A Ltd. ₹ 30,000 to perform the first service and ₹ 50,000 to perform the second service. Assume actual costs equal expected costs. When A Ltd. provides machine services to customers in a separate transaction it earns a margin of 50 % on cost. On 1st April, 2018, the cash selling price of the machine 'model pi' sold to Mr. Anik is ₹ 2,51,927.

The promised supply of machine 'model pi' and maintenance service obligations are satisfactorily carried out in time by the company.

You are required to:

- (i) Segregate the components of the transaction that A Ltd. shall apply to the revenue recognition criteria separately as per Ind AS 115;

- (ii) Calculate the amount of revenue which A Ltd. must allocate to each component of the transaction;
- (iii) Prepare journal entries to record the information set out above in the books of accounts of A Ltd. for the years ended 31st March 2019 and 31st March 2020; and
- (iv) Draft an extract showing how revenue could be presented and disclosed in the financial statements of A Ltd. for the year ended 31st March 2019 and 31st March 2020.

Exam Paper January 2021 (12 Marks)

Ans:

- (i) As per para 27 of Ind AS 115, a good or service that is promised to a customer is distinct if both of the following criteria are met:
 - (a) the customer can benefit from the good or service either on its own or together with other resources that are readily available to the m. A readily available resource is a good or service that is sold separately (by the entity or another entity) or that the customer has already obtained from the entity or from other transactions or events; and
 - (b) the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract.

Factors that indicate that two or more promises to transfer goods or services to a customer are separately identifiable include, but are not limited to, the following:

- (a) significant integration services are not provided (i.e. the entity is not using the goods or services as inputs to produce or deliver the combined output called for in the contract)
- (b) the goods or services does not significantly modify or customize other promised goods or services in the contract.
- (c) the goods or services are not highly inter-dependent or highly interrelated with other promised goods or services in the contract

Accordingly, on 1st April, 2018, entity A entered into a single transaction with three identifiable separate components:

1. Sale of a good (i.e. engineering machine);
2. Rendering of services (i.e. engineering machine maintenance services on 30th September, 2018 and 1st April, 2019); and
3. Providing finance (i.e. sale of engineering machine and rendering of services on extended period credit).

- (ii) **Calculation and allocation of revenue to each component of the transaction**

Date	Opening	Finance	Goods	Services	Payment	Closing
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	balance	income			received	balance
1 st April, 2018	-	-	2,51,927	-	-	2,51,927
30 th September, 2018	2,51,927	12,596 (Note 1)	-	45,000	-	3,09,523
31 st March 2019	3,09,523	15,477 (Note 2)	-	-	-	3,25,000
1 st April, 2019	3,25,000	-	-	75,000	(4,00,000)	

Notes:

1. Calculation of finance income as on 30th September, 2018

$$= 5\% \times 2,51,927 = ₹ 12,596$$

2. Calculation of finance income as on 31st March, 2019

$$= 5\% \times 3,09,523 = ₹ 15,477$$

(iii) Journal Entries

Date	Particulars	Dr. (₹)	Cr. (₹)
1st April, 2018	Mr. Anik Dr. To Revenue - sale of goods (Profit or loss A/c) (Being revenue recognised from the sale of the machine on credit)	2,51,927	2,51,927
	Cost of goods sold (Profit or loss) Dr. To Inventories (Being cost of goods sold recognised)	1,60,000	1,60,000
30th September 2018	Mr. Anik Dr. To Finance Income (Profit or loss) (Being finance income recognised)	12,596	12,596
	Mr. Anik Dr. To Revenue- rendering of services (Profit or loss) (Being revenue from the rendering of maintenance services recognised)	45,000	45,000
	Cost of services (Profit or loss) Dr.		

31 st March 2019	To Cash/Bank or payables (Being the cost of performing maintenance services recognised)	30,000	30,000
	Mr. Anik Dr. To Finance Income (Profit or loss) (Being finance income recognised)	15,477	15,477
1 st April, 2019	Mr. Anik Dr. To Revenue - rendering of services (Profit or loss) (Being revenue from the rendering of maintenance services recognised)	75,000	75,000
	Cost of services (Profit or loss) Dr. To Cash/Bank or payables (Being the cost of performing maintenance services recognised)	50,000	50,000
	Cash/Bank Dr. To Mr. Anik Being the receipt of cash from the customer recognised)	4,00,000	4,00,000

- (iv) **Extract of Notes to the financial statements for the year ended 31st March, 2019 and 31st March, 2020**

Note on Revenue

	2019-2020	2018-2019
	₹	₹
Sale of goods	–	2,51,927
Rendering of machine - maintenance services	75,000	45,000
Finance income	–	28,073
	75,000	3,25,000

Q93: ABC Limited supplies plastic buckets to wholesaler customers. As per the contract entered into between ABC Limited and a customer for the financial year 2019 -2020, the price per plastic bucket will decrease retrospectively as sales volume increases within the stipulated time of one year.

The price applicable for the entire sale will be based, on sales volume bracket during the year.

Price per unit (INR)	Sales volume
90	0 - 10,000 units
80	10,001 - 35,000 units
70	35,001 units & above

All transactions are made in cash.

- (i) Suggest how revenue is to be recognised in the books of accounts of ABC Limited as per expected value method, considering a probability of 15%, 75% and 10% for sales volumes of 9,000 units, 28,000 units and 36,000 units respectively. For workings, assume that ABC Limited achieved the same number of units of sales to the customer during the year as initially estimated under expected value method for the financial year 2019-2020.
- (ii) In case ABC Limited decides to measure revenue, based on most likely method instead of expected value method, how will be the revenue recognised in the books of accounts of ABC Limited based on above available information? For workings, assume that ABC Limited achieved the same number of units of sales to the customer during the year as initially estimated under most likely value method for the financial year 2019-2020.
- (iii) You are required to pass Journal entries in the books of ABC Limited if the revenue is accounted for as per expected value method for financial year 2019-2020.

Exam Paper November 2020 (14 Marks)

- Ans:** (i) Determination of how revenue is to be recognised in the books of ABC Ltd. as per expected value method

Calculation of probability weighted sales volume

Sales volume (units)	Probability	Probability-weighted sales volume (units)
9,000	15%	1,350
28,000	75%	21,000
36,000	10%	<u>3,600</u>
		<u>25,950</u>

Calculation of probability weighted sales value

Sales volume (units)	Sales price per unit (₹)	Probability	Probability-weighted sales value (₹)
9,000	90	15%	1,21,500
28,000	80	75%	16,80,000
36,000	70	10%	<u>2,52,000</u>

<u>20,53,500</u>

Average unit price = Probability weighted sales value/ Probability weighted sales volume
 = 20,53,500 / 25,950 = ₹ 79.13 per unit

Revenue is recognised at ₹ 79.13 for each unit sold. First 10,000 units sold will be booked at ₹ 90 per unit and liability is accrued for the difference price of ₹ 10.87 per unit (₹ 90 – ₹ 79.13), which will be reversed upon subsequent sales of 15,950 units (as the question states that ABC Ltd. achieved the same number of units of sales to the customer during the year as initially estimated under the expected value method for the financial year 2019-2020). For, subsequent sale of 15,950 units, contract liability is accrued at ₹ 0.87 (80 – 79.13) per unit and revenue will be deferred.

(ii) Determination of how revenue is to be recognised in the books of ABC Ltd. as per most likely method

Note: It is assumed that the sales volume of 28,000 units given under the expected value method, with highest probability is the sales estimated under most likely method too.

Transaction price will be: 28,000 units x ₹ 80 per unit = ₹ 22,40,000

Average unit price applicable = ₹ 80

First 10,000 units sold will be booked at ₹ 90 per unit and liability of ₹ 1,00,000 is accrued for the difference price of ₹ 10 per unit (₹ 90 – ₹ 80), which will be reversed upon subsequent sales of 18,000 units (as question states that ABC Ltd. achieved the same number of units of sales to the customer during the year as initially estimated under the most likely method for the financial year 2019-2020).

Note: Alternatively, the question may be solved based on 25,950 units (as calculated under expected value method assuming that the targets were met) as follows:

Transaction price will be:

25,950 units x ₹ 80 per unit = ₹ 20,76,000

Average unit price applicable = ₹ 80.

First 10,000 units sold will be booked at ₹ 90 per unit and liability is accrued for the difference price of ₹ 10 per unit (₹ 90 – ₹ 80), which will be reversed upon subsequent sales of 15,950 units.

(iii) Journal Entries in the books of ABC Ltd.

(when revenue is accounted for as per expected value method for

financial year 2019-2020)

		₹		₹	

1.	Bank A/c (10,000 x ₹ 90)Dr. To Revenue A/c (10,000 x ₹ 79.13) To Liability (10,000 x ₹ 10.87)		9,00,000		7,91,300 1,08,700
(Revenue recognised on sale of first 10,000 units)					
2.	Bank A/c [(25,950 x ₹ 80)- 9,00,000]	Dr.	11,76,000		
	Liability	Dr.	86,124		
	To Revenue A/c (15,950 x ₹ 79.13)				12,62,124
(Revenue recognised on sale of remaining 15,950 units (25,950 - 10,000). Amount paid by the customer will be the balance amount after adjusting the excess paid earlier since, the customer falls now in second slab)					
3.	Liability (1,08,700 – 86,124)	Dr.	22,576		
	To Revenue A/c [25,950 x (80-79.13)]				22,576
(On reversal of liability at the end of the financial year 2019-2020 i.e. after completion of stipulated time)					

Alternatively, in place of first two entries, one consolidated entry may be passed as follows:

Bank A/c (25,950 x ₹ 80)	Dr.	20,76,000	
To Revenue A/c (25,950 x ₹ 79.13)			20,53,424
To Liability (25,950 x ₹ 0.87)			22,576
(Revenue recognised on sale of 25,950 units)			

Note: In 2nd journal entry, it is assumed that the customer had paid balance amount of ₹ 11,76,000 after adjusting excess ₹ 1,00,000 paid with first lot of sale of 10,000 unit. However, one can pass journal entry with total sales value of ₹ 12,76,000 (15,950 units x ₹ 80 per unit) and later on pass third entry for refund. In such a situation, alternatively, 2nd and 3rd entries would be as follows:

Bank A/c (15,950 x ₹ 80)	Dr.	12,76,000	
To Revenue A/c (15,950 x ₹ 79.13)			12,62,124
To Liability			13,876
(Revenue recognised on sale of remaining 15,950 units (25,950 - 10,000))			
Liability (1,08,700 + 13,876)	Dr.	1,22,576	
To Revenue A/c [25,950 x			22,576

(80-79.13)]			
To Bank			1,00,000
(On reversal of liability at the end of the financial year 2019-2020 i.e. after completion of stipulated time and excess amount refunded)			

Q 94: An entity negotiates with major airlines to purchase tickets at reduced rates compared with the price of tickets sold directly by the airlines to the public. The entity agrees to buy a specific number of tickets and will pay for those tickets even if it is not able to resell them. The reduced rate paid by the entity for each ticket purchased is negotiated and agreed in advance. The entity determines the prices at which the airline tickets will be sold to its customers. The entity sells the tickets and collects the consideration from customers when the tickets are sold; therefore, there is no credit risk to the entity.

The entity also assists the customers in resolving complaints with the service provided by airlines.

However, each airline is responsible for fulfilling obligations associated with the ticket, including remedies to a customer for dissatisfaction with the service.

Determine whether the entity is a principal or an agent with suitable explanation in light with the provisions given in the relevant standard.

Exam Paper November 2020 (4 Marks)

Ans: To determine whether the entity's performance obligation is to provide the specified goods or services itself (i.e. the entity is a principal) or to arrange for another party to provide those goods or services (i.e. the entity is an agent), the entity considers the nature of its promise as per Ind AS 115.

The entity determines that its promise is to provide the customer with a ticket, which provides the right to fly on the specified flight or another flight if the specified flight is changed or cancelled. The entity considers the following indicators for assessment as principal or agent under the contract with the customers:

- the entity is primarily responsible for fulfilling the contract, which is providing the right to fly. However, the entity is not responsible for providing the flight itself, which will be provided by the airline.
- the entity has inventory risk for the tickets because they are purchased before they are sold to the entity's customers and the entity is exposed to any loss as a result of not being able to sell the tickets for more than the entity's cost.
- the entity has discretion in setting the sales prices for tickets to its customers.

The entity concludes that its promise is to provide a ticket (i.e. a right to fly) to the customer. On the basis of the indicators, the entity concludes that it controls the ticket before it is transferred to the customer. Thus, the entity concludes that it is a principal

in the transaction and recognises revenue in the gross amount of consideration to which it is entitled in exchange for the tickets transferred.

Q95. Entity AB Ltd. enters into a three-year service contract with a customer CD Ltd. for Rs. 4,50,000 (Rs.1,50,000 per year). The standalone selling price for one year of service at inception of the contract is Rs.1,50,000 per year. AB Ltd. accounts for the contract as a series of distinct services.

At the beginning of the third year, the parties agree to modify the contract as follows:

- a) the fee for the third year is reduced to Rs.1,20,000; and
- b) CD Ltd. agrees to extend the contract for another three years for Rs.3,00,000 (Rs.1,00,000 per year).

The standalone selling price for one year of service at the time of modification is Rs. 1,20,000. How should AB Ltd. account for the modification? Analyze.

MTP May 2021

Ans: Paragraph 20 of Ind AS 115, inter alia, states that, “An entity shall account for a contract modification as a separate contract if both of the following conditions are present:

- a) the scope of the contract increases because of the addition of promised goods or services that are distinct (in accordance with paragraphs 26–30); and
- b) the price of the contract increases by an amount of consideration that reflects the entity’s stand-alone selling prices of the additional promised goods or services and any appropriate adjustments to that price to reflect the circumstances of the particular contract.

In accordance with the above, it may be noted that a contract modification should be accounted for prospectively if the additional promised goods or services are distinct and the pricing for those goods or services reflects their stand-alone selling price.

In the given case, even though the remaining services to be provided are distinct, the modification should not be accounted for as a separate contract because the price of the contract did not increase by an amount of consideration that reflects the standalone selling price of the additional services. The modification would be accounted for, from the date of the modification, as if the existing arrangement was terminated and a new contract created (i.e. on a prospective basis) because the remaining services to be provided are distinct.

AB Ltd. should reallocate the remaining consideration to all of the remaining services to be provided (i.e. the obligations remaining from the original contract and the new obligations). AB Ltd. will recognise a total of Rs.4,20,000 (Rs.1,20,000 + Rs.3,00,000) over the remaining four-year service period (one year remaining under the original contract plus three additional years) or Rs.1,05,000 per year.

CHAPTER 24

LEASES (IND AS 116)

QUESTIONS FROM ICAI STUDY MATERIAL

Short-term lease

Q1: Scenario A:

A lessee enters into a lease with a nine-month non-cancellable term with an option to extend the lease for four months. The lease does not have a purchase option. At the lease commencement date, the lessee is reasonably certain to exercise the extension option because the monthly lease payments during the extension period are significantly below market rates. Whether the lessee can take a short-term exemption in accordance with Ind AS 116?

Scenario B:

Assume the same facts as Scenario A except, at the lease commencement date, the lessee is not reasonably certain to exercise the extension option because the monthly lease payments during the optional extension period are at what the lessee expects to be market rates and there are no other factors that would make exercise of the renewal option reasonably certain. Will your answer be different in this case?

Ans: Scenario A:

As the lessee is reasonably certain to exercise the extension option (Refer section 3.2 lease term), the lease term is greater than 12 months (i.e., 13 months). Therefore, the lessee will not account for the lease as a short-term lease.

Scenario B:

In this case, the lease term is less than 12 months, i.e., nine months. Thus, the lessee may account for the said lease under the short-term lease exemption, i.e., it recognises lease payments as an expense on either a straight-line basis over the lease term or another systematic basis.

Asset implicitly specified in a contract

Q2: Customer XYZ enters into a ten-year contract with Supplier ABC for the use of rolling stock specifically designed for Customer XYZ.

The rolling stock is designed to transport materials used in Customer XYZ's production process and is not suitable for use by other customers. The rolling stock is not explicitly specified in the contract but, Supplier ABC owns only one rolling stock that is suitable for Customer XYZ's use. If the rolling stock does not operate properly, the contract requires Supplier ABC to repair or replace the rolling stock.

Whether there is an identified asset?

Ans: Yes, the said rolling stock is an identified asset.

Though the rolling stock is not explicitly specified in the contract (e.g., by serial number), it is implicitly specified because Supplier ABC must use it to fulfil the contract.

Asset implicitly specified in a contract

Q3: Customer XYZ enters into a ten-year contract with Supplier ABC for the use of a car. The specification of the car is specified in the contract (i.e., brand, type, colour, options, etc.). At inception of the contract, the car is not yet built.

Whether there is an identified asset?

Ans: es, the said car is an identified asset.

Though the car cannot be identified at inception of the contract, it is implicitly specified at the time the same will be made available to Customer XYZ.

Substantive Substitution Rights

Q4: Scenario A: An electronic data storage provider (supplier) provides services through a centralised data centre that involve the use of a specified server (Server No. 10). The supplier maintains many identical servers in a single accessible location and determines, at inception of the contract, that it is permitted to and can easily substitute another server without the customer's consent throughout the period of use.

Further, the supplier would benefit economically from substituting an alternative asset, because doing this would allow the supplier to optimise the performance of its network at only a nominal cost. In addition, the supplier has made clear that it has negotiated this right of substitution as an important right in the arrangement, and the substitution right affected the pricing of the arrangement.

Whether the substitution rights are substantive and whether there is an identified asset?

Scenario B: Assume the same facts as in Scenario A except that Server No. 10 is customised, and the supplier does not have the practical ability to substitute the customised asset throughout the period of use. Additionally, it is unclear whether the supplier would benefit economically from sourcing a similar alternative asset.

Whether the substitution rights are substantive and whether there is an identified asset?

Ans: Scenario A: The customer does not have the right to use an identified asset because, at the inception of the contract, the supplier has the practical ability to substitute the server and would benefit economically from such a substitution. Thus, there is no identified asset.

However, if the customer could not readily determine whether the supplier had a substantive substitution right (for e.g., there is insufficient transparency into the supplier's operations), the customer would presume the substitution right is not substantive and conclude that there is an identified asset.

Scenario B: The substitution right is not substantive, and Server No. 10 would be an identified asset because the supplier does not have the practical ability to substitute the asset and there is no evidence of economic benefit to the supplier for substituting the asset. In this case,

neither of the conditions of a substitution right is met (whereas both the conditions must be met for the supplier to have a substantive substitution right). Therefore, Server No 10 will be considered as an identified asset.

Identified Asset – Physically Distinct

Q5: Customer XYZ enters into a 15-year contract with Supplier ABC for the right to use five fibres within a fibre optic cable between Mumbai and Pune. The contract identifies five of the cable's 25 fibres for use by Customer XYZ. The five fibres are dedicated solely to Customer XYZ's data for the duration of the contract term. Assume that Supplier ABC does not have a substantive substitution right.

Whether there is an identified asset?

Ans: Yes, the said five fibres are identified assets because they are physically distinct and explicitly specified in the contract.

Identified Asset – Not Physically Distinct

Q6: **Scenario A:** Customer XYZ enters into a ten-year contract with Supplier ABC for the right to transport oil from India to Bangladesh through Supplier ABC's pipeline. The contract provides that Customer XYZ will have the right to use of 95% of the pipeline's capacity throughout the term of the arrangement.

Whether there is an identified asset?

Scenario B: Assume the same facts as in Scenario A, except that Customer XYZ has the right to use 65% of the pipeline's capacity throughout the term of the arrangement.

Whether there is an identified asset?

Ans: **Scenario A:** Yes, the capacity portion of the pipeline is an identified asset.

While 95% of the pipeline's capacity is not physically distinct from the remaining capacity of the pipeline, it represents substantially all of the capacity of the entire pipeline and thereby provides Customer XYZ with the right to obtain substantially all of the economic benefits from use of the pipeline.

Scenario B: No, the capacity portion of the pipeline is NOT an identified asset.

Since 65% of the pipeline's capacity is less than substantially all of the capacity of the pipeline, Customer XYZ does not have the right to obtain substantially all of the economic benefits from use of the pipeline.

Right to use for a portion of the term of contract

Q7: ABC Ltd enters into a contract with XYZ Ltd, which grants ABC Ltd exclusive rights to use a specific grain storage facility over a five-year period in the months of May and June. During these months, ABC Ltd has the right to decide which crops are placed in storage and when to remove them. XYZ Ltd provides the loading and unloading services for the warehouse activities. During the other ten months each year, XYZ Ltd has the right to determine how the warehouse will be used.

Which party has the right to control the use of the identified asset during the period of use?

Ans: In the above case, ABC Ltd has the right to control the use of the identified asset during the period of use because they have the power to determine how the warehouse will be used during the contractually defined usage periods. The analysis should focus on the rights and economics of the use of the warehouse for the specified usage periods (May and June). During the period of use, ABC Ltd has the rights to determine how much of a crop to place in storage, and the timing of placing and removing it from storage. These rights are more significant to the economics of the use of the asset than the loading and unloading services performed by XYZ Ltd during the same period. ABC Ltd receives all of the economic benefit from use of the asset during those specified time periods. Therefore, contract contains a lease for the specified period of term.

Right to obtain substantially all of the economic benefits

Q8: Company MNO enters into a 15-year contract with Power Company PQR to purchase all of the electricity produced by a new solar farm. PQR owns the solar farm and will receive tax credits relating to the construction and ownership of the solar farm, and MNO will receive renewable energy credits that accrue from use of the solar farm.).

Who has the right to substantial benefits from the solar farm?

Ans: Company MNO has the right to obtain substantially all of the economic benefits from use of the solar farm over the 15-year period because it obtains:

the electricity produced by the farm over the lease term — i.e. the primary product from use of the asset; and the renewable energy credits — i.e. the by-product from use of the asset.

Although PQR receives economic benefits from the solar farm in the form of tax credits, these economic benefits relate to the ownership of the solar farm. The tax credits do not relate to use of the solar farm and therefore are not considered in this assessment.

Right to direct the use of an asset

Q9: Customer X enters into a contract with Supplier Y to use a vehicle for a five-year period. The vehicle is identified in the contract. Supplier Y cannot substitute another vehicle unless the specified vehicle is not operational (for e.g., if it breaks down). Under the contract:

Customer X operates the vehicle (i.e., drives the vehicle) or directs others to operate the vehicle (for e.g., hires a driver).

Customer X decides how to use the vehicle (within contractual limitations). For example, throughout the period of use, Customer X decides where the vehicle goes, as well as when or whether it is used and what it is used for. Customer X can also change these decisions throughout the period of use.

Supplier Y prohibits certain uses of the vehicle (for e.g., moving it overseas) and modifications to the vehicle to protect its interest in the asset.

Whether Customer X has the right to direct the use of the vehicle throughout the period of lease?

Ans: Yes, Customer X has the right to direct the use of the identified vehicle throughout the period of use because it has the right to change how the vehicle is used, when or whether the vehicle is used, where the vehicle goes and what the vehicle is used for.

Supplier Y's limits on certain uses for the vehicle and modifications to it are considered protective rights that define the scope of Customer X's use of the asset, but do not affect the assessment of whether Customer X directs the use of the asset.

Right to direct the use of an asset

Q10: Entity A contracts with Supplier H to manufacture parts in a facility. Entity A designed the facility and provided its specifications. Supplier H owns the facility and the land. Entity A specifies how many parts it needs and when it needs the parts to be available. Supplier H operates the machinery and makes all operating decisions including how and when the parts are to be produced, as long as it meets the contractual requirements to deliver the specified number on the specified date. Assuming supplier H cannot substitute the facility and hence is an identified asset.

Which party has the right to control the use of the identified asset (i.e., equipment) during the period of use?

Ans: Entity A does not direct the use of the asset that most significantly drives the economic benefits because Supplier H determines how and when the equipment is operated once the contract is signed. Therefore, Supplier H has the right to control the use of the identified asset during the period of use. Although Entity A stipulates the product to be provided and has input into the initial decisions regarding the use of the asset through its involvement in the design of the asset, it does not have decision making rights over how and for what purpose the asset will be used over the asset during the period of use. This arrangement is a supply agreement, not a lease.

Right to direct the use of an asset

Q11: Entity L enters into a five—year contract with Company A, a ship owner, for the use of an identified ship. Entity L decides whether and what cargo will be transported, and when and to which ports the ship will sail throughout the period of use, subject to restrictions specified in the contract. These restrictions prevent Entity L from sailing the ship into waters at a high risk of piracy or carrying explosive materials as cargo. Company A operates and maintains the ship, and is responsible for safe passage.

Who has the right to direct the use of the ship during the period of use?

Ans: Entity L has the right to direct the use of the ship. The contractual restrictions are protective rights. In the scope of its right of use, Entity L determines how and for what purpose the ship is used throughout the five — year period because it decides whether, where and when the ship sails, as well as the cargo that it will transport. Entity L has the right to change these decisions throughout the period of use. Therefore, the contract contains a lease.

Identifying and separating lease components

Q12: Scenario A: A lessee enters a lease of an excavator and the related accessories (for e.g., excavator attachments) that are used for mining purposes. The lessee is a local mining company

that intends to use the excavator at a copper mine. How many lease and non-lease components are there?

Scenario B: Assume the same facts as in Scenario A, except that the contract also conveys the right to use an additional loading truck. This loading truck could be deployed by the lessee for other uses (for e.g., to transport iron ores at another mine).

Ans: **Scenario A:** The lessee would be unable to benefit from the use of the excavator without also using the accessories. Therefore, the excavator is dependent upon the accessories. Thus, from the perspective of the lessee, the contract contains one lease component.

Scenario B: The lessee can benefit from the loading truck on its own or together with other readily available resources because the loading truck could be deployed for other uses independent of the excavator. The lessee can also benefit from the use of the excavator on its own or together with other readily available resources.

Thus, from the perspective of the lessee, the contract contains two lease components, viz., a lease of the excavator (together with the accessories) and a lease of the loading truck.

Identifying different components in the contract

Q13: Entity L rents an office building from Landlord M for a term of 10 years. The rental contract stipulates that the office is fully furnished and has a newly installed and tailored HVAC system. It also requires Landlord M to perform all common area maintenance (CAM) during the term of the arrangement. Entity L makes single monthly rental payment and does not pay for the maintenance separately. The office building has a useful life of 40 years and the HVAC system and office furniture each has a life of 15 years.

What are the units of account in the lease?

Ans: There are three components in the arrangement – the building assets (office building and HVAC), the office furniture, and the maintenance agreement.

The office building and HVAC system are one lease component because they cannot function independently of each other. The HVAC system was designed and tailored specifically to be integrated into the office building and cannot be removed and used in another building without incurring substantial costs. These building assets are a lease component because they are identified assets for which Entity L directs the use.

The office furniture functions independently and can be used on its own. It is also a lease component because it is a group of distinct assets for which Entity L directs the use.

The maintenance agreement is a non-lease component because it is a contract for service and not for the use of a specified asset.

Activities which are not components of a lease contract

Q14: **Scenario A:** A lessee enters into a five-year lease of equipment, with fixed annual payments of ₹ 10,000. The contract contains fixed annual payments as follows: ₹ 8,000 for rent, ₹ 1,500 for maintenance and ₹ 500 of administrative tasks. How the consideration would be allocated?

Scenario B: Assume the fact pattern as in scenario A except that, in addition, the contract requires the lessee to pay for the restoration of the equipment to its original condition. How the consideration would be allocated?

Ans: **Scenario A:** The contract contains two components, viz., a lease component (lease of equipment) and a non-lease component (maintenance). The amount paid for administrative tasks does not transfer a good or service to the lessee.

Assuming that the lessee does not elect to use the practical expedient as per para 15 of Ind AS 116, both the lessee and the lessor account for the lease of equipment and maintenance components separately and the administration charge is included in the total consideration to be allocated between those components. Therefore, the total consideration in the contract of ₹ 50,000 will be allocated to the lease component (equipment) and the non-lease component (maintenance).

Scenario B: The contract still contains two components, viz., a lease component (lease of equipment) and a non-lease component (maintenance). Similar to the amount paid for administrative tasks, the restoration does not transfer a good or service to the lessee as it is only performed at the end of the lease term.

Therefore, the total consideration in the contract of ₹ 50,000 will be allocated to the lease component (equipment) and the non-lease component (maintenance).

Allocating contract consideration to lease and non-lease components – Lessees

Q15: A lessee enters into a lease of an equipment. The contract stipulates the lessor will perform maintenance of the leased equipment and receive consideration for that maintenance service. The contract includes the following fixed prices for the lease and non-lease component:

Lease	₹80,000
Maintenance	₹ 10,000
Total	₹ 90,000

Assume the stand-alone prices cannot be readily observed, so the lessee makes estimates, maximising the use of observable information, of the lease and non-lease components, as follows:

Lease	₹ 85,000
Maintenance	₹ 15,000
Total	₹ 1,00,000

In the given scenario, assuming lessee has not opted the practical expedient, how will the lessee allocate the consideration to lease and non-lease component?

Ans: The stand-alone price for the lease component represents 85% (i.e., ₹ 85,000 / ₹ 1,00,000) of total estimated stand-alone prices. The lessee allocates the consideration in the contract (i.e., ₹ 90,000), as follows:

Lease (₹ 90,000 x 85%)	₹ 76,500
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Maintenance (₹ 90,000 x 15%)	₹ 13,500
Total	₹ 90,000

Determining the lease term

Q16: Scenario A: Entity ABC enters into a lease for equipment that includes a non-cancellable term of six years and a two-year fixed-priced renewal option with future lease payments that are intended to approximate market rates at lease inception. There are no termination penalties or other factors indicating that Entity ABC is reasonably certain to exercise the renewal option. What is the lease term?

Scenario B: Entity XYZ enters into a lease for a building that includes a non-cancellable term of eight years and a two-year, market-priced renewal option. Before it takes possession of the building, Entity XYZ pays for leasehold improvements. The leasehold improvements are expected to have significant value at the end of eight years, and that value can only be realised through continued occupancy of the leased property. What is the lease term?

Scenario C: Entity PQR enters into a lease for an identified retail space in a shopping centre. The retail space will be available to Entity PQR for only the months of October, November and December during a non-cancellable term of seven years. The lessor agrees to provide the same retail space for each of the seven years. What is the lease term?

Ans: Scenario A: At the lease commencement date, the lease term is six years (being the non-cancellable period). The renewal period of two years is not taken into consideration since it is mentioned that Entity ABC is not reasonably certain to exercise the option.

Scenario B: At the lease commencement, Entity XYZ determines that it is reasonably certain to exercise the renewal option because it would suffer a significant economic penalty if it abandoned the leasehold improvements at the end of the initial non-cancellable period of eight years. Thus, at the lease commencement, Entity XYZ concludes that the lease term is ten years (being eight years of non-cancellable period plus the renewal period of two years where the lessee is reasonably certain to exercise the option).

Scenario C: At the lease commencement date, the lease term is 21 months (three months per year over the seven annual periods as specified in the contract), i.e., the period over which Entity PQR controls the right to use the underlying asset.

Re-assessment of exercise of lease extension option

Q17: Retailer M enters into a five-year lease for a building floor, followed by two successive five-year renewal options. On the commencement date, Retailer M is not reasonably certain to exercise the extension option. At the end of third year, Retailer M extended to include another floor from year 4 due to a business acquisition. For this purpose, the lessee concludes a separate seven-year lease for an additional floor in the building already leased. Is Retailer M required to reassess the lease term in this case?

Ans: Ind AS 116 requires a lessee to reassess the lease term if there is change in business decision of the company which is directly relevant to exercising or not exercising an option to renew / extend the lease. In the given case, the Retailer M at the end of third year has extended to include another floor in the same building on account of acquiring another company. As

Retailer M has entered into fresh lease of another floor for a seven-year term, it is reasonably certain to exercise the renewal option of original lease for a further five-year term. Hence Retailer M will have to reassess the lease term at the end of third year.

Re-assessment of non-cancellable period of lease

Q18: Company N has taken 10 vehicles on lease for an initial period of 5 years with an extension option at the option of the lessee for a further period of 5 years at the same rental amount. The remaining useful life of the vehicles as on the commencement date of the lease is 15 years. Company N has determined at the commencement date that it is reasonably certain to exercise the extension option and hence it has taken a period of 10 years for the lease. At the end of 4th year, there is an announcement by the government that all the cars of this particular model have to be discontinued from the road within 1 year due to the change in the pollution norms in the country. Will the lease term be reassessed in this case?

Ans: In the given case, as per Ind AS 116, the announcement by the government to discontinue the use of the underlying asset will prohibit the lessee from exercising the extension option that was already included in the non-cancellable period by Company N and hence, Company N will reassess the non-cancellable period to exclude the extension option of 5 years.

Determining the fixed payments

Q19: Entity M and Lessor A enter into a 10-year lease of an office building for fixed annual lease payments of ₹ 200,000. Per the terms of the lease agreement, annual fixed lease payments comprise ₹ 170,000 for rent and ₹ 30,000 for real estate taxes.

What are the fixed lease payments for purposes of classifying the lease?

Ans: The fixed lease payments are ₹ 2,00,000. Although real estate taxes are explicitly stated in the lease contract, they do not represent a separate non-lease component as they do not provide a separate good or service. The right to use the office building is the only component. The annual lease payments of ₹ 2,00,000 represent payments related to that single lease component.

In substance fixed lease payments

Q20: Entity Q enters into a seven-year lease for a piece of machinery. The contract sets out the lease payments as follows.

- If Q uses the machinery within a given month, then an amount of 2,000 accrues for that month.
- If Q does not use the machinery within a given month, then an amount of 1,000 accrues for that month.

What is considered as lease payment in this case?

Ans: Q considers the contract and notes that although the lease payments contain variability based on usage, and there is a realistic possibility that Q may not use the machinery in some months, a monthly payment of 1,000 is unavoidable. Accordingly, this is an in-substance fixed payment, and is included in the measurement of the lease liability.

In-substance fixed lease payment

Q21: Entity P enters into a five-year lease for office space with Entity Q. The initial base rent is ₹ 1 lakh per month. Rents increase by the greater of 1% of Entity P's generated sales or 2% of the previous rental rate on each anniversary of the lease commencement date. What are the lease payments for purposes of measuring lease liability?

Ans: In the given case, the lease payments for purposes of classifying the lease are the fixed monthly payments of ₹ 1 lakh plus the minimum annual increase of 2% of the previous rental rate. Entity P is required to pay no less than a 2% increase regardless of the level of sales activity; therefore, this minimum level of increase is in substance fixed lease payment.

In substance fixed lease payments

Q22: Company N leases a production line. The lease payments depends on the number of operating hours of the production line – i.e., N has to pay ₹ 1,000 per hour of use. The annual minimum payment is ₹ 10,00,000. The expected usage per year is 1,500 hours

Ans: The lease contains in substance fixed payments of ₹ 10,00,000 per year, which are included in the initial measurement of the lease liability. The additional ₹ 5,00,000 that Company N expects to pay per year are variable payments that do not depend on an index or a rate but usage.

Variable lease payments that depend on an index or rate

Q23: An entity enters into a 10-year lease of property. The lease payment for the first year is ₹ 1,000. The lease payments are linked to the consumer price index (CPI), i.e., not a floating interest rate. The CPI at the beginning of the first year is 100. Lease payments are updated at the end of every second year. At the end of year one, the CPI is 105. At the end of year two, the CPI is 108. What should be included in lease payments?

Ans: At the lease commencement date, the lease payments are ₹ 1,000 per year for 10 years. The entity does not take into consideration the potential future changes in the index. At the end of year one, the payments have not changed and hence, the liability is not updated.

At the end of year two, when the lease payments change, the entity updates the remaining eight lease payments to ₹ 1,080 per year (i.e., ₹ 1,000 / 100 x 108).

Variable lease payments that do not depend on an index or rate

Q24: Entity XYZ is a medical equipment manufacturer and a supplier of the related consumables. Customer ABC operates a medical centre. Under the agreement entered into by both parties, Entity XYZ grants Customer ABC the right to use a medical laboratory machine at no cost and Customer ABC purchases consumables for use in the equipment from Entity XYZ at ₹ 100 each. The consumables can only be used for that equipment and Customer ABC cannot use other consumables as substitutes. There is no minimum purchase amount required in the contract.

Based on its historical experience, Customer ABC estimates that it is highly likely to purchase at least 8,000 units of consumables annually. Customer ABC has appropriately assessed that the arrangement contains a lease of medical equipment. There are no residual value guarantees or other forms of consideration included in the contract. Whether these payments affect the

calculation of lease liability and ROU Asset? How does Entity XYZ and Customer ABC would allocate these lease payments?

Ans: There are two components in the arrangement, viz., a lease of equipment and the purchase of consumables.

Even though Customer ABC may believe that it is highly unlikely to purchase lesser than 8,000 units of consumables every year, in this example, there are no lease payments for purposes of initial measurement (for Entity XYZ and Customer ABC) and lease classification (for Entity XYZ).

Entity XYZ and Customer ABC would allocate the payments associated with the future payments to the lease and consumables component of the contract.

Variable lease payments

Q25: Entity A enters into a five-year lease of an office building. The lease payments are ₹ 5,00,000 per year and the contract includes an additional water charge calculated as ₹ 0.50 per litre consumed. Payments are due at the end of year. Entity A elects to apply the practical expedient to combine lease and non-lease components

Ans: As stated above, payments are due at the end of the year. Entity A elects to apply the practical expedient not to separate lease and non-lease components.

At the commencement date, Entity A measures the lease liability as the present value of the fixed lease payments (i.e. five annual payments of 5,00,000). Although Entity A has elected to apply the practical expedient to combine non-lease components (i.e. water charges) with the lease component, Entity A excludes the non-lease component from its lease liability because they are variable payments that depend on usage. That is, the nature of the costs does not become fixed just because Entity A has elected not to separate them from the fixed lease payments. Entity A recognises the payments for water – as a variable lease payment – in profit or loss when they are incurred.

In contrast, if B does not elect to apply the practical expedient to combine lease and non-lease components, then it recognises the payments for water – as an operating expense – in profit or loss when they are incurred.

Residual value guarantee included in lease payments

Q26: An entity (a lessee) enters into a lease and guarantees that the lessor will realise ₹ 20,000 from selling the asset to another party at the end of the lease. At lease commencement, based on the lessee's estimate of the residual value of the underlying asset, the lessee determines that it expects that it will owe ₹ 8,000 at the end of the lease. Whether the lessee should include the said payment of ₹ 8,000 as a lease payment?

Ans: The lessee should include the amount of ₹ 8,000 as a lease payment because it is expected that it will owe the same to the lessor under the residual value guarantee.

Initial measurement of lease liability

Q27: Entity L enters into a lease for 10 years, with a single lease payment payable at the beginning of each year. The initial lease payment is ₹ 100,000. Lease payments will increase by the rate of

LIBOR each year. At the date of commencement of the lease, LIBOR is 2 per cent. Assume that the interest rate implicit in the lease is 5 per cent. How lease liability is initially measured?

Ans: In the given case, the lease payments depend on a rate (i.e., LIBOR) and hence is included in measuring lease liability, As per Ind AS 116, the lease payments should initially be measured using the rate (i.e. LIBOR) as at the commencement date. LIBOR at that date is 2 per cent; therefore, in measuring the lease liability, it is assumed that each year the payments will increase by 2 per cent, as follows

Year	Lease Payment	Discount factor @ 5%	PV of lease payments
1	1,00,000	1	100,000
2	1,02,000	0.952	97,102
3	1,04,040	0.907	94,364
4	1,06,121	0.864	91,689
5	1,08,243	0.823	89,084
6	1,10,408	0.784	86,560
7	1,12,616	0.746	84,012
8	1,14,869	0.711	81,672
9	1,17,166	0.677	79,321
10	1,19,509	0.645	77,083
			8,80,887

Therefore, the lease liability is initially measured at ₹ 8,80,887

Measuring right-of-use asset

Q28: Entity Y and Entity Z execute a 12-year lease of a railcar with the following terms on January 1, 2016:

- ⇒ The lease commencement date is February 1, 2016.
- ⇒ Entity Y must pay Entity Z the first monthly rental payment of ₹ 10,000 upon execution of the lease.
- ⇒ Entity Z will pay Entity Y ₹ 50,000 cash incentive to enter into the lease payable upon lease execution.

Entity Y incurred ₹ 1,000 of initial direct costs, which are payable on February 1, 2016. Entity Y calculated the initial lease liability as the present value of the lease payments discounted using its incremental borrowing rate because the rate implicit in the lease could not be readily determined; the initial lease liability is ₹ 850,000.

How would Lessee Company measure and record this lease?

Ans: Entity Y would calculate the right-of-use asset as follows:

	₹
Initial measurement of lease liability	8,50,000
Lease payments made to Entity Z at or before the commencement date	10,000
Lease incentives received from Entity Z	(50,000)

Initial direct cost	1,000
Initial measurement of right-of-use asset	8,11,000

Dismantling costs to be included in initial measurement of ROU Asset

Q29: Company H leases an aircraft for a period of 5 years. The aircraft must undergo a planned check after every 100,000 flight hours. At the end of the lease, company H must have a check performed (or refund the costs to the lessor), irrespective of the actual number of flight hours. What are the lease payments for purposes of calculating ROU asset?

Ans: In the given case, the legal requirement to perform a check after every 1,00,000 flight hours does not directly lead to an obligation as it depends on future circumstances. However, as the check must be carried out at the end of the lease irrespective of the actual number of flight hours gives rise to an obligation.

As a result, company H has to recognize a provision for the costs of the final check (“present value of the expected cost”) at the beginning of the lease term. At the same time, these costs must be included in the cost of the right-of-use (ROU) asset pursuant to para 24 (d) of Ind AS 116.

Lessee Accounting

Q30: Entity ABC (lessee) enters into a three-year lease of equipment. Entity ABC agrees to make the following annual payments at the end of each year:

₹ 20,000 in year one

₹ 30,000 in year two

₹ 50,000 in year three.

For simplicity purposes, there are no other elements to the lease payments (like purchase options, lease incentives from the lessor or initial direct costs). Assumed a discount rate of 12% (which is Entity ABC’s incremental borrowing rate because the interest rate implicit in the lease cannot be readily determined). Entity ABC depreciates the ROU Asset on a straight-line basis over the lease term.

How would Entity ABC would account for the said lease under Ind AS 116?

Ans: At the commencement date, Entity ABC would initially recognise ROU Asset and the corresponding Lease Liability of ₹ 77,364 which is calculated as follows:

Year	Payments (Cash flows)	Discounting Factor @12%	Discounted Cash flows / Present Value
1	20,000	0.8929	17,858
2	30,000	0.7972	23,916
3	50,000	0.7118	35,590
	1,00,000		77,364

Then, the next step would be to prepare a schedule for Lease Liability and ROU Asset as follows:

Lease Liability

Year	Opening balance	Interest Expense	Payments	Closing balance
1	77,364	9,284	(20,000)	66,648
2	66,648	7,998	(30,000)	44,646
3	44,646	5,354*	(50,000)	-

* Difference of ₹ 4 is due to approximation.

ROU Asset (assuming no lease incentives, no initial direct costs, etc.):

Year	Opening balance	Depreciation	Closing balance
1	77,364	(25,788)	51,576
2	51,576	(25,788)	25,788
3	25,788	(25,788)	-

At lease commencement, Entity ABC would recognise the Lease Liability and the corresponding ROU Asset as follows:

ROU Asset	Dr.	77,364	
To Lease Liability			77,364

To initially recognise the Lease Liability and the corresponding ROU Asset

The following journal entries would be recorded in the first year:

Interest Expense	Dr.	9,284	
To Lease Liability			9,284

To record interest expense and accrete the lease liability using the effective interest method (₹ 77,364 x 12%)

Depreciation Expense	Dr.	25,788	
To ROU Asset			25,788

To record interest expense and accrete the lease liability using the straight line method (₹ 77,364 / 3 years)

Lease Liability	Dr.	20,000	
To Cash / Bank			20,000

To record lease payment

Following is the summary of the said lease contract's accounting (assuming no changes due to reassessment):

Particulars	Initially	Year 1	Year 2	Year 3
Cash lease payments		20,000	30,000	50,000
<u>Lease Expense Recognised:</u>				
Interest Expense		9,284	7,998	5,354

Depreciation Expense		<u>25,788</u>	<u>25,788</u>	<u>25,788</u>
Total Periodic Expense		<u>35,072</u>	<u>33,786</u>	<u>31,142</u>
Balance Sheet:				
ROU Asset	77,364	51,576	25,788	-
Lease Liability	(77,364)	(66,648)	(44,646)	-

Subsequent measurement using cost model

Q31: Company EFG enters into a property lease with Entity H. The initial term of the lease is 10 years with a 5- year renewal option. The economic life of the property is 40 years and the fair value of the leased property is ₹ 50 Lacs. Company EFG has an option to purchase the property at the end of the lease term for ₹ 30 lacs. The first annual payment is ₹ 5 lacs with an increase of 3% every year thereafter. The implicit rate of interest is 9.04%. Entity H gives Company EFG an incentive of ₹ 2 lacs (payable at the beginning of year 2), which is to be used for normal tenant improvement.

Company EFG is reasonably certain to exercise that purchase option. How would EFG measure the right-of-use asset and lease liability over the lease term?

Ans: As per Ind AS 116, Company EFG would first calculate the lease liability as the present value of the annual lease payments, less the lease incentive paid in year 2, plus the exercise price of the purchase option using the rate implicit in the lease of approximately 9.04%.

PV of lease payments, less lease incentive (W.N. 1)	₹ 37,39,648
PV of purchase option at end of lease term (W.N. 2)	₹ 12,60,000
Total lease liability	₹ 49,99,648 or ₹ 50,00,000 (approx.)

The right-of-use asset is equal to the lease liability because there is no adjustment required for initial direct costs incurred by Company EFG, lease payments made at or before the lease commencement date, or lease incentives received prior to the lease commencement date.

Entity EFG would record the following journal entry on the lease commencement date.

Right-of-use Asset	Dr. ₹ 50,00,000	
To Lease Liability		₹ 50,00,000

To record ROU asset and lease liability at the commencement date.

Since the purchase option is reasonably certain to be exercised, EFG would amortize the right-of-use asset over the economic life of the underlying asset (40 years). Annual amortization expense would be ₹ 1,25,000 (₹ 50,00,000 / 40 years)

Interest expense on the lease liability would be calculated as shown in the following table. This table includes all expected cash flows during the lease term, including the lease incentive paid by Entity H and Company EFG's purchase option.

Year	Payment	Principal paid at the beginning of the year	Interest paid	Interest expense	Lease Liability (end of the year)
	a	b= a-c	c = (d of pvs. Year)	d = [(e of pvs. year-a) x 9.04%]	e = (e of pvs. Year + d - a)
Commencement					50,00,000
Year 1	5,00,000	5,00,000	-	4,06,800	49,06,800
Year 2	3,15,000*	(91,800)	4,06,800	4,15,099	50,06,899
Year 3	5,30,450	1,15,351	4,15,099	4,04,671	48,81,120
Year 4	5,46,364	1,41,693	4,04,671	3,91,862	47,26,618
Year 5	5,62,754	1,70,892	3,91,862	3,76,413	45,40,277
Year 6	5,79,637	2,03,224	3,76,413	3,58,042	43,18,682
Year 7	5,97,026	2,38,984	3,58,042	3,36,438	40,58,094
Year 8	6,14,937	2,78,499	3,36,438	3,11,261	37,54,418
Year 9	6,33,385	3,22,124	3,11,261	2,82,141	34,03,174
Year 10	6,52,387	3,70,246	2,82,141	2,49,213*	30,00,000
Year 10	<u>30,00,000</u>	<u>27,50,787</u>	<u>2,49,213*</u>	=	-
Total	<u>85,31,940</u>	<u>50,00,000</u>	<u>35,31,940</u>	<u>35,31,940</u>	

*(5,00,000 + increased by 3% - lease incentive paid amounting to 2,00,000)

Although the lease was for 10 years, the asset had an economic life of 40 years. When Company EFG exercises its purchase option at the end of the 10-year lease, it would have fully extinguished its lease liability but continue depreciating the asset over the remaining useful life.

Working Notes

- Calculating PV of lease payments, less lease incentive:

Year	Lease Payment (A)	Present value factor @ 9.04% (B)	Present value of lease payments (A*B=C)
Year 1	5,00,000	1	5,00,000
Year 2	3,15,000	0.92	2,89,800
Year 3	5,30,450	0.84	4,45,578
Year 4	5,46,364	0.77	4,20,700
Year 5	5,62,754	0.71	3,99,555
Year 6	5,79,637	0.65	3,76,764
Year 7	5,97,026	0.59	3,52,245
Year 8	6,14,937	0.55	3,38,215
Year 9	6,33,385	0.50	3,16,693

Year 10	6,52,387	0.46	3,00,098
Total			37,39,648

2. Calculating PV of purchase option at end of lease term:

Year	Payment on purchase option (A)	Present value factor @ 9.04% (B)	Present value of purchase option (A*B=C)
Year 10	30,00,000	0.42	12,60,000
Total			12,60,000

The discount rate for year 10 is different in the above calculations because in the earlier one its beginning of year 10 and in the later one its end of the year 10.

Remeasurement of a lease with variable lease payments

Q32: Entity W entered into a contract for lease of retail store with Entity J on January 01/01/2017. The initial term of the lease is 5 years with a renewal option of further 3 years. The annual payments for initial term and renewal term is ₹ 100,000 and ₹ 110,000 respectively. The annual lease payment will increase based on the annual increase in the CPI at the end of the preceding year. For example, the payment due on 01/01/18 will be based on the CPI available at 31/12/17.

Entity W's incremental borrowing rate at the lease inception date and as at 01/01/2020 is 5% and 6% respectively and the CPI at lease commencement date and as at 01/01/2020 is 120 and 125 respectively.

At the lease commencement date, Entity W did not have a significant economic incentive to exercise the renewal option. In the first quarter of 2020, Entity W installed unique lease improvements into the retail store with an estimated five-year economic life. Entity W determined that it would only recover the cost of the improvements if it exercises the renewal option, creating a significant economic incentive to extend.

Is Entity W required to remeasure the lease in the first quarter of 2020?

Ans: Since Entity W is now reasonably certain that it will exercise its renewal option, it is required to remeasure the lease in the first quarter of 20X4.

The following table summarizes information pertinent to the lease remeasurement.

Remeasured lease term	5 years; 2 years remaining in the initial term plus 3 years in the renewal period
Entity W's incremental borrowing rate On the remeasurement date	6%
CPI available on the remeasurement date	125
Right-of-use asset immediately before the remeasurement	₹ 1,81,840 (Refer note 1)
Lease liability immediately before the remeasurement	₹ 1,95,244 (Refer note 1)

To remeasure the lease liability, Entity W would first calculate the present value of the future lease payments for the new lease term (using the updated discount rate of 6%). The following table shows the present value of the future lease payments based on an updated CPI of 125. Since the initial lease payments were based on a CPI of 120, the CPI has increased by 4.167% approx. As a result, Entity W would increase the future lease payments by 4%. As shown in the table, the revised lease liability is ₹ 4,91,376.

Year	4	5	6	7	8	Total
Lease payment	1,04,167	1,04,167	1,14,583	1,14,583	1,14,583	5,52,083
Discount	1	0.943	0.890	0.840	0.792	
Present value	1,04,000	98,230	1,01,979	96,250	90,750	4,91,376

To calculate the adjustment to the lease liability, Entity W would compare the recalculated and original lease liability balances on the remeasurement date.

Revised lease liability	4,91,376
Original lease liability	<u>(1,95,244)</u>
	<u>2,96,132</u>

Entity W would record the following journal entry to adjust the lease liability.

ROU Asset	Dr.	2,96,132	
	To Lease liability		2,96,132
<i>Being lease liability and ROU asset adjusted on account of remeasurement.</i>			

Working Notes:

Calculation of ROU asset before the date of remeasurement

Year beginning	Lease Payment (A)	Present value factor @ 5% (B)	Present value of lease payments (A x B=C)
1	1,00,000	1.000	1,00,000
2	1,00,000	0.952	95,200
3	1,00,000	0.907	90,700
4	1,00,000	0.864	86,400
5	1,00,000	0.823	<u>82,300</u>
Lease liability as at commencement date			<u>4,54,600</u>

Calculation of Lease Liability and ROU asset at each year end

Year	Lease Liability				ROU asset		
	Initial value	Lease payments	Interest expense @ 5%	Closing balance	Initial Value	Depreciation for 5 years	Closing balance
1	4,54,600	1,00,000	17,730	3,72,330	4,54,600	90,920	3,63,680
2	3,72,330	1,00,000	13,617	2,85,947	3,63,680	90,920	2,72,760
3	2,85,947	1,00,000	9,297	1,95,244	2,72,760	90,920	1,81,840
4	1,95,244				1,81,840		

Modification that is a separate lease

Q33: Lessee enters into a 10-year lease for 2,000 square metres of office space. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease for the remaining five years to include an additional 3,000 square metres of office space in the same building. The additional space is made available for use by Lessee at the end of the second quarter of Year 6. The increase in total consideration for the lease is commensurate with the current market rate for the new 3,000 square metres of office space, adjusted for the discount that Lessee receives reflecting that Lessor does not incur costs that it would otherwise have incurred if leasing the same space to a new tenant (for example, marketing costs).

How should the said modification be accounted for?

Ans: Lessee accounts for the modification as a separate lease, separate from the original 10-year lease because the modification grants Lessee an additional right to use an underlying asset, and the increase in consideration for the lease is commensurate with the stand-alone price of the additional right-of-use adjusted to reflect the circumstances of the contract. In this example, the additional underlying asset is the new 3,000 square metres of office space. Accordingly, at the commencement date of the new lease (at the end of the second quarter of Year 6), Lessee recognises a ROU Asset and a lease liability relating to the lease of the additional 3,000 square metres of office space. Lessee does not make any adjustments to the accounting for the original lease of 2,000 square metres of office space as a result of this modification.

Modification that increases the scope of the lease by extending the contractual lease term

Q34: Lessee enters into a 10-year lease for 5,000 square metres of office space. The annual lease payments are ₹ 1,00,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a. At the beginning of Year 7, Lessee and Lessor agree to amend the original lease by extending the contractual lease term by four years. The annual lease payments are unchanged (i.e., ₹ 1,00,000 payable at the end of each year from Year 7 to Year 14). Lessee's incremental borrowing rate at the beginning of Year 7 is 7% p.a.

How should the said modification be accounted for?

Ans: At the effective date of the modification (at the beginning of Year 7), Lessee remeasures the lease liability based on:

- An eight-year remaining lease term
- Annual payments of ₹ 1,00,000 and
- Lessee's incremental borrowing rate of 7% p.a.

The modified lease liability equals ₹ 5,97,100 (W.N.1). The lease liability immediately before the modification (including the recognition of the interest expense until the end of Year 6) is ₹ 3,46,355 (W.N.3). Lessee recognises the difference between the carrying amount of the modified lease liability and the carrying amount of the lease liability immediately before the modification (i.e., ₹ 2,50,745) (W.N. 4) as an adjustment to the ROU Asset.

Working Notes:

1. Calculation of modified lease liability:

Year	Lease Payment (A)	Present value factor @ 7% (B)	Present value of lease payments (A*B=C)
7	100,000	0.935	93,500
8	100,000	0.873	87,300
9	100,000	0.816	81,600
10	100,000	0.763	76,300
11	100,000	0.713	71,300
12	100,000	0.666	66,600
13	100,000	0.623	62,300
14	100,000	0.582	58,200
Modified lease liability			5,97,100

2. Calculation of Lease liability as at commencement date:

Year	Lease Payment (A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	100,000	0.943	94,300
2	100,000	0.890	89,000
3	100,000	0.840	84,000
4	100,000	0.792	79,200
5	100,000	0.747	74,700
6	100,000	0.705	70,500
7	100,000	0.665	66,500
8	100,000	0.627	62,700
9	100,000	0.592	59,200
10	100,000	0.558	55,800
Lease liability as at modification date			7,35,900

3. Calculation of Lease liability immediately before modification date:

Year	Opening lease liability (A)	Interest @ 6% (B) = [A x 6%]	Lease payments (C)	Closing liability (D) = [A+B-C]
1	7,35,900	44,154	100,000	6,80,054
2	6,80,054	40,803	100,000	6,20,857
3	6,20,857	37,251	100,000	5,58,108
4	5,58,108	33,486	100,000	4,91,594
5	4,91,594	29,496	100,000	4,21,090
6	4,21,090	25,265	100,000	3,46,355
Lease liability as at modification date				3,46,355

4. Adjustment to ROU asset:

Modified Lease liability	5,97,100
Original Lease liability as at modification date	(3,46,355)
Adjustment to ROU asset	2,50,745

The ROU asset will be increased by ₹ 2,50,745 on the date of modification.

Modification that decreases the scope of the lease

Q35: Lessee enters into a 10-year lease for 5,000 square metres of office space. The annual lease payments are ₹ 50,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease to reduce the space to only 2,500 square metres of the original space starting from the end of the first quarter of Year 6. The annual fixed lease payments (from Year 6 to Year 10) are ₹ 30,000. Lessee's incremental borrowing rate at the beginning of Year 6 is 5% p.a.

How should the said modification be accounted for?

Ans: In the given case, Lessee calculates the ROU asset and the lease liabilities before modification as follows:

Year	Lease Liability				ROU asset		
	Initial value	Lease payments	Interest expense @ 6%	Closing balance	Initial Value	Depreciation	Closing balance
	a	B	c = a x 6%	d = a-b + c	e	f	g
1	3,67,950*	50,000	22,077	3,40,027	3,67,950	36,795	3,31,155
2	3,40,027	50,000	20,402	3,10,429	3,31,155	36,795	2,94,360
3	3,10,429	50,000	18,626	2,79,055	2,94,360	36,795	2,57,565
4	2,79,055	50,000	16,743	2,45,798	2,57,565	36,795	2,20,770
5	2,45,798	50,000	14,748	2,10,546	2,20,770	36,795	1,83,975
6	2,10,546				1,83,975		

*(refer note 1)

At the effective date of the modification (at the beginning of Year 6), Lessee remeasures the lease liability based on:

- (a) a five-year remaining lease term,
- (b) annual payments of ₹ 30,000 and
- (c) Lessee's incremental borrowing rate of 5% p.a.

Year	Lease Payment(A)	Present value factor @ 5% (B)	Present value of lease payments (A x B = C)
6	30,000	0.952	28,560
7	30,000	0.907	27,210
8	30,000	0.864	25,920
9	30,000	0.823	24,690
10	30,000	0.784	23,520
Total		1,29,900	

Lessee determines the proportionate decrease in the carrying amount of the ROU Asset on the basis of the remaining ROU Asset (i.e., 2,500 square metres corresponding to 50% of the original ROU Asset).

50% of the pre-modification ROU Asset (₹ 1,83,975) is ₹ 91,987.50.

50% of the pre-modification lease liability (₹ 2,10,546) is ₹ 1,05,273.

Consequently, Lessee reduces the carrying amount of the ROU Asset by ₹ 91,987.50 and the carrying amount of the lease liability by ₹ 1,05,273. Lessee recognises the difference between the decrease in the lease liability and the decrease in the ROU Asset (₹ 1,05,273 – ₹ 91,987.50 = ₹ 13,285.50) as a gain in profit or loss at the effective date of the modification (at the beginning of Year 6).

Lessee recognises the difference between the remaining lease liability of ₹ 1,05,273 and the modified lease liability of ₹ 1,29,900 (which equals ₹ 24,627) as an adjustment to the ROU Asset reflecting the change in the consideration paid for the lease and the revised discount rate.

Working Note:

1. Calculation of Initial value of ROU asset and lease liability:

Year	Lease Payment(A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	50,000	0.943	47,150
2	50,000	0.890	44,500
3	50,000	0.840	42,000
4	50,000	0.792	39,600
5	50,000	0.747	37,350
6	50,000	0.705	35,250
7	50,000	0.665	33,250

8	50,000	0.627	31,350
9	50,000	0.592	29,600
10	50,000	0.558	27,900
			3,67,950

Modification that is a change in consideration only

Q36: Lessee enters into a 10-year lease for 5,000 square metres of office space. At the beginning of Year 6, Lessee and Lessor agree to amend the original lease for the remaining five years to reduce the lease payments from ₹ 1,00,000 per year to ₹ 95,000 per year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a. Lessee's incremental borrowing rate at the beginning of Year 6 is 7% p.a. The annual lease payments are payable at the end of each year.

How should the said modification be accounted for?

Ans: In the given case, Lessee calculates the ROU asset and the lease liabilities before modification as follows:

Year	Opening lease liability (A)	Interest @ 6% (B) = [A x 6%]	Lease payments (C)	Closing liability (D) = [A+B-C]
1	7,35,900	44,154	100,000	6,80,054
2	6,80,054	40,803	100,000	6,20,857
3	6,20,857	37,251	100,000	5,58,108
4	5,58,108	33,486	100,000	4,91,594
5	4,91,594	29,496	100,000	4,21,090
6				4,21,090

At the effective date of the modification (at the beginning of Year 6), Lessee remeasures the lease liability based on:

- a five-year remaining lease term,
- annual payments of ₹ 95,000, and
- Lessee's incremental borrowing rate of 7% p.a.

Year	Lease Payments (A)	Present value @ 7% (B)	Present value of lease payments (A x B = C)
1	95,000	0.935	88,825
2	95,000	0.873	82,935
3	95,000	0.816	77,520
4	95,000	0.763	72,485
5	95,000	0.713	67,735
			3,89,500

Lessee recognises the difference between the carrying amount of the modified liability (₹ 3,89,500) and the lease liability immediately before the modification (₹ 4,21,090) of ₹ 31,590 as an adjustment to the ROU Asset.

Working Note:

1. Calculation of Initial value of ROU asset and lease liability:

Year	Lease Payment (A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	100,000	0.943	94,300
2	100,000	0.890	89,000
3	100,000	0.840	84,000
4	100,000	0.792	79,200
5	100,000	0.747	74,700
6	100,000	0.705	70,500
7	100,000	0.665	66,500
8	100,000	0.627	62,700
9	100,000	0.592	59,200
10	100,000	0.558	55,800
Lease liability as at modification date			7,35,900

Modification that both increases and decreases the scope of the lease

Q37: Lessee enters into a 10-year lease for 2,000 square metres of office space. The annual lease payments are ₹ 1,00,000 payable at the end of each year. The interest rate implicit in the lease cannot be readily determined. Lessee's incremental borrowing rate at the commencement date is 6% p.a.

At the beginning of Year 6, Lessee and Lessor agree to amend the original lease to:

- a) include an additional 1,500 square metres of space in the same building starting from the beginning of Year 6 and
- b) reduce the lease term from 10 years to eight years. The annual fixed payment for the 3,500 square metres is ₹ 1,50,000 payable at the end of each year (from Year 6 to Year 8). Lessee's incremental borrowing rate at the beginning of Year 6 is 7% p.a.

The consideration for the increase in scope of 1,500 square metres of space is not commensurate with the stand-alone price for that increase adjusted to reflect the circumstances of the contract. Consequently, Lessee does not account for the increase in scope that adds the right to use an additional 1,500 square metres of space as a separate lease.

How should the said modification be accounted for?

Ans: The pre-modification ROU Asset and the pre-modification lease liability in relation to the lease are as follows:

Year	Lease liability				ROU Asset		
	Opening balance	Interest expense @ 6%	Lease payment	Closing balance	Opening balance	Depreciation charge	Closing balance
1	7,35,900*	44,154	(1,00,000)	6,80,054	7,35,900	(73,590)	6,62,310
2	6,80,054	40,803	(1,00,000)	6,20,857	6,62,310	(73,590)	5,88,720
3	6,20,857	37,251	(1,00,000)	5,58,108	5,88,720	(73,590)	5,15,130
4	5,58,108	33,486	(1,00,000)	4,91,594	5,15,130	(73,590)	4,41,540
5	4,91,594	29,496	(1,00,000)	4,21,090	4,41,540	(73,590)	3,67,950
6	4,21,090				3,67,950		

*Refer Note 4.

At the effective date of the modification (at the beginning of Year 6), Lessee remeasures the lease liability on the basis of:

- A three-year remaining lease term (ie. till 8th year),
- Annual payments of ₹ 150,000 and
- Lessee's incremental borrowing rate of 7% p.a.

Year	Lease Payments (A)	Present value @ 7% (B)	Present value of lease payments (A x B = C)
1	1,50,000	0.935	1,40,250
2	1,50,000	0.873	1,30,950
3	1,50,000	0.816	<u>1,22,400</u>
Modified lease liability			<u>3,93,600</u>

The modified liability equals ₹ 3,93,600, of which (a) ₹ 1,31,200 relates to the increase of ₹ 50,000 in the annual lease payments from Year 6 to Year 8 and (refer note 1) (b) ₹ 2,62,400 relates to the remaining three annual lease payments of ₹ 1,00,000 from Year 6 to Year 8 with reduction of lease term (Refer Note 3)

Decrease in the lease term:

At the effective date of the modification (at the beginning of Year 6), the pre-modification ROU Asset is ₹ 3,67,950. Lessee determines the proportionate decrease in the carrying amount of the ROU Asset based on the remaining ROU Asset for the original 2,000 square metres of office space (i.e., a remaining three-year lease term rather than the original five-year lease term). The remaining ROU Asset for the original 2,000 square metres of office space is ₹ 2,20,770 [i.e., ₹ (3,67,950 / 5) x 3 years].

At the effective date of the modification (at the beginning of Year 6), the pre-modification lease liability is ₹ 4,21,090. The remaining lease liability for the original 2,000 square metres of office space is ₹ 2,67,300 (i.e., present value of three annual lease payments of ₹ 1,00,000, discounted at the original discount rate of 6% p.a.) (refer note 2).

Consequently, Lessee reduces the carrying amount of the ROU Asset by ₹ 1,47,180 (₹ 3,67,950 – ₹ 2,20,770), and the carrying amount of the lease liability by ₹ 1,53,790 (₹ 4,21,090 – ₹ 2,67,300). Lessee recognises the difference between the decrease in the lease liability and the decrease in the ROU Asset (₹ 1,53,790 – ₹ 1,47,180 = ₹ 6,610) as a gain in profit or loss at the effective date of the modification (at the beginning of Year 6).

Lease Liability	Dr.	1,53,790	
To ROU Asset			1,47,180
To Gain			6,610

At the effective date of the modification (at the beginning of Year 6), Lessee recognises the effect of the remeasurement of the remaining lease liability reflecting the revised discount rate of 7% p.a., which is ₹ 4,900 (₹ 2,67,300 – ₹ 2,62,400*), as an adjustment to the ROU Asset.

*(Refer note 3)

Lease Liability	Dr.	4,900	
To ROU Asset			4,900

Increase in the leased space:

At the commencement date of the lease for the additional 1,500 square metres of space (at the beginning of Year 6), Lessee recognises the increase in the lease liability related to the increase in leased space of ₹ 1,31,200 (i.e., present value of three annual lease payments of ₹ 50,000, discounted at the revised interest rate of 7% p.a.) as an adjustment to the ROU Asset.

ROU Asset	Dr.	1,31,200	
To Lease Liability			1,31,200

The modified ROU Asset and the modified lease liability in relation to the modified lease are as follows:

Year	Lease liability				ROU Asset		
	Opening balance	Interest expense @ 7%	Lease payment	Closing balance	Opening balance	Depreciation charge	Closing balance
6	3,93,600	27,552	(1,50,000)	2,71,152	3,47,070**	(1,15,690)	2,31,380
7	2,71,152	18,981	(1,50,000)	1,40,133	2,31,380	(1,15,690)	1,15,690
8	1,40,133	9,867*	(1,50,000)	-	1,15,690	(1,15,690)	-

*Difference is due to approximation.

**Refer Note 5

Working Notes:

Calculation of lease liability on increased consideration:

Year	Lease Payments (A)	Present value @7% (B)	Present value of lease payments (A x B = C)
1	50,000	0.935	46,750
2	50,000	0.873	43,650
3	50,000	0.816	<u>40,800</u>
Modified lease liability			<u>1,31,200</u>

Calculation of remaining lease liability for the original contract of 2000 square meters at Original discount rate:

Year	Lease Payments (A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	1,00,000	0.943	94,300
2	1,00,000	0.890	89,000
3	1,00,000	0.840	<u>84,000</u>
Remaining lease liability			<u>2,67,300</u>

Calculation of remaining lease liability for the original contract of 2000 square meters at revised discount rate:

Year	Lease Payments (A)	Present value factor @ 7% (B)	Present value of lease payments (A x B = C)
1	1,00,000	0.935	93,500
2	1,00,000	0.873	87,300
3	1,00,000	0.816	<u>81,600</u>
Remaining lease liability			<u>2,62,400</u>

Calculation of Initial value of ROU asset and lease liability:

Year	Lease Payment (A)	Present value factor @ 6% (B)	Present value of lease payments (A x B = C)
1	100,000	0.943	94,300
2	100,000	0.890	89,000
3	100,000	0.840	84,000
4	100,000	0.792	79,200
5	100,000	0.747	74,700

6	100,000	0.705	70,500
7	100,000	0.665	66,500
8	100,000	0.627	62,700
9	100,000	0.592	59,200
10	100,000	0.558	55,800
Lease liability as at modification date			<u>7,35,900</u>

Calculation of opening balance of Modified ROU Asset at the beginning of 6th year:

The remaining ROU Asset for the original 2,000 square metres of office space after decrease in term	2,20,770
Less: Adjustment for increase in interest rate from 6% to 7%	(4,900)
Add: Adjustment for increase in leased space	<u>1,31,200</u>
	<u>3,47,070</u>

Lessor accounting for a finance lease ? dealer-lessor case

Q38: A Lessor enters into a 10-year lease of equipment with Lessee. The equipment is not specialised in nature and is expected to have alternative use to Lessor at the end of the 10-year lease term. Under the lease:

- ◆ Lessor receives annual lease payments of ₹ 15,000, payable at the end of the year
- ◆ Lessor expects the residual value of the equipment to be ₹ 50,000 at the end of the 10-year lease term
- ◆ Lessee provides a residual value guarantee that protects Lessor from the first ₹ 30,000 of loss for a sale at a price below the estimated residual value at the end of the lease term (i.e., ₹ 50,000)
- ◆ The equipment has an estimated remaining economic life of 15 years, a carrying amount of ₹ 1,00,000 and a fair value of ₹ 1,11,000
- ◆ The lease does not transfer ownership of the underlying asset to Lessee at the end of the lease term or contain an option to purchase the underlying asset
- ◆ The interest rate implicit in the lease is 10.078%.

How should the Lessor account for the same in its books of accounts?

Ans: Lessor shall classify the lease as a FINANCE LEASE because the sum of the present value of lease payments amounts to substantially all of the fair value of the underlying asset.

At lease commencement, Lessor accounts for the finance lease, as follows:

Net investment in the lease	₹ 1,11,000 ^(a)
Cost of goods sold	₹ 92,340 ^(b)
Revenue	₹ 1,03,340 ^(c)
Property held for lease	₹ 1,00,000 ^(d)

To record the net investment in the finance lease and derecognise the underlying asset.

- (a) The net investment in the lease consists of:
- (1) the present value of 10 annual payments of ₹ 15,000 plus the guaranteed residual value of ₹ 30,000, both discounted at the interest rate implicit in the lease, which equals ₹ 1,03,340 (i.e., the lease payment) (Refer note 1) AND
 - (2) the present value of unguaranteed residual asset of ₹ 20,000, which equals ₹ 7,660 (Refer note 2).

Note that the net investment in the lease is subject to the same considerations as other assets in classification as current or non-current assets in a classified balance sheet.

- (b) Cost of goods sold is the carrying amount of the equipment of ₹ 1,00,000 (less) the present value of the unguaranteed residual asset of ₹ 7,660.
- (c) Revenue equals the lease receivable.
- (d) The carrying amount of the underlying asset.

At lease commencement, Lessor recognises selling profit of ₹ 11,000 which is calculated as = lease payment of ₹ 1,03,340 – [carrying amount of the asset (₹ 1,00,000) – net of any unguaranteed residual asset (₹ 7,660) ie which equals ₹ 92,340]

Year 1 Journal entry for a finance lease

Cash	₹ 15,000(e)
Net investment in the lease	₹ 3,813(f)
Interest income	₹ 11,187(g)

- (e) Receipt of annual lease payments at the end of the year. © The Institute of Chartered Accountants of India
- (f) Reduction of the net investment in the lease for lease payments received of ₹ 15,000, net of interest income of ₹ 11,187
- (g) Interest income is the amount that produces a constant periodic discount rate on the remaining balance of the net investment in the lease. Please refer the computation below:

The following table summarises the interest income from this lease and the related amortisation of the net investment over the lease term:

Year	Annual Rental Payment	Annual Interest Income ^(h)	Net investment at the end of the year
Initial net investment	-	-	1,11,000
1	15,000	11,187	1,07,187
2	15,000	10,802	1,02,989
3	15,000	10,379	98,368
4	15,000	9,914	93,282
5	15,000	9,401	87,683
6	15,000	8,837	81,520

7	15,000	8,216	74,736
8	15,000	7,532	67,268
9	15,000	6,779	59,047
10	15,000	5,953	50,000 ⁽ⁱ⁾

h) Interest income equals 10.078% of the net investment in the lease at the beginning of each year. For e.g., Year 1 annual interest income is calculated as ₹ 1,11,000 (initial net investment) x 10.078%.

(i) The estimated residual value of the equipment at the end of the lease term.

Working Notes:

1 Calculation of net investment in lease:

Year	Lease Payment (A)	Present value factor @ 10.078% (B)	Present value of lease payments (A x B = C)
1	15,000	0.908	13,620
2	15,000	0.825	12,375
3	15,000	0.750	11,250
4	15,000	0.681	10,215
5	15,000	0.619	9,285
6	15,000	0.562	8,430
7	15,000	0.511	7,665
8	15,000	0.464	6,960
9	15,000	0.421	6,315
10	15,000	0.383	5,745
10	30,000	0.383	11,480*
			1,03,340

* Figure has been rounded off for equalization of journal entry.

Calculation of present value of unguaranteed residual asset

Year	Lease Payment (A)	Present value factor @ 10.078% (B)	Present value of lease payments (A x B = C)
10	20,000	0.383	7,660

Classification of a sublease in case of an Intermediate Lessor

Q39: Entity ABC (original lessee/intermediate lessor) leases a building for five years. The building has an economic life of 40 years. Entity ABC subleases the building for four years.

How should the said sublease be classified by Entity ABC?

Ans: The sublease is classified with reference to the 'ROU Asset' in the head lease (and NOT the 'underlying building' of the head lease). Hence, when assessing the useful life criterion, the sublease term of four years is compared with five-year ROU Asset in the head lease (NOT

compared with 40-year economic life of the building) and accordingly may result in the sublease being classified as a finance lease.

Intermediate Lessor – Where the sublease is classified as a ‘Finance Lease’

Q40: Head lease:

An intermediate lessor enters into a five-year lease for 10,000 square metres of office space (the head lease) with Entity XYZ (the head lessor).

Sublease:

At the beginning of Year 3, the intermediate lessor subleases the 10,000 square metres of office space for the remaining lease term i.e three years of the head lease to a sub-lessee.

How should the said sublease be classified and accounted for by the Intermediate Lessor?

Ans: The intermediate lessor classifies the sublease by reference to the ROU Asset arising from the head lease (i.e., in this case, comparing the three-year sublease with the five-year ROU Asset in the head lease). The intermediate lessor classifies the sublease as a finance lease, having considered the requirements of Ind AS 116 (i.e., one of the criteria of ‘useful life’ for a lease to be classified as a finance lease).

When the intermediate lessor enters into a sublease, the intermediate lessor:

- (i) derecognises the ROU asset relating to the head lease that it transfers to the sublessee and recognises the net investment in the sublease;
- (ii) recognises any difference between the ROU asset and the net investment in the sublease in profit or loss; AND
- (iii) retains the lease liability relating to the head lease in its balance sheet, which represents the lease payments owed to the head lessor.

During the term of the sublease, the intermediate lessor recognises both

- finance income on the sublease AND
- interest expense on the head lease.

Intermediate Lessor – Where the sublease is classified as a ‘Operating Lease’

Q41: Head lease: An intermediate lessor enters into a five-year lease for 10,000 square metres of office space (the head lease) with Entity XYZ (the head lessor).

Sublease: At the commencement of the head lease, the intermediate lessor subleases the 10,000 square metres of office space for two years to a sub-lessee.

How should the said sublease be classified and accounted for by the Intermediate Lessor?

Ans: The intermediate lessor classifies the sublease by reference to the ROU Asset arising from the head lease (i.e., in this case, comparing the two-year sublease with the five-year ROU Asset in the head lease). The intermediate lessor classifies the sublease as an operating lease, having considered the requirements of Ind AS 116 (i.e., one of the criteria of ‘useful life’ for a lease to

be classified as a finance lease and since, it is not satisfied, classified the same as an operating lease).

When the intermediate lessor enters into the sublease, the intermediate lessor retains:

- the lease liability AND
- the ROU asset

both relating to the head lease in its balance sheet.

During the term of the sublease, the intermediate lessor:

- (a) recognises a depreciation charge for the ROU asset and interest on the lease liability;
AND
- (b) recognises lease income from the sublease.

Sub-lessee Accounting:

A sub-lessee accounts for its lease in the same manner as any other lease (i.e., as a new lease subject to Ind AS 116's recognition and measurement provisions).

Sale and leaseback transaction

Q42: An entity (Seller-lessee) sells a building to another entity (Buyer-lessor) for cash of ₹ 30,00,000. Immediately before the transaction, the building is carried at a cost of ₹ 15,00,000. At the same time, Seller-lessee enters into a contract with Buyer-lessor for the right to use the building for 20 years, with annual payments of ₹ 2,00,000 payable at the end of each year.

The terms and conditions of the transaction are such that the transfer of the building by Seller-lessee satisfies the requirements for determining when a performance obligation is satisfied in Ind AS 115 Revenue from Contracts with Customers.

The fair value of the building at the date of sale is ₹ 27,00,000. Initial direct costs, if any, are to be ignored. The interest rate implicit in the lease is 12% p.a., which is readily determinable by Seller-lessee.

Buyer-lessor classifies the lease of the building as an operating lease.

How should the said transaction be accounted by the Seller-lessee and the Buyer-lessor?

Ans: Considering facts of the case, Seller-lessee and buyer-lessor account for the transaction as a sale and leaseback.

Firstly, since the consideration for the sale of the building is not at fair value, Seller-lessee and Buyer - lessor make adjustments to measure the sale proceeds at fair value. Thus, the amount of the excess sale price of ₹ 3,00,000 (as calculated below) is recognised as additional financing provided by Buyer-lessor to Seller-lessee.

Sale Price:	30,00,000
Less: Fair Value (at the date of sale):	(27,00,000)
Additional financing provided by Buyer-lessor to Seller-lessee	3,00,000

Next step would be to calculate the present value of the annual payments which amounts to ₹ 14,94,000 (calculated considering 20 payments of ₹ 2,00,000 each, discounted at 12% p.a.) of which ₹ 3,00,000 relates to the additional financing (as calculated above) and balance ₹ 11,94,000 relates to the lease — corresponding to 20 annual payments of ₹ 40,164 and ₹ 1,59,836, respectively (refer calculations below).

Proportion of annual lease payments:

Present value of lease payments (as calculated above)	(A)	14,94,000
Additional financing provided (as calculated above)	(B)	3,00,000
Relating to the Additional financing provided	(C) = (E x B / A)	40,160
Relating to the Lease	(D) = (E – C)	1,59,840
Annual payments (at the end of each year)	(E)	2,00,000

Seller-Lessee:

At the commencement date, Seller-lessee measures the ROU asset arising from the leaseback of the building at the proportion of the previous carrying amount of the building that relates to the right-of-use retained by Seller-lessee, calculated as follows:

Carrying Amount	(A)	15,00,000
Fair Value (at the date of sale)	(B)	27,00,000
Discounted lease payments for the 20-year ROU asset	(C)	11,94,000
ROU Asset	[(A / B) x C]	6,63,333

Seller-lessee recognises only the amount of the gain that relates to the rights transferred to Buyer- lessor, calculated as follows:

Fair Value (at the date of sale)	(A)	27,00,000
Carrying Amount	(B)	15,00,000
Discounted lease payments for the 20-year ROU asset	(C)	11,94,000
Gain on sale of building	(D) = (A - B)	12,00,000

Relating to the right to use the building retained by

Seller-lessee	(E) = [(D / A) x C]	5,30,667
Relating to the rights transferred to Buyer-lessor	(D - E)	6,69,333

At the commencement date, Seller-lessee accounts for the transaction, as follows:

Cash	Dr.	30,00,000
ROU Asset	Dr.	6,63,333
To Building		15,00,000
To Financial Liability		14,94,000

To Gain on rights transferred 6,69,333

Buyer-Lessor:

At the commencement date, Buyer-lessor accounts for the transaction, as follows:

Building Dr. 27,00,000

Financial Asset

(20 payments of ₹ 40,160 discounted @ 12% p.a.) (approx.) Dr. 3,00,000

To Cash 30,00,000

After the commencement date, Buyer-lessor accounts for the lease by treating ₹ 1,59,840 of the annual payments of ₹ 2,00,000 as lease payments. The remaining ₹ 40,160 of annual payments received from Seller-lessee are accounted for as:

- (a) payments received to settle the financial asset of ₹ 3,00,000 AND
- (b) interest revenue.

Transition Approaches

Q43: A retailer (lessee) entered into 3-year lease of retail space beginning at 1 April 2017 with three annual lease payments of ₹ 2,00,000 due on 31 March 2018, 2019 and 2020, respectively. The lease is classified as an operating lease under Ind AS 17. The retailer initially applies Ind AS 116 for the first time in the annual period beginning at 1 April 2019. The incremental borrowing rate at the date of the initial application (i.e., 1 April 2019) is 10% p.a. and at the commencement of the lease (i.e., 1 April 2017) was 12% p.a. The ROU asset is subject to straight-line depreciation over the lease term. Assume that no practical expedients are elected, the lessee did not incur initial direct costs, there were no lease incentives and there were no requirements for the lessee to dismantle and remove the underlying asset, restore the site on which it is located or restore the underlying asset to the condition under the terms and conditions of the lease.

What would be the impact for the lessee using all the following transition approaches:

- a) Full Retrospective Approach
- b) Modified Retrospective Approach
 - Alternative 1
 - Alternative 2

Ans: Full Retrospective Approach:

Under the full retrospective approach, the lease liability and the ROU asset are measured on the commencement date (i.e., 1 April 2017 in this case) using the incremental borrowing rate at lease commencement date (i.e., 12% p.a. in this case). The lease liability is accounted for by the interest method subsequently and the ROU asset is subject to depreciation on the straight-line basis over the lease term of three years. Let us first calculate the Lease Liability and ROU Asset as follows:

Year	Payments (Cash flows)	Present Value Factor @12%	Discounted Cash flows / Present Value
31 Mar 2018	2,00,000	0.8929	1,78,580
31 Mar 2019	2,00,000	0.7972	1,59,440
31 Mar 2020	<u>2,00,000</u>	0.7118	<u>1,42,360</u>
	<u>6,00,000</u>		<u>4,80,380</u>

Lease Liability Schedule:

Year	Opening	Interest Expense @ 12%	Payments	Closing
31 Mar 2018	4,80,380	57,646	(2,00,000)	3,38,026
31 Mar 2019	3,38,026	40,563	(2,00,000)	1,78,589
31 Mar 2020	1,78,589	21,411*	(2,00,000)	-

*Difference is due to approximation

ROU asset Schedule:

Year	Opening	Depreciation	Closing
31 Mar 2018	4,80,380	(1,60,126)	3,20,254
31 Mar 2019	3,20,254	(1,60,127)	1,60,127
31 Mar 2020	1,60,127	(1,60,127)	-

The following table shows account balances under this method beginning at lease commencement:

Date	ROU Asset	Lease Liability	Interest Expense	Depreciation Expense	Retained Earnings
01 Apr 2017	4,80,380	4,80,380	-	-	-
31 Mar 2018	3,20,254	3,38,026	-	-	-
01 Apr 2018	3,20,254	3,38,026			(17,772)
31 Mar 2019	1,60,127	1,78,589	40,563	1,60,127	-
01 Apr 2019	1,60,127	1,78,589	-	-	-
31 Mar 2020	-	-	21,411	1,60,127	-

Ind AS 116 is applicable for the financial year beginning from 1st April 2019. Hence, 2019-20 is the first year of adoption and using Full retrospective method the comparative for 2018-19 needs to be restated and 1st April 2018 (i.e the opening of the comparative) is taken as transition date for adoption of this standard. At adoption, the lessee would record the ROU asset and lease liability at the 1 April 2018 by taking values from the above table, with the difference between the ROU asset and lease liability going to retained earnings as of 1 April 2018 (assuming that only the 2018-19 financial information is included as comparatives).

ROU Asset	Dr.	3,20,254	
Retained Earnings	Dr.	17,772	
To Lease Liability			3,38,026

To initially recognise the lease-related asset and liability as of 1 April 2018.

The following journal entries would be recorded during 2018-19:

Interest expense	Dr.	40,563	
To Lease Liability			40,563

To record interest expense and accrete the lease liability using the interest method.

Depreciation expense	Dr.	1,60,127	
To ROU Asset			1,60,127

To record depreciation expense on the ROU asset.

Lease Liability	Dr.	2,00,000	
To Cash			2,00,000

To record lease payment.

The following journal entries would be recorded during 2019-20:

Interest expense	Dr.	21,411	
To Lease Liability			21,411

To record interest expense and accrete the lease liability using the interest method.

Depreciation expense	Dr.	1,60,127	
To ROU Asset			1,60,127

To record depreciation expense on the ROU asset.

Lease Liability	Dr.	2,00,000	
To Cash			2,00,000

To record lease payment.

Modified Retrospective Approach (Alternative 1):

Under the modified retrospective approach (Alternative 1), the lease liability is measured based on the remaining lease payments (i.e., from the date of transition to the lease end date, viz., 01 April 2019 to 31 March 2020 in this case) discounted using the incremental borrowing rate as of the date of initial application being 01 April 2019 (i.e. 10% p.a. in this case). The ROU asset is at its carrying amount as if Ind AS 116 had been applied since the commencement date (i.e., 01 April 2017 in this case) by using incremental borrowing rate as at transition date. Let us first calculate the Lease Liability and ROU Asset as follows:

Year	Payments (Cash flows)	Discounting Factor @10%	Discounted Cash flows/ Present Value
31 Mar 2020	2,00,000	0.9091	1,81,820
	2,00,000		1,81,820

Lease Liability Schedule:

Year	Opening Balance	Interest Expense @ 10%	Payments	Closing Balance
31 Mar 2020	1,81,820	18,182	(2,00,000)	-

ROU Asset Schedule

Year	Opening Balance	Depreciation	Closing Balance
31 Mar 2020	1,65,790***	(1,65,790)	-

***(Refer note no 3)

The following table shows account balances under this method beginning at lease commencement:

Date	ROU Asset	Lease Liability	Interest Expense	Depreciation Expense	Retained Earnings
01 Apr 2017	4,97,360*	4,97,360* *	-	-	-
31 Mar 2018	3,31,574	3,47,096	49,737	1,65,786	-
31 Mar 2019	1,65,787	1,81,806	34,710	1,65,787	(16,019)
01 Apr 2019	1,65,787	1,81,806	-	-	-
31 Mar 2020	-	-	18,194	1,65,787	-

*(Refer note no 1)

** (Refer note no 2)

At adoption, the lessee would record the ROU asset and lease liability at the 1 April 2019 by taking values from the above table, with the difference between the ROU asset and lease liability going to retained earnings as of 1 April 2019.

ROU Asset Dr. 1,65,787

Retained Earnings Dr. 16,019

To Lease Liability 1,81,806

To initially recognise the lease-related asset and liability as of 1 April 2019.

The following journal entries would be recorded during 2019-20:

Interest expense Dr. 18,182

To Lease Liability 18,182

To record interest expense and accrete the lease liability using the interest method.

Depreciation expense Dr. 1,65,787

To ROU Asset 1,65,787

To record depreciation expense on the ROU asset.

Lease Liability Dr. 2,00,000

To Cash 2,00,000

To record lease payment.

Note 1:

Calculation of Present value of lease payments as at commencement date i.e., 01/04/2017

Year	Payments (Cash flows)	Discounting Factor @10%	Discounted Cash flows / Present Value
31 Mar 2018	2,00,000	0.9091	1,81,820
31 Mar 2019	2,00,000	0.8264	1,65,280
31 Mar 2020	<u>2,00,000</u>	0.7513	<u>1,50,260</u>
	<u>6,00,000</u>		<u>4,97,360</u>

Lease Liability Schedule:

Year	Opening	Interest Expense @ 10%	Payments	Closing
31 Mar 2018	4,97,360	49,736	(2,00,000)	3,47,096
31 Mar 2019	3,47,096	34,710	(2,00,000)	1,81,806
31 Mar 2020	1,81,806	18,194*	(2,00,000)	-

*Difference is due to approximation

Calculation of ROU asset as at transition date i.e., April 01, 2019

Year	Opening	Depreciation	Closing
31 Mar 2018	4,97,360	(1,65,786)	3,31,574
31 Mar 2019	3,31,574	(1,65,787)	1,65,787
31 Mar 2020	1,65,787	(1,65,787)	-

Modified Retrospective Approach (Alternative 2):

Under the modified retrospective approach (Alternative 2), the lease liability is also measured based on the remaining lease payments (i.e., from the date of transition to the lease end date, viz., 01 April 2019 to 31 March 2020 in this case) discounted using the incremental borrowing rate as of the date of initial application being 01 April 2019 (i.e. 10% p.a. in this case). The carrying amount of the ROU asset is an amount equal to the carrying amount of the lease liability on the date of initial application as there are no prepayments or accrual items and hence, no impact on retained earnings as on the transition date. Let us first calculate the Lease Liability and ROU Asset as follows:

Year	Payments (Cash flows)	Discounting Factor @ 10%	Discounted Cash flows / Present Value
31 Mar 2020	<u>2,00,000</u>	0.9091	<u>1,81,820</u>
	<u>2,00,000</u>		<u>1,81,820</u>

Lease Liability Schedule:

Year	Opening	Interest Expense	Payments	Closing
31 Mar 2020	1,81,820	18,182	(2,00,000)	-

ROU Asset Schedule:

Year	Opening	Depreciation	Closing
31 Mar 2020	1,81,820	(1,81,820)	-

The following table shows account balances under this method beginning at lease commencement:

Date	ROU Asset	Lease Liability	Interest Expense	Depreciation Expense	Retained Earnings
01 Apr 2019	1,81,820	1,81,820	-	-	-
31 Mar 2020	-	-	18,182	1,81,820	-

At adoption, the lessee would record the ROU asset and lease liability at the 1 April 2019 by taking values from the above table and there will be no impact on retained earnings on the transition date being 1 April 2019 since under this alternative, ROU Asset is equal to the Lease Liability.

ROU Asset Dr. 1,81,820
 To Lease Liability 1,81,820

To initially recognise the lease-related asset and liability as of 1 April 2019.

The following journal entries would be recorded during 2019-20:

Interest expense Dr. 18,182
 To Lease Liability 18,182

To record interest expense and accrete the lease liability using the interest method.

Depreciation expense Dr. 1,81,820
 To ROU Asset 1,81,820

To record depreciation expense on the ROU asset.

Lease Liability Dr. 2,00,000
 To Cash 2,00,000

To record lease payment.

A summary of the lease contract's accounting (assuming there are no changes due to reassessments) is, as follows:

Particulars	Full Retrospective Approach	Modified Retrospective Approach (Alternative 1)	Modified Retrospective Approach (Alternative 2)
<u>Opening balance sheet impact as on 1 April 2019:</u>			
ROU Asset	1,60,126	1,65,787	1,81,820
Lease Liability	1,78,589	1,81,806	1,81,820
<u>Period ended 31 March 2020 activity:</u>			
Cash lease payments	2,00,000	2,00,000	2,00,000
<u>Lease payments recognised:</u>			
Interest expense	21,411	18,194	18,182
Depreciation expense	<u>1,60,127</u>	<u>1,65,787</u>	<u>1,81,820</u>
Total periodic expense	<u>1,81,538</u>	<u>1,83,981</u>	<u>2,00,002</u>

Q44: A lessee enters into a ten-year contract with a lessor (freight carrier) to transport a specified quantity of goods. Lessor uses rail wagons of a particular specification, and has a large pool of similar rail wagons that can be used to fulfil the requirements of the contract. The rail wagons and engines are stored at lessor's premises when they are not being used to transport goods. Costs associated with substituting the rail wagons are minimal for lessor.

Whether the lessor has substantive substitutions rights and whether the arrangement contains a lease?

Ans: In this case, the rail wagons are stored at lessor's premises and it has a large pool of similar rail wagons and substitution costs to be incurred are minimal. Thus, the lessor has the practical ability to substitute the asset. If at any point, the same become economically beneficial for the lessor to substitute the wagons, he can do so and hence, the lessor's substitution rights are substantive and the arrangement does not contain a lease.

Q45: Customer M enters into a 20-year contract with Energy Supplier S to install, operate and maintain a solar plant for M's energy supply. M designed the solar plant before it was constructed – M hired experts in solar energy to assist in determining the location of the plant and the engineering of the equipment to be used. M has the exclusive right to receive and the obligation to take any energy produced. Whether it can be established that M is having the right to control the use of identified asset?

Ans: In this case, the nature of the solar plant is such that all of the decisions about how and for what purpose the asset is used are predetermined because:

- the type of output (i.e. energy) and the production location are predetermined in the agreement; and
- when, whether and how much energy is produced is influenced by the sunlight and the design of the solar plant.

Because M designed the solar plant and thereby predetermined any decisions about how and for what purpose it is used, M is considered to have the right to direct the use. Although regular maintenance of the solar plant may increase the efficiency of the solar panels, it does not give

the supplier the right to direct how and for what purpose the solar plant is used. Hence, M is having a right to control the use of asset.

Q46: A Customer enters into a ten-year contract with a Company (a ship owner) for the use of an identified ship. Customer decides whether and what cargo will be transported, and when and to which ports the ship will sail throughout the period of use, subject to restrictions specified in the contract. These restrictions prevent the company from sailing the ship into waters at a high risk of piracy or carrying explosive materials. The company operates and maintains the ship, and is responsible for safe passage.

Does the customer has the right to direct how and for what purpose the ship is to be used throughout the period of use and whether the arrangement contains a lease?

Ans: The customer has the right to direct the use of the ship because the contractual restrictions are merely protective rights that protect the company's investment in the ship and its personnel. In the scope of its right of use, the customer determines how and for what purpose the ship is used throughout the ten-year period because it decides whether, where and when the ship sails, as well as the cargo that it will transport.

The customer has the right to change these decisions throughout the period of use and hence, the contract contains a lease.

Q47: A Lessee enters into a ten-year lease contract with a Lessor to use an equipment. The contract includes maintenance services (as provided by lessor). The Lessor obtains its own insurance for the equipment. Annual payments are ₹ 10,000 (₹ 1,000 relate to maintenance services and ₹ 500 to insurance costs).

The Lessee is able to determine that similar maintenance services and insurance costs are offered by third parties for ₹ 2,000 and ₹ 500 a year, respectively. The Lessee is unable to find an observable stand-alone rental amount for a similar equipment because none is leased without related maintenance services provided by the lessor.

How would the Lessee allocate the consideration to the lease component?

Ans: The observable stand-alone price for maintenance services is ₹ 2,000. There is no observable stand-alone price for the lease. Further, the insurance cost does not transfer a good or service to the lessee and therefore, it is not a separate lease component.

Thus, the Lessee allocates ₹ 8,000 (₹ 10,000 – ₹ 2,000) to the lease component.

Q48: A Lessee enters into a non-cancellable lease contract with a Lessor to lease a building. Initially, the lease is for five years, and the lessee has the option to extend the lease by another five years at the same rental.

To determine the lease term, the lessee considers the following factors:

- Market rentals for a comparable building in the same area are expected to increase by 10% over the ten-year period covered by the lease. At inception of the lease, lease rentals are in accordance with current market rents.
- The lessee intends to stay in business in the same area for at least 20 years.

- The location of the building is ideal for relationships with suppliers and customers. What should be the lease term for lease accounting under Ind AS 116?

Ans: After considering all the stated factors, the lessee concludes that it has a significant economic incentive to extend the lease.

Thus, for the purpose of lease accounting under Ind AS 116, the lessee uses a lease term of ten years.

Q49: A Lessee enters into a lease of a five-year-old machine. The non-cancellable lease term is 15 years. The lessee has the option to extend the lease after the initial 15-year period for optional periods of 12 months each at market rents.

To determine the lease term, the lessee considers the following factors:

- The machine is to be used in manufacturing parts for a type of plane that the lessee expects will remain popular with customers until development and testing of an improved model are completed in approximately 15 years.
- The cost to install the machine in lessee's manufacturing facility is significant.
- The non-cancellable term of lessee's manufacturing facility lease ends in 19 years, and the lessee has an option to renew that lease for another twelve years.
- Lessee does not expect to be able to use the machine in its manufacturing process for other types of planes without significant modifications.
- The total remaining life of the machine is 30 years.

What should be the lease term for lease accounting under Ind AS 116?

Ans: The lessee notes that the terms for the optional renewal provide no economic incentive and the cost to install is significant. The lessee has no incentive to make significant modifications to the machine after the initial 15-year period. Therefore, the lessee does not expect to have a business purpose for using the machine after the non-cancellable lease term of 15 years.

Thus, the lessee concludes that the lease term consists of the 15-year non-cancellable period only.

Q50: A Company leases a manufacturing facility. The lease payments depend on the number of operating hours of the manufacturing facility, i.e., the lessee has to pay ₹ 2,000 per hour of use. The annual minimum payment is ₹ 2,00,00,000. The expected usage per year is 20,000 hours.

Whether the said payments be included in the calculation of lease liability under Ind AS 116?

Ans: The said lease contains in-substance fixed payments of ₹ 2,00,00,000 per year, which are included in the initial measurement of the lease liability under Ind AS 116.

However, the additional ₹ 2,00,00,000 that the company expects to pay per year are variable payments that do not depend on an index or rate and, thus, are not included in the initial measurement of the lease liability but, are expensed when the over-use occurs.

NEW QUESTIONS IN SM (FOR MAY 21 ATTEMPT)**Deferral of lease payments not a lease modification**

Q51: Lessor L leases retail space to Lessee Z and classifies the lease as an operating lease. The lease includes fixed lease payments of ₹ 10,000 per month.

Due to the COVID-19 pandemic, L and Z agree on a rent concession that allows Z to pay no rent in the period from July, 2020 to September 2020 but to pay rent of 20,000 per month in the period from January 2021 to March 2021. There are no other changes to the lease.

How this will be accounted for by lessor?

Ans: L determines that the reduction in lease payments in July 2020 to September 2020 and the proportional increase in January 2021 to March 2021 does not result in an overall change in the consideration for the lease.

L does not account for the change as a lease modification. L continues to recognise operating lease income on a straight-line basis, which is representative of the pattern in which Z's benefit from use of the underlying asset is diminished.

Unamortised lease incentive: Lease modification

Q52: Lessor M enters into a 10-year lease of office space with Lessee K, which commences on 1 April 2015. The rental payments are 15,000 per month, payable in arrears. M classifies the lease as an operating lease. M reimburses K's relocation costs of ₹ 600,000, which M accounts for as a lease incentive. The lease incentive is recognised as a reduction in rental income over the lease term using the same basis as for the lease income – in this case, on a straight-line basis over 10 years.

On 1 April 2020, during the COVID-19 pandemic, M agrees to waive K's rental payments for May, June and July 2020.

This decrease in consideration is not included in the original terms and conditions of the lease and is therefore a lease modification.

How this will be accounted for by lessor?

Ans: M accounts for this modification as a new operating lease from its effective date – i.e. 1 April 2020. M recognises the impact of the waiver on a straight-line basis over the five-year term of the new lease. M also takes into account the carrying amount of the unamortised lease incentive on 1 April 2020 of ₹ 3,00,000. M amortises this balance on a straight-line basis over the five-year term of the new lease.

Modification that is not a separate lease and lease would have been classified as an operating lease

Q53: Lessor L enters into an eight-year lease of 40 lorries with Lessee M that commences on 1 January 2018. The lease term approximates the lorries' economic life and no other features indicate that

the lease transfer or does not transfer substantially all of the risks and rewards incidental to ownership of the lorries. Assuming that substantially all of the risks and rewards incidental to ownership of the lorries are transferred, L classifies the lease as a finance lease.

During the COVID-19 pandemic, M's business has contracted. In June 2020, L and M amend the contract so that it now terminates on 31 December 2020.

Early termination was not part of the original terms and conditions of the lease and this is therefore a lease modification. The modification does not grant M an additional right to use the underlying assets and therefore cannot be accounted for as a separate lease.

How this will be accounted for by lessor?

Ans: L determines that, had the modified terms been effective at the inception date, the lease term would not have been for the major part of the lorries' economic life. Furthermore, there are no other indicators that the lease would have transferred substantially all of the risks and rewards incidental to ownership of the lorries. Therefore, the lease would have been classified as an operating lease.

In June 2020, L accounts for the modified lease as a new operating lease. The lessor L:

- a) derecognises the finance lease receivable and recognises the underlying assets in its statement of financial position according to the nature of the underlying asset – i.e. as property, plant and equipment in this case; and
- b) measures the aggregate carrying amount of the underlying assets as the amount of the net investment in the lease immediately before the effective date of the lease modification.

Revised consideration is substantially the same as or less than the original consideration

Q54: Retailer Q leases a store in a large retail mall. The rent payable is ₹ 1,00,000 per month. As a result of the COVID-19 pandemic, Q agrees with the lessor to defer the rent originally due in the months April, 2020 to June, 2020.

As part of this agreement, the rent for the period January, 2021 to March 2021 will be increased by ₹ 1,10,000 per month, which compensates the lessor for the deferred rent as adjusted for the time value of money.

Whether the rent deferral is eligible for the practical expedient if the other conditions are met?

Ans: The rent deferral satisfies the criteria to apply the practical expedient because:

- It is a rent concession occurring as a direct consequence of the pandemic;
- Increase in rentals during January, 2021 to March 2021 compensates for the time value of money;
- Rent deferral reduces lease payments originally due on or before 30 June 2021; and
- There is no substantive change to other terms and conditions of the lease. Hence, Q considers applying the practical expedient.

Consider only payments that were originally due on or before 30 June, 2021

Q55: Lessee P operates a chain of restaurants and leases several outlets. As a result of COVID-19 pandemic, P agrees a rent deferral with the lessor.

Under the terms of the rent deferral, rent originally due in the period July 2020 to December 2020 will be added to the rent due in the period July 2021 to December 2021.

Whether the rent deferral is eligible for the practical expedient if the other conditions are met?

Ans: The rent deferral satisfies the criteria to apply the practical expedient because:

- It is a rent concession occurring as a direct consequence of the pandemic;
- Recovery of rentals during July, 2021 to December, 2021 is substantially the same as, or less than, the consideration for the lease immediately preceding the change;
- Rent deferral reduces lease payments originally due on or before 30 June 2021; and
- There is no substantive change to other terms and conditions of the lease.

Therefore, P concludes that the rent deferral meets the 'payments due' eligibility criterion.

Reduction in rent payments that extends beyond 30 June 2021

Q56: Lessee T leases office buildings from a lessor. As a result of the COVID-19 pandemic, in September 2020, T agrees a rent concession with the lessor, under which the monthly rent will be reduced by 50% per month for the 12 months commencing 1 October 2020.

Whether the rent deferral is eligible for the practical expedient if the other conditions are met?

Ans: The rent deferral does not satisfies the criteria to apply the practical expedient because out of the listed eligibility criteria given in para 46B of Ind AS 116, rent deferral reduces lease payments starting from October, 2020 and reduction will continue till September, 2021 which is beyond 30 June 2021.

Therefore, T is not permitted to apply the practical expedient.

Deferral of rent payments by extending the lease term

Q57: A lessee is granted a rent concession by the lessor whereby the lease payments for the period April 2020 to June 2020 are deferred. Three months are added to the end of the lease term at the same monthly rent, and the lessee repays the deferred rent during those additional months. The rent concession is a direct consequence of COVID-19.

Whether the rent deferral is eligible for the practical expedient?

Ans: The lessee considers applying the practical expedient. In considering whether this rent concession is eligible for the practical expedient, the lessee notes the following.

Firstly, the revised consideration in the lease is substantially the same as the original – i.e. the condition in paragraph 46B(a) of Ind AS 116 is met.

Secondly, the rent concession only reduces lease payments originally due in 2020 – i.e. before 30 June 2021 – so the condition in paragraph 46B(b) of Ind AS 116 is met.

Thirdly, there is a change in the lease term – an extension by three months.

There is no explicit guidance on what is considered 'substantive'. Judgement will need to be applied, considering both qualitative and quantitative factors. The lessee assesses that three-month extension at the end of the lease term with substantially the same lease payments, would not constitute a substantive change.

Hence, the condition in paragraph 46B(c) of Ind AS 116 is met. Since, the rent concession is a direct consequence of COVID-19 and all three conditions in paragraph 46B of Ind AS 116 are met, the lessee concludes that the rent concession is eligible for application of practical expedient.

Forgiveness of lease payments

Q58: Lessee Z entered into a lease contract with Lessor L to lease 1,500 sqm of retail space for five years. The lease commenced on 1 April 2018 and the rental payments are 100,000 payable quarterly in advance on 1 April, 1 July, 1 October and 1 January. Z's incremental borrowing rate at commencement of the lease is 5% (assume that the interest rate implicit in the lease cannot be readily determined). There are no initial direct costs, lease incentives or dismantling costs.

Z's business is severely impacted by the COVID-19 pandemic and L and Z negotiate a rent concession. On 1 June 2020, L agrees to provide Z with an unconditional rent concession that allows Z to forego payment of its rent due on 1 July – i.e. L forgives Z the rent payment of 100,000 due on 1 July.

What will be the accounting treatment in the books of lessee for rent concessions assuming that it is eligible for practical expedient?

Ans: Z determines that the rent concession is eligible for the practical expedient.

Applying the practical expedient, Z should account for the forgiveness of rent as a negative variable lease payment. The rent concession is unconditional, so the event that triggers the variable lease payment is the agreement between Z and L for the rent concession on 1 June 2020.

Therefore, Z accounts for the rent concession as a negative variable lease payment on 1 June.

Assuming that there are no other changes to the lease, Z continues to use the retail space and the right-of-use asset is not impaired. The lease accounting entries will be as follows:

- recognise the rent concession as a variable lease payment in profit or loss (i.e. record a debit to the lease liability and a corresponding credit in the income statement); and
- continue to accrue interest on the lease liability at the unchanged incremental borrowing rate of 5% (i.e. record a debit to interest expense and a corresponding credit to the lease liability).

After accounting for the impact of the rent concession, Z's lease liability represents the present value of all future lease payments owing to L, discounted at the unchanged incremental borrowing rate. Z has effectively derecognised the portion of the lease liability that has been extinguished by the forgiveness of the quarterly lease payment due on 1 July 2020.

In addition, Z continues to depreciate the carrying amount of the right-of-use asset, which is unchanged as a result of the rent concession.

QUESTIONS FROM OTHER SOURCES

Q59: On 1 April 2017, Jupiter Ltd has taken a property on a 20-year lease from Moon Ltd.. Jupiter Ltd paid a lease premium of ₹ 30,00,000 on 1 April 2017. The terms of the lease required Jupiter Ltd to make annual payments of ₹ 500,000 in arrears, the first of which was made on 31 March 2018.

On 1 April 2017 the fair values of the leasehold interests in the leased property were as follows:

- Land ₹ 30,00,000.
- Buildings ₹ 45,00,000.

There is no opportunity to extend the lease term beyond 31 March 2037. On 1 April 2017, the estimated useful economic life of the buildings was 20 years.

The annual rate of interest implicit in finance leases can be taken to be 9.2%. The present value of 20 payments of ₹ 1 in arrears at a discount rate of 9.2% is ₹ 9.

Required: Explain the accounting treatment for the above property lease in the books of Jupiter Ltd and Moon Ltd. for the year ended 31 March 2018.

Ans: In the Books of Moon Ltd.

Statement of Profit and Loss	Rs.
Operating lease Income	2,60,000
Finance Income relating to finance leases	2,48,400
Balance Sheet	Rs.
Non-Current Assets	
Financial assets	
- Lease Receivable	25,92,100
Current Assets	
Financial assets	
- Lease Receivable	56,300
Non-Current Liabilities	
Other non- current liability	
- Pre received Lease Income	11,40,000
Current Liabilities	
Other Current liability	
- Pre received Lease Income	60,000

Explanation and supporting calculations:

Separate decisions are made for the land and buildings elements of the lease.

- 1) The land lease is an operating lease because land has an indefinite useful economic life and the lease term is 20 years.

The lease premium and annual rentals are apportioned 40% (3/7·5) to the land element.

Therefore, the premium for the land element is Rs. 12,00,000 (Rs. 30,00,000 X 40%) and the annual rentals for the land element Rs. 200,000 (Rs. 500,000 X 40%). This makes the total lease payments Rs. 52,00,000 (Rs. 12,00,000 + 20 X Rs. 200,000).

The Lease Income for the current period is Rs. 2,60,000 (Rs. 52,00,000 X 1/20).

The amount paid in the current period are: the land element is Rs. 14,00,000 (Rs. 12,00,000 + Rs. 200,000). Therefore, there is a pre received Income of Rs. 1,140,000 (Rs. 14,00,000 – Rs. 2,60,000) at the year end.

In the next 19 periods, the lease income will be Rs. 2,60,000 and the lease payment will be Rs. 200,000. Therefore Rs. 60,000 of the pre received lease income will reverse in each period. This means that Rs. 60,000 of the pre received lease income will be a current liability, and the balance a non-current liability.

- 2) The buildings element of the lease will be a finance lease because the lease term is for substantially all of the useful life of the buildings.

The premium apportioned to the building's element is Rs. 18,00,000 (Rs. 30,00,000 X 60%) and the annual rental apportioned to the buildings is Rs. 300,000 (Rs. 500,000 X 60%).

The initial carrying value of the lease receivable will be net investment i.e., Rs. 45,00,000 (Rs. 18,00,000 + Rs. 300,000 X 9).

Building will be derecognised at its Carrying amount (amount is not given in the question) and the difference between the carrying amount building and net investment in the assets will be recognised as gain or loss on sale of building in PL

The finance income in respect of the finance lease and the closing non-current assets is shown in the working below.

The closing current assets is Rs. 56,300 (Rs. 26,48,400 – Rs. 25,92,100).

The closing non - current assets is Rs. 25,92,100

Lease liability profile – working

Year ended 31 March	Bal b/f	Finance Income @9.2%	Lease rental payment	Bal c/f
2018	27,00,000	2,48,400	(3,00,000)	26,48,400
2019	26,48,400	243,700	(3,00,000)	25,92,100

* = Net of lease premium of Rs. 18,00,000 (Rs. 45,00,000 – Rs. 18,00,000 = Rs. 27,00,000).

In the books of Jupiter Ltd.

Statement of Profit and Loss	Rs.
Depreciation on ROU Assets	3,75,000

Finance Expenses	4,14,000
Balance Sheet	Rs.
Property, plant and equipment	
- ROU assets (if classified as PPE)	71,25,000
Lease liability:	
In non-current liabilities	43,20,088
In current liabilities	93,912

Explanation and supporting calculations:

Separate decisions are not made for the land and buildings elements of the lease.

At the commencement date, Jupiter LTD would initially recognise ROU Asset and the corresponding Lease Liability of ₹ 75,00,000 which is calculated as follows:

The initial carrying value of the lease liability and ROU assets is Rs. 75,00,000 (Rs. 30,00,000 + Rs. 500,000 X 9).

Therefore, the annual depreciation charge is Rs. 3,75,000 (Rs. 75,00,000 X 1/20) and the closing balance of ROU assets is Rs. 71,25,000 (Rs. 75,00,000 – Rs. 3,75,000).

The finance cost in respect of the lease liability and the closing current and non-current liability is shown in the working below.

The closing current liability is Rs. 93,912 (Rs. 44,14,000 – Rs. 43,20,088).

The closing current liability is Rs. 43,20,088

Lease liability profile – working

Year ended 31 March	Bal b/f	Finance Cost @9.2%	Lease rental payment	Bal c/f
2018	*45,00,000	4,14,000	(5,00,000)	44,14,000
2019	44,14,000	4,06,088	(5,00,000)	43,20,088

* = Net of lease premium of Rs. 45,00,000 (Rs. 75,00,000 – Rs. 30,00,000 = Rs. 45,00,000).

QUESTIONS FROM RTP/MTP/EXAMS

Q60: Entity X (lessee) entered into a lease agreement ('lease agreement') with Entity Y (lessor) to lease an entire floor of a shopping mall for a period of 9 years. The monthly lease rent is ₹ 70,000. To carry out its operations smoothly, Entity X simultaneously entered into another agreement ('facilities agreement') with Entity Y for using certain other facilities owned by Entity Y such as passenger lifts, DG sets, power supply infrastructure, parking space etc., which are specifically mentioned in the agreement, for monthly service charges amounting to ₹ 1,00,000. As per the agreement, the ownership of the facilities shall remain with Entity Y. Lessee's incremental borrowing rate is 10%.

The facilities agreement clearly specifies that it shall be co-existent and coterminous with 'lease agreement'. The facility agreement shall stand terminated automatically on termination or expiry of 'lease agreement'.

Entity X has assessed that the stand-alone price of 'lease agreement' is ₹ 1,20,000 per month and stand-alone price of the 'facilities agreement' is ₹ 80,000 per month. Entity X has not elected to apply the practical expedient in paragraph 15 of Ind AS 116 of not to separate non-lease component (s) from lease component(s) and accordingly it separates non-lease components from lease components.

How will Entity X account for lease liability as at the commencement date? [RTP NOV 2020]

Ans: Entity X identifies that the contract contains lease of premises and non-lease component of facilities availed. As Entity X has not elected to apply the practical expedient as provided in paragraph 15, it will separate the lease and non-lease components and allocate the total consideration of ₹ 1,70,000 to the lease and non-lease components in the ratio of their relative stand-alone selling prices as follows:

Particulars	Stand-alone Prices	% of total Stand-alone Price	Allocation of consideration
	₹		₹
Building rent	1,20,000	60%	1,02,000
Service charge	<u>80,000</u>	<u>40%</u>	<u>68,000</u>
Total	<u>2,00,000</u>	<u>100%</u>	<u>1,70,000</u>
Total	<u>2,00,000</u>	<u>100%</u>	<u>1,70,000</u>

As Entity X's incremental borrowing rate is 10%, it discounts lease payments using this rate and the lease liability at the commencement date is calculated as follows:

Year	Lease Payment (A)	Present value factor @ 10% (B)	Present value of lease payments (A X B = C)
Year 1	1,02,000	.909	92,718
Year 2	1,02,000	.826	84,252
Year 3	1,02,000	.751	76,602
Year 4	1,02,000	.683	69,666
Year 5	1,02,000	.621	63,342
Year 6	1,02,000	.564	57,528
Year 7	1,02,000	.513	52,326
Year 8	1,02,000	.467	47,634
Year 9	1,02,000	.424	43,248
Lease Liability at commencement date			5,87,316

Further, ₹ 68,000 allocated to the non-lease component of facility used will be recognised in profit or loss as and when incurred.

Q61: Entity X is an Indian entity whose functional currency is Indian Rupee. It has taken a plant on lease from Entity Y for 5 years to use in its manufacturing process for which it has to pay annual rentals in arrears of USD 10,000 every year. On the commencement date, exchange rate was USD = ₹ 68. The average rate for Year 1 was ₹ 69 and at the end of year 1, the exchange rate was ₹ 70. The incremental borrowing rate of Entity X on commencement of the lease for a USD borrowing was 5% p.a.

How will entity X measure the right of use (ROU) asset and lease liability initially and at the end of Year 1?

RTP May 2021

Ans: On initial measurement, Entity X will measure the lease liability and ROU asset as under:

Year	Lease Payments (USD)	Present Value factor @ 5%	Present Value of Lease Payment	Conversion rate (spot rate)	INR value
1	10,000	0.952	9,520	68	6,47,360
2	10,000	0.907	9,070	68	6,16,760
3	10,000	0.864	8,640	68	5,87,520
4	10,000	0.823	8,230	68	5,59,640
5	10,000	0.784	7,840	68	5,33,120
Total			43,300		29,44,400

As per Ind AS 21, The Effects of Changes in Foreign Exchange Rates, monetary assets and liabilities are restated at each reporting date at the closing rate and the difference due to foreign exchange movement is recognised in profit and loss whereas non - monetary assets and liabilities carried measured in terms of historical cost in foreign currency are not restated.

Accordingly, the ROU asset in the given case being a non-monetary asset measured in terms of historical cost in foreign currency will not be restated but the lease liability being a monetary liability will be restated at each reporting date with the resultant difference being taken to profit and loss.

At the end of Year 1, the lease liability will be measured in terms of USD as under: Lease Liability:

Year	Initial Value (USD) (a)	Lease Payment (b)	Interest @ 5% (c) = (a x 5%)	Closing Value (USD) (d = a + c - b)
1	43,300	10,000	2,165	35,465

Interest at the rate of 5% will be accounted for in profit and loss at average rate of ₹ 69 (i.e., USD 2,165 x 69) = ₹ 1,49,385.

Particulars		Dr. (₹)	Cr. (₹)
Interest Expense	Dr.	1,49,385	
To Lease liability			1,49,385

Lease payment would be accounted for at the reporting date exchange rate, i.e. ₹ 70 at the end of year 1

Particulars		Dr. (₹)	Cr. (₹)
Lease liability	Dr.	7,00,000	
To Cash			7,00,000

As per the guidance above under Ind AS 21, the lease liability will be restated using the reporting date exchange rate i.e., ₹ 70 at the end of Year 1. Accordingly, the lease liability will be measured at ₹ 24,82,550 (35,465 x ₹ 70) with the corresponding impact due to exchange rate movement of ₹ 88,765 (24,82,550 – (29,44,400 + 1,49,385 – 700,000) taken to profit and loss.

At the end of year 1, the ROU asset will be measured as under:

Year	Initial Value (USD) (a)	Lease Payment (b)	Closing Value (USD) (d = a + c - b)
1	43,300	10,000	35,465

Q62: Coups Limited availed a machine on lease from Ferrari Limited. The terms and conditions of the Lease are as under:

Lease period is 3 years, machine costing ₹ 8,00,000.

- Machine has expected useful life of 5 years.
- Machine reverts back to Ferrari Limited on termination of lease.
- The unguaranteed residual value is estimated at ₹ 50,000 at the end of 3rd year.
- 3 equal annual installments are made at the end of each year.
- Implicit Interest Rate (IRR) = 10%.
- Present value of ₹ 1 due at the end of 3rd year at 10% rate of interest is 0.7513.
- Present value of annuity of ₹ 1 due at the end of 3rd year at 10% IRR is 2.4868.

You are required to ascertain whether it is a Finance Lease or Operating Lease and also calculate Unearned Finance Income with the relevant context to relevant Ind AS.

Exam Paper January 2021 (6 Marks)

Ans: It is assumed that the fair value of the machine on lease is equivalent to the cost of the machine.

- (i) A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership of an underlying asset. A lease is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to ownership of an underlying asset.

(ii) **Computation of annual lease payment to the lessor**

	₹
Cost of equipment / fair value	8,00,000
Unguaranteed residual value	50,000
Present value of residual value after third year @ 10% (50,000 x 0.7513)	37,565
Fair value to be recovered from lease payments (8,00,000 – 37,565)	7,62,435
Present value of annuity for three years is 2.4868	
Annual lease payment = 7,62,435 / 2.4868	3,06,593

The present value of lease payment i.e., ₹ 7,62,435 is more than 95% of the fair market value i.e., ₹ 8,00,000. The present value of minimum lease payments substantially covers the initial fair value of the leased asset and lease term (i.e. 3 years) covers the major part of the life of asset (i.e. 5 years). Therefore, it constitutes a finance lease.

(iii) **Computation of Unearned Finance Income**

	₹
Total lease payments (₹ 3,06,593 x 3)	9,19,779
<i>Add:</i> Unguaranteed residual value	50,000
Gross investment in the lease	9,69,779
<i>Less:</i> Present value of investment (lease payments and residual value) (37,565 + 7,62,435)	(8,00,000)
Unearned finance income	1,69,779

NOTES

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CHAPTER 25

INCOME TAXES (IND AS 12)

QUESTIONS FROM ICAI STUDY MATERIAL

Q1: An entity has a deductible temporary difference of ₹ 50,000. It has no taxable temporary differences against which it can be offset. The entity is also not anticipating any future profits. However, it can implement a tax planning strategy which can generate profits up to ₹ 60,000. The cost of implementing this tax planning strategy is ₹ 12,000. The tax rate is 30%. Compute the deferred tax asset that should be recognised.

Ans: The entity should recognise a deferred tax asset of ₹ 14,400 @ 30% of ₹ 48,000 (₹ 60,000 – ₹ 12,000).

The balance deferred tax asset of ₹ 600 @ 30% on ₹ 2,000 (₹ 50,000 – ₹ 48,000) shall remain unrecognised.

Q2: A Limited recognises interest income in its books on accrual basis. However, for income tax purposes the method is 'cash basis'. On December 31, 20X1, it has interest receivable of ₹ 10,000 and the tax rate was 25%. On February 28, 20X1, the finance bill is introduced in the legislation that changes the tax rate to 30%. The finance bill is enacted as Act on May 21, 20X2. Discuss the treatment of deferred tax in case the reporting date of A Limited's financial statement is December 31, 20X1 and these are approved for issued on May 31, 20X2.

Ans: The difference of ₹ 10,000 between the carrying value of interest receivable of ₹ 10,000 and its tax base of NIL is a taxable temporary difference.

A Limited has to recognise a deferred tax liability of ₹ 2,500 (₹ 10,000 x 25%) in its financial statements for the reporting period ended on December 31, 20X1.

It will not recognise the deferred tax liability @ 30% because as on December 31, 20X1, this tax rate was neither substantively enacted nor enacted on the reporting date. However, if the effect of this change is material, A Limited should disclose this difference in its financial statements.

Q3: An asset which cost ₹ 150 has a carrying amount of ₹ 100. Cumulative depreciation for tax purposes is ₹ 90 and the tax rate is 25%. Calculate the tax base.

Ans: The tax base of the asset is ₹ 60 (cost of ₹ 150 less cumulative tax depreciation of ₹ 90). To recover the carrying amount of ₹ 100, the entity must earn taxable income of ₹ 100, but will only be able to deduct tax depreciation of ₹ 60. Consequently, the entity will pay income taxes of ₹ 10 (₹ 40 at 25%) when it recovers the carrying amount of the asset. The difference between the carrying amount of ₹ 100 and the tax base of ₹ 60 is a taxable temporary difference of ₹ 40. Therefore, the entity recognises a deferred tax liability of ₹ 10 (₹ 40 at 25%) representing the income taxes that it will pay when it recovers the carrying amount of the asset.

Inventory -----	Dr	120	
Debtors -----	Dr	200	
Goodwill -----	Dr	22.5 (30- 7.5)	
DTA -----	Dr	7.5	
To 9% Debentures			100
To Bank			500

Q6: B Limited is a newly incorporated entity. Its first financial period ends on March 31, 2011. As on the said date, the following temporary differences exist:

- Taxable temporary differences relating to accelerated depreciation of ₹ 9,000. These are expected to reverse equally over next 3 years.
- Deductible temporary differences of ₹ 4,000 expected to reverse equally over next 4 years.

It is expected that B Limited will continue to make losses for next 5 years. Tax rate is 30%. Losses can be carried forward but not backwards.

Discuss the treatment of deferred tax as on March 31, 2011.

Ans: The year-wise anticipated reversal of temporary differences is as under:

Particulars	March 31, 2012	March 31, 2013	March 31, 2014	March 31, 2015
Reversal of taxable temporary difference relating to accelerated depreciation over next 3 years (₹ 9,000/3)	3,000	3,000	3,000	Nil
Reversal of deductible temporary difference relating to preliminary expenses over next 4 years (₹ 4,000/4)	1,000	1,000	1,000	1,000

B Limited will recognise a deferred tax liability of ₹ 2,700 on taxable temporary difference relating to accelerated depreciation of ₹ 9,000 @ 30%.

However, it will limit and recognise a deferred tax asset on reversal of deductible temporary difference relating to preliminary expenses reversing up to year ending March 31, 2014 amounting to ₹ 900 (₹ 3,000 @ 30%). No deferred tax asset shall be recognized for the reversal of deductible temporary difference for the year ending on March 31, 2015 as there are no taxable temporary differences. Further, the outlook is also a loss. However, if there are tax planning opportunities that could be identified for the year ending on March 31, 2015 deferred tax asset on the remainder of ₹ 1,000 (₹ 4,000 – ₹ 3,000) of deductible temporary difference could be recognised at the 30% tax rate.

Q7: An entity has unutilised deductible temporary difference of ₹ 1,000 at the end of year 1 that is going to be reversed in the year 2. In year 2, taxable profits are computed because of tax disallowances of unpaid statutory liabilities of ₹ 1,000 which can be claimed as deduction only

in year 3, if paid, but cannot be carried forward. The entity expects nil taxable profit in year 3. How much DTA will be recognised in the Year 2 if Tax rate is 30%.

Ans: In this case, no deferred tax asset will be created.

Q8: An entity has unutilised deductible temporary difference of ₹ 1,000 at the end of year 1 that is going to be reversed in the year 2. In year 2, taxable profits are computed because of tax disallowances of unpaid statutory liabilities of ₹ 1,000 which can be claimed as deduction only in year 3, if paid, but cannot be carried forward. The entity expects taxable profit of ₹ 450 in year 3. How much DTA will be recognised in the Year 2 if Tax rate is 30%.

Ans: In this case, deferred tax asset will be created at appropriate rate on deductible temporary difference of ₹ 450 only.

Q9A: XYZ Ltd. proposes to issue 1000 shares to its 200 employees under ESOP. (Vesting condition: Continuous employment for 3 years). 10% labour turnover is observed and value of option is ₹ 40. Calculate Deferred Tax Asset. What is if the entity gets a deduction of ₹ 19,00,000 (say as per tax law the share-based payment is measured differently) instead of ₹ 19,44,000?

Ans: **On Year End 1:**

The Employee Benefit Expense will be calculated as under as per IND AS 102:

Fair value of option per share = ₹ 40

Number of shares expected to vest under the scheme = [200 x 90 % 90 % 90%] Employees x 1,000 = 1,45,800

Fair value = 1,45,800 × ₹ 40 = ₹ 58,32,000

Expected vesting period = 3 years

Value of option recognised as expense in Year 1 = ₹ 58,32,000 / 3 = ₹ 19,44,000

The tax benefit is calculated as under:

Carrying amount of Share based payment	₹ 0.00
Tax Base of Share based payment	₹ 19,00,000
Deductible Temporary Difference (Carrying amount – Tax base)	₹ 19,00,000
Deferred Tax Asset recognized (DTD x Tax rate) (19,00,000 x 30%)	₹ 5,70,000

Journal Entry for above:

Employee Benefit Expense A/c	Dr.	₹ 19,44,000
To SBP Reserve		₹ 19,44,000
(Being EB Expense recognized)		
Deferred Tax Asset	Dr.	₹ 5,70,000
To Tax Expense		₹ 5,70,000

(Being DTA recognized on equity option)

Q9B: On 1st April 20X1, ABC Ltd acquired 100% shares of XYZ Ltd for INR 4,373 crores. By 31st March, 20X5, XYZ Ltd had made profits of INR 5 crores, which remain undistributed. Based on the tax legislation in India, the tax base investment in XYZ Ltd is its original cost. Assume the dividend distribution tax rate applicable is 15%.

Ans: A taxable temporary difference of INR 5 therefore exists between the carrying value of the investment in XYZ at the reporting date of INR 4,378 (INR 4,373 + INR 5) and its tax base of INR 4,373. Since a parent, by definition, controls a subsidiary, it will be able to control the reversal of this temporary difference, for example - through control of the dividend policy of the subsidiary. Therefore, deferred tax on such temporary difference is generally not provided unless it is probable that the temporary will reverse in the foreseeable future

Q10: ABC Ltd. acquired 50% of the shares in PQR Ltd. on 1st January 20X1 for INR 1000 crores. By 31st March, 20X5 PQR Ltd. had made profits of INR 50 crores (ABC Ltd.'s share), which remained undistributed. Based on the tax legislation in India, the tax base of the investment in PQR Ltd. is its original cost. Assume the dividend distribution tax rate applicable is 15%.

Ans: A taxable temporary difference of INR 50 therefore exists between the carrying value of the investment in PQR at the reporting date of INR 1,050 (INR 1,000 + INR 50) and its tax base of INR 1,000. As ABC Ltd. does not completely control PQR Ltd. it is not in a position to control the dividend policy of PQR Ltd. As a result, it cannot control the reversal of this temporary difference and deferred tax is provided on temporary differences arising on investments in joint venture. (50 x 15%).

Q11: An entity has made an accounting profit of ₹ 1,00,000. The tax rate is 30%. In computing the accounting profit, a penalty of ₹ 10,000 has been considered which is not tax deductible. There are no other tax impacts. In this case, the taxable profits are ₹ 1,10,000 (₹ 1,00,000 + ₹ 10,000) and tax expense @ 30% is ₹ 33,000. Explain the disclosure requirement.

Ans: The two types of disclosures are as under:

Particulars	Amount (₹)
Accounting profit	1,00,000
Tax at the applicable tax rate of 30%	30,000
Tax effect of expenses that are not deductible in determining taxable profits:-	
Penalties	3,000
Tax expense	33,000
The effective tax rate is as per the national income-tax rate.	
Particulars	%
Applicable tax rate	30
Tax effect of expenses that are not deductible in determining taxable profits:- Penalties	3
Average effective tax rate	33

Q12: In 20X2, an entity has accounting profit in its own jurisdiction (country A) of ₹ 1,500 (20X1: ₹ 2,000) and in country B of ₹ 1,500 (20X1: ₹ 500). The tax rate is 30% in country A and 20% in country B. In country A, expenses of ₹ 100 (20X1: ₹ 200) are not deductible for tax purposes. Explain the reconciliation requirement.

Ans: The following reconciliation will be prepared:

Particulars	Amount (₹)	
	20X2	20X1
Accounting profit	3,000	2,500
Tax at the domestic rate of 30%	900	750
Tax effect of expenses that are not deductible for tax purposes	30	60
Effect of lower tax rates in country B	(150)	(50)
Tax expense	780	760

Q13: A Ltd. operate in a jurisdiction where income taxes are payable at a higher rate on undistributed profits (50%) with an amount being refundable when profits are distributed. The tax rate on distributed profits is 35%. At the end of the reporting period, December 31, 20X1, the entity does not recognise a liability for dividends proposed or declared after the reporting period. As a result, no dividends are recognised in the year 20X1. Taxable income for 20X1 is ₹ 1,00,000. The net taxable temporary difference for the year 20X1 is ₹ 40,000.

Subsequently, on March 15, 20X2 the entity recognises dividends of ₹ 10,000 from previous operating profits as a liability.

Calculate Tax effect for the Year 20X1 and 20X2.

Ans: The entity recognises a current tax liability and a current income tax expense of ₹ 50,000. No asset is recognised for the amount potentially recoverable as a result of future dividends. The entity also recognises a deferred tax liability and deferred tax expense of ₹ 20,000 (₹ 40,000 at 50%) representing the income taxes that the entity will pay when it recovers or settles the carrying amounts of its assets and liabilities based on the tax rate applicable to undistributed profits.

On March 15, 20X2, the entity recognises the recovery of income taxes of ₹ 1,500 (15% of the dividends recognised as a liability) as a current tax asset and as a reduction of current income tax expense for 20X2.

Q14: An entity declares a dividend of ₹ 5,000 to its shareholders (all shareholders have small shareholdings). The entity operates in a jurisdiction where it is required to withhold 25 per cent of the value of the dividend payable to shareholders and pay it to the tax authorities on behalf of those shareholders. Give accounting treatment.

Ans: The entity would make the following journal entries when it declares the dividend to shareholders:

Dr Retained earnings	₹ 5,000
Cr Payable (amount due to shareholders)	₹ 3,750
Cr Payable (amount due to tax authority)	₹ 1,250

To recognise dividends payable to shareholders.

The entity recognises a financial liability for the amount withheld that will need to be paid to the tax authorities of ₹ 1,250 (ie ₹ 5,000 × 25%) and the net dividend payable to the shareholders of ₹ 3,750 (ie ₹ 5,000 less ₹ 1,250).

Q15: An asset with a cost of ₹ 100 and a carrying amount of ₹ 80 is revalued to ₹ 150. No equivalent adjustment is made for tax purposes. Cumulative depreciation for tax purposes is ₹ 30 and the tax rate is 30%. If the asset is sold for more than cost, the cumulative tax depreciation of ₹ 30 will be included in taxable income but sale proceeds in excess of cost will not be taxable. Calculate deferred tax in the following cases

- If the entity expects to recover the carrying amount by using the asset
- If the entity expects to recover the carrying amount by selling the asset

Ans: The tax base of the asset is ₹ 70 and there is a taxable temporary difference of ₹ 80 (₹ 150 the revalued amount is the carrying amount).

If the entity expects to recover the carrying amount by using the asset, it must generate taxable income of ₹ 150, but will only be able to deduct depreciation of ₹ 70. On this basis, there is a deferred tax liability of ₹ 24 (₹ 80 at 30%).

If the entity expects to recover the carrying amount by selling the asset immediately for proceeds of ₹ 150, the deferred tax liability is computed as follows:

(i) Sale proceeds	₹ 150
(ii) Sale proceeds in excess of cost (₹ 100)	₹ 50
(iii) Taxable proceeds	₹ 100
(iv) Tax base	₹ 70
(v) Taxable temporary difference	₹ 30
(vi) Tax rate	30%
(vii) Deferred tax liability	₹ 9

NEW QUESTIONS IN SM (FOR MAY 21 ATTEMPT)

Q16: The directors of H wish to recognise a material deferred tax asset in relation to ₹ 250 Cr of unused trading losses which have accumulated as at 31st March 20X1. H has budgeted profits for ₹ 80 Cr for the year ended 31st March 20X2. The directors have forecast that profits will grow by 20% each year thereafter. However, the improvement in trading results may occur after the next couple of years to come at the position of breakeven. The market is currently depressed and sales orders are at a lower level for the first quarter of 20X2 than they were for the same period in any of the previous five years. H operates under a tax jurisdiction which allows for trading losses to be only carried forward for a maximum of two years.

Analyse whether a deferred tax asset can be recognized in the financial statements of H for the year ended 31st March 20X1?

Ans: In relation to unused trading losses, the carrying amount is zero since the losses have not yet been recognised in the financial statements of H. A potential deferred tax asset does arise but the determination of the tax base is more problematic.

The tax base of an asset is the amount which will be deductible against taxable economic benefits from recovering the carrying amount of the asset. Where recovery of an asset will

have no tax consequences, the tax base is equal to the carrying amount. H operates under a tax jurisdiction which only allows losses to be carried forward for two years. The maximum the tax base could be is therefore equal to the amount of unused losses for years 20X0 and 20X1 since these only are available to be deducted from future profits. The tax base though needs to be restricted to the extent that there is a probability of sufficient future profits to offset the trading losses. The directors of H should base their forecast of the future profitability on reasonable and supportable assumptions. There appears to be evidence that this is not the case.

H has accumulated trading losses and there is little evidence that there will be an improvement in trading results within the next couple of years. The market is depressed and sales orders for the first quarter of 20X2 are below levels in any of the previous five years.

The forecast profitability for 20X2 and subsequent growth rate therefore appear to be unrealistically optimistic.

Given that losses can only be carried forward for a maximum of two years, it is unlikely that any deferred tax asset should be recognised.

Hence, the contention of directors to recognized deferred tax assets in relation to ₹250 crores is not correct.

Q17: On 1st April 20X1, S Ltd. leased a machine over a 5 year period. The present value of lease liability is ₹ 120 Cr (discount rate of 8%) and is recognized as lease liability and corresponding Right of Use (RoU) Asset on the same date. The RoU Asset is depreciated under straight line method over the 5 years. The annual lease rentals are ₹ 30 Cr payable starting 31st March 20X2. The tax law permits tax deduction on the basis of payment of rent.

Assuming tax rate of 30%, you are required to explain the deferred tax consequences for the above transaction for the year ended 31st March 20X2.

Ans: A temporary difference effectively arises between the value of the machine for accounting purposes and the amount of lease liability, since the rent payment is eligible for tax deduction.

Tax base of the machine is nil as the amount is not eligible for deduction for tax purposes.

Tax base of the lease liability is nil as it is measured at carrying amount less any future tax deductible amount

Recognition of deferred tax on 31st March 20X2:

Carrying amount in balance sheet

RoU Asset (120 Cr – 24 Cr (Depreciation))	₹ 96.00 Dr
Lease Liability (120 Cr + 9.60 Cr (120 Cr x 8%) - 30 Cr)	₹ 99.60 Cr
Net Amount	₹ 3.60 Cr
Tax Base	₹ 0.00 Cr
Temporary Difference (deductible)	₹ 3.60 Cr

Deferred Tax asset to be recognized ($\text{₹ } 3.60 \text{ Cr} \times 30\%$)

₹ 1.08 Cr

Q18: On 1 April 20X1, A Ltd. acquired 12 Cr shares (representing 80% stake) in B Ltd. by means of a cash payment of ₹ 25 Cr. It is the group policy to value the non-controlling interest in subsidiaries at the date of acquisition at fair value. The market value of an equity share in B Ltd. at 1 April 20X1 can be used for this purpose. On 1 April 20X1, the market value of a B Ltd. share was ₹ 2.00

On 1 April 20X1, the individual financial statements of B Ltd. showed the net assets at ₹ 23 Cr.

The directors of A Ltd. carried out a fair value exercise to measure the identifiable assets and liabilities of B Ltd. at 1 April 20X1. The following matters emerged:

- Property having a carrying value of ₹ 15 Cr at 1 April 20X1 had an estimated market value of ₹ 18 Cr at that date.
- Plant and equipment having a carrying value of ₹ 1 Cr at 1 April 20X1 had an estimated market value of ₹ 13 Cr at that date.
- Inventory in the books of B Ltd. is shown at a cost of ₹ 2.50 Cr. The fair value of the inventory on the acquisition date is ₹ 3 Cr.

The fair value adjustments have not been reflected in the individual financial statements of B Ltd. In the consolidated financial statements, the fair value adjustments will be regarded as temporary differences for the purposes of computing deferred tax. The rate of deferred tax to apply to temporary differences is 20%.

Calculate the deferred tax impact on above and calculate the goodwill arising on acquisition of B Ltd.

Ans: Purchase Consideration:	₹ 25 Cr
Non-Controlling Interest [$\{(12 \text{ Cr} \times (20\% / 80\%)) \times ₹ 2 \text{ per share}\}$]	₹ 6 Cr
Computation of Net Assets of B Ltd.	
As per books	₹ 23.00 Cr
Add: Fair value differences not recognized in books of B Ltd.:	
Property (18 Cr – 15 Cr)	₹ 3.00 Cr
Plant and Equipment (13 Cr – 11 Cr)	₹ 2.00 Cr
Inventory (3 Cr – 2.5 Cr)	₹ 0.50 Cr
	₹ 28.5 Cr
Less: Deferred tax liability on fair value difference @ 20%	
$[(3 \text{ Cr} + 2 \text{ Cr} + 0.50 \text{ Cr}) \times 20\%]$	(₹ 1.10 Cr)
Total Net Assets at Fair Value	₹ 27.40 Cr
Computation of Goodwill:	

Purchase Consideration	₹ 25.00 Cr
Add: Non-Controlling Interest	₹ 6.00 Cr
	₹ 31.00 Cr
Less: Net Assets at Fair Value	(₹ 27.40 Cr)
Goodwill on acquisition date	₹ 3.60 Cr

Q19: On 1st April 20X1, P Ltd. had granted 1 Cr share options worth ₹ 4 Cr subject to a two-year vesting period. The income tax law permits a tax deduction at the exercise date of the intrinsic value of the options. The intrinsic value of the options at 31st March 20X2 was ₹ 1.60 Cr and at 31st March 20X3 was ₹ 4.60 Cr. The increase in the fair value of the options on 31st March 20X3 was not foreseeable at 31st March 20X2. The options were exercised at 31st March 20X3.

Give the accounting for the above transaction for deferred tax for period ending 31st March, 20X2 and 31st March, 20X3. Assume that there are sufficient taxable profits available in future against any deferred tax assets. Tax rate of 30% is applicable to P Ltd.

Ans: On 31st March 20X2:

The tax benefit is calculated as under:

Carrying amount of Share based payment	₹ 0.00 Cr
Tax Base of Share based payment (₹ 1.60 Cr x ½)	₹ 0.80 Cr
Temporary Difference (Carrying amount – tax base)	₹ 0.80 Cr
Deferred Tax Asset recognized (Temporary Difference x Tax rate)	
(0.80 Cr x 30%)	₹ 0.24 Cr

Journal Entry for above:

Deferred Tax Asset	Dr.	₹ 0.24 Cr
To Tax Expense		₹ 0.24 Cr

(Being DTA recognized on equity option)

On 31st March 20X3:

The options have been exercised and a current tax benefit will be available to the entity on the basis of intrinsic value of ₹ 4.60 Cr. Initially recognized deferred tax asset will no longer be required.

The accounting entry will be done as under:

Tax Expense	Dr.	₹ 0.24 Cr
To Deferred Tax Asset		₹ 0.24 Cr

(Being DTA reversed on the exercise of the option)

Q20: A's Ltd. profit before tax according to Ind AS for Year 20X1-20X2 is ₹ 100 thousand and taxable profit for year 20X1-20X2 is ₹ 104 thousand. The difference between these amounts arose as follows:

- On 1st February, 20X2, it acquired a machine for ₹ 120 thousand. Depreciation is charged on the machine on a monthly basis for accounting purpose. Under the tax law, the machine will be depreciated for 6 months. The machine's useful life is 10 years according to Ind AS as well as for tax purposes.
- In the year 20X1-20X2, expenses of ₹ 8 thousand were incurred for charitable donations. These are not deductible for tax purposes.

Prepare necessary entries as at 31st March 20X2, taking current and deferred tax into account. The tax rate is 25%. Also prepare the tax reconciliation in absolute numbers as well as the tax rate reconciliation.

Ans: Current tax = Taxable profit x Tax rate = ₹ 104 thousand x 25% = ₹ 26 thousand.

Computation of Taxable Profit:

	₹ in thousand
Accounting profit	100
Add: Donation not deductible	8
Less: Excess Depreciation (6-2)	<u>(4)</u>
Total Taxable profit	<u>104</u>

	₹ in thousand	₹ in thousand
Profit & loss A/c Dr.	26	
To Current Tax		26

Deferred tax:

Machine's carrying amount according to Ind AS is ₹ 118 thousand (₹ 120 thousand – ₹ 2 thousand) Machine's carrying amount for taxation purpose = ₹ 114 thousand (₹ 120 thousand – ₹ 6 thousand) Deferred Tax Liability = ₹ 4 thousand x 25%

	₹ in thousand	
Profit & loss A/c Dr.	1	
To Deferred Tax Liability		1

Tax reconciliation in absolute numbers:

	₹ in thousand
Profit before tax according to Ind AS	100
Applicable tax rate @ 25%	

Tax	25
Expenses not deductible for tax purposes (₹ 8 thousand x 25%)	<u>2</u>
Tax expense (Current and deferred)	<u>27</u>

Tax rate reconciliation

Applicable tax rate	25%
Expenses not deductible for tax purposes	<u>2%</u>
Average effective tax rate	<u>27%</u>

Q21: A Ltd prepares financial statements to 31 March each year. The rate of income tax applicable to A Ltd is 20%. The following information relates to transactions, assets and liabilities of A Ltd during the year ended 31 March 20X2:

1. A Ltd has a 40% shareholding in L Ltd. A Ltd purchased this shareholding for ₹ 45 Cr. The shareholding gives A Ltd significant influence over L Ltd but not control and therefore A Ltd. accounts for its interest in L Ltd using the equity method. The equity method carrying value of A Ltd's investment in L Ltd was ₹ 70 Cr on 31 March 20X1 and ₹ 75 Cr on 31 March 20X2. In the tax jurisdiction in which A Ltd operates, profits recognised under the equity method are taxed if and when they are distributed as a dividend or the relevant investment is disposed of.
2. A Ltd. measures its head office building using the revaluation model. The building is revalued every year on 31 March. On 31 March 20X1, carrying value of the building (after revaluation) was ₹ 40 Cr and its tax base was ₹ 22 Cr. During the year ended 31 March 20X2, A Ltd charged depreciation in its statement of profit or loss of ₹ 2 Cr and claimed a tax deduction for tax depreciation of ₹ 1.25 Cr. On 31 March 20X2, the building was revalued to ₹ 45 Cr. In the tax jurisdiction in which A Ltd operates, revaluation of property, plant and equipment does not affect taxable income at the time of revaluation.

Basis the above information, you are required to compute:

The deferred tax liability of A Ltd at 31 March 20X2

The charge or credit to both profit or loss and other comprehensive income relating to deferred tax for the year ended 31 March 20X2

A) Deferred Tax Liability as at 31st March 20X2 Investment in L Ltd:

Carrying Amount	=	₹ 75 Cr
Tax base	=	₹ 45 Cr (Purchase cost) Temporary Difference
	=	₹ 30 Cr

Since carrying amount is higher than the tax base, the temporary difference is recognized as a taxable temporary difference. Using the tax rate of 20%, a deferred tax liability of ₹ 6 Cr is recognized:

Head office building

Carrying Amount	=	₹ 45 Cr (Revalued amount on 31st of March 20X2)
Tax base	=	₹ 20.75 Cr (22 Cr – 1.25 Cr)
Temporary Difference	=	₹ 24.25 Cr

Since carrying amount is higher than the tax base, the temporary difference is recognized as a taxable temporary difference. Using the tax rate of 20%, a deferred tax liability of ₹ 4.85 Cr is created.

Total Deferred Tax Liability ₹ 6 Cr + ₹ 4.85 Cr = ₹ 10.85 Cr

B) Charge to Statement of Profit or Loss for the year ended 31st March 20X2: Investment in L Ltd.

Particulars		CA		TB		TD
Opening Balance (1st April 20X1)	₹	70 Cr	₹	45 Cr	₹	25 Cr
Closing Balance (31st March 20X2)	₹	75 Cr	₹	45 Cr	₹	30 Cr
Net Change					₹	5 Cr

Increase in Deferred Tax Liability (20% tax rate) ₹ 1 Cr

Considering the increase in the value of investment arising through Statement of Profit or Loss, the accounting for the increase in deferred tax liability is made as under:

Tax expense (Profit or Loss Statement)	Dr	₹ 1 Cr
To Deferred Tax Liability		₹ 1 Cr

(Being increase in deferred tax liability recognized)

Head Office Building:

The deferred tax liability at 31 March 20X1 is ₹ 3.6 Cr (20% x {₹ 40 Cr – ₹ 22 Cr}).

At 31 March 20X2, prior to revaluation, the carrying amount of the property is ₹ 38 Cr and its tax base is ₹ 20.75 Cr (₹ 22 Cr – ₹ 1.25 Cr). The deferred tax liability at this point is ₹ 3.45 Cr (20% x {₹ 38 Cr – ₹ 20.75 Cr}).

The reduction in this liability is ₹ 0.15 Cr (₹ 3.6 Cr – ₹ 3.45 Cr). This would be credited to income tax expense in arriving at profit or loss.

Post revaluation, the carrying value of the building becomes ₹ 45 Cr and the tax base stays the same. Therefore, the new deferred tax liability is ₹ 4.85 Cr (20% x (₹ 45 Cr – ₹ 20.75 Cr)). The increase in the deferred tax liability of ₹ 1.4 Cr (₹ 4.85 Cr – ₹ 3.45 Cr) is charged to other comprehensive income.

Q22: K Ltd prepares consolidated financial statements to 31st March each year. During the year ended 31st March 20X2, K Ltd entered into the following transactions:

- a) On 1st April 20X1, K Ltd purchased an equity investment for ₹ 2,00,000. The investment was designated as fair value through other comprehensive income. On 31st March 20X2, the fair value of the investment was ₹ 2,40,000. In the tax jurisdiction in which K Ltd operates, unrealised gains and losses arising on the revaluation of investments of this nature are not taxable unless the investment is sold. K Ltd has no intention of selling the investment in the foreseeable future.
- b) On 1st August 20X1, K Ltd sold products to A Ltd, a wholly owned subsidiary operating in the same tax jurisdiction as K Ltd, for ₹ 80,000. The goods had cost to K Ltd for ₹ 64,000. By 31st March 20X2, A Ltd had sold 40% of these goods, selling the remaining during next year.
- c) On 31st October 20X1, K Ltd received ₹ 2,00,000 from a customer. This payment was in respect of services to be provided by K Ltd from 1st November 20X1 to 31st July 20X2. K Ltd recognised revenue of ₹ 1,20,000 in respect of this transaction in the year ended 31st March 20X2 and will recognise the remainder in the year ended 31st March 20X3. Under the tax jurisdiction in which K Ltd operates, ₹ 2,00,000 received on 31st October 20X1 was included in the taxable profits of K Ltd for the year ended 31st March 20X2.

Explain and show how the tax consequences (current and deferred) of the three transactions would be reported in its statement of profit or loss and other comprehensive income for the year ended 31st March 20X2. Assume tax rate to be 25%.

Ans:

- (a) Because the unrealised gain on revaluation of the equity investment is not taxable until sold, there are no current tax consequences. The tax base of the investment is ₹ 2,00,000. The revaluation creates a taxable temporary difference of ₹ 40,000 (₹ 2,40,000 – ₹ 2,00,000).

This creates a deferred tax liability of ₹ 10,000 (₹ 40,000 x 25%). The liability would be non-current. The fact that there is no intention to dispose of the investment does not affect the accounting treatment. Because the unrealised gain is reported in other comprehensive income, the related deferred tax expense is also reported in other comprehensive income.

- (b) When K Ltd sold the products to A Ltd, K Ltd would have generated a taxable profit of ₹ 16,000 (₹ 80,000 – ₹ 64,000). This would have created a current tax liability for K Ltd and the group of ₹ 4,000 (₹ 16,000 x 25%). This liability would be shown as a current liability and charged as an expense in arriving at profit or loss for the period.

In the consolidated financial statements the carrying value of the unsold inventory would be ₹ 38,400 (₹ 64,000 x 60%). The tax base of the unsold inventory would be ₹ 48,000 (₹ 80,000 x 60%). In the consolidated financial statements there would be a deductible temporary difference of ₹ 9,600 (₹ 48,000 – ₹ 38,400) and a potential deferred tax asset of ₹ 2,400 (₹ 9,600 x 25%). This would be recognised as a deferred tax asset since A Ltd is expected to generate sufficient taxable profits against which to utilise the deductible temporary difference. The resulting credit would reduce consolidated deferred tax expense in arriving at profit or loss.

- (c) The receipt of revenue in advance on 1st October 20X1 would create a current tax liability of ₹ 50,000 ($₹ 200,000 \times 25\%$) as at 31st March 20X2. The carrying value of the revenue received in advance at 31st March 20X2 is ₹ 80,000 ($₹ 200,000 - ₹ 120,000$). Its tax base is nil. The deductible temporary difference of ₹ 80,000 would create a deferred tax asset of ₹ 20,000 ($₹ 80,000 \times 25\%$). The asset can be recognised because K Ltd has sufficient taxable profits against which to utilise the deductible temporary difference.

QUESTIONS FROM OTHER SOURCE

Q23: In accordance with the relevant tax rules in its jurisdiction, an entity estimates its taxable loss for the tax period 2017/2018 at ₹ 9,000. The tax legislation in the jurisdiction permits entities to carry back losses three tax years into the past with no requirement on which of the three years the loss is set off against first. Taxable income in 2016/2017 was RS.7,000, in 2015/2016 it was RS.5,000 and in 2014/2015 it was RS.3,000. The entity has a 30 September financial year-end (end of the reporting period) and this coincides with the entity's tax year. The relevant income tax rates are as follows:

- 18 per cent in 2016/2017 and 2017/2018
- 20 per cent in 2015/2016
- 17 per cent in 2014/2015.

Calculate current Tax asset for 2017/2018

Ans: The entity will want to maximise the refund. Consequently, the entity first would set off the losses against the prior year that has the highest tax rate. Hence, the entity would carry back RS.5,000 of the loss to 2015/2016 (the maximum possible, because the amount cannot exceed available profits) and RS.4,000 to 2016/2017. As a result, the entity will save tax at 20 per cent on the RS.5,000 carried back to 2015/2016 and save tax at 18 per cent on the RS.4,000 carried back to 2016/2017.

The tax refund is ₹ 1,720 (ie $₹ 5,000 \times 20\% + (₹ 4,000 \times 18\%)$).

For the year ended 30 September 20X8, the entity would recognise a current tax asset/benefit as follows:

Dr Current tax asset	₹ 1,720
Cr Profit or loss—income tax (current tax)	₹ 1,720

Q24: The facts are the same as in above question. However, in this example, the tax laws require the entity to set the losses against the most recent period possible, ie 2016/2017 first, 2015/2016 second and 2014/2015 last.

Ans: The entity must first set off the losses against 2016/2017. Consequently, the entity would carry back RS.7,000 of the loss to 2016/2017 and RS.2,000 to 2015/2016. As a result, the entity will save tax at 18 per cent on the RS.7,000 carried back to 2016/2017 and at 20 per cent on RS.2,000 in 2015/2016. The tax refund is RS.1,660 (ie $₹ 7,000 \times 18\% + (₹ 2,000 \times 20\%)$). For the year ended 30 September 20X8, the entity would recognise a current tax asset/benefit as follows

Dr Current tax asset	RS.1,660
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Cr Profit or loss—income tax (current tax)

RS.1,660

To recognise current tax asset.

Q25: ABC Ltd. prepares its accounts annually on 31st March. On 1st April' 2001, it purchases a machine at a cost of ₹ 1,50,000. The machine has a useful life of three years and an expected scrap value of zero. Although it is eligible for a 100% first year depreciation allowance for tax purposes, the straight-line method is considered appropriate for accounting purposes. ABC Ltd. has profits before depreciation and taxes of ₹ 2,00,000 each year and the corporate tax rate for 2002, 2003 and 2004 are 40%, 35% and 38% respectively. Show the profit and loss account and pass the journal entries as per IND AS 12.

[For Answer – Refer Class Notes]

Q26: Profit before depreciation and before profit or loss on sale of fixed assets for the financial year 2015-16 is ₹5,00,000

Block of Machinery as per IT act as on 01.04.2015 8,00,000

WDV of Machinery as per Co. Act as on 01.04.2015 10,00,000

The Company charges depreciation on machines @ 10% p.a. whereas the rates as per tax is 15% p.a.

On 30.06.2015 one machinery whose WDV as on 01.04.2015 is ₹ 2,00,000 was sold for ₹ ₹ 1,20,000.

Tax rates for financial year 2015-16 and 2014-15 are 30%and 35 % respectively.

You are required to prepare the profit and loss statement showing the provision for taxes under the IND AS 12.

[For Answer – Refer Class Notes]

Q 27: XYZ Ltd. prepares its accounts annually on 31st March. The company has incurred a loss of ₹ 1,00,000 in the year 2001 and made profits of ₹ 50,000 and 60,000 in year 2002 and year 2003 respectively. It is assumed that under the tax laws, loss can be carried forward for 8 years and tax rate is 40% and at the end of year 2001, it was probable, supported by convincing evidence, that the company would have sufficient taxable income in the future years against which unabsorbed depreciation and carry forward of losses can be set-off. It is also assumed that there is no difference between taxable income and accounting income except that set-off of loss is allowed in years 2002 and 2003 for tax purposes. Calculate Deferred Tax.

[For Answer – Refer Class Notes]

Q28: From the following details of A Ltd. for the year ended 31-03-2006, calculate the deferred tax asset/liability as per IND AS-12

Particulars	₹
Accounting Profit	6,00,000
Book Profit as per MAT	3,50,000
Profit as per Income Tax Act	60,000
Taxable temporary difference due to Excessive allowance of depreciation	5,40,000

under tax laws	
Tax rate	30%
MAT rate	18.5 %

[For Answer – Refer Class Notes]

Q29: An entity purchases plant and equipment for ₹20Lacs. In the tax jurisdiction, there are no tax allowances available for the depreciation of this asset; neither are any profits or losses on disposal taken into account for taxation purposes. The entity depreciates the asset at 25% per annum. Taxation is 30%.

Explain the deferred tax position of the plant and equipment on initial recognition and at the first yearend after initial recognition.

Ans: The asset would have a tax base of zero on initial recognition, and this would normally give rise to a deferred tax liability of ₹20 Lacs @ 30%, or ₹600,000. This would mean that an immediate tax expense has arisen before the asset was used. IND AS 12 prohibits the recognition of this expense. This could be classified as a permanent difference.

At the date of the first accounts, the asset would have been depreciated by, say, 25% of ₹2 Lacs, or ₹500,000. As the tax base is zero, this would normally cause a deferred tax liability of ₹1.5 @ 30%, or ₹450,000. However, this liability has arisen from the initial recognition of the asset and therefore is not provided for.

Q30: An entity has the following assets and liabilities recorded in its balance sheet at December 31, 20X5:

	Carrying value Rs Lacs
Property	10
Plant and equipment	5
Inventory	4
Trade receivables	3
Trade payables	6
Cash	2

The value for tax purposes of property and for plant and equipment are Rs7 Lacs and Rs4 Lacs respectively.

The entity has made a provision for inventory obsolescence of Rs 2 Lacs, which is not allowable for tax purposes until the inventory is sold. Further, an impairment charge against trade receivables of Rs1 Lacs has been made. This charge does not relate to any specific trade receivable but to the entity's assessment of the overall collectibility of the amount. This charge will not be allowed in the current year for tax purposes but will be allowed in the future. Income tax paid is at 30%.

Required:

Calculate the deferred tax provision at December 31, 20X5.

Ans:

	Carrying value	Tax base	Temporary difference
	Rs (In lacs)	Rs (In lacs)	Rs (In lacs)
Property	10	7	3
Plant and equipment	5	4	1
Inventory	4	6	(2)
Trade receivables	3	4	(1)
Trade payables	6	6	-
Cash	2	2	-
			1

The deferred tax provision will be Rs1 Lacs \times 30%, or Rs300,000.

Because the provision against inventory and the impairment charge are not currently allowed, the tax base will be higher than the carrying value by the respective amounts.

Q31: An entity has revalued its property and has recognized the increase in the revaluation in its financial statements. The carrying value of the property was ₹8 Lacs and the revalued amount was ₹10 Lacs. Tax base of the property was ₹6 Lacs. In this country, the tax rate applicable to profits is 35% and the tax rate applicable to profits made on the sale of property is 30%. If the revaluation took place at the entity's year end of December 31, 20X4, calculate the deferred tax liability on the property as of that date.

Ans: The carrying value after revaluation is ₹10 Lacs, the tax base is ₹6 Lacs, and the rate of tax applicable to the sale of property is 30%; therefore, the answer is ₹10 Lacs minus ₹6 Lacs multiplied by 30%, or ₹1.2 Lacs.

Q 32: An entity has spent ₹600,000 in developing a new product. These costs meet the definition of an intangible asset under IND AS 38 and have been recognized in the balance sheet. Local tax legislation allows these costs to be deducted for tax purposes when they are incurred. Therefore, they have been recognized as an expense for tax purposes. At the year-end the intangible asset is deemed to be impaired by ₹50,000.

Calculate the tax base of the intangible asset at the accounting year-end.

Ans: Zero, because the tax authority has already allowed the intangible asset costs to be deducted for tax purposes.

Q33: Mercury Ltd has an identifiable asset with a carrying amount of ₹ 1,000. Its recoverable amount is ₹ 650. The tax rate is 30% and the tax base of the asset is ₹ 800. Impairment losses are not deductible for tax purposes. The effect of the impairment loss is as follows:

Ans: Carrying amount	1,000 - 350	650
Tax Base		800
Deductible temporary difference		150
Deferred tax asset at 30%		45

In accordance with Ind AS 12, the entity recognises the deferred tax asset to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised.

QUESTIONS FROM RTP/MTP/EXAMS/GFRS

Q34: X Ltd. prepares consolidated financial statements to 31st March each year. During the year ended 31st March 2018, the following events affected the tax position of the group:

- (i) Y Ltd., a wholly owned subsidiary of X Ltd., made a loss adjusted for tax purposes of ₹ 30,00,000. Y Ltd. is unable to utilise this loss against previous tax liabilities. Income-tax Act does not allow Y Ltd. to transfer the tax loss to other group companies. However, it allows Y Ltd. to carry the loss forward and utilise it against company's future taxable profits. The directors of X Ltd. do not consider that Y Ltd. will make taxable profits in the foreseeable future.
- (ii) Just before 31st March, 2018, X Ltd. committed itself to closing a division after the year end, making a number of employees redundant. Therefore X Ltd. recognised a provision for closure costs of ₹ 20,00,000 in its statement of financial position as at 31st March, 2018. Income-tax Act allows tax deductions for closure costs only when the closure actually takes place. In the year ended 31 March 2019, X Ltd. expects to make taxable profits which are well in excess of ₹ 20,00,000. On 31st March, 2018, X Ltd. had taxable temporary differences from other sources which were greater than ₹ 20,00,000.
- (iii) During the year ended 31 March 2017, X Ltd. capitalised development costs which satisfied the criteria in paragraph 57 of Ind AS 38 'Intangible Assets'. The total amount capitalised was ₹ 16,00,000. The development project began to generate economic benefits for X Ltd. from 1st January 2018. The directors of X Ltd. estimated that the project would generate economic benefits for five years from that date. The development expenditure was fully deductible against taxable profits for the year ended 31 March 2018.
- (iv) On 1 April 2017, X Ltd. borrowed ₹ 1,00,00,000. The cost to X Ltd. of arranging the borrowing was ₹ 2,00,000 and this cost qualified for a tax deduction on 1 April 2017. The loan was for a three-year period. No interest was payable on the loan but the amount repayable on 31 March 2020 will be ₹ 1,30,43,800. This equates to an effective annual interest rate of 10%. As per the Income-tax Act, a further tax deduction of ₹ 30,43,800 will be claimable when the loan is repaid on 31st March, 2020.

Explain and show how each of these events would affect the deferred tax assets / liabilities in the consolidated balance sheet of X Ltd. group at 31 March, 2018 as per Ind AS. Assume the rate of corporate income tax is 20%. **[RTP Nov 2018]**

Ans. (i) The tax loss creates a potential deferred tax asset for the group since its carrying value is nil and its tax base is ₹ 30,00,000.

However, no deferred tax asset can be recognised because there is no prospect of being able to reduce tax liabilities in the foreseeable future as no taxable profits are anticipated.

- (ii) The provision creates a potential deferred tax asset for the group since its carrying value is ₹ 20,00,000 and its tax base is nil.

This deferred tax asset can be recognised because X Ltd. is expected to generate taxable profits in excess of ₹ 20,00,000 in the year to 31st March, 2019.

The amount of the deferred tax asset will be ₹ 4,00,000 (₹ 20,00,000 x 20%).

This asset will be presented as a deduction from the deferred tax liabilities caused by the (larger) taxable temporary differences.

- (iii) The development costs have a carrying value of ₹ 15,20,000 (₹ 16,00,000 – (₹ 16,00,000 x 1/5 x 3/12)).

The tax base of the development costs is nil since the relevant tax deduction has already been claimed.

The deferred tax liability will be ₹ 3,04,000 (₹ 15,20,000 x 20%). All deferred tax liabilities are shown as non-current.

- (iv) The carrying value of the loan at 31st March, 2018 is ₹ 1,07,80,000 (₹ 1,00,00,000 – ₹ 2,00,000 + (₹ 98,00,000 x 10%)).

The tax base of the loan is ₹ 1,00,00,000.

This creates a deductible temporary difference of ₹ 7,80,000 (₹ 1,07,80,000 – ₹ 1,00,00,000) and a potential deferred tax asset of ₹ 1,56,000 (₹ 7,80,000 x 20%).

Due to the availability of taxable profits next year (see part (ii) above), this asset can be recognised as a deduction from deferred tax liabilities.

Q35: PQR Ltd., a manufacturing company, prepares consolidated financial statements to 31st March each year. During the year ended 31st March, 2018, the following events affected the tax position of the group:

- QPR Ltd., a wholly owned subsidiary of PQR Ltd., incurred a loss adjusted for tax purposes of ₹ 30,00,000. QPR Ltd. is unable to utilise this loss against previous tax liabilities. Income-tax Act does not allow QPR Ltd. to transfer the tax loss to other group companies. However, it allows QPR Ltd. to carry the loss forward and utilise it against company's future taxable profits. The directors of PQR Ltd. do not consider that QPR Ltd. will make taxable profits in the foreseeable future.
- During the year ended 31st March, 2018, PQR Ltd. capitalised development costs which satisfied the criteria as per Ind AS 38 'Intangible Assets'. The total amount capitalised was ₹ 16,00,000. The development project began to generate economic benefits for PQR Ltd. from 1st January, 2018. The directors of PQR Ltd. estimated that the project would generate economic benefits for five years from that date. The development expenditure was fully deductible against taxable profits for the year ended 31st March, 2018.
- On 1st April, 2017, PQR Ltd. borrowed ₹ 1,00,00,000. The cost to PQR Ltd. of arranging the borrowing was ₹ 2,00,000 and this cost qualified for a tax deduction on 1st April 2017. The loan was for a three-year period. No interest was payable on the loan but the amount repayable on 31st March 2020 will be ₹ 1,30,43,800. This equates to an

effective annual interest rate of 10%. As per the Income-tax Act, a further tax deduction of ₹ 30,43,800 will be claimable when the loan is repaid on 31st March, 2020.

Explain and show how each of these events would affect the deferred tax assets / liabilities in the consolidated balance sheet of PQR Ltd. group at 31st March, 2018 as per Ind AS. The rate of corporate income tax is 30%. **[RTP May 2019]**

Ans: Impact on consolidated balance sheet of PQR Ltd. group at 31st March, 2018

- The tax loss creates a potential deferred tax asset for the PQR Ltd. group since its carrying value is nil and its tax base is ₹ 30,00,000. However, no deferred tax asset can be recognised because there is no prospect of being able to reduce tax liabilities in the foreseeable future as no taxable profits are anticipated.
- The development costs have a carrying value of ₹ 15,20,000 (₹ 16,00,000 – (₹ 16,00,000 × 1/5 × 3/12)). The tax base of the development costs is nil since the relevant tax deduction has already been claimed. The deferred tax liability will be ₹ 4,56,000 (₹ 15,20,000 × 30%). All deferred tax liabilities are shown as non-current.
- The carrying value of the loan at 31st March, 2018 is ₹ 1,07,80,000 (₹ 1,00,00,000 – ₹ 200,000 + (₹ 98,00,000 × 10%)). The tax base of the loan is 1,00,00,000. This creates a deductible temporary difference of ₹ 7,80,000 and a potential deferred tax asset of ₹ 2,34,000 (₹ 7,80,000 × 30%).

Q36: QA Ltd. is in the process of computation of the deferred taxes as per applicable Ind AS. QA Ltd. had acquired 40% shares in GK Ltd. for an aggregate amount of ₹ 45 crores. The shareholding gives QA Ltd. significant influence over GK Ltd. but not control and therefore the said interest in GK Ltd. is accounted using the equity method. Under the equity method, the carrying value of investment in GK Ltd. was ₹ 70 crores on 31st March, 2017 and ₹ 75 crores as on 31st March, 2018. As per the applicable tax laws, profits recognised under the equity method are taxed if and when they are distributed as dividend or the relevant investment is disposed of.

QA Ltd. wants you to compute the deferred tax liability as on 31st March, 2018 and the charge to the Statement of Profit for the same. Consider the tax rate at 20%. **[MTP N 2018]**

Ans. DTL created on accumulation of undistributed profits as on 31.3.2018

	31st March, 2017	31st March, 2018
Carrying value	70 crore	75 crore
Value as per tax records	45 crore	45 crore
Tax base	45 crore	45 crore
Taxable temporary differences	25 crore	30 crore
Total Deferred tax liability @ 20%	5 crore	6 crore
Charged to P&L during the year	5 crore	1 crore
		(6 crore – 5 crore)

Q37: A's Ltd. profit before tax according to Ind AS for Year 20X1-20X2 is ₹ 100 thousand and taxable profit for year 20X1-20X2 is ₹ 104 thousand. The difference between these amounts arose as follows:

On 1st February, 20X2, it acquired a machine for ₹ 120 thousand. Depreciation is charged on the machine on a monthly basis for accounting purpose. Under the tax law, the machine will be depreciated for 6 months. The machine's useful life is 10 years according to Ind AS as well as for tax purposes. In the year 20X1-20X2, expenses of ₹ 8 thousand were incurred for charitable donations. These are not deductible for tax purposes.

You are required to prepare necessary entries as at 31st March 20X2, taking current and deferred tax into account. The tax rate is 25%.

Also prepare the tax reconciliation in absolute numbers as well as the tax rate reconciliation.

[RTP May 2018]

Ans: Current tax = Taxable profit x Tax rate = ₹104 thousand x 25% = ₹26 thousand.

Computation of Taxable Profit:		₹ in thousand
Accounting profit		100
Add: Donation not deductible		8
Less: Excess Depreciation		(4)
Total Taxable profit		104
₹ in thousand		₹ in thousand
Profit & loss A/c Dr.	26	
To Current Tax		26

Deferred tax:

Machine's carrying amount according to Ind AS is ₹ 118 thousand (₹ 120 thousand – ₹ 2 thousand) Machine's carrying amount for taxation purpose = ₹ 114 thousand (₹ 120 thousand – ₹ 6 thousand)

Deferred Tax Liability = ₹ 4 thousand x 25%

		₹ in thousand
Profit & loss A/c Dr.	1	
To Deferred Tax Liability		1

Tax reconciliation in absolute numbers:

		₹ in thousand
Profit before tax according to Ind AS		100
Applicable tax rate		25%
Tax		25
Expenses not deductible for tax purposes (₹ 8 thousand x 25%)		2
Tax expense (Current and deferred)		27

Tax rate reconciliation

Tax rate reconciliation Applicable tax rate	25%
Expenses not deductible for tax purposes	2%
Average effective tax rate	27%

Q38: QA Ltd. is in the process of computation of the deferred taxes as per applicable Ind AS and wants guidance on the tax treatment for the following:

- (i) QA Ltd. does not have taxable income as per the applicable tax laws, but pays 'Minimum Alternate Tax' (MAT) based on its books profits. The tax paid under MAT can be carried forward for the next 10 years and as per the Company's projections submitted to its bankers, it is in a position to get credit for the same by the end of eighth year. The Company is recognising the MAT credit as a current asset under IGAAP. The amount of MAT credit as on 31st March, 2016 is ₹ 8.5 crores and as on 31st March, 2017 is ₹ 9.75 crores;
- (ii) The Company measures its head office property using the revaluation model. The property is revalued every year as on 31st March. On 31st March, 2016, the carrying value of the property (after revaluation) was ₹ 40 crores whereas its tax base was ₹ 22 crores. During the year ended 31st March, 2017, the Company charged depreciation in its Statement of Profit and Loss of ₹ 2 crores and claimed a tax deduction for tax depreciation of ₹ 1.25 crores. On 31st March, 2017, the property was revalued to ₹45 crores. As per the tax laws, the revaluation of Property, Plant & Equipment does not affect taxable income at the time of revaluation.

The Company has no other temporary differences other than those indicated above. The Company wants you to compute the deferred tax liability as on 31st March, 2017 and the charge/credit to the Statement of Profit and Loss and/or Other Comprehensive Income for the same. Consider the tax rate at 20%. **[MTP May 2019]**

Ans: Computation of Deferred Tax Liability

- (i) MAT credit as on 31st December of ₹ 9.75 crore will be presented in the Balance Sheet as Deferred tax asset. DTA in the current year will be ₹ 1.25 crore (₹ 9.75 crore – ₹ 8.50 crore)
- (ii)
- (a) In case defer tax is created only on account of depreciation

	Carrying value without revaluation	Value as Per tax records	Tax base	Taxable/ (deductible) temporary difference	Total Deferred tax liability/ (asset @ 20%	Credit to P&L during the year
A	b	c	D	E= b-d	F = e x 20%	g
31st March, 2016	22 crore	22 crore	22 crore	nil	nil	nil

Less: Depreciation for the year 2016-17	(2 crore)	(1.25 crore)				
Carrying value as on 31 st March, 2017	20 crore	20.75 crore	20.75 crore	(0.75 crore)	DTA (0.15 crore)	DTA (0.15 crore)

(b) Computation of tax effect taking into account the revalued figures and adjusting impact of tax effect on account of difference in depreciation

S. No.		Carrying value after revaluation	Value as per tax records	Tax base	Taxable / (deductible) temporary difference	Total Deferred tax liability/ (asset) @ 20%	Credit to P&L during the year	Charged to OCI during the year
	a	b	C	d	E= b-d	F = e x 20%	g	h
I	31 st March, 2016	40 crore	22 crore	22 crore	18 crore	DTL 3.6 crore	-	DTL 3.6 crore
IV	Revalued again on 31.3.2017 (It is assumed that revaluation has been done after taking into consideration the impact of Depreciation for the current year)	45 crore	20.75 crore (22-1.25)	20.75 crore	24.25 crore	DTL 4.85 Crore	DTA (0.15 crore) (Refer table (a) above)	DTL 5 crore (Refer Note below) [5 DTL (B/F) – 0.15 DTA = 4.85 DTL]
V	Additional DTL/DTA required during the year (IV-I)					DTL 1.25 crore	DTA (0.15 crore) (Refer table (a))	DTL (1.40 crore) (Refer Note below)

Note: As per para 65 of Ind AS 12, when an asset is revalued for tax purposes and that revaluation is related to an accounting revaluation of an earlier period, or to one that is expected to be carried out in a future period, the tax effects on account of revaluation of asset and the adjustment of the tax base are recognised in other comprehensive income in the periods in which they occur.

Here, it is important to understand that only the tax effects on account of revaluation of asset and the adjustment of the tax base are recognised in other comprehensive income. However, tax effects on account of depreciation of asset and the adjustment of the tax base are recognized in profit and loss.

Accordingly, first of all the tax effect has been calculated assuming that there is no revaluation (Refer Table (a) above) [Since the information for the carrying value before revaluation has not been mentioned, it is assumed to be equal to the carrying amount as per the tax records]. Later the DTA arrived due to difference in depreciation is adjusted with the DTL created due to revaluation. DTA of ₹ 0.15 crore on account of depreciation will be charged to Profit and Loss

and DTL of ₹ 1.40 crore will be charged to OCI. Net effect in the year 31.3.2017 will be DTL 1.25 crore (DTL 1.4 crore – DTA 0.15 crore) [Refer Table (b) above.

Q39: An entity is finalising its financial statements for the year ended 31st March, 20X2. Before 31st March, 20X2, the government announced that the tax rate was to be amended from 40 per cent to 45 per cent of taxable profit from 30th June, 20X2.

The legislation to amend the tax rate has not yet been approved by the legislature. However, the government has a significant majority and it is usual, in the tax jurisdiction concerned, to regard an announcement of a change in the tax rate as having the substantive effect of actual enactment (i.e. it is substantively enacted).

After performing the income tax calculations at the rate of 40 per cent, the entity has the following deferred tax asset and deferred tax liability balances:

Deferred tax asset	₹ 80,000
Deferred tax liability	₹ 60,000

Of the deferred tax asset balance, ₹ 28,000 related to a temporary difference. This deferred tax asset had previously been recognised in OCI and accumulated in equity as a revaluation surplus.

The entity reviewed the carrying amount of the asset in accordance with para 56 of Ind AS 12 and determined that it was probable that sufficient taxable profit to allow utilisation of the deferred tax asset would be available in the future.

Show the revised amount of Deferred tax asset & Deferred tax liability and present the necessary journal entries. [RTP Nov 2019]

Ans: Calculation of Deductible temporary differences:

Deferred tax asset	= ₹ 80,000
Existing tax rate	= 40%
Deductible temporary differences	= 80,000/40% = ₹ 2,00,000

Calculation of Taxable temporary differences:

Deferred tax liability	= ₹ 60,000
Existing tax rate	= 40%
Deductible temporary differences	= 60,000 / 40% = ₹ 1,50,000

Of the total deferred tax asset balance of ₹ 80,000, ₹ 28,000 is recognized in OCI Hence, Deferred tax asset balance of Profit & Loss is ₹ 80,000 - ₹ 28,000 = ₹ 52,000

Deductible temporary difference recognized in Profit & Loss is ₹ 1,30,000 (52,000 / 40%)

Deductible temporary difference recognized in OCI is ₹ 70,000 (28,000 / 40%) The adjusted balances of the deferred tax accounts under the new tax rate are:

Deferred tax asset	₹	
Previously credited to OCI-equity	₹ 70,000 x 0.45	31,500

Previously recognised as Income	₹ 1,30,000 x 0.45	58,500
		90,000

Deferred tax liability

Previously recognized as expense	₹ 1,50,000 x 0.45	67,500
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The net adjustment to deferred tax expense is a reduction of ₹ 2,500. Of this amount, ₹ 3,500 is recognised in OCI and ₹ 1,000 is charged to P&L.

The amounts are calculated as follows:

	Carrying amount at 45%	Carrying amount at 40%	Increase (decrease) in deferred tax expense
Deferred tax assets			
Previously credited to OCI-equity	31,500	28,000	(3,500)
Previously recognised as Income	58,500	52,000	(6,500)
Deferred tax liability	90,000	80,000	(10,000)
Previously recognized as expense	67,500	60,000	7,500
Net adjustment			(2,500)

An alternative method of calculation is:

		₹
DTA shown in OCI	₹ 70,000 x (0.45 - 0.40)	3,500
DTA shown in Profit or Loss	₹ 1,30,000 x (0.45-0.40)	6,500
DTL shown in Profit or Loss	₹ 1,50,000 x (0.45 -0.40)	7,500

Journal Entries

Deferred tax asset	3,500	
OCI –revaluation surplus		3,500
Deferred tax asset	6,500	
Deferred tax expense		6,500
Deferred tax expense	7,500	
Deferred tax liability		7,500

Alternatively, a combined journal entry may be passed as follows:

Deferred tax asset	Dr.	10,000
Deferred tax expense	Dr.	1,000
To OCI –revaluation surplus		3,500
To Deferred tax liability		7,500

Q 40: On 1 January 2020, entity H acquired 100% share capital of entity S for ₹15,00,000. The book values and the fair values of the identifiable assets and liabilities of entity S at the date of acquisition are set out below, together with their tax bases in entity S's tax jurisdictions. Any goodwill arising on the acquisition is not deductible for tax purposes. The tax rates in entity H's and entity S's jurisdictions are 30% and 40% respectively.

Acquisitions	Book values ₹'000	Tax base ₹'000	Fair values ₹'000
Land and buildings	600	500	700
Property, plant and equipment	250	200	270
Inventory	100	100	80
Accounts receivable	150	150	150
Cash and cash equivalents	130	130	130
Accounts payable	(160)	(160)	(160)
Retirement benefit obligations	(100)	-	(100)

You are required to calculate the deferred tax arising on acquisition of Entity S. Also calculate the Goodwill arising on acquisition.

Ans: Calculation of Net assets acquired (excluding the effect of deferred tax liability):

Net assets acquired	Tax base ₹'000	Fair values ₹'000
Land and buildings	500	700
Property, plant and equipment	200	270
Inventory	100	80
Accounts receivable	150	150
Cash and cash equivalents	130	130
Total assets	1,080	1,330
Accounts payable	(160)	(160)
Retirement benefit obligations	-	(100)
Net assets before deferred tax liability	920	1,070

Calculation of deferred tax arising on acquisition of entity S and goodwill

	₹'000	₹'000
Fair values of S's identifiable assets and liabilities (excluding deferred tax)		1,070
Less: Tax base		(920)
Temporary difference arising on acquisition		150
Net deferred tax liability arising on acquisition of		60

entity S (₹150,000 @ 40%)		
Purchase consideration		1,500
Less: Fair values of entity S's identifiable assets and liabilities (excluding deferred tax)	1,070	
Deferred tax liability	(60)	(1,010)
Goodwill arising on acquisition		490

Note: Since, the tax base of the goodwill is nil, taxable temporary difference of ₹ 4,90,000 arises on goodwill. However, no deferred tax is recognised on the goodwill. The deferred tax on other temporary differences arising on acquisition is provided at 40% and not 30%, because taxes will be payable or recoverable in entity S's tax jurisdictions when the temporary differences will be reversed.

Q41: PQR Ltd. is preparing the opening consolidated financial statements of the group under Ind AS and has approached you to suggest the possible deferred tax impact on the following transactions/events:

- (i) On 1st April, 2015, PQR Ltd. acquired 100% shares of ABC Ltd. for ₹ 4,373 crore. By March 31, 2017, ABC Ltd. has made profit of ₹ 5 crore, which remained undistributed. Based on tax legislation in India, the tax base of the investment in XYZ Ltd. is its original cost. Assume dividend distribution tax rate applicable is 15%.
- (ii) On 15th March, 2017, ABC Ltd. sells to PQR Ltd. inventory with a cost of ₹ 120 crore giving rise to taxable profit of ₹ 20 crore in the books of ABC Ltd. The inventory is lying in the books of PQR Ltd. as on 31st March 2017. The corporate income tax applicable to PQR Ltd. is 30%, while that of ABC Ltd. is 34%.
- (iii) PQR Ltd. acquired 50% of shares KKR Ltd. on 1st January, 2017 for ₹ 1,000 crore. By 31st March, 2017, KKR Ltd. has made profit of ₹ 50 crore (Share of PQR) which remain undistributed. Based on the tax legislation in India, the tax base of the investment in KKR Ltd. is its original cost. Assume the dividend distribution tax rate applicable is 15%.

[GFRS]

Ans: (i) As a parent controls the dividend policy of its subsidiary, it is able to control the timing of the reversal of temporary differences associated with that investment (including the temporary differences arising not only from undistributed profits but also from any foreign exchange translation differences). Furthermore, it would often be impracticable to determine the amount of income taxes that would be payable when the temporary difference reverses. Therefore, when the parent has determined that those profits will not be distributed in the foreseeable future the parent does not recognise a deferred tax liability.

In accordance with the above, the deferred tax liability (DTL) is not recognised on the accumulated undistributed profits of the subsidiary company in the consolidated financial statements of the parent entity, if it is determined that such accumulated undistributed profits will not be distributed in the foreseeable future.

However, if based on evaluation of facts and circumstances, it is concluded that it is probable that the accumulated undistributed profits will be distributed in the foreseeable future, then DTL on accumulated undistributed profits of the subsidiary company should be recognised in the consolidated statement of profit and loss of the parent company.

- (ii) In the Consolidated Balance Sheet the profit made by ABC Ltd. will be eliminated. Under Ind AS 12 'Income Taxes', a deferred tax asset would be recognized on the unrealized profit of ₹ 20 crore based on PQR Ltd. tax rate of 30% ie ₹ 6 cr. [20 cr x 30%]. The additional ₹ 0.80 crore tax actually paid by ABC Ltd. ie [(20 cr x 34%) - 6 cr] would be recognized in Profit or loss for the period ended 31st March, 2017.
- (iii) Similar to the treatment given in point (i) above, the deferred tax liability (DTL) is not recognised on the accumulated undistributed profits of the KKR Ltd. (joint venture) in the consolidated financial statements of the parent entity, if it is determined that such accumulated undistributed profits will not be distributed in the foreseeable future.

However, if based on evaluation of facts and circumstances, it is concluded that it is probable that the accumulated undistributed profits will be distributed in the foreseeable future, then DTL on proportionate accumulated undistributed profits of the KKR Ltd. (joint venture) should be recognised in the consolidated statement of profit and loss of the parent company at ₹ 7.5 crore.

Q42: The entity has an identifiable asset ASSOTA with a carrying amount of ₹ 10,00,000. Its recoverable amount is ₹ 6,50,000. The tax base of ASSOTA is ₹ 8,00,000 and the tax rate is 30%. Impairment losses are not tax deductible. Entity expects to continue to earn profits in future.

For the identifiable asset ASSOTA, what would be the impact on the deferred tax asset/ liability at the end of the period?

RTP May 2021

Ans: As per Ind AS 36, the revised carrying amount of asset ASSOTA would be ₹6,50,000.

The tax base of asset ASSOTA is given as ₹8,00,000.

Carrying base of asset = ₹6,50,000

Tax base of asset = ₹8,00,000

Since tax base is greater than carrying base of asset, so deferred tax asset would be created on the temporary difference of ₹1,50,000 (₹8,00,000 – ₹6,50,000) at the given tax rate of 30%.

Hence, Deferred tax asset for the asset ASSOTA would be ₹1,50,000 x 30% = ₹45,000.

Q43 C Ltd. acquired the following assets and liabilities of D Ltd. in a business combination:

₹ in '000s

	Fair Value	Carrying Amount	Temporary Difference
Plant & equipment	500	510	(10)
Inventory	130	150	(20)
Trade receivables	200	210	(10)
Loans and advances	80	85	(5)
	910	955	(45)
10% Debentures	200	200	
	710	755	
Consideration Paid	760	760	
Goodwill	50	5	45

Goodwill is deductible as permissible expenses under the existing tax law. Calculate Deferred Tax Asset / liability as per relevant Ind AS and also pass related journal entry in books of C Ltd. and assume tax rate at 25%.

Exam Paper January 2021 (4 Marks)

Ans: In this case there is a Deferred Tax Asset as the Tax base of assets acquired is higher by ₹ 45,000. Deferred Tax Asset would be ₹ 11,250 (45,000 x 25%)

Journal entry

Plant and equipment	Dr.	5,00,000	
Inventory	Dr.	1,30,000	
Trade receivables	Dr.	2,00,000	
Loans and advances	Dr.	80,000	
Goodwill (50,000 - 11,250)	Dr.	38,750	
Deferred Tax Asset	Dr.	11,250	
To 10% Debentures			2,00,000
To Bank			7,60,000