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**“Must do Questions” Before Exam**

*Topic -*  
*INDAS 2 - INVENTORIES*

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**Question 1 (MTP Oct18 & Dec21 EXAMS)**

In a manufacturing process of Mars Ltd, one by-product BP emerges besides two main products MP1 and MP2 apart from scrap. Details of cost of production process are here under:

Item	Unit	Amount	Output	Closing Stock 31-3-20X1
Raw material	14,500	1,50,000	MP I-5,000 units	250
Wages	-	90,000	MP II - 4,000 units	100
Fixed overhead	-	65,000	BP- 2,000 units	-
Variable overhead	-	50,000	-	-

Average market price of MP1 and MP2 is ₹60 per unit and ₹50 per unit respectively, by- product is sold @ ₹20 per unit. There is a profit of ₹5,000 on sale of by-product after incurring separate processing charges of ₹8,000 and packing charges of ₹2,000, ₹5,000 was realised from sale of scrap.

Required:

Calculate the value of closing stock of MP1 and MP2 as on 31-03-20X1.

**SOLUTION**

As per Ind 2 'Inventories', most by-products as well as scrap or waste materials, by their nature, are immaterial. They are often measured at net realizable value and this value is deducted from the cost of the main product.

**1) Calculation of NRV of By-product BP**

Selling price of by-product	2,000 units x 20 per unit	40,000
Less: Separate processing charges of by- product BP		(8,000)
Packing charges		(2,000)
<b>Net realizable value of by-product BP</b>		<b>30,000</b>

**2) Calculation of cost of conversion for allocation between joint products MP1 and MP2**

Raw material		1,50,000
Wages		90,000
Fixed overhead		65,000
Variable overhead		50,000
Less: NRV of by-product BP (See Calculation 1)	30,000	
Sale value of scrap	5,000	(35,000)
<b>Joint cost to be allocated between MP1 and MP2</b>		<b>3,20,000</b>

**3) Determination of "basis for allocation" and allocation of joint cost to MP1 and MP2**

	MP I	MP 2
Output in units (a)	5,000	4,000
Sales price per unit (b)	60	50
Sales value (a x b)	3,00,000	2,00,000
Ratio of allocation	3	2
Joint cost of ₹ 3,20,000 allocated in the ratio of 3:2 (c)	1,92,000	1,28,000
<b>Cost per unit [c/a]</b>	<b>38.4</b>	<b>32</b>

**4) Determination of Value of Closing stock of MP 1 & MP 2**

Particulars	MP 1	MP 2
Closing stock in units	250 units	100 units
Cost per unit	38.4	30
<b>Value of closing stock</b>	<b>9,600</b>	<b>3,200</b>

**Question 2 (RTP May20)**

The following is relevant information for an entity:

- Full capacity is 10,000 labour hours in a year.
- Normal capacity is 7,500 labour hours in a year.
- Actual labour hours for current period are 6,500 hours.

- Total fixed production overhead is ₹ 1,500.
- Total variable production overhead is ₹ 2,600.
- Total opening inventory is 2,500 units.
- Total units produced in a year are 6,500 units.
- Total units sold in a year are 6,700 units.
- The cost of inventories is assigned by using FIFO cost formula.

How overhead costs are to be allocated to cost of goods sold and closing inventory?

### **SOLUTION**

**Hours taken to produce 1 unit** = 6,500 hours / 6,500 units = 1 hour per unit.

**Fixed production overhead absorption rate:**

$$\begin{aligned}
 &= \text{Fixed production overhead} / \text{labour hours for normal capacity} \\
 &= ₹ 1,500 / 7,500 \\
 &= ₹ 0.2 \text{ per hour}
 \end{aligned}$$

Management should allocate fixed overhead costs to units produced at a rate of ₹ 0.2 per hour.

Therefore, fixed production overhead allocated to 6,500 units produced during the year (one unit per hour) = 6,500 units x 1 hour x ₹ 0.2 = ₹ 1,300.

The remaining fixed overhead incurred during the year of ₹ 200 (₹ 1500 – ₹ 1300) that remains unallocated is recognised as an expense.

The amount of fixed overhead allocated to inventory is not increased as a result of low production by using normal capacity to allocate fixed overhead.

Variable production overhead absorption rate:

$$\begin{aligned}
 &= \text{Variable production overhead} / \text{actual hours for current period} \\
 &= ₹ 2,600 / 6,500 \text{ hours} \\
 &= ₹ 0.4 \text{ per hour}
 \end{aligned}$$

Management should allocate variable overhead costs to units produced at a rate of ₹ 0.4 per hour.

The above rate results in the allocation of all variable overheads to units produced during the year.

Closing inventory = Opening inventory + Units produced during year – Units sold during year  
 = 2,500 + 6,500 – 6,700 = 2,300 units

As each unit has taken one hour to produce (6,500 hours / 6,500 units produced), total fixed and variable production overhead recognised as part of cost of inventory:

$$\begin{aligned}
 &= \text{Number of units of closing inventory} \times \text{Number of hours to produce each unit} \times (\text{Fixed production overhead absorption rate} + \text{Variable production overhead absorption rate}) \\
 &= 2,300 \text{ units} \times 1 \text{ hour} \times (₹ 0.2 + ₹ 0.4) \\
 &= ₹ 1,380
 \end{aligned}$$

The remaining ₹ 2,720 [(₹ 1,500 + ₹ 2,600) – ₹ 1,380] is recognised as an expense in the income statement as follows:

₹	
Absorbed in cost of goods sold (FIFO basis) (6,500 – 2,300) = 4,200 x ₹ 0.6	2,520
Unabsorbed fixed overheads, not included in the cost of goods sold	200
<b>Total</b>	<b>2,720</b>

### **Question 3 (RTP May21 & MTP Nov22)**

On 1 January 20X1 an entity accepted an order for 7,000 custom-made corporate gifts.

On 3 January 20X1 the entity purchased raw materials to be consumed in the production process for ₹ 5,50,000, including ₹ 50,000 refundable purchase taxes. The purchase price was funded by raising a loan of ₹ 5,55,000 (including ₹ 5,000 loan-raising fees). The loan is secured by the inventories.

During January 20X1 the entity designed the corporate gifts for the customer.

Design costs included:

- Cost of external designer = ₹ 7,000; and
- Labour = ₹ 3,000.

During February 20X1 the entity's production team developed the manufacturing technique and made further modifications necessary to bring the inventories to the conditions specified in the agreement. The following costs were incurred in the testing phase:

- Materials, net of ₹. 3,000 recovered from the sale of the scrapped output = ₹ 21,000;
- Labour = ₹ 11,000; and
- Depreciation of plant used to perform the modifications = ₹ 5,000.

During February 20X1 the entity incurred the following additional costs in manufacturing the customised corporate gifts:

- Consumable stores = ₹ 55,000;
- Labour = ₹ 65,000; and
- Depreciation of plant used to manufacture the customised corporate gifts = ₹ 15,000.

The customised corporate gifts were ready for sale on 1 March 20X1. No abnormal wastage occurred in the development and manufacture of the corporate gifts.

Compute the cost of the inventory? Substantiate your answer with appropriate reasons and calculations, wherever required

### SOLUTION

Statement showing computation of inventory cost

Particulars	Amount (₹)	Remarks
Costs of purchase	5,00,000	Purchase price of raw material [purchase price (₹ 5,50,000) less refundable purchase taxes (Rs. 50,000)]
Loan-raising fee	-----	Included in the measurement of the liability
Costs of purchase	55,000	Purchase price of consumable stores
Costs of conversion	65,000	Direct costs – labour
Production overheads	15,000	Fixed costs – depreciation
Production overheads	10,000	Product design costs and labour cost for specific customer
Other costs	37,000	Refer working note
Borrowing costs	----	Recognised as an expense in profit or loss
<b>Total cost of inventories</b>	<b>6,82,000</b>	

### Working Note:

#### Costs of testing product designed for specific customer:

₹ 21,000 material (i.e. net of the ₹ 3,000 recovered from the sale of the scrapped output) + ₹ 11,000 labour + ₹ 5,000 depreciation.

### Question 4 (RTP Nov22)

(i) A retailer company imported goods at a cost of Rs. 1,30,000 including Rs. 20,000 non-refundable import duties and Rs. 10,000 refundable purchase taxes. The risks and rewards of ownership of the imported goods were transferred to the retailer company upon collection of the goods from the harbour warehouse. The retailer company was required to pay for the goods upon collection. The retailer company incurred Rs. 5,000 to transport the goods to its retail outlet and a further Rs. 2,000 in delivering the goods to its customer. Further selling costs of Rs. 3,000 were incurred in selling the goods.

State whether delivery charges and selling expenses will form part of the cost of inventory. If not, then why? Also calculate the cost of inventory.

(ii) Company A incurred Rs. 20,000 as cost for restoring the site on which the item of PPE was located. This item was used for manufacturing of goods and the requirement for restoring will arise due to manufacturing of goods.

What will the treatment of this Rs. 20,000 in the books of Company A? Analyse on the basis of the provisions of relevant Ind AS.



**SOLUTION****(i) Calculation of Inventory cost:**

Particulars	Amount (Rs.)
Purchase Price (1,30,000 – 20,000 – 10,000)	1,00,000
Non-refundable import duties	20,000
Transport cost	5,000
<b>Total</b>	<b>1,25,000</b>

**Note:** The cost of purchase excludes the refundable purchase taxes paid on acquisition of the goods as the Rs. 10,000 paid will be refunded to the retailer.

Ind AS 2 specifically exclude selling cost from forming part of cost of inventory. However, selling and distribution costs are generally used as single term because both are related, as selling costs are incurred to effect the sale and the distribution costs are incurred by the seller to complete a sale transaction by making the goods available to the buyer from the point of sale to the point at which the buyer takes possession. Since these costs are not related to bringing the goods to their present location and condition, the same are not included in the cost of inventories. Accordingly, though the word 'distribution costs' is not specifically mentioned in Ind AS 2, these costs would continue to be excluded from the cost of inventories. Therefore, it excludes the selling expenses incurred (i.e., Rs. 2,000 delivery costs and Rs. 3,000 other selling costs).

**(ii)** Paragraph 16 of Ind AS 16, Property, Plant and Equipment, inter alia states that the cost of an item of property, plant and equipment comprises the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

Further, paragraph 18 of Ind AS 16 states that an entity applies Ind AS 2 to the costs of obligations for dismantling, removing and restoring the site on which an item is located that are incurred during a particular period as a consequence of having used the item to produce inventories during that period. The obligations for costs accounted for in accordance with Ind AS 2 or Ind AS 16 are recognised and measured in accordance with Ind AS 37, Provisions, Contingent Liabilities and Contingent Assets.

Paragraph 16 of Ind AS 16 clarifies that decommissioning costs that meet the recognition criteria under Ind AS 37, Provisions, Contingent Liabilities and Contingent Assets, for a provision are added to the cost of an item of property, plant and equipment if such costs are not incurred through the asset's use to produce inventories. Paragraph 18 fills the gap by clarifying where such costs are incurred through the asset's use to produce inventories, they are added to the cost of inventories.

Where the obligation to restore the asset arises due to the use of the asset to produce inventories but not due to the asset's installation, construction or acquisition, the costs are added to the costs of inventories.

Based on the above provisions and discussion, cost of restoring the site Rs. 20,000 incurred during the period of production as a consequence of having used the item to produce inventories during that period should be added to the cost of inventories. However, later the inventories are measured at the lower of cost and net realisable value in accordance with paragraph 9 of Ind AS 2.

**Question 5 (RTP May23)**

An entity has following details regarding cost and retail price of the goods purchased and unsold at the beginning of the year:

	Cost	Retail Price
Opening inventory	6,250	8,000
Purchases	19,500	34,000
Inventory on hand		(23,000)
Sales for the period		19,000

Applying the retail method, compute the following:

- Percentage of cost price over retail price;
- Cost of closing inventory;
- Value of cost of sales (at cost); and
- Profit earned during the year on sale of inventory

Ignore the impact of mark-ups or mark-downs on the selling price

### Solution:

Table showing application of Retail method for calculation of the goods sold during the year and unsold inventory

S. No.	Particulars		₹
	Cost price of goods	6,250 + 19,500	25,750
	Retail price of goods	8,000 + 34,000	42,000
(a)	Cost percentage of retail price	25,750 / 42,000	61%
(b)	Closing inventory (at cost)	23,000 x 61%	14,030
(c)	Cost of sales for the period	[(6,250 + 19,500) - 14,030]	11,720
	Sales for the period		19,000
(d)	Profit earned on sale of goods during the year	19,000 - 11,720	7,280

### Question 6 (ICAI Module)

The following information on Zenith Ltd. is given below.

**You are required to:**

- Calculate the value to raw material and finished goods at cost.
- Calculate the value of closing stock when
  - Net realizable value of finished Goods B is Rs 800
  - Net realizable value of finished Goods B is Rs 600

<b>Raw Material A</b>	
Closing Balance	1000 Units
	<b>Rs per Units</b>
Cost price including GST	400
GST (Input credit is receivable)	20
Freight Inward	40
Unloading Charges	20
Replacement Cost	300
<b>Finished Goods B</b>	
Closing Balance	2400 Units
	<b>Rs per Units</b>
Raw material consumed	440
Direct Labour	120
Direct Overhead	80

Raw material A is used for production of finished Good B. The total fixed overhead for the year was Rs 4 lakhs on normal capacity of 20,000 units.

### SOLUTION:

(1) Statement showing valuation of Raw Material and Finished Goods at Cost

Raw Material A	Rs per unit
Cost price	400
Less: GST - Input credit is receivable	(20)

Add: Fright inward	380
Unloading charges	40
<b>Total cost</b>	<b>440</b>
<b>Finished Goods B</b>	<b>Rs per units</b>
Raw material consumed	440
Direct Labour	120
Direct Overhead	80
Fixed overhead (Rs 4,00,000/20,000 units)	20
<b>Total cost</b>	<b>660</b>

(2)

- (a) When Net Realisable Value (NRV) of the Finished Goods B is Rs 800\* per units NRV is greater than the cost of finished Goods B i.e. Rs 660 per unit Hence, Raw Material and Finished Goods will be valued at cost

Accordingly, Value of closing stock will be:

	Quantity	Rate	Amount (Rs)
Raw Material A	1000	440	4,40,000
Finished Goods B	2400	660	15,84,000
<b>Total cost of closing stock</b>			<b>20,24,000</b>

NRV is less than the cost of finished Goods B i.e. Rs 660 per unit

- (b) When Net Realisable Value of the Finished Goods B is Rs 600\* per unit Hence, Raw Material is to be valued at replacement cost and Finished Goods are to be valued at NRV.

Accordingly, Value of closing stock will be:

	Quantity	Rate	Amount (Rs)
Raw Material A	1000	300	3,00,000
Finished Goods B	2400	600	14,40,000
<b>Total cost of closing stock</b>			<b>17,40,000</b>

### Question 7 (ICAI Module)

Particulars	Kg.	units	₹
Opening Inventory:	Finished Goods	1,000	25,000
	Raw Materials	1,100	11,000
Purchases		10,000	1,00,000
Labour			76,500
Overheads (Fixed)			75,000
Sales		10,000	2,80,000
Closing Inventory:	Raw Materials	900	
	Finished Goods	1200	

The expected production for the year was 15,000 kg of the finished product. Due to fall in market demand the sales price for the finished goods was ₹ 20 per kg and the replacement cost for the raw material was ₹ 9.50 per kg on the closing day. You are required to calculate the closing inventory as on that date.

### SOLUTION

#### Calculation of cost for closing inventory

Particulars	₹
Cost of Purchase (10,200 x 10)	1,02,000
Direct Labour	76,500



Fixed Overhead 75000/15000 x 10200	51,000
Cost of Production	<u>2,29,500</u>
Cost of closing inventory per unit (2,29,500/10,200)	₹ 22.50
<b>Net Realisable Value per unit</b>	<b>₹ 20.00</b>

Since net realisable value is less than cost, closing inventory will be valued at ₹ 20.

As NRV of the finished goods is less than its cost, relevant raw materials will be valued at replacement cost i.e. ₹ 9.50.

Therefore, value of closing inventory: Finished Goods (1,200x20)	₹ 24,000
Raw Materials (900 x 9.50)	<u>₹ 8,550</u>
	<b>₹ 32,550</b>

### **Question 8 (RTP May18)**

On 31 March 20X1, the inventory of ABC includes spare parts which it had been supplying to a number of different customers for some years. The cost of the spare parts was ₹ 10 million and based on retail prices at 31 March 20X1, the expected selling price of the spare parts is ₹ 12 million. On 15 April 20X1, due to market fluctuations, expected selling price of the spare parts in stock reduced to ₹ 8 million. The estimated selling expense required to make the sales would ₹ 0.5 million. Financial statements were approved by the Board of Directors on 20<sup>th</sup> April 20X1.

As at 31<sup>st</sup> March 20X2, Directors noted that such inventory is still unsold and lying in the warehouse of the company. Directors believe that inventory is in a saleable condition and active marketing would result in an immediate sale. Since the market conditions have improved, estimated selling price of inventory is ₹ 11 million and estimated selling expenses are same ₹ 0.5 million.

What will be the value inventory at the following dates:

- 31<sup>st</sup> March 20X1
- 31<sup>st</sup> March 20X2

### **SOLUTION**

As per Ind AS 2 'Inventories', inventory is measured at lower of 'cost' or 'net realisable value'. Further, as per Ind AS 10: 'Events after Balance Sheet Date', decline in net realisable value below cost provides additional evidence of events occurring at the balance sheet date and hence shall be considered as 'adjusting events'.

- In the given case, for valuation of inventory as on 31 March 20X1, cost of inventory would be ₹ 10 million and net realisable value would be ₹ 7.5 million (i.e. Expected selling price ₹ 8 million- estimated selling expenses ₹ 0.5 million). Accordingly, inventory shall be measured at ₹ 7.5 million i.e. lower of cost and net realisable value. Therefore, inventory write down of ₹ 2.5 million would be recorded in income statement of that year.
- As per para 33 of Ind AS 2, a new assessment is made of net realizable value in each subsequent period. It Inter alia states that if there is increase in net realizable value because of changed economic circumstances, the amount of write down is reversed so that new carrying amount is the lower of the cost and the revised net realizable value. Accordingly, as at 31 March 20X2, again inventory would be valued at cost or net realisable value whichever is lower. In the present case, cost is ₹ 10 million and net realisable value would be ₹ 10.5 million (i.e. expected selling price ₹ 11 million – estimated selling expense ₹ 0.5 million). Accordingly, inventory would be recorded at ₹ 10 million and inventory write down carried out in previous year for ₹ 2.5 million shall be reversed.

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*Financial Reporting (FR)*

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*Topic - INDAS 16 - PROPERTY,  
PLANT & EQUIPMENT*

Question of No. 11

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**Question 9 (ICAI Module)**

MS Ltd. has acquired a heavy machinery at a cost of Rs. 1,00,00,000 (with no breakdown of the component parts). The estimated useful life is 10 years. At the end of the sixth year, one of the major components, the turbine requires replacement, as further maintenance is uneconomical. The remainder of the machine is perfect and is expected to last for the next four years. The cost of a new turbine is Rs. 45,00,000. Appropriate Discount Rate is 5% pa

Can the cost of the new turbine be recognised as an asset, and, if so, what treatment should be used?

**SOLUTION:**

The new turbine will produce economic benefits to MS Ltd., and the cost is measurable. Hence, the item should be recognised as an asset. The original invoice for the machine did not specify the cost of the turbine; however, the cost of the replacement Rs. 45,00,000 can be used as an indication (usually by discounting) of the likely cost, six years previously.

If an appropriate discount rate is 5% per annum, Rs. 45,00,000 discounted back six years amounts to Rs. 33,57,900 [Rs. 45,00,000/(1.05)<sup>6</sup>], i.e., the approximate cost of turbine before 6 years.

The current carrying amount of the turbine which is required to be replaced of Rs. 13,43,160 would be derecognised from the books of account, (i.e., Original Cost Rs. 33,57,900 as reduced by accumulated depreciation for past 6 years Rs. 20,14,740, assuming depreciation is charged on straight-line basis.)

The cost of the new turbine, Rs. 45,00,000 would be added to the cost of machine, resulting in a revision of carrying amount of machine to Rs. 71,56,840. (i.e., Rs. 40,00,000\* – Rs. 13,43,160 + Rs. 45,00,000).

\*Original cost of machine Rs. 1,00,00,000 reduced by accumulated depreciation (till the end of 6 years) Rs. 60,00,000.

**Question 10 (ICAI Module)**

X Limited started construction on a building for its own use on April 1, 20X0. The following costs are incurred:

	Amount (Rs).
Purchase price of land	30,00,000
Stamp duty & legal fee	2,00,000
Architect fee	2,00,000
Site preparation	50,000
Materials	10,00,000
Direct labour cost	4,00,000
General overheads	1,00,000

Other relevant information: Material costing ₹ 1,00,000 had been spoiled and therefore wasted and a further ₹ 1,50,000 was spent on account of faulty design work. As a result of these problems, work on the building was stopped for two weeks during November, 20X0 and it is estimated that ₹ 22,000 of the labour cost relate to that period. The building was completed on 1st January, 20X1 and brought in use 1st April, 20X1. X Limited had taken a loan of ₹ 40,00,000 on 1st April, 20X0 for construction of the building. The loan carried an interest rate of 8% per annum and is repayable on 1st April, 20X2.

Calculate the cost of the building that will be included in tangible non-current asset as an addition?

**SOLUTION:**

Only those costs which are directly attributable to bringing the asset into working condition for its intended use should be included. Administration and general costs cannot be included. Abnormal cost also should be excluded. The cost of spoilt materials and faulty designs are abnormal costs. The labour cost incurred during the stoppage is an abnormal cost and should not to be included.

**Amount to be included in Property, Plant and Equipment (PPE):**

	Rs.
Purchase price of land	30,00,000
Stamp duty & legal fee	2,00,000
Architect fee	2,00,000

Site preparation	50,000
Material (10,00,000 – 2,50,000)	7,50,000
Direct labour cost (4,00,000 – 22,000)	3,78,000
General overheads	Nil
Interest	Nil
<b>Total to be capitalized</b>	<b>48,04,667</b>

\*Period of construction of building is not a substantial period (i.e. 9 months), borrowing cost are not eligible for capitalisation.

#### Author's View:

Period of 9 months should be considered as Substantial Period even though it is less than 12 months. Therefore interest on loan should be capitalised from April 1, 20X0, and capitalization of interest on loan must cease when the asset is ready to use i.e., January 1, 20X1. Hence interest is  $40,00,000 \times 8\% \times 8.5/12 = 2,26,667/-$

Since the work was stopped during two weeks, considering this period as extended period, therefore labour cost is treated as abnormal and capitalisation of Borrowing cost shall also be suspended for 2 weeks as per IndAS 23.

#### Question 11 : (Nov18 EXAM)

On 1 April 20X1, Sun Ltd purchased some Land for Rs.10000 (including legal costs of Rs 1000) in order to construct a new factory. Construction work commenced on 1 May 20X1. Sun ltd incurred the following costs in relation with its construction:

- Preparation and levelling of the land – Rs. 300
- Purchase of materials for the construction – Rs. 6080 in total.
- Employment costs of the construction workers – Rs. 200 per month.
- Overhead costs incurred directly on the construction of the factory – Rs. 100 per month.
- Ongoing overhead costs allocated to the construction project using the company's normal overhead allocation model – Rs. 50 per month.
- Income received during the temporary use of the factory premises as a car park during the construction period – Rs. 50.
- Costs of relocating employees to work at the new factory – Rs. 300
- Costs of the opening ceremony on 31<sup>st</sup> January 20X1 – Rs. 150

The factory was completed on 30 November 20X1 and production began on 1 February 20X2. The overall useful life of the factory building was estimated at 40 years from the date of completion. However, it is estimated that the roof will need to be replaced 20 years after the date of completion and that the cost of replacing the roof at current prices would be 30% of the total cost of the building.

At the end of the 40-year period, Sun Ltd has a legally enforceable obligation to demolish the factory and restore the site to its original condition. The directors estimate that the cost of demolition in 40 years' time (based on prices prevailing at that time) will be Rs 20000. An annual risk adjusted discount rate which is appropriate to this project is 8%. The present value of Rs 1 payable in 40 years' time at an annual discount rate of 8% is Rs. 0.046

The construction of the factory was partly financed by a loan of Rs. 17500 taken out on 1 April 20X1. The loan was at an annual rate of interest of 6%. During the period 1 April 20X1 to 31 August 20X1 (when the loan proceeds had been fully utilised to finance the construction), Sun Ltd received investment income of Rs 100 on the temporary investment of the proceeds.

Required:

Compute the carrying amount of the factory in the Balance Sheet of Sun Ltd at 31 March 20X2. You should explain your treatment of all the amounts referred to in this part in your answer.

**SOLUTION:****Computation of the cost of the factory**

Description	Included in P.P.E.	Explanation
Purchase of land	10,000	Both the purchase of the land and the associated legal costs are direct costs of constructing the factory.
Preparation and leveling	300	A direct cost of constructing the factory
Materials	6,080	A direct cost of constructing the factory
Employment costs of construction workers	1,400	A direct cost of constructing the factory for a seven-month period
Direct overhead costs	700	A direct cost of constructing the factory for a seven-month period
Allocated overhead costs	Nil	Not a direct cost of construction
Income from use as a car park	Nil	Not essential to the construction so recognised directly in profit or loss
Relocation costs	Nil	Not a direct cost of construction
Opening ceremony	Nil	Not a direct cost of construction
Finance costs	612.50	Capitalise the interest cost incurred in as even month period (purchase of land would not trigger off capitalisation since land is not a qualifying asset and it is separate from building. Construction started from 1 <sup>st</sup> May)
Investment income on temporary investment of the loan proceeds	(100)	offset against the amount capitalized
Demolition cost recognised as a provision	<u>920</u>	Where an obligation must recognise as part of the initial cost at PV.
<b>Total cost of Land &amp; Building</b>	<b><u>19,912.50</u></b>	
<b>Computation of accumulated depreciation</b>		
Total depreciable amount	9,912.50	All of the net finance cost of 512.50 (612.50 – 100) has been allocated to the depreciable amount. Also acceptable to reduce by allocating a portion to the non-depreciable land element principle
Depreciation must be in two parts: Depreciation of roof component	49.56	$9,912.50 \times 30\% \times 1/20 \times 4/12$
Depreciation of remainder	57.82	$9,912.50 \times 70\% \times 1/40 \times 4/12$
Total depreciation	107.38	
<b>Computation of carrying amount</b>	<b><u>19,805.12</u></b>	<b>19,912.50 – 107.38</b>

**Question 12: (RTP Nov18 & Nov19 EXAMS)**

ABC Ltd is setting up a new refinery outside the city limits. In order to facilitate the construction of the refinery and its operations, ABC Ltd. is required to incur expenditure on the construction / development of railway siding, road and bridge. Though ABC Ltd. incurs (or contributes to) the expenditure on the construction/ development, it will not have ownership rights on these items and they are also available for use to other entities and public at large. Whether ABC Ltd. can capitalise expenditure incurred on these items as property, plant and equipment (PPE)? If yes, how should these items be depreciated and presented in the financial statements of ABC Ltd. as per Ind AS?

**SOLUTION**

Ind AS 16 states that the cost of an item of property, plant and equipment shall be recognised as an asset if, and only if:

- It is probable that future economic benefits associated with the item will flow to the entity; and
- The cost of the item can be measured reliably.



Further, paragraph 9 provides that the standard does not prescribe the unit of measure for recognition, i.e., what constitutes an item of property, plant and equipment. Thus, judgment is required in applying the recognition criteria to an entity's specific circumstances.

Paragraph 16, inter alia, states that the cost of an item of property, plant and equipment comprise any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

In the given case, railway siding, road and bridge are required to facilitate the construction of the refinery and for its operations. Expenditure on these items is required to be incurred in order to get future economic benefits from the project as a whole which can be considered as the unit of measure for the purpose of capitalisation of the said expenditure even though the company cannot restrict the access of others for using the assets individually. It is apparent that the aforesaid expenditure is directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.

In view of this, even though ABC Ltd. may not be able to recognize expenditure incurred on these assets as an individual item of property, plant and equipment in many cases (where it cannot restrict others from using the asset), expenditure incurred may be capitalised as a part of overall cost of the project. From this, it can be concluded that, in the extant case the expenditure incurred on these assets, i.e., railway siding, road and bridge, should be considered as the cost of constructing the refinery and accordingly, expenditure incurred on these items should be allocated and capitalised as part of the items of property, plant and equipment of the refinery.

### **Depreciation**

As per paragraph 43 and 47 of Ind AS 16, if these assets have a useful life which is different from the useful life of the item of property, plant and equipment to which they relate, it should be depreciated separately. However, if these assets have a useful life and the depreciation method that are the same as the useful life and the depreciation method of the item of property, plant and equipment to which they relate, these assets may be grouped in determining the depreciation charge. Nevertheless, if it has been included in the cost of property, plant and equipment as a directly attributable cost, it will be depreciated over the useful lives of the said property, plant and equipment.

The useful lives of these assets should not exceed that of the asset to which it relates.

### **Presentation**

These assets should be presented within the class of asset to which they relate.

### **Question 12 (RTP May22 & MTP May23)**

*On 1st January, 20X1 an entity purchased an item of equipment for Rs. 600,000, including Rs. 50,000 refundable purchase taxes. The purchase price was funded by raising a loan of Rs. 605,000. In addition, the entity has to pay Rs. 5,000 in loan raising fees to the Bank. The loan is secured against the equipment.*

*In January 20X1 the entity incurred costs of Rs. 20,000 in transporting the equipment to the entity's site and Rs. 100,000 in installing the equipment at the site. At the end of the equipment's 10-year useful life the entity is required to dismantle the equipment and restore the building housing the equipment. The present value of the cost of dismantling the equipment and restoring the building is estimated to be Rs. 100,000.*

***In January 20X1 the entity's engineer incurred the following costs in modifying the equipment so that it can produce the products manufactured by the entity:***

- Materials – Rs. 55,000*
- Labour – Rs. 65,000*
- Depreciation of plant and equipment used to perform the modifications – Rs. 15,000*

***In January 20X1, the entity's production staff were trained in how to operate the new item of equipment. Training costs included:***

- Cost of an expert external instructor – Rs. 7,000*
- Labour – Rs. 3,000*

***In February 20X1 the entity's production team tested the equipment and the engineering team***



made further modifications necessary to get the equipment to function as intended by management.

The following costs were incurred in the testing phase:

- Materials, net of Rs. 3,000 recovered from the sale of the scrapped output – Rs. 21,000
- Labour – Rs. 16,000

The equipment was ready for use on 1st March, 20X1. However, because of low initial order levels the entity incurred a loss of Rs. 23,000 on operating the equipment during March. Thereafter the equipment operated profitably.

What is the cost of the equipment at initial recognition?

### SOLUTION

Description	Calculation or reason	Rs.
Purchase price	Rs. 600,000 purchase price minus Rs. 50,000 refundable purchase taxes	550,000
Loan raising fee	Offset against the measurement of the liability	-
Transport cost	Directly attributable expenditure	20,000
Installation costs	Directly attributable expenditure	100,000
Environmental restoration costs	The obligation to dismantle and restore the environment arose from the installation of the equipment	100,000
Preparation costs	Rs. 55,000 materials + Rs. 65,000 labour + Rs. 15,000 depreciation	135,000
Training costs	Recognised as expenses in profit and loss account. The equipment was capable of operating in the manner intended by management without incurring the training costs.	-
Cost of testing	Rs. 21,000 materials (i.e. net of the Rs. 3,000 recovered from the sale of the scrapped output) + Rs. 16,000 labour	37,000
Operating loss	Recognised as expenses in profit and loss account	-
Borrowing costs	Recognised as expenses in profit and loss account	-
<b>Cost of equipment</b>		<b>9,42,000</b>

### Question 13 (MTP May20)

Flying Airways Ltd is a company which manufactures aircraft parts and engines and sells them to large multinational companies like Boeing and Airbus Industries.

On 1 April 20X1, the company began the construction of a new production line in its aircraft parts manufacturing shed.

Costs relating to the production line are as follows:

Details	Amount Rs.'000
Costs of the basic materials (list price Rs.12.5 million less a 20% trade discount)	10,000
Recoverable goods and services taxes incurred not included in the purchase cost	1,000
Employment costs of the construction staff for the three months (April to June)	1,200
Other overheads directly related to the construction	900
Payments to external advisors relating to the construction	500
Expected dismantling and restoration costs	2,000

### Additional Information

The construction staff was engaged in the production line, which took two months to make ready for use and was brought into use on 31 May 20X1.

The other overheads were incurred in the two months period ended on 31 May 20X1. They included an abnormal cost of Rs. 3,00,000 caused by a major electrical fault.

The production line is expected to have a useful economic life of eight years. At the end of that time Flying Airways Ltd was legally required to dismantle the plant in a specified manner and restore its location to an acceptable standard. The amount of Rs.2 million mentioned above is the amount that is expected to be incurred at the end of the useful life of the production line. The appropriate rate to use in any discounting calculations is 5%. The present value of Re.1 payable in eight years at a discount rate of 5% is approximately Re.0.68.

Four years after being brought into use, the production line will require a major overhaul to ensure that it

generates economic benefits for the second half of its useful life. The estimated cost of the overhaul, at current prices, is Rs.3 million.

The Company computes its depreciation charge on a monthly basis. No impairment of the plant had occurred by 31 March 20X2.

Analyze the accounting implications of costs related to production line to be recognized in the balance sheet and profit and loss for the year ended 31 March, 20X2

## SOLUTION

### Statement showing Cost of production line:

Particulars	Amount Rs.'000
Purchase cost	10,000
Goods and services tax – recoverable goods and services tax not included	-
Employment costs during the period of getting the production line ready for use (1,200 x 2 months / 3 months)	800
Other overheads – abnormal costs	600
Payment to external advisors – directly attributable cost	500
Dismantling costs – recognized at present value where an obligation exists (2,000 x 0.68)	1,360
<b>Total</b>	<b>13,260</b>

### Carrying value of production line as on 31<sup>st</sup> March, 20X2:

Particulars	Amount Rs. '000
Cost of Production line	13,260
Less: Depreciation (W.N.1)	(1,694)
<b>Net carrying value carried to Balance Sheet</b>	<b>11,566</b>

### Provision for dismantling cost:

Particulars	Amount Rs. '000
Non-current liabilities	1,360
Add: Finance cost (WN3)	57
<b>Net book value carried to Balance Sheet</b>	<b>1,417</b>

### Extract of Statement of Profit & Loss

Particulars	Amount Rs. '000
Depreciation (W.N.1)	1,694
Finance cost (W.N.2)	57
<b>Amounts carried to Statement of Profit &amp; Loss</b>	<b>1,751</b>

### Extract of Balance Sheet

Particulars	Amount Rs. '000
<b>Assets</b>	
Non-current assets	
Property, plant and equipment	11,566
<b>Equity and liabilities</b>	
Non-current liabilities Other liabilities	
Provision for dismantling cost	1417

## Working Notes:

### 1. Calculation of depreciation charge

Particulars	Amount Rs. '000
In accordance with Ind AS 16 the asset is split into two depreciable components: Out of the total capitalization amount of 13,260, Depreciation for 3,000 with a useful economic life (UEL) of four years (3,000 x $\frac{1}{4}$ x 10/12). This is related to a major overhaul to ensure that it generates economic benefits for the second half of its useful life	625
For balance amount, depreciation for 10,260 with an useful economic life of	1,069

eight years will be : $10,260 \times 1/8 \times 10/12$	
Total (To Statement of Profit & Loss for the year ended 31 <sup>st</sup> March 20X2)	1,694

### 1. Finance costs

Particulars	Amount Rs. '000
Unwinding of discount (Statement of Profit and Loss – finance cost) $1,360 \times 5\% \times 10/12$	57

### **Question 14 (Jan21 EXAMS) (Mix of IndAS 16 & IndAS 40) (MTP- May22)**

On 1st April 2019, an entity purchased an office block (building) for Rs. 50,00,000 and paid a non-refundable property transfer tax and direct legal cost of Rs. 2,50,000 and Rs. 50,000 respectively while acquiring the building.

During 2019, the entity redeveloped the building into two-story building. Expenditures on re-development were:

- Rs. 1,00,000 Building plan approval;
- Rs. 10,00,000 construction costs (including Rs. 60,000 refundable purchase taxes); and
- Rs. 40,000 due to abnormal wastage of material and labour.

When the re-development of the building was completed on 1st October 2019, the entity rents out Ground Floor of the building to its subsidiary under an operating lease in return for rental payment. The subsidiary uses the building as a retail outlet for its products. The entity kept first floor for its own administration and maintenance staff usage. Equal value can be attributed to each floor.

How will the entity account for all the above-mentioned expenses in the books of account?

Also, discuss how the above building will be shown in Consolidated financial statement of the entity as a group and in its separate financial statements as per relevant Ind AS

### **SOLUTION**

In accordance with Ind AS 16, all costs required to bring an asset to its present location and condition for its intended use should be capitalised. Therefore, the initial purchase price of the building would be:

Particulars	Amount Rs.
Purchase amount	50,00,000
Non-refundable property tax	2,50,000
Direct legal cost	50,000
	53,00,000
Expenditures on redevelopment:	
Building plan approval	1,00,000
Construction costs (10,00,000 – 60,000)	9,40,000
<b>Total amount to be capitalised at 1st October 2019</b>	<b>63,40,000</b>

### **Treatment of abnormal wastage of material and labour:**

As per Ind AS 16, the cost of abnormal amounts of wasted material, labour, or other resources incurred in self-constructing an asset is not included in the cost of the asset.

It will be charged to Profit and Loss in the year it is incurred. Hence, abnormal wastage of Rs. 40,000 will be expensed off in Profit & Loss in the financial year 2019-2020.

### **Accounting of property- Building:**

When the property is used as an administrative centre, it is not an investment property, rather it is an 'owner occupied property'. Hence, Ind AS 16 will be applicable.

When the property (land and/or buildings) is held to earn rentals or for capital appreciation (or both), it is an Investment property. Ind AS 40 prescribes the cost model for accounting of such investment property. Since equal value can be attributed to each floor, Ground Floor of the building will be considered as Investment Property and accounted as per Ind AS 40 and First Floor would be considered as Property, Plant and Equipment and accounted as per Ind AS 16.

Cost of each floor =  $\text{Rs.}63,40,000 / 2 = \text{Rs.}31,70,000$

**As on 1st October 2019, the carrying value of building vis-à-vis its classification would be as follows:**

- (i) In Separate Financial Statements: The Ground Floor of the building will be classified as investment property for Rs. 31,70,000, as it is property held to earn rentals. While First Floor of the building will be classified as item of property, plant and equipment for Rs. 31,70,000.
- (ii) In Consolidated Financial Statements: The consolidated financial statements present the parent and its subsidiary as a single entity. The consolidated entity uses the building for the supply of goods. Therefore, the leased-out property to a subsidiary does not qualify as investment property in the consolidated financial statements. Hence, the whole building will be classified as an item of Property, Plant and Equipment for Rs. 63,40,000.

**Question 15: (MTP May19 & MTP Nov19)**

An entity has a nuclear power plant and a related decommissioning liability. The nuclear power plant started operating on April 1, 2011. The plant has a useful life of 40 years. Its initial cost was Rs. 1,20,000.; This included an amount for decommissioning costs of Rs. 10,000, which represented Rs. 70,400 in estimated cash flows payable in 40 years discounted at a risk-adjusted rate of 5 per cent. The entity's financial year ends on March 31. Assume that a market-based discounted cash flow valuation of Rs. 1,15,000 is obtained at March 31, 2014. It excludes an allowance of Rs. 11,600 for decommissioning costs, which represents no change to the original estimate, after the unwinding of three years' discount.

On March 31, 2015, the entity estimates that, as a result of technological advances, the present value of the decommissioning liability has decreased by Rs. 5,000. The entity decides that a full valuation of the asset is needed at March 31, 2015, in order to ensure that the carrying amount does not differ materially from fair value. The asset is now valued at Rs. 1,07,000, which is net of an allowance for the reduced decommissioning obligation.

How the entity will account for the above changes in decommissioning liability if it adopts revaluation model?

**SOLUTION:**

At March 31, 20X4:	Rs
Asset at valuation (1)	1,26,600
Accumulated depreciation	Nil
Decommissioning liability	(11,600)
Net assets	1,15,000
Retained earnings (2)	(10,600)
Revaluation surplus (3)	15,600

**Notes:**

- (1) Valuation obtained of Rs. 1,15,000 plus decommissioning costs of Rs. 11,600, allowed for in the valuation but recognised as a separate liability = Rs. 1,26,600.
- (2) Three years' depreciation on original cost Rs. 1,20,000  $\times$  3/40 = Rs. 9,000 plus cumulative discount on Rs. 10,000 at 5 per cent compound = Rs. 1,600; total Rs. 10,600.
- (3) Revalued amount Rs. 1,26,600 less previous net book value of Rs. 1,11,000 (cost Rs. 1,20,000 less accumulated depreciation Rs. 9,000).

The depreciation expense for 20X4-20X5 is therefore Rs. 3,420 (Rs. 1,26,600  $\times$  1/37) and the discount expense for 20X5 is Rs600. On March 31, 20X5, the decommissioning liability (before any adjustment) is Rs. 12,200. However, as per estimate of the entity, the present value of the decommissioning liability has decreased by Rs. 5,000. Accordingly, the entity adjusts the decommissioning liability from Rs. 12,200 to Rs. 7,200.

The whole of this adjustment is taken to revaluation surplus, because it does not exceed the carrying amount that would have been recognised had the asset been carried under the cost model. If it had done, the excess would have been taken to profit or loss. The entity makes the following journal entry to reflect the change:

<b>Decommissioning liability</b>	<b>Dr.</b>	<b>Rs</b>	<b>Rs</b>
<b>To Revaluation surplus</b>		<b>5,000</b>	<b>5,000</b>

As at March 31, 20X5, the entity revalued its asset at Rs. 1,07,000, which is net of an allowance of Rs. 7,200 for the reduced decommissioning obligation that should be recognised as a separate liability. The valuation of the asset for financial reporting purposes, before deducting this allowance, is therefore Rs. 1,14,200. The following additional journal entry is needed:

**Notes:**

		<b>Rs</b>	<b>Rs</b>
Accumulated depreciation (1)	Dr.	3,420	
To Asset at valuation			3,420
Revaluation surplus (2)	Dr.	8,980	
To Asset at valuation (3)			8,980

- (1) Eliminating accumulated depreciation of Rs. 3,420 in accordance with the entity's accounting policy.
- (2) The debit is to revaluation surplus because the deficit arising on the revaluation does not exceed the credit balance existing in the revaluation surplus in respect of the asset.
- (3) Previous valuation (before allowance for decommissioning costs) Rs. 1,26,600, less cumulative depreciation Rs. 3,420, less new valuation (before allowance for decommissioning costs) Rs. 1,14,200.

**Following this valuation, the amounts included in the balance sheet are:**

Asset at valuation	1,14,200
Accumulated depreciation	Nil
Decommissioning liability	(7,200)
Net assets	1,07,000
Retained earnings (1)	(14,620)
Revaluation surplus (2)	11,620

**Notes:**

- (1) Rs. 10,600 at March 31, 20X4, plus depreciation expense of Rs. 3,420 and discount expense of Rs. 600 = Rs. 14,620.
- (2) Rs. 15,600 at March 31, 20X4, plus Rs. 5,000 arising on the decrease in the liability, less Rs. 8,980 deficit on revaluation = Rs. 11,620.

**Question 16 (ICAI Module)**

H Limited purchased an item of PPE costing Rs. 100 million which has useful life of 10 years. The entity has a contractual decommissioning and site restoration obligation, estimated at Rs. 5 million to be incurred at the end of 10<sup>th</sup> year. The current market based discount rate is 8%.

The company follows SLM method of depreciation. H Limited follows the Cost Model for accounting of PPE. Determine the carrying value of an item of PPE and decommissioning liability at each year end when

- There is no change in the expected decommissioning expenses, expected timing of incurring the decommissioning expense and / or the discount rate
- At the end of Year 4, the entity expects that the estimated cash outflow on account of decommissioning and site restoration to be incurred at the end of the useful life of the asset will be Rs. 8 million (in place of Rs. 5 million, estimated in the past).

Determine in case (b), how H Limited need to account for the changes in the decommissioning liability?

**SOLUTION**

The present value of such decommissioning and site restoration obligation at the end of 10<sup>th</sup> year is **Rs. 2.32 million** [being  $5 / (1.08)^{10}$ ]. H Limited will recognise the present value of decommissioning liability of Rs. 2.32 million as an **addition to cost of PPE and** will also recognize a corresponding decommissioning



liability. Further, the entity will recognise the unwinding of discount as finance charge.

(a) The following table shows the relevant computations, if there is **no change** in the expected decommissioning expenses, expected timing of incurring the decommissioning expense and / or the discount rate:

(b) (Rs.in million)

Year	Opening Amount of PPE	Depreciation Charge (on SLM) for 10 Years	Carrying Amount of PPE at the end of the year	Opening Decommissioning Liability	Unwinding of Interest @ 8%	Closing Decommissioning Liability
1	102.32	10.23	92.08	2.32	0.19	2.50
2	92.08	10.23	81.85	2.50	0.20	2.70
3	81.85	10.23	71.62	2.70	0.22	2.92
4	71.62	10.23	61.39	2.92	0.23	3.15
5	61.39	10.23	51.16	3.15	0.25	3.40
6	51.16	10.23	40.93	3.40	0.27	3.68
7	40.93	10.23	30.69	3.68	0.29	3.97
8	30.69	10.23	20.46	3.97	0.32	4.29
9	20.46	10.23	10.23	4.29	0.34	4.63
10	10.23	10.23	-	4.63	0.37	5.00
<b>Total</b>		<b>102.32</b>			<b>2.68</b>	

(c) The changes to the estimate of expected decommissioning obligation:

- The present value of the decommissioning liability at the end of Year 4 works out to be **Rs. 5.04 million** [being  $8 / (1.08)^6$ ].
- As against this, the carrying amount of decommissioning liability at the end of Year 4 is **Rs. 3.15 million** (as computed above).
- The changes in the decommissioning liability of **Rs. 1.89 million** (being Rs. 5.04 million less Rs. 3.15 million) shall be **added to** the cost of the asset in the current period and the related provision for decommissioning liability is also adjusted.

The journal entry will be:

PPE	Dr.	Rs. 1.89 million	
	To Provision for decommissioning liability		Rs. 1.89 million

- The following table shows the calculations for years 5 - 10:

Year	Opening Amount of PPE	Depreciation Charge SLM - 10 Years	Carrying Amount of PPE at the end of the year	Opening Decommissioning Liability	Unwinding of Interest @8%	Closing Decommissioning Liability
5	63.28	10.55	52.73	5.04	0.40	5.44
6	52.73	10.55	42.19	5.44	0.44	5.88
7	42.19	10.55	31.64	5.88	0.47	6.35
8	31.64	10.55	21.09	6.35	0.51	6.86
9	21.09	10.55	10.55	6.86	0.55	7.41
10	10.55	10.55	-	7.41	0.59	8.00
<b>Total</b>		<b>63.28</b>			<b>2.96</b>	

Note that in the above table:

- Opening amount of PPE at the beginning of Year 5 is computed as Rs. 63.28 million (being carrying amount of Rs. 61.39 million at the end of Year 4 *plus* increase of Rs. 1.89 million arising due to increase in the present value of the decommissioning liability at the end of Year 4).
- The revised carrying amount of PPE (at Rs. 63.28 million) at the beginning of Year 5 will be depreciated



over the balance 6 years of the useful life).

- Opening decommissioning liability at the beginning of Year 5 is computed as Rs. 5.04 million (being carrying amount of Rs. 3.15 million at the end of Year 4 *plus* increase of Rs. 1.89 million).

Since the entity has adjusted the increase in the decommissioning liability against the carrying amount of PPE, it needs to evaluate whether the new carrying amount (in this case, Rs. 63.28 million) is recoverable. If not, it will give rise to impairment loss, to be accounted for under Ind AS 36.

### **Question 17 (RTP Nov18)**

*On 1<sup>st</sup> October, 2017, A Ltd. completed the construction of a power generating facility. The total construction cost was Rs. 2,00,00,000. The facility was capable of being used from 1<sup>st</sup> October, 2017 but A Ltd. did not bring the facility into use until 1<sup>st</sup> January, 2018. The estimated useful life of the facility at 1<sup>st</sup> October, 2017 was 40 years. Under legal regulations in the jurisdiction in which A Ltd. operates, there are no requirements to restore the land on which power generating facilities stand to its original state at the end of the useful life of the facility. However, A Ltd. has a reputation for conducting its business in an environmentally friendly way and has previously chosen to restore similar land even in the absence of such legal requirements. The directors of A Ltd. estimated that the cost of restoring the land in 40 years' time (based on prices prevailing at that time) would be Rs. 1,00,00,000. A relevant annual discount rate to use in any discounting calculations is 5%. When the annual discount rate is 5%, the present value of Rs. 1 receivable in 40 years' time is approximately 0.142. Analyze and present how the above events would be reported in the financial statements of A Ltd. for the year ended 31<sup>st</sup> March, 2018 as per Ind AS.*

### **SOLUTION**

**(All figures are Rs in '000.)**

The power generating facility should be depreciated from the date it is ready for use, rather than when it would actually start being used. In this case, the facility should be depreciated from 1<sup>st</sup> October, 2017.

Although A Ltd. has no legal obligation to restore the piece of land, it does have a constructive obligation, based on its past practice and policies.

The amount of the obligation will be 1,420, being the present value of the anticipated future restoration expenditure ( $10,000 \times 0.142$ ).

This will be recognised as a provision under non-current liabilities in the Balance Sheet of A Ltd. at 31<sup>st</sup> March, 2018.

As time passes the discounted amount unwinds. The unwinding of the discount for the year ended 31<sup>st</sup> March, 2018 will be  $35.5 = (1,420 \times 5\% \times 6/12)$ .

The unwinding of the discount will be shown as a finance cost in the statement of profit or loss and the closing provision will be  $1,455.50 = (1,420 + 35.5)$ .

The initial amount of the provision is included in the carrying amount of the non-current asset, which becomes  $21,420 = (20,000 + 1,420)$ .

The depreciation charge in profit or loss for the year ended 31<sup>st</sup> March, 2018 is  $267.75 = (21,420 \times 1/40 \times 6/12)$ .

The closing balance included in non-current assets will be  $21,152.25 = (21,420 - 267.75)$ .

### **Question 18 (RTP Nov21)**

*Heaven Ltd. had purchased a machinery on 1.4.2X01 for Rs. 30,00,000, which is reflected in its books at written down value of Rs. 17,50,000 on 1.4.2X06. The company has estimated an upward revaluation of 10% on 1.4.2X06 to arrive at the fair value of the asset. Heaven Ltd. availed the option given by Ind AS of transferring some of the surplus as the asset is used by an enterprise.*

*On 1.4.2X08, the machinery was revalued downward by 15% and the company also re-estimated the machinery's remaining life to be 8 years. On 31.3.2X10 the machinery was sold for Rs. 9,35,000. The company charges depreciation on straight line method.*

*Prepare machinery account in the books of Heaven Ltd. over its useful life to record the above transactions.*

**SOLUTION****In the books of Heaven Ltd. Machinery A/c**

Date	Particulars	Amount	Date	Particulars	Amount
1.4.2X01	To Bank/ Vendor	30,00,000	31.3.2X02	By Depreciation (W.N.1)	2,50,000
			31.3.2X02	By Balance c/d	27,50,000
		<b>30,00,000</b>			<b>30,00,000</b>
1.4.2X02	To Balance b/d	27,50,000	31.3.2X03	By Depreciation	2,50,000
			31.3.2X03	By Balance c/d	25,00,000
		<b>27,50,000</b>			<b>27,50,000</b>
1.4.2X03	To Balance b/d	25,00,000	31.3.2X04	By Depreciation	2,50,000
			31.3.2X04	By Balance c/d	22,50,000
		<b>25,00,000</b>			<b>25,00,000</b>
1.4.2X04	To Balance b/d	22,50,000	31.3.2X05	By Depreciation	2,50,000
			31.3.2X05	By Balance c/d	20,00,000
		<b>22,50,000</b>			<b>22,50,000</b>
1.4.2X05	To Balance b/d	20,00,000	31.3.2X06	By Depreciation	2,50,000
			31.3.2X06	By Balance c/d	17,50,000
		<b>20,00,000</b>			<b>20,00,000</b>
1.4.2X06	To Balance b/d	17,50,000	31.3.2X07	By Depreciation (W.N.2)	2,75,000
1.4.2X06	To Revaluation Reserve @ 10%	1,75,000	31.3.2X07	By Balance c/d	16,50,000
		19,25,000			19,25,000
1.4.2X07	To Balance b/d	16,50,000	31.3.2X08	By Depreciation	2,75,000
			31.3.2X08	By Balance c/d	13,75,000
		<b>16,50,000</b>			<b>16,50,000</b>
1.4.2X08	To Balance b/d	13,75,000	1.4.2X08	By Revaluation Reserve (W.N.4)	1,25,000
			31.3.2X09	By Profit and Loss A/c (W.N.5)	81,250
			31.3.2X09	By Depreciation (W.N.3)	1,46,094
			31.3.2X09	By Balance c/d	10,22,656
		<b>13,75,000</b>			<b>13,75,000</b>
1.4.2X09	To Balance b/d	10,22,656	31.3.2X10	By Depreciation	1,46,094
31.3.2X10	To Profit and Loss A/c (balancing figure)	58,438*	31.3.2X10	By Bank A/c	9,35,000
		<b>10,81,094</b>			<b>10,81,094</b>

**Working Notes:****1. Calculation of useful life of machinery on 1.4.2X01**

Depreciation charge in 5 years =  $(30,00,000 - 17,50,000) = \text{Rs. } 12,50,000$

Depreciation per year as per Straight Line method =  $12,50,000 / 5 \text{ years}$

= Rs. 2,50,000

Remaining useful life =  $\text{Rs. } 17,50,000 / \text{Rs. } 2,50,000 = 7 \text{ years}$

Total useful life = 5 years + 7 years = 12 years

**2. Depreciation after upward revaluation as on 31.3.2X06****Rs.**

Book value as on 1.4.2X06 17,50,000

Add: 10% upward revaluation 1,75,000

Revalued amount 19,25,000

Remaining useful life 7 years (Refer W.N.1)

Depreciation on revalued amount =  $19,25,000 / 7 \text{ years} = \text{Rs. } 2,75,000 \text{ lakh}$

**3. Depreciation after downward revaluation as on 31.3.2X08**

	<b>Rs.</b>
Book value as on 1.4.2X08	13,75,000
Less: 15% Downward revaluation	(2,06,250)
Revalued amount	11,68,750
Revised useful life 8 years	
Depreciation on revalued amount = 11,68,750 / 8 years = Rs. 1,46,094	

**4. Amount transferred from revaluation reserve**

Revaluation reserve on 1.4.2X06 (A)	Rs. 1,75,000
Remaining useful life	7 years
Amount transferred every year (1,75,000 / 7)	Rs. 25,000
Amount transferred in 2 years (25,000 x 2) (B)	Rs. 50,000
Balance of revaluation reserve on 1.4.2X08 (A-B)	Rs. 1,25,000

**5. Amount of downward revaluation to be charged to Profit and Loss Account**

Downward revaluation as on 1.4.2X08 (W.N.3)	Rs. 2,06,250
Less: Adjusted from Revaluation reserve (W.N.4)	(Rs. 1,25,000)
Amount transferred to Profit and Loss Account	Rs. 81,250

**Question 19 (July21 EXAMS) – Mix of IndAS 16 & IndAS 40**

Special Limited is a multinational entity that owns 3 properties. All 3 properties were purchased on 1<sup>st</sup> April, 2020. The following details were furnished:



Particulars	Property 1	Property 2	Property 3
Purchase Price	Rs. 7,50,000	Rs. 10,50,000	Rs. 12,00,000
Estimated life	10 years	15 years	15 years
Fair value as on 31 <sup>st</sup> March, 2021	Rs. 8,00,000	Rs. 9,50,000	Rs. 13,00,000

The Company uses Property 1 and Property 2 for its business purposes. The Company is exploring the opportunity to sell Property 3 if it gets reasonable consideration. Till the time it is not sold, the Company has rented the property.

It has adopted revaluation model for subsequent measurement of these properties. The depreciation is charged on straight line method. However, the Company has not charged any depreciation on Property 1 and Property 3 for the current year since the fair value of properties exceeds their carrying amount. The difference between their fair value and carrying amount has been recognized in the statement of profit and loss. The properties are shown under the head property, plant and equipment in the Balance Sheet.

Analyze whether the accounting policies adopted by the Company in relation to the given properties are in accordance with Ind AS. If not, advise the correct treatment and present an extract of the Balance Sheet for the year ended 31<sup>st</sup> March 2021.

**SOLUTION****(a) Preamble:**

The given issue needs to be examined in the umbrella of the provisions given in Ind AS 1 'Presentation of Financial Statements', Ind AS 16 'Property, Plant and Equipment' in relation to property '1' and '2' and Ind AS 40 'Investment Property' in relation to property '3'.

Guidance given in relevant Ind AS:

**1. Property '1' and '2'**

Definition and applicability:

As per Ind AS 16, Property plant and equipment are tangible items that:

(a) Are held for use in the production or supply of goods or services or for administrative purposes; and

(b) Are expected to be used during more than one period.

Hence, property 1 and 2 are held for use in the business, therefore Ind AS 16 shall apply in respect of these two properties.



Property '3' (1,200,000 – 80,000)	11,20,000
Equity and Liabilities	
Other Equity	
Revaluation Reserve	
Property '1' [8,00,000 – (7,50,000 – 75,000)]	1,25,000

The revaluation reserve should be routed through Other Comprehensive Income (subsequently not reclassified to Profit and Loss) and shown in a separate column under Statement of Changes in Equity.

**Working Notes:**

Particulars	Property 1	Property 2	Property 3
Purchase Price	Rs. 7,50,000	Rs. 10,50,000	Rs. 12,00,000
Estimated Life	10 years	15 years	15 years
Depreciation for the year	Rs. 75,000	Rs. 70,000	Rs. 80,000
Carrying Value as on 31 <sup>st</sup> March, 2021	Rs. 6,75,000	Rs. 9,80,000	Rs. 11,20,000
Fair Value as on 31 <sup>st</sup> March, 2021	Rs. 8,00,000	Rs. 9,50,000	Rs. 13,00,000
Subsequent Measurement Revaluation Surplus / (Deficit)	Fair Value Rs. 1,25,000	Fair Value (Rs. 30,000)	Cost



*CA Final*  
*Financial Reporting (FR)*

**“Must do Questions” Before Exam**

*Topic -*  
*INDAS 38 - INTANGIBLE ASSETS*

Question of No. 5

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**Question 20 (ICAI Module)**

X Pharmaceutical Ltd. seeks your opinion in respect of following accounting transactions:

1. Acquired a 4 year license to manufacture a specialized drug at a cost of Rs. 1,00,00,000 at the start of the year. Production commenced immediately.
2. Also purchased another company at the start of year. As part of that acquisition the company acquired a brand with a FV of Rs. 3,00,00,000 based on sales revenue. The life of the brand is estimated at 15 years.
3. Spent Rs. 1,00,00,000 on an advertising campaign during the first six months. Subsequent sales have shown a significant improvement and it is expected this will continue for 3 years.
4. It has commenced developing a new drug 'Drug-A'. The project cost would be Rs. 10,00,00,000. Clinical trial proved successful and such drug is expected to generate revenue over the next 5 years. Cost incurred (accumulated) till March 31, 20X1 is Rs. 5,00,00,000. Balance cost incurred during the financial year 20X1-20X2 is Rs. 5,00,00,000.
5. It has also commenced developing another drug 'Drug B'. It has incurred Rs. 50,00,000 towards research expenses till March 31, 20X2. The technological feasibility has not yet been established.

How the above transactions will be accounted for in the books of account of X Pharmaceutical Ltd?

**SOLUTION**

X Pharmaceutical Ltd. is advised as under:

1. It should recognise the drug license as an intangible asset, because it is a separate external purchase, separately identifiable asset and considered successful in respect of feasibility and probable future cash inflows.  
The drug license should be recorded at Rs. 1,00,00,000.
2. It should recognise the brand as an intangible asset because it is purchased as part of acquisition and it is separately identifiable. The brand should be amortised over a period of 15 years.  
The brand will be recorded at Rs. 3,00,00,000.
3. The advertisement expenses of Rs. 1,00,00,000 should be expensed off.
4. The development cost incurred during the financial year 20X1-20X2 should be capitalised.  
Cost of intangible asset (Drug A) as on March 31, 20X2
 

Opening cost	Rs. 5,00,00,000
Development cost	Rs. 5,00,00,000
<b>Total cost</b>	<b>Rs. 10,00,00,000</b>
5. Research expenses of Rs. 50,00,000 incurred for developing 'Drug B' should be expensed off since technological feasibility has not yet established.

**Question 21 (RTP Nov20)**

ABC Pvt. Ltd., recruited a player. As per the terms of the contract, the player is prohibited from playing for any other entity for the coming 5 years and has to be in employment with the company and cannot leave the entity without mutual agreement. The price the entity paid to acquire this right is derived from the skills and fame of the said player. The entity uses and develops the player through participation in matches. State whether the cost incurred to obtain the right regarding the player can be recognised as an intangible asset as per Ind AS 38?

**SOLUTION**

As per Ind AS 38, for an item to be recognised as an intangible asset, it must meet the definition of an intangible asset, i.e., identifiability, control over a resource and existence of future economic benefits and also recognition criteria.

With regard to establishment of control, Ind AS 38 states that an entity controls an asset if the entity has the power to obtain the future economic benefits flowing from the underlying resource and to restrict the access of others to those benefits. The capacity of an entity to control the future economic benefits from an intangible asset would normally stem from legal rights that are enforceable in a court of law. In the absence of legal rights, it is more difficult to demonstrate control. However, legal enforceability of a right is not a necessary condition for control because an entity may be able to control the future economic benefits in

some other way.

Further, Ind AS 38 provides that an entity may have a team of skilled staff and may be able to identify incremental staff skills leading to future economic benefits from training. The entity may also expect that the staff will continue to make their skills available to the entity. However, an entity usually has insufficient control over the expected future economic benefits arising from a team of skilled staff and from training for these items to meet the definition of an intangible asset. For a similar reason, specific management or technical talent is unlikely to meet the definition of an intangible asset, unless it is protected by legal rights to use it and to obtain the future economic benefits expected from it, and it also meets the other parts of the definition.

Since the right in the instant case is contractual, identifiability criterion is satisfied. Based on the facts provided in the given case, the player is prohibited from playing in other teams by the terms of the contract which legally binds the player to stay with ABC Ltd for 5 years.

Accordingly, in the given case, the company would be able to demonstrate control. Future economic benefits are expected to arise from use of the player in matches. Further, the cost of obtaining rights is also reliably measurable. Hence, it can recognise the costs incurred to obtain the right regarding the player as an intangible asset. However, careful assessment of relevant facts and circumstances of each case is required to be made.

### **Question 22 (ICAI Module)**

*An entity is developing a new production process. During 20X1-20X2, expenditure incurred was Rs. 1,000, of which Rs. 900 was incurred before March 1, 20X2 and Rs 100 was incurred between March 1, 20X2 and March 31, 20X2. The entity is able to demonstrate that at March 1, 20X2, the production process met the criteria for recognition as an intangible asset. The recoverable amount of the know-how embodied in the process (including future cash outflows to complete the process before it is available for use) is estimated to be Rs. 500.*

*During 20X2-20X3, expenditure incurred is Rs. 2,000. At the end of 20X3, the recoverable amount of the know-how embodied in the process (including future cash outflows to complete the process before it is available for use) is estimated to be Rs. 1,900.*

### **SOLUTION:**

At the end of the financial year 20X2, the production process is recognised as an intangible asset at a cost of Rs. 100 (expenditure incurred since the date when the recognition criteria were met, i.e., March 1, 20X2). Rs. 900 expenditure incurred before March 1, 20X2 is recognised as an expense because the recognition criteria were not met until March 1, 20X2. This expenditure does not form part of the cost of the production process recognised in the balance sheet.

At the end of 20X3, the cost of the production process is Rs. 2,100 (Rs. 100 expenditure recognised at the end of 20X2 plus Rs. 2,000 expenditure recognised in 20X3). The entity recognises an impairment loss of Rs. 200 to adjust the carrying amount of the process before impairment loss (Rs. 2,100) to its recoverable amount (Rs. 1,900). This impairment loss will be reversed in a subsequent period if the requirements for the reversal of an impairment loss in Ind AS 36 are met.

### **Question 23 (RTP NOV 18)**

*One of the senior engineers at XYZ has been working on a process to improve manufacturing efficiency and, consequently, reduce manufacturing costs. This is a major project and has the full support of XYZ's board of directors. The senior engineer believes that the cost reductions will exceed the project costs within twenty four months of their implementation. Regulatory testing and health and safety approval was obtained on 1 June 20X5. This removed uncertainties concerning the project, which was finally completed on 20 April 20X6. Costs of Rs. 18,00,000, incurred during the year till 31st March 20X6, have been recognized as an intangible asset. An offer of Rs. 7,80,000 for the new developed technology has been received by potential buyer but it has been rejected by XYZ. Utkarsh believes that the project will be a major success and has the potential to save the company Rs. 12,00,000 in perpetuity. Director of research at XYZ, Neha, who is a qualified electronic engineer, is seriously concerned about the long term prospects of the new process and she is of the opinion that competitors would have developed new technology at some time which would require to replace the new process within four years. She estimates that the present value of future cost savings will be Rs. 9,60,000 over*

this period. After that, she thinks that there is no certainty about its future. What would be the appropriate accounting treatment of aforesaid issue?'

### **SOLUTION:**

Ind AS 38 'Intangible Assets' requires an intangible asset to be recognised if, and only if, certain criteria are met. Regulatory approval on 1 June 20X5 was the last criterion to be met, the other criteria have been met as follows:

- Intention to complete the asset is apparent as it is a major project with full support from board
- Finance is available as resources are focused on project
- Costs can be reliably measured
- Benefits are expected to exceed costs – (in 2 years)

Amount of Rs. 15,00,000 (Rs. 18,00,000 x 10/12) should be capitalised in the Balance sheet of year ending 20X5-20X6 representing expenditure since 1 June 20X5.

The expenditure incurred prior to 1 June 20X5 which is Rs. 3,00,000 (2/12 x Rs. 18,00,000) should be recognised as an expense, retrospective recognition of expense as an asset is not allowed.

Ind AS 36 'Impairment of assets' requires an intangible asset not yet available for use to be tested for impairment annually.

Cash flow of Rs. 12,00,000 in perpetuity would clearly have a present value in excess of Rs. 12,00,000 and hence there would be no impairment. However, the research director is technically qualified, so impairment tests should be based on her estimate of a four-year remaining life and so present value of the future cost savings of Rs. 9,60,000 should be considered in that case.

Rs. 9,60,000 is greater than the offer received (fair value less costs to sell) of Rs. 7,80,000 and so Rs. 9,60,000 should be used as the recoverable amount.

So, the carrying amount should be consequently reduced to Rs. 9,60,000.

### **Calculation of Impairment loss**

Particulars	Amount Rs.
Carrying amount (Restated)	15,00,000
Less: Recoverable amount	9,60,000
Impairment loss	5,40,000

Impairment loss of Rs. 5,40,000 is to be recognised in the profit and loss for the year 20X5-20X6.

Necessary adjusting entry to correct books of account will be:

	₹	₹
Operating expenses- Development expenditure Dr.	3,00,000	
Operating expenses- Impairment loss of intangible assets Dr.	5,40,000	
To Intangible assets – Development expenditure		8,40,000

### **Question 24**

Bharat Steel Ltd develops and manufactures exotic cutlery and has the following projects in hand.



	PROJECTS			
	1	2	3	4
Deferred Development Exp. b/f 1.1.X2	280	450	-	-
Development Exp. Incurred during the year:				
Salaries & Wages	35	-	60	20
Overhead Costs	2	-	-	3
Materials & Services	3	-	11	4
Patents & Licenses	1	-	-	-
Market Research	-	-	2	-

Deferred development expenditure relates to expenditure which has been incurred and which has met the criteria for recognition as an intangible asset.

**Project 1:** originally expected to be highly profitable but this is now in doubt, since the scientist in charge of the project is now behind schedule, with the result that competitors are gaining ground.

**Project 2:** commercial production started during the year. Sales were 20,000 units in 20X2 and future sales are expected to be: 20X3 30,000 units; 20X4 60,000 units; 20X5 40,000 units; 20X6 30,000 units. There are no sales expected after 20X6.

**Project 3:** these costs relate to a new project, which meets the criteria for deferral of expenditure and which is expected to last for three years.

**Project 4:** is another new project, which is now observed as non-profitable and entity may discontinue it. The company's policy is to defer development costs, where required by INDAS 38. Expenditure carried forward is written off evenly over the expected sales life of projects, starting in the first year of sale.

### Required

Show how the above projects should be treated in the financial statements of Bharat Steel Ltd for the year ended 31 December 20X2 in accordance with best accounting practice. Justify your treatment of each project.

### SOLUTION

- **Project 1** expenditure, including that relating to previous years, should all be written off in 20X2, as there is now considerable doubt as to the profitability of the project.
- Since commercial production has started under **Project 2** the expenditure previously deferred should now be amortised. This will be done over the estimated life of the product, as stated in the question.
- **Project 3:** the development costs must be deferred. Assuming it is to be amortised from next year for 3 years.
- Since **Project 4** is not expected to be profitable its development costs should not be deferred.

### Balance Sheet as at 31<sup>st</sup> December, 20X2 (Extract)

<b>NON CURRENT ASSETS</b>	<b>(Rs. In 000<sup>'s</sup>)</b>
<i>Intangible Assets</i>	
Development Cost (Note 2)	433.00

### Notes:

#### 1. Accounting policies

Research and development expenditure is written off as incurred, except that development costs incurred on an individual project are carried forward when their future recoverability can be foreseen with reasonable assurance. Any expenditure carried forward is amortised over the period of sales from the related project.

#### 1. Development Costs

Balance brought forward 1 January 20X2	730
Development expenditure incurred during 20X2 (41 + 73 + 27)	141
Development expenditure amortised during 20X2 (450/5)	(90)
Development expenditure written off during 20X2 (321 + 27)	(348)
<b>Balance carried forward 31 December 20X2</b>	<b>433</b>

### Workings

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Total</b>
Brought Forward	280	450	-	-	730
Salaries ETC	35	-	60	20	115
Overheads	2	-	-	3	5
Materials ETC	3	-	11	4	18
Patents ETC	1	-	-	-	1
Market Research	-	-	2	-	2
C/F	-	(360)	(73)	-	(433)
<b>Amortised/Written off</b>	<b>321</b>	<b>90</b>	<b>-</b>	<b>27</b>	<b>438</b>



*CA Final*  
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*INDAS 40 - INVESTMENT PROPERTY*

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**Question 25 (ICAI Module)**

Dodd's Ltd acquired a property by way of a 20 year lease on 1 August 20X3. The company split the property into 30 units and immediately began to market each separate floor to small businesses as available to let on short-term leases. By the end of November just six units had been sublet and as an incentive to attract more tenants, Dodd's offered to provide certain services to its tenants. These services included security, maintenance, a central reception function and a secretarial function. These services were extended to the existing tenants. This is a departure from the normal business model of Dodd's Ltd and required the company to recruit a number of staff to work at the property and occupy two of the empty units. By the year-end of 31 December 20X3, a further 10 units had been sublet.

Discuss whether the property is an investment property.

**SOLUTION**

- An investment property is property which is held to earn rentals or for capital appreciation or both rather than for use in the production or supply of goods or services or for administrative purposes or for sale in the ordinary course of business.
- The property is held as a right-of-use asset under a lease in accordance with IndAS 116; this is not relevant to its possible classification as an investment property as IndAS 40 does not require an investment property to be owned.
- The property is available to let under short-term (operating) leases, and therefore meets the basic definition of an investment property.
- From 1 August 20X3 to the end of November the 30 individual units are either let or available to let without the provision of any ancillary services. Therefore for this time the property is classified as investment property.
- From the end of November to 31 December 20X3, ancillary services are provided to all existing and prospective tenants. The question is whether these ancillary services are significant to the arrangement as a whole. If they are, then the property is classified as owner-occupied; if they are not then the property is classified as investment property.
- Based on the information, the services provided appear to be significant. Dodd's Ltd is required to recruit a number of additional staff and certain services provided are core to the operation of tenants' businesses.
- Therefore it should be concluded that the property is owner-occupied from the end of November and it should be accounted for in accordance with IndAS 16 *Property, Plant and Equipment*.

**Question 26 (RTP - Nov 20 & MTP March 21)**

Shaurya Limited owns a Building A which is specifically used for the purpose of earning rentals. The Company has not been using the building A or any of its facilities for its own use for a long time. The company is also exploring the opportunities to sell the building if it gets the reasonable amount in consideration.



Following information is relevant for Building A for the year ending 31st March, 20X2:

Building A was purchased 5 years ago at the cost of ₹ 10 crores and building life is estimated to be 20 years. The company follows straight line method for depreciation.

During the year, the company has invested in another Building B with the purpose to hold it for capital appreciation. The property was purchased on 1st April, 20X1 at the cost of ₹ 2 crores. Expected life of the building is 40 years. As usual, the company follows straight line method of depreciation.

Further, during the year 20X1-20X2 the company earned/incurred following direct operating expenditure relating to Building A and Building B:

Rental income from Building A	= ₹ 75 lakhs
Rental income from Building B	= ₹ 25 lakhs
Sales promotion expenses	= ₹ 5 lakhs
Fees & Taxes	= ₹ 1 lakhs
Ground rent	= ₹ 2.5 lakhs
Repairs & Maintenance	= ₹ 1.5 lakhs



Legal & Professional = ₹ 2 lakhs

Commission and brokerage = ₹ 1 lakhs

The company does not have any restrictions and contractual obligations against Property - A and B. For complying with the requirements of Ind AS, the management sought an independent report from the specialists so as to ascertain the fair value of buildings A and B. The independent valuer has valued the fair value of property as per the valuation model recommended by International valuation standards committee. Fair value has been computed by the method by streamlining present value of future cash flows namely, discounted cash flow method.

The other key inputs for valuation are as follows:

The estimated rent per month per square feet for the period is expected to be in the range of ₹ 50 - ₹ 60. And it is further expected to grow at the rate of 10 percent per annum for each of 3 years. The weighted discount rate used is 12% to 13%.

Assume that the fair value of properties based on discounted cash flow method is measured at ₹ 10.50 crores. The treatment of fair value of properties is to be given in the financials as per the requirements of Indian accounting standards.

What would be the treatment of Building A and Building B in the balance sheet of Shaurya Limited? Provide detailed disclosures and computations in line with relevant Indian accounting standards. Treat it as if you are preparing a separate note or schedule, of the given assets in the balance sheet.

### **SOLUTION:**

Investment property is held to earn rentals or for capital appreciation or both. Ind AS 40 shall be applied in the recognition, measurement and disclosure of investment property. An investment property shall be measured initially at its cost. After initial recognition, an entity shall measure all of its investment properties in accordance with Ind AS 16's requirements for cost model.

The measurement and disclosure of Investment property as per Ind AS 40 in the balance sheet would be depicted as follows:

#### **Investment Properties:**

Particulars	Period ended 31 <sup>st</sup> March 20X2 (Rs. in crores)
Gross Amount	
Opening Balance (A)	10
Additions during the year (B)	2
Closing balance (C) = (A) + (B)	12
Depreciation	
Opening Balance (D)	2.50
Depreciation during the year € (0.5 + 0.5)	0.55
Closing balance (F) = (D) + (E)	3.05

The changes in the carrying value of investment properties for the year ended 31st March, 20X2 are as follows:

#### **Amount recognised in Profit and Loss with respect to Investment Properties**

Particulars	Period ended 31 <sup>st</sup> March 20X2 (Rs. in crores)
Rental income from investment properties (0.75 + 0.25)	1.00
Less: Direct operating expenses generating rental income (5+1+2.5+1.5+2+1)	-0.13
Profit from investment properties before depreciation and indirect expenses	0.87
Less: depreciation	-0.55
Profit from earnings from investment properties	0.32

#### **Disclosure Note on Investment Properties acquired by the entity**

The investment properties consist Property A and Property B. As at March 31, 20X2, the fair value of the properties is ₹ 10.50 crores. The valuation is performed by independent valuers, who are specialists in valuing investment properties. A valuation model as recommended by International Valuation Standards Committee has been applied. The Company considers factors like management intention, terms of rental

agreements, area leased out, life of the assets etc. to determine classification of assets as investment properties.

The Company has no restrictions on the realisability of its investment properties and no contractual obligations to purchase, construct or develop investment properties or for repairs, maintenance and enhancements.

Description of valuation techniques used and key inputs to valuation on investment properties:

Valuation technique	Significant unobservable inputs	Range (Weighted average)
Discounted cash flow (DCF) method	Estimated rental value per sq. ft. per month	Rs. 50 to Rs. 60
	- Rent growth per annum	- 10% every 3 Years
	- Discount rate	- 12% to 13%

### Question 27 (RTP MAY 18)

X Ltd. is engaged in the construction industry and prepares its financial statements up to 31st March each year. On 1st April, 20X1, X Ltd. purchased a large property (consisting of land) for ₹ 2,00,00,000 and immediately began to lease the property to Y Ltd. on an operating lease. Annual rentals were ₹ 20,00,000. On 31st March, 20X5, the fair value of the property was ₹ 2,60,00,000. Under the terms of the lease, Y Ltd. was able to cancel the lease by giving six months' notice in writing to X Ltd. Y Ltd. gave this notice on 31st March, 20X5 and vacated the property on 30th September, 20X5. On 30th September, 20X5, the fair value of the property was ₹ 2,90,00,000. On 1st October, 20X5, X Ltd. immediately began to convert the property into ten separate flats of equal size which X Ltd. intended to sell in the ordinary course of its business. X Ltd. spent a total of ₹ 60,00,000 on this conversion project between 30th September, 20X5 to 31st March, 20X6. The project was incomplete at 31st March, 20X6 and the directors of X Ltd. estimate that they need to spend a further ₹ 40,00,000 to complete the project, after which each flat could be sold for ₹ 50,00,000.

Examine and show how the three events would be reported in the financial statements of X Ltd. for the year ended 31st March, 20X6 as per Ind AS.



### SOLUTION:

From 1st April, 20X1, the property would be regarded as an investment property since it is being held for its investment potential rather than being owner occupied or developed for sale.

The property would be measured under the cost model. This means it will be measured at ₹ 2,00,00,000 at each year end.

On 30th September, 20X5, the property ceases to be an investment property. X Ltd. begins to develop it for sale as flats.

As per para 59 of Ind AS 40, transfers between investment property, owner-occupied property and inventories do not change the carrying amount of the property transferred and they do not change the cost of that property for measurement or disclosure purposes. Hence, the carrying value of the reclassified property will be ₹ 2,00,00,000.

Since the lease of the property is an operating lease, rental income of ₹ 10,00,000 (₹ 20,00,000 x 6/12) would be recognised in P/L for the year ended 31st March, 20X6.

The additional costs of ₹ 60,00,000 for developing the flats which were incurred up to and including 31st March, 20X6 would be added to the 'cost' of inventory to give a closing cost of ₹ 2,60,00,000.

The total selling price of the flats is expected to be ₹ 5,00,00,000 (10 x ₹ 50,00,000). Since the further costs to develop the flats total ₹ 40,00,000, their net realisable value is ₹ 4,60,00,000 (₹ 5,00,00,000 – ₹ 40,00,000), so the flats will be measured at a cost of ₹ 2,60,00,000.

The flats will be shown in inventory as a current asset.

### Question 28 (RTP May21 & EXAM MAY22 & MTP May23)

X Ltd owned a land property whose future use was not determined as at 31 March 20X1. How should the property be classified in the books of X Ltd as at 31 March 20X1?

During June 20X1, X Ltd commenced construction of office building on it for own use. Presuming that the construction of the office building will still be in progress as at 31 March 20X2



- (a) How should the land property be classified by X Ltd in its financial statements as at 31 March 20X2?
- (b) Will there be a change in the carrying amount of the property resulting from any change in use of the investment property?
- (c) Whether the change in classification to, or from, investment properties is a change in accounting policy to be accounted for in accordance with Ind AS 8, Accounting Policies, Changes in Accounting Estimates and Errors?
- (d) Would your answer to (a) above be different if there were to be a management intention to commence construction of an office building for own use; however, no construction activity was planned by 31 March 20X2?

**SOLUTION:**

As per paragraph 8(b) of Ind AS 40, any land held for currently undetermined future use, should be classified as an investment property. Hence, in this case, the land would be regarded as held for capital appreciation. Hence the land property should be classified by X Ltd as investment property in the financial statements as at 31 March 20X1.

As per Para 57 of the Standard, an entity can change the classification of any property to, and from, an investment property when and only when evidenced by a change in use. A change occurs when the property meets or ceases to meet the definition of investment property and there is evidence of the change in use. Mere management's intention for use of the property does not provide evidence of a change in use.

- (a) Since X Ltd has commenced construction of office building on it for own use, the property should be reclassified from investment property to owner occupied as at 31 March 20X2.
- (b) As per Para 59, transfers between investment property, owner occupied and inventories do not change the carrying amount of the property transferred and they do not change the cost of the property for measurement or disclosure purposes.
- (c) No. The change in classification to, or from, investment properties is due to change in use of the property. No retrospective application is required and prior period's financial statements need not be re-stated.
- (d) Mere management intentions for use of the property do not evidence change in use. Since X Ltd has no plans to commence construction of the office building during 20X1-20X2, the property should continue to be classified as an investment property by X Ltd. in its financial statements as at 31 March 20X2.

**Note: The answer to the above is as per ICAI Module. However, Different opinion exist and the property can be reclassified as PPE.**

**Question 29 (MTP Aug18)**

UK Ltd. has purchased a new head office property for Rs. 10 crores. The new office building has 10 floors and the organization structure of UK Ltd. is as follows:



Floor	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>	6 <sup>th</sup>	7 <sup>th</sup>	8 <sup>th</sup>	9 <sup>th</sup>	10 <sup>th</sup>
Use	Waiting Area	Admin	HR	Accounts	Inspection	MD Office	Canteen	Vacant		

Since UK Ltd. did not need the floors 8, 9 and 10 for its business needs, it has leased out the same to a restaurant on a long-term lease basis. The terms of the lease agreement are as follows:

- Tenure of Lease Agreement - 5 Years
- Non-Cancellable Period - 3 years
- Lease Rent - annual lease rent receivable from these floors are Rs. 10,00,000 per floor with an escalation of 5% every year.

Based on the certificate from its architect, UK Ltd. has estimated the cost of the 3 top floors as approximately Rs. 3 crores. The remaining cost of Rs. 7 crores can be allocated as 25% towards Land and 75% towards Building.

As on 31st March, 2018, UK Ltd. obtained a valuation report from an independent valuer who has estimated the fair value of the property at Rs. 15 crores. UK Ltd. wishes to use the cost model for measuring Property,

*Plant & Equipment and the fair value model for measuring the Investment Property. UK Ltd. depreciates the building over an estimated useful life of 50 years, with no estimated residual value.*

*Advise UK Ltd. on the accounting and disclosures for the above as per the applicable Ind AS.*

### **SOLUTION**

- (a) Ind AS 16 'Property, Plant and Equipment' states that property, plant and equipment are tangible items that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes.
- (b) As per Ind AS 40 'Investment property', investment property is a property held to earn rentals or for capital appreciation or both, rather than for use in the production or supply of goods or services or for administrative purposes or sale in the ordinary course of business.
- (c) Further, as per Ind AS 40, the building owned by the entity and leased out under one or more operating leases will be classified as investment property. Here the top three floors have been leased out for 5 years with a non-cancellable period of 3 years. The useful life of the building is 50 years. The lease period is far less than the useful life of the building leased out. Further, the lease rentals of three years altogether do not recover the fair value of the floors leased i.e.  $15 \text{ crore} \times 30\% = 4.50 \text{ crore}$ . Hence the lease is an operating lease. Therefore, the 3 floors leased out as operating lease will be classified as investment property in the books of lessor i.e. UK Ltd.
- (d) However, for investment property, Ind AS 40 states that an entity shall adopt as its accounting policy the cost model to all of its investment property. Ind AS 40 also requires that an entity shall disclose the fair value of such investment property (ies).

(In crore)

	PPE (70%)		Investment property (30%)	Total
	Land (25%)	Building (75%)		
Cost	1.75	5.25	3	10
FV	2.625	7.875	4.5	15
Valuation model followed	Cost	Cost	Cost	
Value recognized in the books	1.75	5.25	3	
Less: Depreciation	Nil	$(5.25/50) = 0.105 \text{ crore}$	$(3/50) = 0.06$	
Carrying value as on 31st March, 2018	1.75	5.145	2.94	
<b>Impairment loss</b>	<b>No impairment loss since fair value is more than the cost</b>			

**Note-** Do not get confused over here.

Ind AS 40 will classify an asset. Ind AS 116 will do the recognition and accounting for that asset after it is classified as a leasehold property according to Ind AS 40.



# CA Final Financial Reporting (FR)

**“Must do Questions” Before Exam**

Topic -  
INDAS 116 - LEASES

Question of No. 22

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TELEGRAM GRP - MAY24 EXAM**



**Question 30 (ICAI Module)****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?

**SOLUTION****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.

**Question 31 (ICAI Module)**

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?

**SOLUTION:**

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.



**Question 32 (ICAI Module)**

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 Rs. 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?

**SOLUTION:**

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 (assuming Customer ABC does not elect to combine lease and non-lease components for this class of asset).

If Customer ABC elects the practical expedient not to separate the associated non-lease component from the lease component and instead accounts for the lease component and the non-lease component as a single lease component, the future payments for the consumables will still constitute genuine variability. Hence there will also be no lease payments for purposes of initial measurement.

**Question 33 (ICAI Module)****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?

**SOLUTION:****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.

### **Question 34 (ICAI Module)**

*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?*

### **ANSWER:**

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.

### **Question 35 (Singapore CA Institute)**

*Pacific Laundry Ltd, a commercial laundry, enters into a three-year lease contract to obtain use of a commercial washing machine and commercial dryer for use at its new premises within a hotel belonging to one of its main corporate customers. The terms of the contract provide for an annual service of the machines to be carried out by the manufacturer-lessor; an initial fee of \$10,000 is payable and annual payments of \$60,000 are required. Pacific Laundry Ltd has established the following standalone prices for the lease of the washer, the lease of the dryer and their servicing:*

	<b>Leases (\$)</b>	<b>Servicing (\$)</b>
Washer	85,000	20,000
Dryer	75,000	15,000
<b>Total</b>	<b>1,60,000</b>	<b>35,000</b>

*Identify the components of the contract and explain how the contract consideration is allocated to them.*

### **SOLUTION**

The contract contains lease and non-lease components as well as an initial fee that is not a component of the contract.

The contract conveys the right to use two underlying assets – a washer and a dryer. These are two separate lease components because the washer and dryer are not highly dependent on one another. Although the dryer is used after items have been washed, it could be used in conjunction with any other washer, or after hand washing items. Equally the washer does not depend on the dryer as items could be hung to air-dry. The contract also provides for the servicing of the washer and the servicing of the dryer. These are non-lease components and are therefore joined together to be a single non-lease component.

The contract therefore contains two lease components and a single non-lease component. The total contract consideration of \$190,000 (\$10,000 + (\$60,000 X 3)) is allocated to these three components.

The total of the standalone prices is \$195,000, meaning that a discount is provided in the contract. The \$190,000 is allocated to the components of the contract as follows:

Lease of washer	=	(85,000/195,000 X 1,90,000)	=	\$82,821
Lease of dryer	=	(75,000/195,000 X 1,90,000)	=	\$73,077
Servicing	=	(35,000/195,000 X 1,90,000)	=	\$34,102

### **Question 36 (Singapore CA Institute)**

*On 1 March 20X7 Sentosa Designs Ltd (SDL) leased a cutting machine with a fair value of \$135,000 on a two year lease. Lease payments are \$2,000 per calendar month, payable in advance. In addition SDL were required to pay fees of \$5,000 at the start of the lease. SDL has an option to terminate the agreement after 12 months without penalty and management of SDL believe that they are likely to exercise this option.*

*Explain how the lease should be accounted for and calculate the amount to be recognised in the financial statements in the year ended 31 October 20X7.*

### **SOLUTION**

This lease is not for a low value asset; it is however a short-term lease.

A lease term is the non-cancellable period for which a lessee has the right to use the underlying asset, plus:

- Periods covered by an option to extend the lease if the lessee is reasonably certain to exercise the option; and
- Periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise the option.

The non-cancellable period is the initial 12 months of the lease. The remaining 12 months are covered by an option to terminate the lease. These form part of the lease term only if SDL is reasonably certain not to exercise the option. This is not the case and therefore the additional 12 months are not part of the lease term. The lease is for 12 months and is therefore short-term.

SDL may elect to apply simplified accounting to this class of assets and assuming that it does, an expense of \$19,333 is recognised in profit or loss for the year ended 31 October 20X7:

Total cost is \$5,000 + (12 x \$2,000) = \$29,000

Therefore for 8 months: \$29,000 x 8/12m = \$19,333

### **Question 37 (RTP May22)**

#### **Case I**

*Scenario 1: The 'last mile' is a dedicated cable that connects Entity Y's network with the end customer's device. The use of this cable is at the discretion of the customer. Entity Y decides the location of end points and has right to replace the lines (dedicated cable), however it is not practical to replace the lines, since replacement would require additional costs to be incurred without any corresponding benefit. Whether the arrangement would be within the scope of Ind AS 116?*

*Scenario 2: If it is practical for the Entity Y to replace the lines and Entity Y would benefit from this replacement, would the answer be different?*



#### **Case II**

*Customer X enters into a 10-year contract with a utility company, Entity Y, for the right to use three specified, physically distinct fibers within a larger cable connecting Mumbai to Delhi. Customer makes the decisions about the use of the fibers by connecting each end of the fibers to its electronic equipment. Entity Y owns extra fibers but can substitute those for Customer's fibers only for reasons of repairs, maintenance or malfunction. The useful life of the fiber is 15 years. Whether this arrangement is covered under Ind AS 116?*

#### **Case III**

*Customer X enters into a 10-year contract with Entity Y for the right to use a specified amount of capacity within a cable connecting Mumbai to Delhi. The specified amount is equivalent to Customer X having the use*

of the full capacity of three fiber strands within the cable (the cable contains multiple fibers with similar capacities). Entity Y makes decisions about the transmission of data (i.e., Entity Y lights the fibers, makes decisions about which fibers are used to transmit Customer's traffic). The useful life of the fiber is 15 years. Whether this arrangement is covered under Ind AS 116?

### **SOLUTION**

Paragraph 9, B9, B13 and B14 of Ind AS 116 state the following:

“9 At inception of a contract, an entity shall assess whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.”

“B9 to assess whether a contract conveys the right to control the use of an identified asset for a period of time, an entity shall assess whether, throughout the period of use, the customer has both of the following:

- (a) The right to obtain substantially all of the economic benefits from use of the identified asset; and
- (b) The right to direct the use of the identified asset.”

“B13 an asset is typically identified by being explicitly specified in a contract. However, an asset can also be identified by being implicitly specified at the time that the asset is made available for use by the customer.”

“B14 Even if an asset is specified, a customer does not have the right to use an identified asset if the supplier has the substantive right to substitute the asset throughout the period of use. A supplier's right to substitute an asset is substantive only if both of the following conditions exist:

- (a) The supplier has the practical ability to substitute alternative assets throughout the period of use (for example, the customer cannot prevent the supplier from substituting the asset and alternative assets are readily available to the supplier or could be sourced by the supplier within a reasonable period of time); and
- (b) The supplier would benefit economically from the exercise of its right to substitute the asset (i.e., the economic benefits associated with substituting the asset are expected to exceed the costs associated with substituting the asset).”

Paragraph B20 of Ind AS 116 which provides guidance regarding identified asset in case of portion of assets states that a capacity portion of an asset is an identified asset if it is physically distinct (for example, a floor of a building). A capacity or other portion of an asset that is not physically distinct (for example, a capacity portion of a fibre optic cable) is not an identified asset, unless it represents substantially all of the capacity of the asset and thereby provides the customer with the right to obtain substantially all of the economic benefits from use of the asset.

Paragraph B21 of Ind AS 116, inter alia, states that to control the use of an identified asset, a customer is required to have the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use (for example, by having exclusive use of the asset throughout that period). A customer can obtain economic benefits from use of an asset directly or indirectly in many ways, such as by using, holding or subleasing the asset.

Further, paragraph B24 of Ind AS 116 provides that a customer has the right to direct the use of an identified asset throughout the period of use if the customer has the right to direct how and for what purpose the asset is used throughout the period of use.

Paragraph B25 of Ind AS 116 states that a customer has the right to direct how and for what purpose the asset is used if, within the scope of its right of use defined in the contract, it can change how and for what purpose the asset is used throughout the period of use. In making this assessment, an entity considers the decision-making rights that are most relevant to changing how and for what purpose the asset is used throughout the period of use. Decision-making rights are relevant when they affect the economic benefits to be derived from use. The decision-making rights that are most relevant are likely to be different for different contracts, depending on the nature of the asset and the terms and conditions of the contract.

### **Case I**

#### **Scenario 1:**

- (i) As per paragraph B13 of Ind AS 116, 'Last mile' which is a dedicated cable is an identified asset since it is physically distinct.
- (ii) There are no substantive substitution rights with Entity Y, as it does not have the practical ability to substitute alternative assets throughout the period of use.

Thus, this arrangement is within the scope of Ind AS 116.



**Scenario 2:**

If Entity Y has the practical ability to replace the lines and it would benefit from such replacement, Entity Y has substantive substitution rights. In such case, this arrangement for the 'last mile cable' will not be within the scope of Ind AS 116.

**Case II**

The fibers are specified in the contract and are physically distinct. Hence, in accordance with paragraph B13 and B20, the said three fibers are identified asset.

Paragraph B18, inter alia, states that the supplier's right or obligation to substitute the asset for repairs and maintenance, if the asset is not operating properly or if a technical upgrade becomes available does not preclude the customer from having the right to use an identified asset.

Further, paragraph B27 provides that although rights such as those to operate or maintain an asset are often essential to the efficient use of an asset, they are not rights to direct how and for what purpose the asset is used and can actually be dependent on the decisions about how and for what purpose the asset is used.

In accordance with the above, as Entity Y can substitute these three distinct fibers only for reasons of repairs, maintenance or malfunction, it does not preclude them from being an identified asset.

Further, the Customer X has right to control the use of the identified fibers for 10 year since it has –

- (a) The right to obtain substantially all of the economic benefits from use of the identified fibers throughout the period of use, i.e., 10 years; and
- (b) The right to direct the use of the fibers as it makes the decisions about the use of the fibers, i.e., it has right to direct how and for what purpose the fibers are used throughout the period of use.

Hence, this arrangement is within the scope of Ind AS 116.

**Case III**

Paragraph B20 specifically provides that a capacity or other portion of an asset that is not physically distinct (for example, a capacity portion of a fiber optic cable) is not an identified asset, unless it represents substantially all of the capacity of the asset and thereby provides the customer with the right to obtain substantially all of the economic benefits from use of the asset. In the given case, the capacity portion that will be provided to Customer X is not physically distinct from the remaining capacity of the cable and does not represent substantially all of the capacity of the cable, thus, it is not an identified asset. Further, Entity Y makes all decisions about the transmission of data, (i.e., supplier lights the fibers, makes decisions about which fibers are used to transmit customer's traffic).

Thus, the contract does not contain a lease and is therefore not within the scope of Ind AS 116.

**Question 38 (ICAI Module)**

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 Rs50 Lacs. Company EFG has an option to purchase the property at the end of the lease term for Rs30 lacs. The first annual payment is Rs5 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 Rs2 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?

**SOLUTION:**

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)	Rs. 37,39,648
PV of purchase option at end of lease term (W.N. 2)	Rs. 12,60,000
<b>Total lease liability</b>	<b>Rs. 49,99,648 or Rs. 50,00,000 (approx)</b>



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.	Rs 50,00,000	
To Lease Liability			Rs 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 Rs. 1,25,000 (Rs. 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	30,00,000	27,50,787	2,49,213*	-	-
<b>Total</b>	<b>85,31,940</b>	<b>50,00,000</b>	<b>35,31,940</b>	<b>35,31,940</b>	

\*(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

#### 1. 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
<b>Total</b>			<b>37,39,648</b>

**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
<b>Total</b>			<b>12,60,000</b>

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.

**Question 39 (MTP Nov22)**

Feel Fresh Limited (the Company) is into manufacturing and retailing of FMCG products listed on stock exchanges in India. One of its products is bathing soap which the Company sells under the brand name 'Feel Fresh'. The Company does not have its own manufacturing facilities for soap and therefore it enters into arrangements with a third party to procure the soaps. The Company entered into a long-term purchase contract of 10 years with M/s. Radhey. Following are the relevant terms of the contract with M/s. Radhey.

- (i) M/s. Radhey has to purchase a machine costing Rs. 10,00,000 from the supplier as specified by the Company. The machine will be customized to produce the soaps as designed by the Company. This machine cannot be used by M/s. Radhey to produce the soaps for buyers other than the Company due to the design specifications. The machine has a useful life of 10 years and the straight-line method of depreciation is best suited considering the use of the machine.
- (ii) The Company will pay Rs. 4.75 per soap for the first year of contract. This is calculated based on the budgeted annual purchase of 7,00,000 soaps as follows:

Particulars	Per soap price
Variable cost of manufacturing	4.00
Cost of machine (Rs. 1,74,015 / 7,00,000 soaps)	0.25
M/s. Radhey's margin	0.50
Per soap cost to the Company	4.75

In case the Company purchases more than 7,00,000 (i.e. budgeted number of soaps) soaps in the first year then the cost of the machine (i.e. 0.25 per soap) will not be paid for soaps procured in excess of 7,00,000 units. However, in case Company procures less than budgeted number of soaps, then the Company will pay the differential unabsorbed cost of the machine, at the end of the year. For example, if the Company purchases only 6,00,000 soaps in first year then the differential amount of Rs. 24,015 (1,74,015 - (6,00,000 x 0.25)) will be paid by the Company to M/s. Radhey at the end of the year. Variable cost will be actualized at the end of the year.

- (iii) The cost per soap will be calculated for each year in advance based on the budgeted number of soaps to be produced each year. An amount of Rs. 1,74,015 shall be considered each year for the cost of machine for year 1 to year 8 while calculating the cost per soap. Any differential under absorbed amount shall be paid by the Company to M/s. Radhey at the end of that year. A charge of Rs. 1,74,015 per annum for the machine is derived using borrowing cost of 8% p.a. For year 9 and year 10, only variable cost and margins will be paid.
- (iv) M/s. Radhey does not have any right to terminate the contract but the Company has the right to terminate the contract at the end of each year. However, if the Company terminates the contract, it has to compensate M/s. Radhey for any unabsorbed cost of Machine. For example, if the Company terminates the contract at the end of second year then it has to pay Rs. 10,44,090 (i.e. 1,74,015 per year x 6 remaining years). If it terminates the contract after the 8th year then the Company does not have to pay the compensation since the cost of the machine would have been absorbed.
- (v) In the first year, the Company purchases 5,50,000 soaps at Rs. 4.75 per soap. Evaluate the contract of the Company with M/s. Radhey and provide necessary accounting entries for first year in accordance with Ind AS with working notes. Assume all cash flows occur at the end of the year.

**SOLUTION**

Identification of the contract (by applying para 9 of Ind AS 116)

**(a) Identified asset**

Feel Fresh Ltd. (a customer company) enters into a long-term purchase contract with M/s Radhey (a manufacturer) to purchase a particular type and quality of soaps for 10 year period.

Since for the purpose of the contract M/s Radhey has to buy a customized machine as per the directions of Feel Fresh Ltd. and also the machine cannot be used for any other type of soap, the machine is an identified asset.

**(b) Right to obtain substantially all of the economic benefits from use of the asset throughout the period of use**

Since the machine cannot be used for manufacture of soap for any other buyer, Feel Fresh Ltd. will obtain substantially all the economic benefits from the use of the asset throughout the period of use.

**(c) Right to direct the use**

Feel Fresh Ltd. controls the use of machine and directs the terms and conditions of the contract with respect to recovery of fixed expenses related to machine.

Hence the contract contains a lease.

**Lease term**

The lease term shall be 10 years assuming reasonable certainty. Though the lessee is not contractually bound till 10th year, i.e., the lessee can refuse to make payment anytime without lessor's permission but, it is assumed that the lessee is reasonably certain that it will not exercise this option to terminate.

**Identification of lease payment**

Lease payments are defined as payments made by a lessee to a lessor relating to the right to use an underlying asset during the lease term, comprising the following:

- (a) fixed payments (including in-substance fixed payments), less any lease incentives
- (b) variable lease paym
- (c) ents that depend on an index or a rate
- (d) the exercise price of a purchase option if the lessee is reasonably certain to exercise that option
- (e) payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease

Here in-substance fixed payments in the given lease contract are Rs. 1,74,015 p.a. The present value of lease payment which would be recovered in 8 years @ 8% would be Rs. 10,00,000 (approx.)

Variable lease payments that do not depend on an index or rate and are not, in substance, fixed are not included as lease payments. Instead, they are recognised in profit or loss in the period in which the event that triggers the payment occurs (unless they are included in the carrying amount of another asset in accordance with other Ind AS).

Hence, lease liability will be recognized by Rs. 10,00,000 in the books of Feel Fresh Ltd. Since there are no payments made to lessor before commencement date less lease incentives received from lessor or initial direct costs incurred by lessee or estimate of costs for restoration / dismantling of underlying asset, the right of use asset is equal to lease liability.

**Journal Entries****On initial recognition**

ROU Asset	Dr.	10,00,000	
To Lease Liability			10,00,000
To initially recognise the Lease Liability and the corresponding ROU Asset			

**At the end of the first year**

Interest Expense	Dr.	80,000	
To Lease Liability			80,000
To record interest expense and accrete the lease liability using the effective interest method (Rs. 10,00,000 x 8%)			
Depreciation Expense (10,00,000 / 10 years)	Dr.	1,00,000	
To ROU Asset			1,00,000
To record depreciation on ROU using the straight-line method (Rs. 10,00,000 / 10 years)			

Lease Liability To Bank / M/s. Radhey To record lease payment	Dr.	1,74,015	1,74,015
Cost of soap To Bank / M/s. Radhey {5,50,000 x (4 + 0.5)} To record variable expenses paid as cost of the goods purchased	Dr.	24,75,000	24,75,000

**Question 40 (ICAI Module):**

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?

**SOLUTION:**

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.

**Question 41: (MTP May22 & MTP May21)**

Lessee enters into a 10-year lease for 5,000 square metres of office space. The annual lease payments are Rs1,00,000 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., Rs1,00,000 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?

**SOLUTION:**

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 Rs1,00,000 and
- Lessee's incremental borrowing rate of 7% p.a.

The modified lease liability equals Rs5,97,100 (W.N.1). The lease liability immediately before the modification (including the recognition of the interest expense until the end of Year 6) is Rs3,46,355 (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., Rs2,50,745) (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
<b>Modified lease liability</b>			<b>5,97,100</b>

### 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
<b>Lease liability as at modification date</b>			<b>7,35,900</b>

### 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
<b>Lease liability as at modification date</b>				<b>3,46,355</b>

### 4. Adjustment to ROU asset:

Modified Lease liability	5,97,100
Original Lease liability as at modification date	(3,46,355)
<b>Adjustment to ROU asset</b>	<b>2,50,745</b>

The ROU asset will be increased by Rs2,50,745 on the date of modification.

### Question 42: (MTP May21, May22)

Lessee enters into a 10-year lease for 5,000 square meters of office space. The annual lease payments are Rs. 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 meters 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 Rs. 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?



**SOLUTION:**

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 five-year remaining lease term,
- annual payments of Rs. 30,000 and
- 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
<b>Total</b>			<b>1,29,900</b>

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 meters corresponding to 50% of the original ROU Asset).

50% of the pre-modification ROU Asset (Rs. 1,83,975) is Rs. 91,987.50.

50% of the pre-modification lease liability (Rs. 2,10,546) is Rs. 1,05,273.

Consequently, Lessee reduces the carrying amount of the ROU Asset by Rs. 91,987.50 and the carrying amount of the lease liability by Rs. 1,05,273. Lessee recognises the difference between the decrease in the lease liability and the decrease in the ROU Asset (Rs. 1,05,273 – Rs. 91,987.50 = Rs. 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 Rs. 1,05,273 and the modified lease liability of Rs. 1,29,900 (which equals Rs. 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:****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
			<b>3,67,950</b>

**Question 43 (ICAI Module):**

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 Rs1,00,000 per year to Rs95,000 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?

**SOLUTION:**

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 Rs95,000, 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
			<b>3,89,500</b>

Lessee recognises the difference between the carrying amount of the modified liability (Rs3,89,500) and the lease liability immediately before the modification (Rs4,21,090) of Rs31,590 as an adjustment to the ROU Asset.

**Working Note:****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
<b>Lease liability as at modification date</b>			<b>7,35,900</b>

**Question 44 (ICAI Module):**

Lessee enters into a 10-year lease for 2,000 square metres of office space. The annual lease payments are Rs1,00,000 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:

- Include an additional 1,500 square metres of space in the same building starting from the beginning of Year 6 and
- Reduce the lease term from 10 years to eight years. The annual fixed payment for the 3,500 square metres is Rs1,50,000 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?

**SOLUTION:**

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 (i.e. till 8th year),
- Annual payments of Rs150,000 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	1,22,400
<b>Modified lease liability</b>			<b>3,93,600</b>

The modified liability equals Rs3,93,600, of which (a) Rs1,31,200 relates to the increase of Rs50,000 in the annual lease payments from Year 6 to Year 8 and (refer note 1) (b) Rs2,62,400 relates to the remaining three annual lease payments of Rs1,00,000 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 Rs. 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 Rs. 2,20,770 [i.e., Rs. (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 Rs. 4,21,090. The remaining lease liability for the original 2,000 square metres of office space is Rs. 2,67,300 (i.e., present value of three annual lease payments of Rs. 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 Rs. 1,47,180 (Rs. 3,67,950 – Rs. 2,20,770), and the carrying amount of the lease liability by Rs. 1,53,790 (Rs. 4,21,090 – Rs. 2,67,300). Lessee recognises the difference between the decrease in the lease liability and the decrease in the ROU Asset (Rs. 1,53,790 – Rs. 1,47,180 = Rs. 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 Rs4,900 (Rs2,67,300 – Rs2,62,400\*), 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 Rs1,31,200 (i.e., present value of three annual lease payments of Rs50,000, 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	3,47,100**	(1,15,700)	2,31,400
7	2,71,152	18,981	(1,50,000)	1,40,133	2,31,400	(1,15,700)	1,15,700
8	1,40,133	9,867*	(1,50,000)	-	1,15,700	(1,15,700)	-

\*Difference is due to approximation.

\*\*Refer Note 5

#### Working Notes:

##### 1. 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	40,800
<b>Modified lease liability</b>			<b>1,31,200</b>

##### 2. 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	84,000

Remaining lease liability	2,67,300
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3. 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	81,600
Remaining lease liability			2,62,400

4. 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

5. 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%	(4,870)
Add: Adjustment for increase in leased space	1,31,200
	<b>3,47,100</b>

### Question 45 (ICAI Module):

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 Rs15,000, payable at the end of the year
- ❖ Lessor expects the residual value of the equipment to be Rs50,000 at the end of the 10-year lease term
- ❖ Lessee provides a residual value guarantee that protects Lessor from the first Rs30,000 of loss for a sale at a price below the estimated residual value at the end of the lease term (i.e., Rs50,000)
- ❖ The equipment has an estimated remaining economic life of 15 years, a carrying amount of Rs1,00,000 and a fair value of Rs1,11,000
- ❖ 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?

### Solution

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	Rs 1,11,000(a)	
Cost of goods sold	Rs 92,340(b)	
Revenue		Rs 1,03,340(c)
Property held for lease		Rs 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 Rs15,000 plus the guaranteed residual value of Rs30,000, both discounted at the interest rate implicit in the lease, which equals Rs1,03,340 (i.e., the lease payment) (Refer note 1) **AND**
- (2) The present value of unguaranteed residual asset of Rs20,000, which equals Rs7,660 (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 Rs1,00,000 (less) the present value of the unguaranteed residual asset of Rs7,660.
- (c) Revenue equals the lease receivable.
- (d) The carrying amount of the underlying asset.

At lease commencement, Lessor recognises selling profit of Rs11,000 which is calculated as = lease payment of Rs1,03,340 – [carrying amount of the asset (Rs1,00,000) – net of any unguaranteed residual asset (Rs7,660) i.e. which equals Rs92,340]

Cash	Rs 15,000 <sup>(e)</sup>	
Net investment in the lease		Rs 3,813 <sup>(f)</sup>
Interest income		Rs 11,187 <sup>(g)</sup>

- (e) Receipt of annual lease payments at the end of the year.
- (f) Reduction of the net investment in the lease for lease payments received of Rs15,000, net of interest income of Rs11,187
- (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 <sup>(h)</sup>	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 <sup>(i)</sup>

- (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 Rs1,11,000 (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*
			<b>1,03,340</b>

\* Figure has been rounded off for equalization of journal entry.

## 2. 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

### Question 46: (RTP Nov22)

A company manufactures specialised machinery. The company offers customers the choice of either buying or leasing the machinery. A customer chooses to lease the machinery. Details of the arrangement are as follows:



- The lease commences on 1st April, 20X1 and lasts for three years.
  - The lessee is required to make three annual rentals payable in arrears of Rs. 57,500.
  - The leased machinery is returned to the lessor at the end of the lease.
  - The fair value of the machinery is Rs. 1,50,000, which is equivalent to the selling price of the machinery
  - The machinery cost Rs. 1,00,000 to manufacture.
  - The lessor incurred costs of Rs. 2,500 to negotiate and arrange the lease
  - The expected useful life of the machinery is 3 years. The machinery has an expected residual value of Rs. 10,000 at the end of year three. The estimated residual value does not change over the term of the lease.
  - The interest rate implicit in the lease is 10.19%. The lessor classifies the lease as a finance lease.
- How should the Lessor account for the same in its books of accounts? Pass necessary journal entries.

### SOLUTION

The cost to the lessor for providing the machinery on lease consists of the book value of the machinery (Rs. 1,00,000), plus the initial direct costs associated with entering into the lease (Rs. 2,500), less the future income expected from disposing of the machinery at the end of the lease (the present value of the unguaranteed residual value of Rs. 10,000 discounted @ 10.19%, being Rs. 7,470). This gives a cost of sale of Rs. 95,030.

The lessor records the following entries at the commencement of the lease:

		Rs.	Rs.
Lease receivable	Dr.	1,50,000	
Cost of sales	Dr.	95,030	
To Inventory			1,00,000
To Revenue			1,42,530
To Creditors/Cash			2,500

The sales profit recognised by the lessor at the commencement of the lease is therefore Rs. 47,500 (Rs. 1,42,530 - Rs. 95,030). This is equal to the fair value of the machinery of Rs. 1,50,000, less the book value of the machinery (Rs. 1,00,000) and the initial direct costs of entering into the lease (Rs. 2,500). Revenue is equal to the lease receivable (Rs. 1,50,000), less the present value of the unguaranteed residual value (Rs. 7,470).

Year	Lease receivable at the beginning of year (Rs.) (a)	Lease payments (Rs.) (b)	Interest Income (10.19% per annum) (Rs.) (c)	Decrease In lease receivable (Rs.) (d)=(b)-(c)	Lease receivable at the end of year (Rs.) (e)=(a)-(d)
1	1,50,000	57,500	15,285	42,215	1,07,785
2	1,07,785	57,500	10,983	46,517	61,268
3	61,268	57,500	6,232*	51,268	10,000

*\*Difference is due to approximation*

The lessor will record the following entries:

			Rs.	Rs.
Year 1	Cash/Bank	Dr.	57,500	
	To Lease receivable			42,215
	To Interest income			15,285
Year 2	Cash/Bank	Dr.	57,500	
	To Lease receivable			46,517
	To Interest income			10,983
Year 3	Cash/Bank	Dr.	57,500	
	To Lease receivable			51,268
	To Interest income			6,232

At the end of the three-year lease term, the leased machinery will be returned to the lessor, who will record the following entries:

		Rs.	Rs.
Inventory	Dr.	10,000	
To Lease receivable			10,000

### Question 48: (MTP Apr19)

On 1 April 2017, Jupiter ltd began to lease a property on a 20-year lease. Jupiter ltd paid a lease premium of Rs. 30,00,000 (One Time payment) on 1 April 2017. The terms of the lease required Jupiter ltd to make annual payments of Rs. 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 Rs. 30,00,000.
- Buildings Rs. 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 Rs. 1 in arrears at a discount rate of 9.2% is Rs. 9.

#### Required:

Explain the accounting treatment for the above property lease and produce appropriate extracts from the financial statements of Jupiter ltd for the year ended 31 March 2018.

#### SOLUTION:

**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 rental expense for the current period is Rs. 2,60,000 (Rs. 52,00,000 X 1/20).

The amount paid in the current period re: the land element is Rs. 14,00,000 (Rs. 12,00,000 + Rs. 200,000).

Therefore there is a prepayment of Rs. 1,140,000 (Rs. 14,00,000 – Rs. 2,60,000) at the year end.

In the next 19 periods, the rental expense will be Rs. 260,000 and the rental payment will be Rs. 200,000.

Therefore Rs. 60,000 of the rental prepayment will reverse in each period. This means that Rs. 60,000 of the prepayment will be a current asset, and the balance a non-current asset.

**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 buildings 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 leased asset in PPE is Rs. 45,00,000 (Rs. 18,00,000 + Rs. 300,000 X 9).



Therefore the annual depreciation charge is Rs. 2,25,000 (Rs. 45,00,000 X 1/20) and the closing PPE (Rs. 45,00,000 – Rs. 2,25,000). The finance cost in respect of the finance lease and the closing non-current liability is shown in the working below. The closing current liability is Rs. 56,300 (Rs. 26,48,400 – Rs. 25,92,100).

Lease liability profile – working

Year ended 31st March	Bal b/f Rs.'000	Finance Cost @ 9.2% Rs. '000	Lease rental payment Rs. '000	Bal c/f Rs. '000
2018	*2,700	248.4	(300)	2,648.4
2019	2,648.4	243.7	(300)	2,592.1

\* Balance brought forward is equal to net of lease premium of Rs. 18,00,000 i.e. Rs. 45,00,000 – Rs. 18,00,000 = Rs. 27,00,000.

### Question 49: (RTP May23)

How will Entity Y account for the incentive in the following scenarios:

#### Scenario A:

Entity Y (lessor) enters into an operating lease of property with Entity X (lessee) for a five-year term at a monthly rental of ₹ 1,10,000. In order to induce Entity X to enter into the lease, Entity Y provides ₹ 6,00,000 to Entity X at lease commencement for lessee improvements (i.e., lessee's assets).

#### Scenario B:

Entity Y (lessor) enters into an operating lease of property with Entity X (lessee) for a five-year term at a monthly rental of ₹ 1,10,000. At lease commencement, Entity Y provides ₹ 6,00,000 to Entity X for leasehold improvements which will be owned by Entity Y (i.e., lessor's assets). The estimated useful life of leasehold improvements is 5 years

### SOLUTION:

Para 70 of Ind AS 116 state that at the commencement date, the lease payments included in the measurement of the net investment in the lease comprise the following payments for the right to use the underlying asset during the lease term that are not received at the commencement date:

- fixed payments (including in-substance fixed payments as described in para B42), less any lease incentives payable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- any residual value guarantees provided to the lessor by the lessee, a party related to the lessee or a third party unrelated to the lessor that is financially capable of discharging the obligations under the guarantee;
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option (assessed considering the factors described in para B37); and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

Further para 71 of the standard states that a lessor shall recognise lease payments from operating leases as income on either a straight-line basis or another systematic basis. The lessor shall apply another systematic basis if that basis is more representative of the pattern in which benefit from the use of the underlying asset is diminished.”

#### Scenario A

In accordance with above, in the given case, at lease commencement, Entity Y accounts for the incentive as follows:

To account for the lease incentive			
Deferred lease incentive A/c	Dr.	₹ 6,00,000	
To Cash A/c			₹ 6,00,000

**Recurring monthly journal entries in Years 1 – 5**

To record cash received on account of lease rental and amortisation of lease incentive over the lease term			
Cash	Dr.	₹ 1,10,000	
To Lease income			₹ 1,00,000
To Deferred lease incentive			₹ 10,000*

\* This is calculated as ₹ 6,00,000 ÷ 60 months.

**Scenario B**

Entity Y has provided lease incentive amounting to ₹ 6,00,000 to Entity X for leasehold improvements in the premises. As Entity Y has the ownership of the leasehold improvements carried out by the lessee, it shall account for the same as property, plant and equipment and shall depreciate the same over its useful life. In accordance with above, in the given case, at lease commencement, Entity Y accounts for the incentive as follows:

To record the lease incentive			
Property, Plant & Equipment A/c	Dr.	₹ 6,00,000	
To Cash A/c			₹ 6,00,000

**Recurring monthly journal entries in Years 1 – 5**

To record cash received on account of lease rental over the lease term			
Cash	Dr.	₹ 1,10,000	
To Lease income			₹ 1,10,000
To record depreciation on PPE over the lease term using straight line method			
Depreciation A/c	Dr.	₹ 10,000	
To Accumulated Depreciation			₹ 10,000

**Question 50: (Nov20 EXAM)**

An entity (Seller-lessee) sells a building to another entity (Buyer-lessor) for cash of Rs. 30,00,000. Immediately before the transaction, the building is carried at a cost of Rs. 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 Rs. 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 Rs. 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?

**SOLUTION:**

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 Rs3,00,000 (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)
<b>Additional financing provided by Buyer-lessor to Seller-lessee</b>	<b>3,00,000</b>

Next step would be to calculate the present value of the annual payments which amounts to Rs14,94,000 (calculated considering 20 payments of Rs2,00,000 each, discounted at 12% p.a.) of which Rs3,00,000 relates to the additional financing (as calculated above) and balance Rs11,94,000 relates to the lease — corresponding to 20 annual payments of Rs40,164 and Rs1,59,836, 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
<b>ROU Asset</b> [(A / B) x C]		<b>6,63,333</b>

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
<b>Gain on sale of building</b> (D) = (A - B)		<b>12,00,000</b>
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 Rs40,160 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 Rs1,59,840 of the annual payments of Rs2,00,000 as lease payments. The remaining Rs40,160 of annual payments received from Seller-lessee are accounted for as:

- payments received to settle the financial asset of Rs3,00,000 **AND**
- Interest revenue.

**Question 51: (MTP Nov21)**

A retailer (lessee) entered into 3-year lease of retail space beginning at 1 April 2017 with three annual lease payments of Rs. 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?

Full Retrospective Approach

**Modified Retrospective Approach**

- Alternative 1
- Alternative 2

**SOLUTION:**

**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	2,00,000	0.7118	1,42,360
	<b>6,00,000</b>		<b>4,80,380</b>

**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
	<b>2,00,000</b>		<b>1,81,820</b>

### 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	2,00,000	0.7513	1,50,260
	<b>6,00,000</b>		<b>4,97,360</b>

#### 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	2,00,000	0.9091	1,81,820
	<b>2,00,000</b>		<b>1,81,820</b>

#### 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)
<b>Opening balance sheet impact as on 1 April 2019:</b>			
ROU Asset	1,60,126	1,65,787	1,81,820
Lease Liability	1,78,589	1,81,806	1,81,820
<b>Period ended 31 March 2020 activity:</b>			
Cash lease payments	2,00,000	2,00,000	2,00,000
Lease payments recognised:			
Interest expense	21,411	18,194	18,182
Depreciation expense	1,60,127	1,65,787	1,81,820
Total periodic expense	1,81,538	1,83,981	2,00,002



*CA Final*  
*Financial Reporting (FR)*

**“Must do Questions” Before Exam**

*Topic -*  
*INDAS 41 - AGRICULTURE*

Question of No. 5

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**Question 52: (RTP Nov22)**

ABC Ltd. is in the business of manufacturing an apple beverage and requires large quantity of apples to manufacture such beverage. In order to satisfy its requirement of apples, it enters into 3 years lease contracts with owners of apple orchards. The lease contracts are mainly of two types:

- (1) Contract 1: The owner of the apple orchard (i.e., the lessor) raises the apple trees to produce apples. ABC Ltd. (i.e., lessee) makes a fixed annual payment to the owner of the apple orchard who is required to cultivate the produce as per the specifications of ABC Ltd. ABC Ltd. harvests the apples itself for fulfilling its requirement of apples.
- (2) Contract 2: ABC Ltd. obtains the apple orchard from owner (i.e., the lessor) to raise the apple trees for subsequent harvest of the apples to ensure that the apples are as per the requirements of ABC Ltd. ABC Ltd. makes a fixed annual payment to the owner of the apple orchards (i.e. the lessor).

Explain whether ABC Ltd. is engaged in agricultural activity as per Ind AS 41 in both of the cases?

**SOLUTION**

Paragraph 5 of Ind AS 41, Agriculture defines agricultural activity and biological transformation as follows:

“Agricultural activity is the management by an entity of the biological transformation and harvest of biological assets for sale or for conversion into agricultural produce or into additional biological assets.”

“Biological transformation comprises the processes of growth, degeneration, production, and procreation that cause qualitative or quantitative changes in a biological asset.”

**Contract 1:**

As per contract 1, during the 3 years of the contract, ABC Ltd. only harvests apples from the apple orchards whereas biological transformation is managed by the owners of the apple orchards (i.e. the lessor). Since ABC Ltd. is not involved in the biological transformation of the apple orchards and is only harvesting biological assets, it cannot be said to be an agricultural activity as per Ind AS 41. Hence, ABC Ltd. is not engaged in agricultural activity as per Ind AS 41.

**Contract 2:**

As per contract 2, ABC Ltd. obtains the apple orchards and is actively involved in the raising of apple trees in order to ensure that the apples are as per its requirements. Since, it is actively managing the biological transformation and harvest of biological asset, Hence, ABC Ltd. is engaged in agricultural activity as per Ind AS 41.

**Question 53: (July21 EXAMS)**

Moon Ltd prepares financial statements to 31<sup>st</sup>March each year. On 1 April 20X1 the company carried out the following transactions:

- Purchased a land for Rs.50 Lakhs.
- Purchased 200 dairy cows (average age at 1 April 20X1 two years) for Rs.10 Lakhs.
- Received a grant of Rs.1 million towards the acquisition of the cows. This grant was non-refundable.

For the year ending 31 March 20X2, the company has incurred following costs:

- Rs.6 Lakh to maintain the condition of the animals (food and protection).
- Rs.4 Lakh as breeding fee to a local farmer.

On 1 October 20X1, 100 calves were born. There were no other changes in the number of animals during the year ended 31 March 20X2. As of 31<sup>st</sup>March 20X2, Moon Ltd had 3,000 litres of unsold milk in inventory. The milk was sold shortly after the year end at market prices.

Information regarding fair values is as follows:

Item	Fair Value less cost to sell		
	1 April 20X1	1 October 20X1	31 March 20X2
	Rs.	Rs.	Rs.
Land	50 Lakhs	60 Lakhs	70 Lakhs
New born calves (per calf)	1,000	1,100	1,200
Six month old calves (per calf)	1,100	1,200	1,300
Two year old cows (per cow)	5,000	5,100	5,200



Three year old cows (per cow)	5,200	5,300	5,500
Milk (per litre)	20	22	24

Prepare extracts from the Balance Sheet and Statement of Profit & Loss that would be reflected in the financial statements of the entity for the year ended 31<sup>st</sup> March 20X2.

### SOLUTION

#### Extract from the Statement of Profit & Loss

Income	WN	Amount
Change in fair value of purchased dairy cow	WN 2	1,00,000
Government Grant	WN 3	10,00,000
Change in the fair value of newly born calves	WN 4	1,30,000
Fair Value of Milk	WN 5	72,000
<b>Total Income</b>		<b>13,02,000</b>
<b>Less: Expenses</b>		
Maintenance Costs	WN 2	6,00,000
Breeding Fees	WN 2	4,00,000
<b>Total Expense</b>		<b>(10,00,000)</b>
<b>Net Income</b>		<b>3,02,000</b>

#### Extracts from Balance Sheet

Property, Plant and Equipment:		
Land	WN 1	50,00,000
Dairy Cow	WN 2	11,00,000
Calves	WN 4	1,30,000
		<b>62,30,000</b>
<b>Inventory</b>		
Milk	WN 5	72,000
		<b>72,000</b>

#### Working Notes:

**1. Land:** The purchase of the land is not covered by Ind AS 41. The relevant standard which would apply to this transaction is Ind AS 16. Under this standard the land would initially be recorded at cost and depreciated over its useful economic life. This would usually be considered to be infinite in the case of land and so no depreciation would be appropriate. Under Cost Model no recognition would be made for post-acquisition changes in the value of land. The allowed alternative treatment under Revaluation Model would permit the land to be revalued to market value with the revaluation surplus taken to the other comprehensive income. We have followed the Cost Model.

**2. Dairy Cows:** Under the 'fair value model' laid down in Ind AS 41 the mature cows would be recognised in the Balance Sheet at 31 March 20X2 at the fair value of  $200 \times \text{Rs. } 5,500 = \text{Rs. } 11,00,000$ .

Increase in price change  $200 \times (5,200 - 5,000) = 40,000$

Increase in physical change  $200 \times (5,500 - 5,200) = 60,000$

The total difference between the fair value of matured herd and its initial cost ( $\text{₹ } 11,00,000 - \text{₹ } 10,00,000 = \text{a gain of ₹ } 1,00,000$ ) would be recognised in the profit and loss along with the maintenance costs and breeding fee of ₹ 6,00,000 and ₹ 4,00,000 respectively.

**3. Grant:** Grant relating to agricultural activity is not subject to the normal requirement of Ind AS 20. Under Ind AS 41 such grants are credited to income as soon as they are unconditionally receivable rather than being recognised over the useful economic life of the herd. Therefore, ₹ 10,00,000 would be credited to income of the company.

**4. Calves:** They are a biological asset and the fair value model is applied. The breeding fees are charged to income and an asset of  $100 \times \text{₹ } 1,300 = \text{₹ } 1,30,000$  recognised in the Balance sheet and credited to Profit and loss.

**5. Milk:** This is agricultural produce and initially recognised on the same basis as biological assets. Thus the milk would be valued at  $3,000 \times ₹ 24 = ₹ 72,000$ . This is regarded as 'cost' for the future application of Ind AS 2 to the unsold milk.

**Question 54 (ICAI Module):**

XY Ltd. is a farming entity where cows are milked on a daily basis. Milk is kept in cold storage immediately after milking and sold to retail distributors on a weekly basis. On 1 April 20X1, XY Ltd. had a herd of 500 cows which were all three years old.



During the year, some of the cows became sick and on 30 September 20X1, 20 cows died. On 1 October 20X1, XY Ltd. purchased 20 replacement cows at the market for ₹ 21,000 each. These 20 cows were all one year old when they were purchased.

On 31 March 20X2, XY Ltd. had 1,000 litres of milk in cold storage which had not been sold to retail distributors. The market price of milk at 31 March 20X2 was ₹ 20 per litre. When selling the milk to distributors, XY Ltd. incurs selling costs of ₹ 1 per litre. These amounts did not change during March 20X2 and are not expected to change during April 20X2.

Information relating to fair value and costs to sell is given below:

Date	Fair value of a dairy cow (aged)				Costs to sell a cow
	1 Year	1.5 Years	3 Years	4 Years	
1st April 20X1	20,000	22,000	27,000	25,000	1,000
1st October 20X1	21,000	23,000	28,000	26,000	1,000
31st March 20X2	21,500	23,500	29,000	26,500	1,100

You can assume that fair value of a 3.5 years old cow on 1st October 20X1 is ₹ 27,000.

Pass necessary journal entries of above transactions with respect to cows in the financial statements of XY Ltd. for the year ended 31st March, 20X2? Also show the amount lying in inventory if any.

**SOLUTION:**

**Journal Entries on 1st October, 20X1**

(All figures in ₹)

Loss (on death of 20 cows) (Refer W.N.) To Biological asset (Loss booked on death of 20 cows)	Dr.	5,20,000	5,20,000
Biological Asset (purchase of 20 new cows) (Refer W.N.) To Bank (Initial recognition of 20 new purchased cows at fair value less costs to sell)	Dr.	4,00,000	4,00,000

**Journal Entries on 31st March, 20X2**

Loss on remeasurement of old cows To Biological asset [(1,30,00,000 – 5,20,000) – 1,21,92,000] (Subsequent measurement of cows at fair value less costs to sell)	Dr.	2,88,000	2,88,000
Biological Asset (4,48,000 – 4,00,000) To Gain on remeasurement of new cows (Subsequent measurement of cows at fair value less costs to sell)	Dr.	48,000	48,000

Inventory (Milk) as at 31st March, 20X2 = ₹ 19,000 (1,000 x (20 – 1))

**Working Note:**

**Calculation of Biological asset at various dates**

Date	Number	Age	Fair Value (₹)	Cost to Sell (₹)	Net (₹)	Biological Assets (₹)
1st April 20X1	500	3 Years	27,000	1000	26,000	1,30,00,000
1st October 20X1	-20	3.5 Years	27,000	1,000	26,000	-5,20,000
1st October 20X1	20	1 Year	21,000	1,000	20,000	4,00,000
						<b>1,28,80,000</b>
31st March 20X2	480	4 Years	26,500	1100	25,400	1,21,92,000

	20	1.5 Years	23500	1100	22,400	4,48,000
						1,26,40,000

**Question 55 (ICAI Module)**

Company X purchased 100 beef cattle at an auction for ₹ 1,00,000 on 30 September 20X1. Subsequent transportation costs were ₹ 1,000 that is similar to the cost X would have to incur to sell the cattle at the auction. Additionally, there would be a 2% selling fee on the market price of the cattle to be incurred by the seller.



On 31 March 20X2, the market value of the cattle in the most relevant market increases to ₹ 1,10,000. Transportation costs of ₹ 1,000 would have to be incurred by the seller to get the cattle to the relevant market. An auctioneer's fee of 2% on the market price of the cattle would be payable by the seller.

On 1 June 20X2, X sold 18 cattle for ₹ 20,000 and incurred transportation charges of ₹150. In addition, there was a 2% auctioneer's fee on the market price of the cattle paid by the seller.

On 15 September 20X2, the fair value of the remaining cattle was ₹ 82,820. 42 cattle were slaughtered on that day, with a total slaughter cost of ₹ 4,200. The total market price of the carcasses on that day was ₹ 48,300, and the expected transportation cost to sell the carcasses is ₹ 420. No other costs are expected.

On 30 September 20X2, the market price of the remaining 40 cattle was ₹ 44,800. The expected transportation cost is ₹ 400. Also, there would be a 2% auctioneer's fee on the market price of the cattle payable by the seller. Pass Journal entries so as to provide the initial and subsequent measurement for all above transactions. Interim reporting periods are of 30 September and 31 March and the company determines the fair values on these dates for reporting.

**SOLUTION:****Value of cattle at initial recognition (30 September 20X1)****(All figures in ₹)**

Biological asset (cattle)	Dr.	97,000*	
Loss on initial recognition	Dr.	4,000	
To Bank (Purchase and cost of transportation)			1,01,000
(Initial recognition of cattle at fair value less costs to sell)			

\*Fair value of cattle = 1,00,000 – 1,000 – 2,000 (2% of 1,00,000) = 97,000

**Subsequent measurement at 31 March 20X2****(All figures in ₹)**

Biological asset (cattle)	Dr.	9,800	
To Gain on Sale (Profit & Loss)			9,800
(Subsequent measurement of Cattle at fair value less costs to sell (1,06,800** – 97,000))			

\*\* Fair value of cattle = 1,10,000 – 1,000 – 2,200 (2% of 1,10,000) = 1,06,800

**Sale of cattle on 1 June 20X2****(All figures in ₹)**

Biological asset (cattle)	Dr.	226	
To Gain on Sale (Profit & Loss)			226
(Subsequent re-measurement of 18 Cattle at fair value less costs to sell just prior to the point at which they are sold [19,450 - {(1,06,800/100) x 18}])			
Cost of Sales	Dr.	19,450	
To Biological asset (cattle)			19,450
(Recording a cost of sales figure separately with a corresponding reduction in the value of the biological assets)			
Bank	Dr.	19,450	
Selling expenses (150 + 400)	Dr.	550	
To Revenue			20,000
(Recognition of revenue from sale of cattle)			



**Transfer of Cattle to Inventory on 15 September 20X2**

(All figures in ₹)

Inventory (48,300 - 420)	Dr.	47,880	
Loss on remeasurement	Dr.	1,176	
To Biological Asset (Cattle)			44,856*
To Bank (Slaughtering cost)			4,200
(Transfer of cattle to inventory)			

\*Note: 44,856 is calculated as the proportion of cattle sold using the fair value  $(1,06,800 + 226 - 19,450) \times 42/82$

**Subsequent measurement of cattle at 30 September 20X2**

(All figures in ₹)

Loss on remeasurement	Dr.	18,440	
To Biological Asset (Cattle)			18,440
(Subsequent measurement of Cattle at fair value less costs to sell [43,504## - {(1,06,800 + 226 - 19,450) - 44,856}])			

##Fair value of cattle =  $44,800 - 400 - 896$  (2% of 44,800) = 43,504

**Question 56 (Nov22 EXAMS)**

A herd of 15, 4-year-old cows valued at Rs. 500 thousand per cow were held in 'M Dairy Farm' as at 1<sup>st</sup> April, 2021. The following transactions took place on 1<sup>st</sup> October, 2021:

- (a) One cow aged 4.5 years was purchased for Rs. 520 thousand.  
(b) One calf was born.

No cow was sold or disposed off during the year.

The per cow/calf fair value less cost to sell was as follows:

**Rs. In thousands**

4-year-old cow on 1 <sup>st</sup> April 2021	500
New born calf on 1 <sup>st</sup> October 2021	400
4.5 years old cow on 1 <sup>st</sup> October 2021	520
New born calf on 31 <sup>st</sup> March 2022	410
0.5-year-old calf on 31 <sup>st</sup> March 2022	440
4-year-old cow on 31 <sup>st</sup> March 2022	516
4.5-year-old cow on 31 <sup>st</sup> March 2022	540
5-year-old cow on 31 <sup>st</sup> March 2022	560

**You are required to:**

- (i) Calculate change in fair value less costs to sell showing:  
(a) The portion attributable to physical changes  
(b) The portion attributable to price changes.  
(ii) Calculate the carrying cost of the herd as on 31<sup>st</sup> March, 2022.

Prepare an extract of the livestock account for the year ended 31<sup>st</sup> March, 2022.

**Question 57: (Nov19 EXAMS)**

Arun Ltd. is an entity engaged in plantation and farming on a large scale and diversified across India. On 1<sup>st</sup> April, 2018, the company has received a government grant for Rs 20 lakh subject to a condition that it will continue to engage in plantation of eucalyptus trees for a coming period of five years.

The management has a reasonable assurance that the entity will comply with condition of engaging in the plantation of eucalyptus trees for specified period of five years and accordingly it recognizes proportionate grant for Rs 4 lakh in Statement of Profit and Loss as income following the principles laid down under Ind AS 20 Accounting for Government Grants and Disclosure of Government Assistance.

Required:

Evaluate whether the above accounting treatment made by the management is in compliance with the applicable Ind AS. If not, advise the correct treatment.

**SOLUTION**

Arun Ltd. is engaged in plantation and farming on a large scale. This implies that it has an agriculture business. Hence, Ind AS 41 will be applicable.

Further, the government grant has been given subject to a condition that it will continue to engage in plantation of eucalyptus trees for a coming period of five years. This implies that it is a conditional grant. In the absence of the measurement base of biological asset, it is assumed that "Arun Ltd measures its Biological Asset at fair value less cost to sell":

- (i) As per Ind AS 41, the government grant should be recognised in profit or loss when, and only when, the conditions attaching to the government grant are met i.e., continuous plantation of eucalyptus trees for the coming period of 5 years. In this case, the grant shall not be recognised in profit or loss until the five years have passed. The entity has recognised the grant in profit and loss on a proportionate basis, which is incorrect.
- (ii) However, if the terms of the grant allow part of it to be retained according to the time elapsed, the entity recognises that part in profit or loss as time passes. Accordingly, the entity can recognise the proportionate grant for Rs 4 lakh in the statement of Profit and Loss based on the terms of the grant.

Alternatively, it may be assumed that Arun Ltd. measures its Biological Asset at its cost less any accumulated depreciation and any accumulated impairment losses:

In such a situation, principles of Ind AS 20 (with respect to conditional grant will apply). According to Ind AS 20, the conditional grant should be recognised in the Statement of Profit and Loss over the periods and in the proportions in which depreciation expense on those assets is recognised. Hence the proportionate recognition of grant Rs 4 lakh (20 lakh/5) as income is correct since the entity has reasonable assurance that the entity will comply with the conditions attached to the grant.

**Note:** In case eucalyptus tree is considered as a bearer plant by Arun Ltd., then Ind AS 20 will be applicable and not Ind AS 41.

# CA Final Financial Reporting (FR)

**“Must do Questions” Before Exam**

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INDAS 23 - BORROWING COSTS

Question of No. 8

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**Question 58 (ICAI Module):**

An entity can borrow funds in its functional currency (Rs) @ 12%. It borrows \$ 1,000 @ 4% on April 1, 20X1 when \$ 1 = Rs. 40. The equivalent amount in functional currency is Rs 40,000. Interest is payable on March 31, 20X2. On March 31, 20X2, exchange rate is \$ 1 = Rs 50. The loan is not due for repayment. The exchange loss in this case is Rs. 10,000 [ $\$ 1000 \times (\text{Rs. } 50 - \text{Rs. } 40)$ ]. The borrowing cost is Rs. 2,000 ( $\$ 1,000 \times 4\% \times \text{Rs } 50$ ). Had the entity borrowed in functional currency the borrowing cost would have been Rs. 4,800 ( $\text{Rs. } 40,000 \times 12\%$ ). The entity will treat exchange difference up to Rs. 2,800 ( $\text{Rs. } 4,800 - \text{Rs. } 2,000$ ) as a borrowing cost that may be eligible for capitalization under this Standard. Thus the total eligible borrowing cost is Rs. 4,800 ( $\text{Rs. } 2,000 + \text{Rs. } 2,800$ ) equivalent to the cost of borrowing cost in functional currency.

**If the exchange rate on March 31, 20X2, is \$ 1 = Rs. 41.** The exchange loss is Rs. 1,000 [ $\$ 1,000 - (\text{Rs. } 41 - \text{Rs. } 40)$ ]. The entity will treat the entire exchange loss as an eligible borrowing cost as total cost of the borrowing Rs. 2,640 ( $\text{Rs. } 1,640 = \$1000 \times 4\% \times 41 + \text{Rs. } 1,000$ ) in foreign currency does not exceed the cost of borrowings in functional currency, i.e., Rs. 4,800.

**If the exchange rate on March 31, 20X2, is \$ 1 = Rs. 39.** There is an exchange gain of is Rs. 1,000 [ $\$ 1,000 \times (\text{Rs. } 40 - \text{Rs. } 39)$ ]. The eligible borrowing cost will be Rs. 1,560 ( $\$1000 \times 4\% \times 39$ ) being interest paid to the foreign lender, since there is exchange gain only.

**Question 59 (ICAI Module):**

Continuing with the aforesaid example:

**If the exchange rate on March 31, 20X3, is \$ 1 = Rs. 48;** the exchange rate on March 31, 20X2, being \$ 1 = Rs. 50, the borrowings are still not due for payment. The entity will recognise a borrowing cost of Rs 1,920 ( $\$ 1,000 \times 4\% \times \text{Rs } 48$ ). There is an exchange gain of Rs. 2,000 ( $\$ 1,000 \times (\text{Rs. } 50 - \text{Rs. } 48)$ ). This will be adjusted in the borrowing cost as there is unrealised exchange loss and the adjustment is less than the exchange loss of Rs. 2,800 recognised in earlier year.

**If the exchange rate on March 31, 20X3, is \$ 1 = Rs. 44;** the exchange rate on March 31, 20X2, being \$ 1 = Rs 50, the borrowings are still not due for payment. The entity will recognise a borrowing cost of Rs 1,760 ( $\$ 1,000 \times 4\% \times \text{Rs. } 44$ ). There is an exchange gain of Rs. 6,000 [ $\$ 1,000 \times (\text{Rs. } 50 - \text{Rs. } 44)$ ]. This will be adjusted in the borrowing cost up to Rs. 2,800 as there is unrealised exchange loss and the adjustment of the exchange loss recognised in earlier years is of Rs. 2,800.

**If the exchange rate on March 31, 20X3, is \$ 1 = Rs. 44** and part of loan is repaid; the exchange rate on March 31, 20X2, being \$ 1 = Rs 50; \$ 600 of the borrowings was paid on March 31, 20X2, \$ 400 of the borrowings are still not due for payment. The entity will recognise a borrowing cost of Rs. 704 ( $\$ 400 \times 4\% \times \text{Rs } 44$ ). There is an exchange gain of Rs. 2400 [ $\$ 400 \times (\text{Rs. } 50 - \text{Rs. } 44)$ ]. The unrealised exchange loss of earlier year is Rs 4,000 [ $\$ 400 \times (\text{Rs. } 50 - \text{Rs. } 40)$ ] out of which Rs. 1,120 ( $\text{Rs. } 2,800 \times \$ 400 / \$ 1000$ ) was charged in March 31, 20X1, as borrowing cost. Thus there will be an adjustment in the borrowing cost upto Rs. 1,120 as this is unrealised exchange loss.

**Question 60:**

The borrowings profile of Santra Pharmaceuticals Ltd. set up for the manufacture of antibiotics at Navi Mumbai is as under:



Date	Nature of borrowings	Amount borrowed	Purpose of Borrowings	Incidental Expenses	Effective Interest
1/1/08	15% Demand Loan	60 Lakhs	Acquisition of Fixed Assets	8.33%	21%
1/7/08	14.5% Term Loan	40 Lakhs	Acquisition of Plant & Machinery	5%	18.5%
1/10/08	14% Bonds	50 Lakhs	Acquisition of Fixed Assets	8%	18%

Fixed assets considered as Qualified as Under:

Sterling Manufacturing Shed	Rs. 10,00,000
Plant & Machinery (Total)	Rs. 90,00,000
Other Fixed Assets	Rs. 10,00,000

The project is completed on 1<sup>st</sup> January 2009 and is ready for commercial production. Show the capitalization of the borrowing cost.

**SOLUTION:****CALCULATION OF BORROWING COSTS:**

Specific Borrowing Cost	General Borrowing Costs
<b>14.5 % Term Loan</b> 40,00,000 X 18.5% X 6/12 = 3,70,000	<b>1. 15% Demand Loan</b> 60,00,000 x 21% = 12,60,000
	<b>2. 14% Bonds</b> 50,00,000 x 18% x 3/12 = 2,25,000
	<b>Total General B.C. = 14,85,000</b>

**Determination of Weighted Avg. Borrowing Rate:**

$$\frac{14,85,000}{(60,00,000 \times 12/12) + (50,00,000 \times 3/12)} = 20.48\%$$

**CAPITALISATION OF BORROWING COSTS**

S. No.	Qualifying Asset	Total Amt. Expended	Out of Specific	Out of General	Capitalisation of B.C.	Amt. Capitalised
1	Sterling Manufacturing Shed	10,00,000	-	10,00,000	10,00,000 x 20.48%	2,04,800
2	Plant & Machinery	90,00,000	50,00,000	40,00,000	<b>3,70,000</b> 50,00,000 x 20.48% = <b>10,24,000</b>	13,94,000
3	Other Fixed Assets	10,00,000	-	10,00,000	10,00,000 x 20.48%	2,04,800
	<b>Total Borrowing Cost to be Capitalised</b>					<b>18,03,600</b>

**Borrowing Cost transfer to Statement of Profit and Loss:**

$$1485000 + 370000 - 1803600 = 51400/-$$

**Question 61: (RTP May22)**

X Ltd. commenced the construction of a plant (qualifying asset) on 1st September, 20X1, estimated to cost Rs. 10 crores. For this purpose, X has not raised any specific borrowings, rather it intends to use general borrowings, which have a weighted average cost of 11%. Total borrowing costs incurred during the period, viz., 1st September, 20X1 to 31st March, 20X2 were Rs. 0.5 crore.



The other relevant details are as follows:

(Rs. in crores)

Month	Cost of construction Accrued	Cash Outflow (Paid in Advance at the start of each month)
September	1.50	3.00
October	0.50	1.70
November	1.50	2.50
December	0.50	-
January	1.80	1.00
February	0.70	-
March	3.00	1.50

Based on the above information, discuss the treatment of borrowing cost as per cash outflow basis and accrual basis and also suggest the appropriate amount of interest that should be capitalised to the cost of the plant in the financial statements for the year ended 31st March, 20X2?



**SOLUTION**

Paragraph 14 of Ind AS 23, inter-alia, states that to the extent that an entity borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the entity shall determine the amount of borrowing costs eligible for capitalisation by applying a capitalisation rate to the expenditures on that asset. The capitalisation rate shall be the weighted average of the borrowing costs applicable to all borrowings of the entity that are outstanding during the period. However, an entity shall exclude from this calculation borrowing costs applicable to borrowings made specifically for the purpose of obtaining a qualifying asset until substantially all the activities necessary to prepare that asset for its intended use or sale are complete. The amount of borrowing costs that an entity capitalises during a period shall not exceed the amount of borrowing costs it incurred during that period.

In this context, a question arises whether such expenditure should be based on costs accrued or actual cash outflows. To contrast these two alternatives, presented below is the computation of borrowing costs based on both the alternatives:

Month	Cost of construction Accrued	Average capital expenditure	Cash outflows (paid in advance at the start of each month)	Average capital expenditure
September	1.50	$1.50 \times 7/12 = 0.875$	3.00	$3.00 \times 7/12 = 1.75$
October	0.50	$0.50 \times 6/12 = 0.25$	1.70	$1.70 \times 6/12 = 0.85$
November	1.50	$1.50 \times 5/12 = 0.625$	2.50	$2.50 \times 5/12 = 1.04$
December	0.50	$0.50 \times 4/12 = 0.17$	-	-
January	1.80	$1.80 \times 3/12 = 0.45$	1.00	$1 \times 3/12 = 0.25$
February	0.70	$0.70 \times 2/12 = 0.12$	-	-
March	3.00	$3.00 \times 1/12 = 0.25$	1.50	$1.50 \times 1/12 = 0.125$
	<b>9.50</b>	<b>2.74</b>	<b>9.70</b>	<b>4.02</b>

If the average capital expenditure on the basis of costs accrued is taken, the borrowing costs eligible to be capitalised would be Rs. 2.74 crore  $\times$  11% = 0.30 crore. Whereas, if average capital expenditure on the basis of cash flows is taken, the borrowing costs eligible to be capitalised would be Rs. 4.02 crore  $\times$  11% = 0.44 crore. Thus, there is a wide variance in the amount of borrowing cost to be capitalised, based on the accrual basis and on actual cash flows basis. This divergence is often experienced during the implementation of large projects, for example, an advance given to a supplier involves an upfront cash outflow while the actual expenditure accrues in later periods (with the receipt of goods and services).

As per paragraph 18 of Ind AS 23, expenditures on a qualifying asset include only those expenditures that have resulted in payments of cash, transfers of other assets or the assumption of interest-bearing liabilities. Expenditures are reduced by any progress payments received and grants received in connection with the asset (see Ind AS 20, Accounting for Government Grants and Disclosure of Government Assistance). The average carrying amount of the asset during a period, including borrowing costs previously capitalised, is normally a reasonable approximation of the expenditures to which the capitalization rate is applied in that period.

Where cash has been paid but the corresponding cost has not yet accrued interest becomes payable on payment of cash. Therefore, the amount so paid should be considered for determining the amount of interest eligible for capitalisation, subject to the fulfillment of other conditions prescribed in paragraph 16 of Ind AS 23. Accordingly, in the present case, interest should be computed on the basis of the cash flows rather than on the basis of costs accrued. Therefore, the amount of interest eligible for capitalisation would be Rs. 0.44 crore.

Another important factor to be noted is that paragraph 14 requires, inter alia, that the amount of borrowing costs that an entity capitalises during a period shall not exceed the amount of borrowing costs it incurred during that period. Thus, the amount of borrowing costs to be capitalised should not exceed the total borrowing costs incurred during the period, that is Rs. 0.5 crore.

**Question 62: (RTP May18, MTP May21 & Nov19 EXAMS)**

An entity constructs a new head office building commencing on 1<sup>st</sup> September 20X1, which continues till 31<sup>st</sup> December 20X1. Directly attributable expenditure at the beginning of the month on this asset are Rs. 100,000 in September 20X1 and Rs. 250,000 in each of the months of October to December 20X1.



The entity has not taken any specific borrowings to finance the construction of the asset but has incurred finance costs on its general borrowings during the construction period. During the year, the entity had issued 10% debentures with a face value of Rs. 20 lacs and had an overdraft of Rs. 500,000, which increased to Rs. 750,000 in December 20X1. Interest was paid on the overdraft at 15% until 1 October 20X1, then the rate was increased to 16%.

Calculate the capitalization rate for computation of borrowing cost in accordance with Ind AS 23 'Borrowing Costs'.

**Solution**

Since the entity has only general borrowing hence first step will be to compute the capitalisation rate. The capitalisation rate of the general borrowings of the entity during the period of construction is calculated as follows:

Finance cost on Rs. 20 lacs 10% debentures during September – December 20X1	Rs.66,667
Interest @ 15% on overdraft of Rs. 5,00,000 in September 20X1	Rs.6,250
Interest @ 16% on overdraft of Rs. 5,00,000 in October and November 20X1	Rs.13,333
Interest @ 16% on overdraft of Rs. 750,000 in December 20X1	Rs.10,000
<b>Total finance costs in September – December 20X1</b>	<b>Rs.96,250</b>

Weighted average borrowings during period

$$= \frac{(20,00,000 \times 4) + (500,000 \times 3) + (750,000 \times 1)}{4} = \text{Rs.}25,62,500$$

Capitalisation rate = Total finance costs during the construction period / Weighted average borrowings during the construction period

$$= 96,250 / 25,62,500 = 3.756\%$$

**Suggested Solution as per Author's View:**

Finance cost on Rs. 20 lacs 10% debentures for whole year	200000
Interest @ 15% on overdraft of Rs. 5,00,000 in January to September 20X1	56,250
Interest @ 16% on overdraft of Rs. 5,00,000 in October and November 20X1	13,333
Interest @ 16% on overdraft of Rs. 750,000 in December 20X1	10,000
<b>Total finance costs for Whole Year</b>	<b>2,79,583</b>

**Weighted average borrowings during period**

$$= (20,00,000 \times 12/12) + (500,000 \times 11/12) + (750,000 \times 1/12)$$

$$= \text{Rs. } 25,20,833$$

**Capitalisation rate** = Total finance costs / Weighted average borrowings = 2,79,583 / 25,20,833 =

$$11.09\% \text{ p.a.; and for 4 Months} = 11.09 \times 4/12 = 3.70\%$$

**Assumption** - Debentures and overdraft were existing from the beginning of the year. Question asks to compute the total borrowing cost capitalization rate. Total borrowing cost using this rate will then be divided between capitalized and expense.

**Question 63: (RTP May23)**

LT Ltd. is in the process of constructing a building. The construction process is expected to take about 18 months from 1st January 20X1 to 30th June 20X2. The building meets the definition of a qualifying asset. LT Ltd. incurs the following expenditure for the construction:

1st January, 20X1	₹ 5 crores
30th June, 20X1	₹ 20 crores
31st March, 20X2	₹ 20 crores
30th June, 20X2	₹ 5 crores

On 1st July 20X1, LT Ltd. issued 10% Redeemable Debentures of ₹ 50 crores. The proceeds from the debentures form part of the company's general borrowings, which it uses to finance the construction of the qualifying asset, ie, the building. LT Ltd. had no borrowings (general or specific) before 1st July 20X1 and did not incur any borrowing costs before that date. LT Ltd. incurred ₹ 25 crores of construction costs before obtaining general borrowings on 1st July 20X1 (pre-borrowing expenditure) and ₹ 25 crores after obtaining the general borrowings (post-borrowing expenditure).

For each of the financial years ended 31st March 20X1, 20X2 and 20X3, calculate the borrowing cost that LT Ltd. is permitted to capitalize as a part of the building cost.

### **SOLUTION:**

Applying paragraph 17 of Ind AS 23 to the fact pattern, the entity would not begin capitalising borrowing costs until it incurs borrowing costs (i.e., from 1st July, 20X1)

In determining the expenditures on a qualifying asset to which an entity applies the capitalisation rate (paragraph 14 of Ind AS 23), the entity does not disregard expenditures on the qualifying asset incurred before the entity obtains the general borrowings. Once the entity incurs borrowing costs and therefore satisfies all three conditions in para 17 of Ind AS 23, it then applies paragraph 14 of Ind AS 23 to determine the expenditures on the qualifying asset to which it applies the capitalisation rate.

#### **Calculation of borrowing cost for financial year 20X0-20X1**

Expenditure		Capitalization Period (current year)	Weighted average Accumulated Expenditure
Date	Amount		
1st January 20X1	₹ 5 crore	0/3	Nil

Borrowing Costs eligible for capitalisation = NIL. LT Ltd. cannot capitalise borrowing costs before 1st July, 20X1 (the day it starts to incur borrowing costs).

#### **Calculation of borrowing cost for financial year 20X1-20X2**

Expenditure		Capitalization Period (current year)	Weighted average Accumulated Expenditure
Date	Amount		
1st January, 20X1	₹ 5 crore	9/12*	₹ 3.75 crore
30th June, 20X1	₹ 20 crore	9/12	₹ 15 crore
31st March, 20X2	₹ 20 crore	0/12	Nil
Total			₹ 18.75 crore

Borrowing Costs eligible for capitalisation = 18.75 cr. x 10% = ₹ 1.875 cr.

\*LT Ltd. cannot capitalise borrowing costs before 1st July, 20X1 (the day it starts to incur borrowing costs). Accordingly, this calculation uses a capitalization period from 1st July, 20X1 to 31st March, 20X2 for this expenditure.

#### **Calculation of borrowing cost for financial year 20X2-20X3**

Expenditure		Capitalization Period (current year)	Weighted average Accumulated Expenditure
Date	Amount		
1st January, 20X1	₹ 5 crore	3/12	₹ 1.25 crore
30th June, 20X1	₹ 20 crore	3/12	₹ 5 crore
31st March, 20X2	₹ 20 crore	3/12	₹ 5 crore
31st March, 20X2	₹ 1.875 crore	3/12	₹ 0.47 crore
30th June, 20X2	₹ 5 crore	0/12	Nil
Total			₹ 11.72 crore

Borrowing costs eligible for capitalisation = ₹ 11.72 cr. x 10% = ₹ 1.172 cr.

**Question 64 (ICAI Module):**

In a group with Parent Company "P" there are 3 subsidiaries with following business: "A" – Real Estate Company

"B" – Construction Company "C" –

**Finance Company**

- Parent Company has no operating activities of its own but performs management functions for its subsidiaries.
- Financing activities and cash management in the group are coordinated centrally.
- Finance Company is a vehicle used by the group solely for raising finance.
- All entities in the group prepare Ind AS financial statements.

The following information is relevant for the current reporting period 20X1-20X2:

**Real Estate Company**

- Borrowings of Rs. 10,00,000 with an interest rate of 7% p.a.
- Expenditures on qualifying assets during the period amounted to Rs. 15,40,000.
- All construction works were performed by Construction Company. Amounts invoiced to Real Estate Company included 10% profit margin.

**Construction Company**

- No borrowings during the period.
- Financed Rs. 10,00,000 of expenditures on qualifying assets using its own cash resources.

**Finance Company**

- Raised Rs.20,00,000 at 7% p.a. externally and issued a loan to Parent Company for general corporate purposes at the rate of 8%.

**Parent Company**

- Used loan from Finance Company to acquire a new subsidiary.
- No qualifying assets apart from those in Real Estate Company and Construction Company.
- Parent Company did not issue any loans to other entities during the period.

What is the amount of borrowing costs eligible for capitalisation in the financial statements of each of the four entities for the current reporting period 20X1-20X2?

**SOLUTION**

Following is the treatment as per Ind AS 23:

**Finance Company**

No expenditure on qualifying assets have been incurred, so Finance Company cannot capitalise anything.

**Real Estate Company**

Total interest costs in the financial statements of Real Estate Company is Rs. 70,000. Expenditures on qualifying assets exceed total borrowings, so the total amount of interest can be capitalised.

**Construction Company**

No interest expense has been incurred, so Construction Company cannot capitalise anything.

**Consolidated financial statements of Parent Company:**

Total general borrowings of the group: Rs. 10,00,000 + Rs. 20,00,000 = Rs. 30,00,000

Although Parent Company used proceeds from loan to acquire a subsidiary, this loan cannot be excluded from the pool of general borrowings.

Total interest expenditures for the group = Rs. 30,00,000 x 7% = Rs. 2,10,000

Total expenditures on qualifying assets for the group are added up. Profit margin charged by Construction Company to Real Estate Company is eliminated:

Real Estate Company – Rs. 15,40,000/1.1 = Rs. 14,00,000 Construction Co – Rs. 10,00,000

Total consolidated expenditures on qualifying assets:

Rs. (14,00,000 + 10,00,000) = Rs. 24,00,000

Capitalisation rate = 7%

Borrowing costs eligible for capitalisation = Rs. 24,00,000 x 7% = Rs. 1,68,000

Total interest expenditures of the group are higher than borrowing costs eligible for capitalisation calculated based on the actual expenditures incurred on the qualifying assets. Therefore, only Rs. 1,68,000 can be capitalised.

### **Question 65: (RTP May21)**

*How will you capitalise the interest when qualifying assets are funded by borrowings in the nature of bonds that are issued at discount?*

*Y Ltd. issued at the start of year 1, 10% (interest paid annually and having maturity period of 4 years) bonds with a face value of Rs. 2,00,000 at a discount of 10% to finance a qualifying asset which is ready for intended use at the end of year 2.*

*Compute the amount of borrowing costs to be capitalized if the company amortizes discount using Effective Interest Rate method by applying 13.39% p.a. of EIR.*

### **SOLUTION:**

#### **Capitalisation Method**

As per the Standard, borrowing costs may include interest expense calculated using the effective interest method. Further, capitalisation of borrowing cost should cease where substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

Thus, only that portion of the amortized discount should be capitalised as part of the cost of a qualifying asset which relates to the period during which acquisition, construction or production of the asset takes place.

#### **Capitalisation of Interest**

Hence based on the above explanation the amount of borrowing cost of year 1 & 2 are to be capitalised and the borrowing cost relating to year 3 & 4 should be expensed.

#### **Quantum of Borrowing**

The value of the bond to Y Ltd. is the transaction price i.e. Rs. 1,80,000 (2,00,000 – 20,000)

Therefore, Y Ltd will recognize the borrowing at Rs. 1,80,000.

#### **Computation of the amount of Borrowing Cost to be Capitalised**

Y Ltd will capitalise the interest (borrowing cost) using the effective interest rate of 13.39% for two years as the qualifying asset is ready for intended use at the end of the year 2, the details of which are as follows:

Year	Opening Borrowing	Interest expense @ 13.39% to be capitalised	Total	Interest paid	Closing Borrowing
	(1)	(2)	(3)	(4)	(5) = (3) – (4)
1	1,80,000	24,102	2,04,102	20,000	1,84,102
2	1,84,102	24,651	2,08,753	20,000	1,88,753
		<b>48,753</b>			

Accordingly, borrowing cost of Rs. 48,753 will be capitalized to the cost of qualifying asset.



# CA Final Financial Reporting (FR)

**“Must do Questions” Before Exam**

Topic -  
INDAS 12 – INCOME TAXES

Question of No. 10

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**Question 66 (ICAI Module):**

If the instrument is classified on initial recognition in two components viz. Equity and Liability then Taxable temporary difference will arise since in books liability will have lower amount and in tax base the entire amount is liability. Therefore **DTL is recognized through Equity**. The same example has been explained as under - 8% Convertible Debentures issued of Rs. 10,00,000. Holders are given an option to convert the instruments into equity shares or to receive cash after 5 years. Entity's IRR/Effective Rate of Interest is 12% pa. Calculate the Deferred Tax Impact.

**SOLUTION**

By applying IndAS 109 Financial Instruments, following will be the Journal Entry at the time of Issue of Debentures –

Bank A/c	Dr.	10,00,000	
To 8% Debentures (FL) A/c		8,56,000	
To 8% Debentures (Equity) A/c		1,44,000	

Now the Carrying Amount of Liability at the time of issue is 8,56,000 however the Tax Base will be Rs. 10,00,000 therefore, Temporary Difference of Rs. 1,44,000 arises (because of IndAS 109 principle by segregating the Financial Instrument into Liability and Equity)

Hence DTL of Rs. 43,200 (assuming 30% Tax Rate i.e. 1,44,000 x 30%) will be created through Equity at the time of issue as under-

Reserves A/c	Dr.	43,200	
To DTL A/c		43,200	

**Question 67: (MTP May19, Dec21 EXAMS)**

B Limited is a newly incorporated entity. Its first financial period ends on March 31, 20X1. As on the said date, the following temporary differences exist:

(a) Taxable temporary differences relating to accelerated depreciation of Rs. 9,000. These are expected to reverse equally over next 3 years.

(b) Deductible temporary differences of Rs. 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, 20X1.

**Suggested Answer:**

As per IndAS 12, DTA shall be recognised to the extent it is probable that the entity **will have taxable profits** against which deductible temp. diff. shall be reversed; or the entity has **sufficient taxable temporary differences** relating to the same taxation authority and the same taxable entity, which will result in taxable amounts against which the unused tax losses or unused tax credits can be utilised before they expire;

In the given situation, sufficient Taxable Income is not available, however entity has some taxable temporary differences. Therefore deductible temporary differences to be extent of Rs. 3000 (1000 each year) shall be considered for recognising DTA.

Balance Rs. 1000 is to be ignored since it is revseable in the year 20x5 where entity does not have any Anticipated Taxable Temporary Differences.

The year-wise anticipated reversal of temporary differences is as under:

Particulars	Year ending on March 31, 20X2	Year ending on March 31, 20X3	Year ending on March 31, 20X4	Year ending on March 31, 20X5
Reversal of taxable temporary difference relating to accelerated depreciation over next 3 years (Rs9,000/3)	3,000	3,000	3,000	Nil
Reversal of deductible temporary difference relating to preliminary expenses over next 4 years (Rs4,000/4)	1,000	1,000	1,000	1,000

B Limited will recognise a deferred tax liability of Rs. 2,700 on taxable temporary difference relating to accelerated depreciation of Rs. 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, 20X4 amounting to Rs. 900 (Rs. 3,000 @ 30%). No deferred tax asset shall be recognized for the reversal of deductible temporary difference for the year ending on March 31, 20X5 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, 20X5 deferred tax asset on the remainder of Rs. 1,000 (Rs. 4,000 – Rs. 3,000) of deductible temporary difference could be recognised at the 30% tax rate.

### **Question 68 (ICAI Module):**

An asset with a cost of Rs. 100 and a carrying amount of Rs. 80 is revalued to Rs. 150. No equivalent adjustment is made for tax purposes. Cumulative depreciation for tax purposes is Rs. 30 and the tax rate is 30%. If the asset is sold for more than cost, the cumulative tax depreciation of Rs. 30 will be included in taxable income but sale proceeds in excess of cost will not be taxable.

#### **Required:**

State the deferred tax consequences of the above if the company:

- Expects to recover its carrying amount through use
- Expects to sell the asset without further use

#### **Suggested Answer:**

The tax base of the asset is Rs. 70 and there is a taxable temporary difference of Rs. 80 (Rs. 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 Rs. 150, but will only be able to deduct depreciation of Rs. 70. On this basis, there is a deferred tax liability of Rs. 24 (Rs. 80 at 30%).
- If the entity expects to recover the carrying amount by selling the asset immediately for proceeds of Rs. 150, the deferred tax liability is computed as follows:

Sale Proceeds	Rs. 150
Sale Proceeds in excess of Cost (Rs. 100)	Rs. 50
Taxable Proceeds	Rs. 100
Tax Base	Rs. 70
Taxable Temporary Differences	Rs. 30
Tax Rate	30%
Deferred Tax liability	Rs. 9

### **Question 69: (MTP Nov21)**

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.

**SOLUTION:**

Purchase Consideration:	₹ 25 Cr
Non-Controlling Interest [(12 Cr x (20% / 80%)) x ₹ 2 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 Cr + 2 Cr + 0.50 Cr) x 20%]	(₹ 1.10 Cr)
<b>Total Net Assets at Fair Value</b>	<b>₹ 27.40 Cr</b>

**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)
<b>Goodwill on acquisition date</b>	<b>₹ 3.60 Cr</b>

**Question 70 (MTP Nov22)**

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:

- 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.
- 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.
- 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%.





**SOLUTION:**

- 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 (₹ 38,400 – ₹ 48,000) 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 x 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 x 25%). The asset can be recognised because K Ltd has sufficient taxable profits against which to utilise the deductible temporary difference.

**Question 71: (RTP Nov18, RTP May19, Nov20 EXAMS)**

*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 31st 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 31st 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 31st March, 2018.*
- iv) *On 1st 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 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 X Ltd. group at 31st March, 2018 as per Ind AS. Assume the rate of corporate income tax is 20%.*



**SOLUTION:**

- 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.

**Question 72:**

The facts are as in Q9 above, except that if the asset is sold for more than cost, the cumulative tax depreciation will be included in taxable income (taxed at 30%) and the sale proceeds will be taxed at 20% after deducting an inflation-adjusted cost of \$110

**SOLUTION**

If the entity expects to recover the carrying amount by selling the asset immediately for proceeds of Rs. 150, the entity will be able to deduct the indexed costs of Rs. 110.  
The net profit of Rs. 40 will be taxed at 20%.  
In addition, the cumulative tax depreciation of Rs. 30 will be included in taxable income and taxed at 30%.  
On this basis, the tax base is Rs. 80 (Rs. 110 – Rs. 30), there is a taxable temporary difference of Rs. 70 and there is a deferred tax liability of Rs. 17 (Rs. 40 x 20% plus Rs. 30 x 30%).

**Question 73: (RTP Nov19)**

An entity is finalizing 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% to 45% 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, Rs. 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 utilization 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.

**SOLUTION****Calculation of Taxable temporary differences (using reverse working):**

Deferred tax liability = 60,000

Existing tax rate = 40%

Deductible temporary differences =  $60,000 / 40\% = 1,50,000$ **Calculation of Deductible temporary differences (using reverse working):**

Deferred tax asset = 80,000

Existing tax rate = 40%

Deductible temporary differences =  $80,000 / 40\% = 2,00,000$ 

Of the total deferred tax asset balance of Rs. 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:**

<b>Deferred Tax Asset</b>		
Previously credited to OCI – Equity	$70,000 \times 0.45$	31,500
Previously recognised income	$1,30,000 \times 0.45$	58,500
		<b>90,000</b>
<b>Deferred Tax Liability</b>		
Previously recognised expense	$1,50,000 \times 0.45$	<b>67,500</b>

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:

	<b>Carrying Amt. at 45%</b>	<b>Carrying Amt. at 40%</b>	<b>Increase (decrease) in DT Expense</b>
<b>Deferred Tax Assets</b>			
Previously credited to OCI – Equity	31,500	28,000	-3,500
Previously recognised income	58,500	52,000	-6,500
	<b>90,000</b>	<b>80,000</b>	<b>-10,000</b>
<b>Deferred Tax Liability</b>			
Previously recognised expense	67,500	60,000	-7,500
<b>Net Adjustment</b>			<b>(2,500)</b>

<b>An alternative method of calculations:</b>	
DTA shown in OCI $70,000 \times (0.45 - 0.40)$	3,500
DTA shown in Profit or Loss $1,30,000 \times (0.45 - 0.40)$	6,500
DTL shown in Profit or Loss $1,50,000 \times (0.45 - 0.40)$	7,500

**Journal Entries**

Deferred Tax Assets Dr. To OCI – Revaluation Surplus	3,500	3,500
Deferred Tax Assets Dr. To Deferred Tax Expenses	6,500	6,500
Deferred Tax Expense Dr. To Deferred Tax Liability	7,500	7,500

**Note** - when a new tax rate is substantially enacted, all the existing DTA / DTL items need to be adjusted in such a manner so as to bring them to the values as per the new rate.

**Question 74: (RTP Nov22) (EXAM Nov22)**

Following is the summarized statement of profit and loss of EARTH Limited as per Ind AS for the year ended 31st March 20X1:

Particulars	Rs. in Crore
Revenue from operations	1,160.00
Other income	56.00
<b>Total Income (A)</b>	<b>1,216.00</b>
Purchase of stock-in-trade	40.00
Changes in inventories of stock-in-trade	6.00
Employee benefits expense	116.00
Finance costs	130.00
Depreciation and amortization expense	30.00
Other expenses	300.00
<b>Total Expenses (B)</b>	<b>622.00</b>
Profit Before Tax (A-B)	594.00
Current tax	165.40
Deferred tax	1.50
Tax Expenses	166.90
<b>Profit after Tax</b>	<b>427.10</b>

**Additional information:**

- Corporate income tax rate applicable to EARTH Limited is 30%.
- Other income includes long-term capital gains of Rs. 10 crore which are taxable at the rate of 10%.
- Other expenses include the following items which are not deductible for income tax purposes:

Item	Rs. in Crore
Penalties	1.00
Impairment of goodwill	44.00
Corporate Social Responsibility expense	6.00

- Other expenses include research and development (R & D) expenditure of Rs. 8 crore in respect of which a 200% weighted deduction is available under income tax laws.
- Other income includes dividends of Rs. 4 crore, which is exempt from tax.
- Profit before tax of Rs. 594 crore includes (i) agriculture income of Rs. 55 crore which is exempt from tax; and (ii) profit of Rs. 60 crore earned in the USA on which EARTH Limited is required to pay tax at the rate of 20%.
- Depreciation as per income tax laws is Rs. 25.0 crore.

During review of the financial statements of EARTH Limited, the CFO multiplied profit before tax by the income tax rate and arrived at Rs. 178.2 crore as the tax expense (Rs. 594 crore x 30% = Rs. 178.2 crore). However, actual income tax expense appearing in the summarized statement of profit and loss is Rs. 166.9 crore.

The CFO has sought your help in reconciling the difference between the two tax expense amounts. Prepare a reconciliation containing the disclosure as required under the relevant Ind AS.

**SOLUTION**

The cost to the lessor for providing the machinery on lease consists of the book value of the machinery (Rs. 1,00,000), plus the initial direct costs associated with entering into the lease (Rs. 2,500), less the future income expected from disposing of the machinery at the end of the lease (the present value of the unguaranteed residual value of Rs. 10,000 discounted @ 10.19%, being Rs. 7,470). This gives a cost of sale of Rs. 95,030.

The lessor records the following entries at the commencement of the lease:

		Rs.	Rs.
Lease receivable	Dr.	1,50,000	
Cost of sales	Dr.	95,030	
To Inventory			1,00,000
To Revenue			1,42,530
To Creditors/Cash			2,500

The sales profit recognised by the lessor at the commencement of the lease is therefore Rs. 47,500 (Rs. 1,42,530 - Rs. 95,030). This is equal to the fair value of the machinery of Rs. 1,50,000, less the book value of the machinery (Rs. 1,00,000) and the initial direct costs of entering into the lease (Rs. 2,500). Revenue is equal to the lease receivable (Rs. 1,50,000), less the present value of the unguaranteed residual value (Rs. 7,470).

Year	Lease receivable at the beginning of year (Rs.) (a)	Lease payments (Rs.) (b)	Interest Income (10.19% per annum) (Rs.) (c)	Decrease in lease receivable (Rs.) (d)=(b)-(c)	Lease receivable at the end of year (Rs.) (e)=(a)-(d)
1	1,50,000	57,500	15,285	42,215	1,07,785
2	1,07,785	57,500	10,983	46,517	61,268
3	61,268	57,500	6,232*	51,268	10,000

\*Difference is due to approximation

The lessor will record the following entries:

		Rs.	Rs.
Year 1	Cash/Bank Dr. To Lease receivable To Interest income	57,500	42,215 15,285
Year 2	Cash/Bank Dr. To Lease receivable To Interest income	57,500	46,517 10,983
Year 3	Cash/Bank Dr. To Lease receivable To Interest income	57,500	51,268 6,232

At the end of the three-year lease term, the leased machinery will be returned to the lessor, who will record the following entries:

		Rs.	Rs.
	Inventory To Lease receivable	Dr. 10,000	10,000

### Question 75: (MTP May19)

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 book 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 Rs. 8.5 crores and as on 31st March, 2017 is Rs. 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 Rs. 40 crores whereas its tax base was Rs. 22 crores. During the year ended 31st March, 2017, the Company charged depreciation in its Statement of Profit and Loss of Rs. 2 crores and claimed a tax deduction for tax depreciation of Rs. 1.25 crores. On 31st March, 2017, the property was revalued to Rs.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%.

**SOLUTION**

(i) MAT credit as on 31st December of Rs. 9.75 crores will be presented in the Balance Sheet as Deferred tax asset. DTA in the current year will be Rs. 1.25 crores (Rs. 9.75 crores – Rs. 8.50 crores).

DTA     Dr.   1.25 crores  
          To P&L       1.25 crores

**Note** - when we have MAT credit available, it means that we have to pay a lower tax amount in future and hence, MAT will always be a DTA.

(ii)

**a) Deferred tax for year ending 31-03-2016**

Sr. No.	Particulars	Before revaluation	After revaluation
A.	Carrying Value	22 crores	40 crores
B.	Tax Base	22 crores	22 crores
C.	Taxable / (Deductible) difference (A-B)	nil	18 crores
D.	DTL / (DTA) (c x 20%)	nil	3.60 crores DTL (charged to OCI)
E.	Journal Entry	-	OCI   Dr.   3.60 crores To DTL     3.60 crores

Therefore, Net DTL for the year = 3.6 crores

**b) Deferred tax for year ending 31-03-2017**

Sr. No.	Particulars	Before revaluation	After revaluation
A.	Carrying Value	20 crores (22 - 2 depreciation)	45 crores
B.	Tax Base	20.75 crores (22 - 1.25 depreciation)	20.75 crores (22 - 1.25 depreciation)
C.	Taxable / (Deductible) difference (A-B)	(0.75 crores)	24.25 crores
D.	DTL / (DTA) (c x 20%)	(0.15 crores) DTA (charged to P&L)	5 crores DTL (charged to OCI) *
E.	Additional DTL / (DTA) for the year	(0.15 crores) DTA (charged to P&L)	1.40 crores DTL (charged to OCI) #
F.	Journal Entry	DTA   Dr.   0.15 crores To P&L     0.15 crores	OCI   Dr.   1.40 crores To DTL     1.40 crores

Therefore, Net DTL for the year = 1.25 crores (1.4 - 0.15).

\* The difference of 24.25 crores is the net change due to 2 reasons - 1. depreciation and 2. revaluation. For the difference due to depreciation of (0.75 crores), we have already made DTA (before revaluation working). Hence, the remaining balance is leading to a taxable difference of 25 crores, on which DTL is created = 5 crores.

# DTA / DTL are balance sheet items and hence cumulative numbers are shown in the balance sheet. Out of the total DTL of 5 crores, we had already created DTL of 3.6 crores in 2016. Therefore additional charge during the year is 1.4 crores.



*CA Final*  
*Financial Reporting (FR)*

**“Must do Questions” Before Exam**

*Topic -*  
*INDAS 7 - STATEMENT OF CASH FLOWS*

Question of No. 3

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**Question 76 (ICAI Module):**

The relevant extracts of consolidated financial statements of A Ltd. are provided below:

**Consolidated Statement of Cash Flows**

	For the year ended (Rs. in Lac)	
	31st March 20X2	31st March 20X1
<b>Assets</b>		
<b>Non-Current Assets</b>		
Property, Plant and Equipment	4,750	4,650
Investment in Associate	800	-
Financial Assets	2,150	1,800
<b>Current Assets</b>		
Inventories	1,550	1,900
Trade Receivables	1,250	1,800
Cash and Cash Equivalents	4,650	3,550
<b>Liabilities</b>		
<b>Current Liabilities</b>		
Trade Payables	1,550	3,610

**Extracts from Consolidated Statement of Profit and Loss for the year ended 31st March 20X2**

Particulars Amount	(Rs. in Lac)
Revenue	12,380
Cost of Goods Sold	(9,860)
Gross Profit	2,520
Other Income	300
Operating Expenses	(450)
Other expenses	(540)
Interest expenses	(110)
Share of Profit of Associate	120
Profit before Tax	1,840

**The below information is relevant for A Ltd Group.**

- 1) A Ltd had spent Rs. 30 Lac on renovation of a building. A Ltd charged the entire renovation cost to profit and loss account.
- 2) On 1st April 20X1, A Ltd acquired 100% shares in S Ltd, for cash of Rs. 300 Lac. Fair value of the assets acquired and liabilities assumed under the acquisition are as under:

Property, Plant and Equipment	140 Lac
Inventories	60 Lac
Trade Receivables	30 Lac
Cash and Cash Equivalents	20 Lac
Total Assets	250 Lac
Less: Trade Payables	(50 Lac)
Net Assets on acquisition	200 Lac

- 3) A Ltd. 's property, plant and equipment comprise the following:

Carrying amount on 1st April 20X1	4,650 Lac
Addition (at cost) including assets in S Ltd.	800 Lac
Revaluation Surplus	80 Lac
Disposal (Sale) of Assets	(490 Lac)
Depreciation for the year	(290 Lac)
Carrying Amount on 31st March 20X2	4,750 Lac

A Ltd constructed a machine that is a qualifying asset and incurred construction costs of Rs. 40 Lac that has been charged to other expenses. Of the interest cost of Rs. 110 Lac charged to profit or loss statement, Rs. 10 Lac includes interest cost on specific borrowings that need to be capitalized. Property, plant and equipment was sold at 630 Lac. Gain on disposal is adjusted against operating expenses.

- 4) A Ltd. purchased 30% interest in an Associate (G Ltd) for cash on 1st April 20X1. The associate reported profit after tax of Rs. 400 Lac and paid a dividend of Rs. 100 Lac for the year.

5) Impairment test was conducted on 31st March 20X2. The following were impaired as under:

Goodwill impairment loss:	Rs. 265 Lac
Intangible Assets impairment loss	Rs. 900 Lac

The goodwill impairment relates to 100% subsidiaries.

Assume that interest cost is all paid in cash.

You are required to determine cash generated from operations for group reporting purposes for the year ended 31st March 20X2.

### Solution

Extracts of Statement of Cash Flows for the year ended 31<sup>st</sup> March 20X2

Cash Flows from Operating Activities		Amount in Rs. Lacs
Profit before tax (W.N.1)		1,920
Less: Profit on Sale of PPE (630 - 490)		(140)
Add back: Depreciation		290
Impairment of Goodwill		265
Impairment of Intangible Assets		900
Less: Share of Profits of Associate (400 x 30%)		(120)
Add: Interest expense	[110 - 10]	100
<b>Working Capital Changes (W.N.2):</b>		
Add: Decrease in Trade Receivables		580
Add: Decrease in Inventories		410
Less: Decrease in Trade Payables		(2,110)
<b>Cash generated from operations</b>		<b>2,095</b>

### Working Notes:

	Amount in Rs. Lacs
<b>1) Profit before tax</b>	
Reported profit as per Profit or Loss Statement	1,840
Add back: Renovation costs charged as expense	30
Construction costs charged as expense	40
Borrowing costs to be capitalized	10
Revised Profit before tax	1,920
<b>2) Changes in Trade Receivables Amount in Rs. Lacs</b>	
Opening Balance	1,800
Add: Receivables of S Ltd.	<u>30</u>
	1,830
Less: Closing Balance	<u>(1,250)</u>
	<u>580</u>
<b>3) Changes in Inventories Amount in Rs. Lacs</b>	
Opening Balance	1,900
Add: Receivables of S Ltd.	<u>60</u>
	1,960
Less: Closing Balance	<u>(1,550)</u>
	<u>410</u>
<b>4) Changes in Trade Payables Amount in Rs. Lacs</b>	
Opening Balance	3,610
Add: Receivables of S Ltd.	<u>50</u>
	3,660
Less: Closing Balance	<u>(1,550)</u>
	<u>2,110</u>

### Question 77: (RTP MAY 20 & MTP MAY 20 & NOV 20 EXAMS)

Entity A acquired a subsidiary, Entity B, during the year. Summarised information from the Consolidated Statement of Profit and Loss and Balance Sheet is provided, together with some supplementary information.

### Consolidated Statement of Profit and Loss

	Amount (₹)
Revenue	3,80,000
Cost of Sale	(2,20,000)
Gross Profit	1,60,000
Depreciation	(30,000)
Other operating expenses	(56,000)
Interest cost	(4000)
<b>Profit before taxation</b>	<b>70,000</b>
Taxation	15,000
<b>Profit after Tax</b>	<b>55,000</b>

#### Consolidated balance sheet

	20X2	20X1
Assets	Amount (₹)	Amount (₹)
Cash and cash equivalents	8,000	5,000
Trade receivables	54,000	50,000
Inventories	30,000	35,000
Property, plant and equipment	1,60,000	80,000
Goodwill	18,000	-
<b>Total assets</b>	<b>2,70,000</b>	<b>1,70,000</b>
Liabilities		
Trade payables	68,000	60,000
Income tax payable	12,000	11,000
Long term debt	1,00,000	64,000
<b>Total liabilities</b>	<b>1,80,000</b>	<b>1,35,000</b>
<b>Shareholders' equity</b>	<b>90,000</b>	<b>35,000</b>
<b>Total liabilities and shareholders'</b>	<b>2,70,000</b>	<b>1,70,000</b>

#### Other information

All of the shares of entity B were acquired for ₹ 74,000 in cash. The fair values of assets acquired and liabilities assumed were:

Particulars	Amount (₹)
Inventories	4,000
Trade receivables	8,000
Cash	2,000
Property, plant and equipment	1,10,000
Trade payables	(32,000)
Long term debt	(36,000)
Goodwill	18,000
<b>Cash consideration paid</b>	<b>74,000</b>

Prepare the Consolidated Statement of Cash Flows for the year 20X2, as per Ind AS 7.

#### Solution:

This information will be incorporated into the Consolidated Statement of Cash Flows as follows:

#### Statement of Cash Flows for the year ended 20X2 (extract)

	Amount (₹)	Amount (₹)
Cash flows from operating activities		
Profit before taxation	70,000	
Adjustments for non-cash items:		
Depreciation	30,000	
Decrease in inventories (W.N. 1)	9,000	
Decrease in trade receivables (W.N. 2)	4,000	
Decrease in trade payables (W.N. 3)	(24,000)	
Interest paid to be included in financing activities	4,000	
Taxation (11,000 + 15,000 – 12,000)	(14,000)	
Net cash generated from operating activities		79,000

<b>Cash flows from investing activities</b>		
Cash paid to acquire subsidiary (74,000 – 2,000)	(72,000)	
Net cash outflow from investing activities		(72,000)
<b>Cash flows from financing activities</b>		
Interest paid	(4,000)	
Net cash outflow from financing activities		(4,000)
<b>Increase in cash and cash equivalents during the year</b>		<b>3,000</b>
<b>Cash and cash equivalents at the beginning of the year</b>		<b>5,000</b>
<b>Cash and cash equivalents at the end of the year</b>	<b>90,000</b>	<b>8,000</b>

**Working Notes:**

1.

<b>Calculation of change in inventory during the year</b>	₹
Total inventories of the Group at the end of the year	30,000
Inventories acquired during the year from subsidiary	(4,000)
	26,000
Opening inventories	35,000
Decrease in inventories	9,000

2.

<b>Calculation of change in Trade Receivables during the year</b>	₹
Total trade receivables of the Group at the end of the year	54,000
Trade receivables acquired during the year from subsidiary	(8,000)
	46,000
Opening trade receivables	50,000
Decrease in trade receivables	4,000

3.

<b>Calculation of change in Trade Payables during the year</b>	₹
Trade payables at the end of the year	68,000
Trade payables of the subsidiary assumed during the year	(32,000)
	36,000
Opening trade payables	60,000
Decrease in trade payables	24,000

**Question 78: (Jan 21 EXAMS)**

Z Ltd. (India) has an overseas branch in USA. It has a bank account having balance of USD 7,000 as on 1st April 2019. During the financial year 2019-2020, Z Ltd. Acquired computers for its USA office for USD 280 which was paid on same date. There is no other transaction reported in USA or India.

Exchange rates between INR and USD during the financial year 2019-2020 were:

<b>Date</b>	<b>USD 1 to INR</b>
1st April 2019	70.00
30th November 2019	71.00 (Date of purchase of computer)
31st March 2020	71.50
Average for 2019-2020	70.50

Please prepare the extract of Cash Flow Statement for the year ended 31st March 2020, as per the relevant Ind AS and also show the foreign exchange profitability from these transactions for the financial year 2019-2020?



**Solution**

**In the books of Z Ltd.**  
**Statement of Cash Flows for the year ended 31st March 2020**

	Rs.	Rs.
<b>Cash flows from operating activities</b>		
Net Profit (Refer Working Note)	10,360	
Adjustments for non-cash items:		
Foreign Exchange Gain	<u>(10,360)</u>	
Net cash outflow from operating activities		0
<b>Cash flows from investing activities</b>		
Acquisition of Property, Plant and Equipment	<u>(19,880)</u>	
Net cash outflow from Investing activities		(19,880)
<b>Cash flows from financing activities</b>		
Net change in cash and cash equivalents		<u>(19,880)</u>
Cash and cash equivalents at the beginning of the year i.e. 1st April 2019		4,90,000
Foreign Exchange difference		<u>10,360</u>
<b>Cash and cash equivalents at the end of the year i.e. 31st March 2020</b>		<b><u>4,80,480</u></b>

**Working Note:**

**Computation of Foreign Exchange Gain**

Bank Account USD	Date	USD	Exchange Rate	Rs.
Opening balance	1.4.2019	7,000	70.00	4,90,000
Less: Purchase of Computer	30.11.2019	<u>280</u>	71.00	<u>19,880</u>
Closing balance calculated		6,720		4,70,120
Closing balance (at year end spot rate)	31.3.2020	6,720	71.50	<u>4,80,480</u>
<b>Foreign Exchange Gain credited to Profit and Loss account</b>				<b><u>10,360</u></b>

*CA Final*  
*Financial Reporting (FR)*

**“Must do Questions” Before Exam**

*Topic -*  
*INDAS 19 – EMPLOYEE BENEFITS*

Question of No. 10

**Also Refer**

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TELEGRAM GRP - MAY24 EXAM**



**Question 79:**

Prosperity Trading Ltd operated a defined benefit plan under which it provided for retirement benefits at a rate of 1.5% of salary per annum for all employees from the date they joined the company. The obligation and scheme assets were measured as follows.

**31 October 20X3**

Present value of defined benefit obligation \$31.5m

Fair value of plan assets \$26m

On 1 November 20X3 the rules of the plan changed to provide for benefit at a rate of 2.5% of salary for employees with over 20 years' service and the present value of the defined benefit obligation on the new basis was \$32.5 million.

Further relevant information is as follows.

- Current service cost was \$1.7 million for the period ended 31 October 20X4.
- An overall remeasurement loss of \$900,000 was identified.
- Market yields on high quality corporate bonds were 3.5% at 1 November 20X3 and 4.2% at 31 October 20X4.

What should be recognised in profit or loss in respect of the plan in the period ended 31 October 20X4?

**SOLUTION**

	\$'000
Current service cost	1,7000.0
Past service cost (32.5m – 31.5m)	1,000.0
Net interest (3.5% x (31.5-26))	192.5
	2,892.5

- Past service cost is the increase in the obligation as a result of the change in plan rules.
- Net interest on the net defined benefit liability is calculated by applying the period-start interest rate to the net liability at the start of the year.

**Question 80:**

Balance of Present Value of Defined Benefit Obligations 15,00,000

Balance of Plan Assets 10,00,000

**Actuary Report Specifies:**

Current Service Costs 3,00,000

Interest Cost 20,000

Contributions to Plan Assets at the end of year 1,50,000

Benefit Paid at the end of year 2,40,000

Expected Return 12% p.a.

Closing Value of Present Value of Defined Benefit Obligations 17,00,000

Closing Value of Plan Assets at Fair Value 10,20,000

Journalise, Prepare ledgers and Extracts of Balance sheet and Profit and Loss account along with disclosures.

**SOLUTION****1) Journal Entries**

a)	Current Service Cost A/c	Dr.	3,00,000	3,20,000
	Interest Cost Account A/c	Dr.	20,000	
	To Defined Benefit Obligation A/c			
b)	Plan Asset A/c	Dr.	1,50,000	1,50,000
	To Bank A/c			
c)	Bank A/c	Dr.	2,40,000	

	To Plan Asset A/c		2,40,000
d)	Defined Benefit Obligation A/c To Bank A/c	Dr.	2,40,000 2,40,000
e)	Plan Asset A/c To Expected Return A/c	Dr.	1,20,000 1,20,000
f)	Actuarial Loss A/c (OCI) To Plan Asset A/c	Dr.	10,000 10,000
g)	Actuarial Loss A/c (OCI) To Defined Benefit Obligation A/c	Dr.	1,20,000 1,20,000

## 2) Ledger Accounts

### a) Defined Benefit Obligation A/c (DBO)

Particulars	Amount	Particulars	Amount
To Bank A/c	2,40,000	By Balance b/d	15,00,000
		By CSC	3,00,000
		By Int. Cost	20,000
		By Actuarial Loss (b/f)	1,20,000
To Balance C/d	17,00,000		
	<b>19,40,000</b>		<b>19,40,000</b>

### b) Plan Asset A/c

Particulars	Amount	Particulars	Amount
To Balance b/d	10,00,000	By Bank A/c	2,40,000
To Expected Rent A/c	1,20,000	By Actuarial Loss A/c (b/f)	10,000
To Bank A/c	1,50,000	By Balance c/d	10,20,000
	<b>12,70,000</b>		<b>12,70,000</b>

## 3) Reporting in Financial Statements

### a) Balance Sheet (Extract)

<b>Non-Current Liability: -</b>	
<u>Long Term Provision</u>	
Net Defined Benefit Liability (17 lakhs – 10.20 lakhs)	6,80,000

### b) P/L Extract

<b>Employee Benefit Expenses:</b>	3,00,000
CSC	
<b>Finance Cost:</b>	
Net Interest Cost (20,000 – 1,20,000)	(1,00,000)

### c) OCI

<b>Items which are Not Reclassf. to P/L:</b>	
Remeasurement Loss (10,000 + 1,20,000)	1,30,000

### Question 81:

A company furnishes the following details for its defined benefit plan on 1.4.2004

PV of obligation 1,00,000

FV of plan assets 1,00,000

	2004-05	2005-06	2006-07
Discount rate	10	9	8
Exp. Rate of return on Plan Assets	12	11.1	10.3
Current service cost	13,000	14,000	15,000
Benefits paid	15,000	18,000	19,000
Contribution paid	9,000	10,000	11,000



PV of Obligation on 31.03.	1,14,100	1,19,700	1,29,500
FV of Plan Assets on 31.03.	1,09,200	1,10,900	1,09,300

Assume benefits are paid and contributions are made in the mid of the year. In 2005-06 the plan was amended and the PV of additional benefit vested was Rs. 8,000.

Prepare Defined benefit obligation and Plan Asset Accounts and calculate net actuarial gain/loss to be transfer to OCI for each year.

**SOLUTION:****Defined Benefit Obligation (liability)A/c**

Particulars	Amount	Particulars	Amount
To Bank (benefits Paid)	15000	By Balance b/d	100000
		By Int. Cost	10000
		By CSC	13000
To Balance c/f	114100	<b>By Actuarial Loss (b/F)</b>	<b>6100</b>
	<b>129100</b>		<b>129100</b>
To Bank (benefits paid)	18000	By Balance b/d	114100
<b>To Actuarial Gain (b/f)</b>	<b>8669</b>	By Int. Cost	10269
To Balance b/d	119700	By CSC	14000
		By Past Service Cost	8000
	<b>146369</b>		<b>146369</b>
To Bank (benefits paid)	19000	By Balance b/d	119700
To Actuarial Gain (b/f)		By Int. Cost	9576
To Balance b/d	129500	By CSC	15000
		<b>By Actuarial Loss (b/f)</b>	<b>4224</b>
	<b>148500</b>		<b>148500</b>

**PLAN ASSETS A/c**

Particulars	Amount	Particulars	Amount
To Balance b/d	100000	By Bank a/c (benefits)	15000
To Exp. Return @ 5.83%	5830		
To Bank A/c (contr.)	9000		
To Exp. Return @ 5.83%	5820		
<b>To Actuarial Gain (b/f)</b>	<b>3550</b>	By Balance c/f	109200
	<b>124200</b>		<b>124200</b>
To Balance b/d	109200	By Bank a/c (benefits)	18000
To Exp. Return @ 5.40%	5897	<b>By Actuarial Loss (b/f)</b>	<b>1980</b>
To Bank A/c (contr.)	10000	By Balance c/f	110900
To Exp. Return @ 5.40%	5783		
	<b>130880</b>		<b>130880</b>
To Balance b/d	110900	By Bank a/c (benefits)	19000
To Exp. Return @ 5%	5545	<b>By Actuarial Loss (b/f)</b>	<b>4567</b>
To Bank A/c (contr.)	11000	By Balance c/f	109300
To Exp. Return @ 5%	5422		
	<b>132867</b>		<b>132867</b>

**Question 82 (ICAI Module):**

The fair value of plan assets of Anupam Ltd. was Rs. 2,00,000 in respect of employee benefit pension plan as on 1st April, 2009. On 1st April, 2009 the plan paid out benefit of Rs. 25,000 and received inward contributions of 55,000.

On 31st March, 2010 the fair value of plan assets was Rs. 2,40,560.

On 1st April, 2009 the company made the following estimates, based on its market studies and prevailing prices:

Interest and dividend income (after tax) payable by fund	10.00 %
Realised gains on plan assets (after tax)	3.00 %
Fund administrative costs	<u>(2.00) %</u>
<b>Expected rate of return</b>	<b>11.00 %</b>

Calculate the expected and actual returns on plan assets as on 31st March, 2010, as per INDAS- 19.





**SOLUTION****PLAN ASSET A/C**

Date	Particulars	Amount	Date	Particulars	Amount
1/01	To Opening Balance	200000	01/04	By Benefits Paid	25000
01/04	To Bank (Contr.)	55000	31/03	By Actuarial Loss (b/f)	14740
31/03	To Expected Return	25300	31/12	By Closing Balance (Fair Value)	240560
		<b>280300</b>			<b>280300</b>

**Actuarial loss of 14740 will be transfer to OCI**

**Question 83:**

On 1.1.2008, the fair value of plan assets is Rs.10,000. On 30.6.2008 it paid benefits of Rs. 1,500 and received contributions of Rs. 4,500. On 31.12.2008 fair value of plan assets is Rs.15,000 and PV of obligation was Rs. 14,972. Actuarial losses on obligation were Rs. 60 on 31.12.2008.

Find the net actuarial gain/losses on 31.12.2008 based on the following estimates:

Interest and dividend income	9.25%
Realised and unrealized gain on plan assets	2.00%
Administration costs	1.00%

**SOLUTION****W.No. 1 – Calculation of Six Monthly Rate:**

$$\{[\text{Square Root of } (1 + 0.1025)] - 1\} \times 100 = 5\%$$

**PLAN ASSET A/C**

Date	Particulars	Amount	Date	Particulars	Amount
1/01	To Opening Balance	10000	30/06	By Benefits Paid	1500
30/06	To Expected Return	500			
30/06	To Bank (Contr.)	4500			
31/12	To Exp. Return	675	31/12	By Closing Balance	15000
31/12	To Actuarial Gain (b/f)	825		(Fair Value)	
		<b>16500</b>			<b>16500</b>

**Net Actuarial Gain = 825 – 60 = 765 will be transfer to OCI**

**BALANCE SHEET (Extract)**

ASSETS	AMT.
<b>Non-Current Asset:</b>	
<i>Other Non-Current Asset:</i>	
Net defined benefit Asset (15000 – 14972)	<b>28</b>

**Question 84: (MTP Oct19 & MTP May23)**

RKA Private Ltd is an old company established in 19XX. 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 Rs. 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, 20X1 and 31st March, 20X2.

Particulars	1st April, 20X1	31st March, 20X2
PV of Defined benefit obligation	1400	1580
Fair Value of Plan Assets	1140	1275

For the financial year ended 31st March, 20X2, service cost was Rs. 55 lacs. The company made a contribution of an amount of Rs. 111 lacs to the plan. No benefits were paid during the year. Consider a discount rate of 8%.



You are required to -

(a) Compute the balance(s) of the company to be included its balance sheet as on 31st March, 20X2 and amounts to be recognized in the statement of profit and loss and other comprehensive income for the year ended 31st March, 20X2.

(b) Give the journal entries in respect of amount(s) to be recognized.

### SOLUTION

(a) Balance Sheet Extract as on 31<sup>st</sup> March, 20X2

Equity & Liabilities	Amount
Closing net defined liability (1580 – 1275) lacs	305 lacs

### Extract of Statement of Profit and Loss for the year ended 31<sup>st</sup> March, 20X2

Particulars	Rs. in Lacs
<b>Employee Benefit Exp.:</b>	
Current Service Cost	55
<b>Finance Costs:</b>	
Net Interest (refer W.No. 1)	21
<b>Other Comprehensive Income:</b>	
Re-measurements (Actuarial Gains/Losses)	80

(b) Journal Entries:

Current Service Cost (P&L) A/c	Dr.	55	
Net Interest Cost (P&L) A/c	Dr.	21	
Actuarial Loss (OCI) A/c	Dr.	80	
To Bank A/c (Contribution)			111
To Net defined liability (Refer W.No.3)			45

### WORKING NOTES:

#### 1. Computation of Net Interest:

Opening new defined liability x Discount rate  
(1400 – 1140) Lacs x 8% = 21 Lacs approx.

#### 2. Computation of Re-measurements (Actuarial Gains/Losses):

Opening balance of liability	1400
Current Service Cost	55
Interest on Opening liability (1400 x 8%)	112
<b>Actuarial Loss (Bal. Fig.)</b>	<b>13</b>
Closing Balance of Liability	1550

Opening balance of Plan Asset	1140
Cash Contribution	111
Expected Return on Opening Asset (1140 x 8%)	91
<b>Actuarial Loss (Bal. Fig.)</b>	<b>-67</b>
Closing Balance of Liability	1275

**Net Re-measurement (Net Actuarial Loss) = 13 + 67 = 80**

#### 3. Computation of Increase/Decrease in net defined benefit liability:

Opening Net liability (1400 – 1140)	260
Closing Net liability (1580 – 1275)	305
<b>Increase in Liability</b>	<b>45</b>

### Question 85: (May22 EXAM & MTP Oct20 & RTP May20)

On 1 April 20X1, the fair value of the assets of XYZ Ltd's defined benefit plan were valued at ₹ 20,40,000 and the present value of the defined obligation was ₹ 21,25,000. On 31st March, 20X2 the plan received contributions from XYZ Ltd amounting to ₹ 4,25,000 and paid out benefits of ₹ 2,55,000. The current service cost for the financial year ending 31 March 20X2 is ₹ 5,10,000. An interest rate of 5% is to be applied to the

plan assets and obligations. The fair value of the plans assets at 31 March 20X2 was ₹ 23,80,000, and the present value of the 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?

**SOLUTION:**

Reconciliation of Plan assets and Defined benefit obligation

Particulars	Plan Assets (₹)	Defined benefit obligation (₹)
Fair value/present value as at 1st 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
---	------------

**Question 86: (MTP Apr21)**

Mr. Niranjana 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. Niranjana 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.

**Solution**

Particulars	Year 20X0-20X1	Year 20X1-20X2
Annual salary	₹ 30,00,000	₹ 30,00,000
No. of working days (A)	300 Days	300 Days
Leave allowed	10 Days	10 Days
Leave 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 20X0-20X1 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	₹ 30,00,000	₹ 30,00,000
No. of working days (A)	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

#### Question 87 (ICAI Module):

Assume same information as in Q.INDAS19.SM.504.

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.



#### SOLUTION

The expenditure to be recognized will be as under:

Particulars	Year 20X0-20X1	Year 20X1-20X2
Annual salary	₹ 30,00,000	₹ 30,00,000
No. of working days (A)	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 – 3 days (excess leave utilized in 20X1-20X2)]		₹ 29,70,000

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

**Question 88 (ICAI Module):**

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.

**SOLUTION**

Paid Vacation:

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

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

Particulars	Man-days
Unused vacation as on 31st 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
<b>Total Unused vacation as on 31st March, 20X2 - (A)</b> <b>(350 employees x 94% x 4 days per employee)</b>	<b>1,316 man-days</b>

B. 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 days per employee
Total Unused vacation as on 31st March, 20X2 - (A) (350 employees x 94% x 4 days per employee)	21 man-days
<b>Total unused vacation as on 31st March, 20X2 (A+ B)</b>	<b>1,337 man-days</b>

**Step 2: Calculation of average salary per day:**

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



**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

# CA Final Financial Reporting (FR)

## “Must do Questions” Before Exam

### Topic - INDAS 21 - THE EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATES

Question of No. 6

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**Question 89 (ICAI Module):**

S Ltd is a company based out of India which got listed on Bombay Stock Exchange in the financial year ended 31st March, 20X1. Since then the company's operations have increased considerably. The company was engaged in the business of trading of motor cycles. The company only deals in imported Motor cycles. These motor cycles are imported from US.

After importing the motor cycles, these are sold across India through its various distribution channels. The company had only private customers earlier but the company also started corporate tie-up and increased its customer base to corporate also. The purchase of the motor cycles are in USD because the vendor(s) from whom these motor cycles are purchased those are all located in US.

All other operating expenses of the company are incurred in India only because of its location and they generally happen to be in INR

Currently, its customers are both corporate and private in the ratio of 70:30 approximately. The USD denominated prices of motor cycles in India is different from those in other countries.

The company is also expecting that in the coming years, its customer's base will increase significantly in India and the current proportion may also change.

Currently, the invoices are raised to the corporate customers in USD for the purpose of hedging. However, private customers don't accept the same arrangement and hence invoices are raised to them in INR.

What would be the functional currency of this company?

**SOLUTION:**

The functional currency of S Ltd is INR.

Primary and secondary indicators should be used for the determination of functional currency of S Ltd. giving priority to primary indicators.

The analysis is given below:

IndAS 21 gives greater emphasis to the currency of the economy that determines the pricing of transactions, as opposed to the currency in which transactions are denominated.

Sales prices for motor cycles are mainly influenced by the competitive forces and regulations in India. The market for motor cycles depends on the economic situation in India and the company is in competition with importers of other motor cycle brands.

Even though 70% of the revenue of the company is denominated in USD, Indian economic conditions are the main factors affecting the prices. This is evidenced by the fact that USD denominated sales prices in India are different from USD denominated sales prices for the same motor cycles in other countries.

Management is able to determine the functional currency because the revenue is clearly influenced by the Indian economic environment and expenses are mixed.

On the basis of above analysis, INR should be considered as the functional currency of the company.

**Question 90: (Dec21 EXAM & RTP May18)**

On 30th January, 20X1, A Ltd. purchased a machinery for \$ 5,000 from USA supplier on credit basis. A Ltd.'s functional currency is Rupees. The exchange rate on the date of transaction is 1 \$ = ₹ 60. The fair value of the machinery determined on 31st March, 20X1 is \$ 5,500. The exchange rate on 31st March, 20X1 is 1\$ = ₹ 65. The payment to overseas supplier done on 31st March 20X2 and the exchange rate on 31st March 20X2 is 1\$ = ₹ 67. The fair value of the machinery remain unchanged for the year ended on 31st March 20X2. Prepare the Journal entries for the year ended on 31st March 20X1 and year 20X2 according to Ind AS 21. Tax rate is 30%

**SOLUTION:****Journal Entries**

(It is assumed that the revaluation method is followed in respect of Plant & Machinery)

Purchase of Machinery on credit basis on 30th January 20X1:

		₹	₹
Machinery A/c (5,000 x \$ 60)	Dr.	3,00,000	
To Trade Payables			3,00,000

(Initial transaction will be recorded at exchange rate on the date of transaction)		
--	--	--

Exchange difference arising on translating monetary item on 31st March 20X1:

		₹	₹
Profit & Loss A/c	Dr.	25,000	
[(5,000 x \$ 65) – (5,000 x \$ 60)]			25,000
To Trade Payables			
Machinery A/c	Dr.	32,500	
To Revaluation Surplus (OCI)			32,500
[Being Machinery revalued to USD 5,500; (₹ 65 x (USD 5,500 - USD 5,000))]			
Machinery A/c	Dr.	25,000	
To Revaluation Surplus (OCI)			25,000
(Being Machinery measured at the exchange rate on 31-03-20X1 [USD 5,000 x (₹ 65 - ₹ 60)])			
Revaluation Surplus (OCI)	Dr.	17,250	
To Deferred Tax Liability			17,250
(DTL created @ of 30% of the total OCI amount)			

Exchange difference arising on translating monetary item and settlement of creditors on 31st March 20X2:

		₹	₹
Trade Payables A/c (5,000 x \$65)	Dr.	3,25,000	
Profit & loss A/c [(5,000 x (\$ 67 - \$ 65))]	Dr.	10,000	
To Bank A/c			3,35,000
Machinery A/c	Dr.	11,000	
To Revaluation Surplus (OCI)			11,000
Revaluation Surplus (OCI)	Dr.	3,300	
To Deferred Tax Liability			3,300
(DTL created @ of 30% of the total OCI amount)			

### Question 91: (RTP May19 & MTP May23)

Supplier, A Ltd., enters into a contract with a customer, B Ltd., on 1st January, 2018 to deliver goods in exchange for total consideration of USD 50 million and receives an upfront payment of USD 20 million on this date. The functional currency of the supplier is INR. The goods are delivered and revenue is recognised on 31st March, 2018. USD 30 million is received on 1st April, 2018 in full and final settlement of the purchase consideration.



State the date of transaction for advance consideration and recognition of revenue. Also state the amount of revenue in INR to be recognized on the date of recognition of revenue. The exchange rates on 1st January, 2018 and 31st March, 2018 are ₹ 72 per USD and ₹ 75 per USD respectively.

### SOLUTION:

**This is the case of Revenue recognised at a single point in time with multiple payments. As per the guidance given in Appendix B to Ind AS 21:**

A Ltd. will recognise a non-monetary contract liability amounting ₹ 1,440 million, by translating USD 20 million at the exchange rate on 1st January, 2018 i.e. ₹ 72 per USD. A Ltd. will recognise revenue at 31st March, 2018 (that is, the date on which it transfers the goods to the customer).

A Ltd. determines that the date of the transaction for the revenue relating to the advance consideration of USD 20 million is 1st January, 2018. Applying paragraph 22 of Ind AS 21, A Ltd. determines that the date of the transaction for the remainder of the revenue as 31st March, 2018.

On 31st March, 2018, A Ltd. will:

- Derecognize the non-monetary contract liability of USD 20 million and recognise USD 20 million of revenue using the exchange rate as at 1st January, 2018 i.e. ₹ 72 per USD; and
- Recognise revenue and a receivable for the remaining USD 30 million, using the exchange rate on 31st March, 2018 i.e. ₹ 75 per USD.

- The receivable of USD 30 million is a monetary item, so it should be translated using the closing rate until the receivable is settled.

### Question 92: (RTP May20)

On 1st April, 20X1, Makers Ltd. raised a long term loan from foreign investors. The investors subscribed for 6 million Foreign Currency (FCY) loan notes at par. It incurred incremental issue costs of FCY 2,00,000. Interest of FCY 6,00,000 is payable annually on 31st March, starting from 31st March, 20X2. The loan is repayable in FCY on 31st March, 20X7 at a premium and the effective annual interest rate implicit in the loan is 12%. The appropriate measurement basis for this loan is amortised cost. Relevant exchange rates are as follows:



- 1st April, 20X1 - FCY 1 = ₹ 2.50.
- 31st March, 20X2 - FCY 1 = ₹ 2.75.
- Average rate for the year ended 31st March, 20X2 - FCY 1 = ₹ 2.42. The functional currency of the group is Indian Rupee.

What would be the appropriate accounting treatment for the foreign currency loan in the books of Makers Ltd. for the FY 20X1-20X2? Calculate the initial measurement amount for the loan, finance cost for the year, closing balance and exchange gain / loss.

### SOLUTION:

Initial carrying amount of loan in books

Loan amount received	= 60,00,000 FCY
Less: Incremental issue costs	= 2,00,000 FCY
	58,00,000 FCY

Ind AS 21, "The Effect of Changes in Foreign Exchange Rates" states that foreign currency transactions are initially recorded at the rate of exchange in force when the transaction was first recognized.

Loan to be converted in INR	= 58,00,000 FCY x ₹ 2.50 / FCY
	= ₹ 1,45,00,000

Therefore, the loan would initially be recorded at ₹ 1,45,00,000.

Calculation of amortized cost of loan (in FCY) at the year-end:

Period	Opening Financial Liability (FCY) A	Interest @ 12% (FCY) B	Cash Flow (FCY) C	Closing Financial Liability (FCY) A+B-C
20X1-20X2	58,00,000	6,96,000	6,00,000	58,96,000

The finance cost in FCY is 6,96,000

The finance cost would be recorded at an average rate for the period since it accrues over a period of time.

Hence, the finance cost for FY 20X1-20X2 in INR is ₹ 16,84,320 (6,96,000 FCY x ₹ 2.42 / FCY)

The actual payment of interest would be recorded at 6,00,000 x 2.75 = INR 16,50,000

The loan balance is a monetary item so it is translated at the rate of exchange at the reporting date.

So the closing loan balance in INR is 58,96,000 FCY x INR 2.75 / FCY = ₹ 1,62,14,000

The exchange differences that are created by this treatment are recognized in profit and loss.

In this case, the exchange difference is

₹ [1,62,14,000 - (1,45,00,000 + 16,84,320 - 16,50,000)] = ₹ 16,79,680.

This exchange difference is taken to profit and loss.

### Question 93: (MTP May22 & Jan21 EXAM)

M Ltd is engaged in the business of manufacturing of bottles for pharmaceutical companies and non-pharmaceutical companies. It has a wholly owned subsidiary, G Ltd, which is engaged in the business of pharmaceuticals. G Ltd purchases the pharmaceutical bottles from





its parent company. The demand of G Ltd is very high and the operations of M Ltd are very large and hence to cater to its shortfall, G Ltd also purchases the bottles from other companies. Purchases are made at the competitive prices.

M Ltd sold pharmaceuticals bottles to G Ltd for Euro 12 lacs on 1st February, 20X1. The cost of these bottles was ₹830 lacs in the books of M Ltd at the time of sale. At the year-end i.e. 31st March, 20X1, all these bottles were lying as closing stock with G Ltd. What should be the accounting treatment for the above?

Following additional information is available:

Exchange rate on 1st February, 20X1 1 Euro = ₹83

Exchange rate on 31st March, 20X1 1 Euro = ₹85

### SOLUTION:

#### Accounting treatment in the books of M Ltd

M Ltd will recognize sales of ₹996 lacs (12 lacs Euro X 83)

Profit on sale of inventory = 996 lacs – 830 lacs = ₹166 lacs.

On balance sheet date receivable from G Ltd. will be translated at closing rate i.e. 1 Euro = ₹ 85. Therefore, unrealised forex gain will be recorded in standalone profit and loss of ₹ 24 lacs. (i.e. (85 - 83) x 12 Lacs)

#### Journal Entries

		₹ (in Lacs)	₹ (in Lacs)
G Ltd. A/c	Dr	996	
To Sales			996
(Being revenue recorded on initial recognition)			
G Ltd. A/c	Dr	24	
To Foreign exchange difference (unrealised)			24
(Being foreign exchange difference recorded at year end)			

#### 1. Accounting treatment in the books of G Ltd

G Ltd will recognize inventory on 1st February, 20X1 of Euro 12 lacs which will also be its closing stock at year end.

		(in Euros)	(in Euros)
Purchase	Dr.	12 Lakhs	
To M Ltd.			12 Lakhs

#### 2. Accounting treatment in the consolidated financial statements

Receivable and payable in respect of above mentioned sale / purchase between M Ltd and G Ltd will get eliminated.

The closing stock of G Ltd will be translated at year end resulting in amount of closing stock of ₹1,020 lacs (12 lacs Euro X 85).

The closing stock of G Ltd will be recorded at lower of cost or NRV.

	Euro (in lacs)	Rate	₹ (in lacs)
Cost	12	83	996
NRV (Assumed Same)	12	85	1020

The restated amount of closing stock includes three components–

- Restated amount of cost of inventory for ₹830 lacs
- Profit element of ₹166 lacs; and
- Translated amount of profit element of ₹24 lacs.

At the time of consolidation, the two elements amounting to ₹190 lacs will be eliminated from the closing stock.

#### Journal Entries

		₹ (in Lacs)	₹ (in Lacs)
Consolidated P&L A/c	Dr	190	
To Inventory			190
(Being profit element of intragroup transaction eliminated)			

**Question 94: (May19 EXAM)**

Infotech Global Ltd. has a functional currency of USD and needs to translate its financial statements into the functional and presentation currency of Infotech Inc. (L\$).

The following is the statement of financial position of Infotech Global Ltd. prior to translation:



Particulars	USD	L\$
PPE	50,000	
Receivables	9,35,000	
<b>Total Assets</b>	<b>9,85,000</b>	
Issued Capital	50,000	30,055
Opening Retained Earnings	28,000	15,274
Profit for the Year	20,000	
Accounts Payable	8,40,000	
Accrued Liabilities	47,000	
<b>Total Equity &amp; Liabilities</b>	<b>9,85,000</b>	

Required:

Translate the statement of financial position of Infotech Global Ltd. into L\$ ready for consolidation by Infotech Inc. (Share capital and opening retained earnings have been pre-populated.)

Prepare a working of the cumulative balance of the foreign currency translation reserve.

**Additional information:**

Relevant exchange rates are:

Rate at beginning of the year L\$ 1 = USD 1.22

Average rate for the year L\$ 1 = USD 1.175

Rate at end of the year L\$ 1 = USD 1.13

**SOLUTION:****Translation of the Financial Statements**

	USD	Rate	L\$
Property, plant and equipment	50,000	1.13	44,248
Receivables	9,35,000	1.13	8,27,434
<b>Total assets</b>	<b>9,85,000</b>		<b>8,71,682</b>
Issued capital	50,000	—	30,055
Opening retained earnings	28,000	—	15,274
Profit for the year	20,000	1.175	17,021
Accounts payable	8,40,000	1.13	7,43,363
Accrued liabilities	47,000	1.13	41,593
<b>Total equity and liabilities USD</b>	<b>9,85,000</b>		<b>8,47,306</b>
<b>Foreign Currency</b>			<b>24,376</b>
<b>Translation Reserve (proof below)</b>			
<b>Total equity and liabilities L\$</b>			<b>8,71,682</b>

**Working of the cumulative balance of the FCTR:**

Particulars	Actual translated amount in L\$	Amount	Difference translated at closing rate of 1.13
Issued capital	30,055	44,274	14,192
Opening retained earnings	15,274	24,779	9,505
Profit for the year	17,021	17,699	678
[Difference of 1 is rounding]	<b>62,350</b>	<b>86,725</b>	<b>24,375</b>

Translated amount if the same conversion rate is applied to following items as applied on other items

			Translated amount
Issued capital	50,000	1.13	44,248
Opening retained earnings	28,000	1.13	24,779
Profit for the year	20,000	1.13	17,699
	<b>98,000</b>		<b>86,726</b>

*CA Final*  
*Financial Reporting (FR)*

**“Must do Questions” Before Exam**

*Topic -*  
*INDAS 33 – EARNINGS PER SHARE*

Question of No. 16

**Also Refer**

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**Question 95 (ICAI Module):**

An entity has following preference shares in issue at the end of 20X4:

- **5% redeemable, non-cumulative preference shares:** These shares are classified as liabilities. During the year, a dividend was paid on the 5% preference shares – Rs. 100,000.
- **Increasing-rate, cumulative, non-redeemable preference shares issued at a discount in 20X0, with a cumulative dividend rate from 20X5 of 10%:** The shares were issued at a discount to compensate the holders, because dividend payments will not commence until 20X5. The accrual for the discount in the current year, calculated using the effective interest method amounted to, say, Rs. 18,000. These shares are classified as equity – Rs. 200,000.
- **8% non-redeemable, non-cumulative preference shares:** At the beginning of the year, the entity had Rs. 100,000 8% preference shares outstanding but, at 30 June 20X4, it repurchased Rs. 50,000 of these at a discount of Rs. 1,000 – Rs. 50,000.
- **7% cumulative, convertible preference shares (converted in the year):** These shares were classified as equity, until their conversion into ordinary shares at the beginning of the year. No dividend was accrued in respect of the year, although the previous year's dividend was paid immediately prior to conversion. To induce conversion, the terms of conversion of the 7% convertible preference shares were also amended, and the revised terms entitled the preference shareholders to an additional 100 ordinary shares on conversion with a fair value of Rs. 300 – Nil.

The profit after tax for the year 20X4 is Rs. 150,000.

Determine the adjustments for the purpose of calculating EPS

**SOLUTION**

Adjustments for the purpose of calculating EPS are made as follows:

Particulars	Amount (Rs.)	Amount (Rs.)
Profit after tax		150,000
Amortisation of discount on issue of increasing-rate preference shares (Refer Note 1)	(18,000)	
Discount on repurchase of 8% preference shares (Refer Note 2)	<u>1,000</u>	<u>(17,000)</u>
Profit attributable to ordinary equity holders for basic EPS (Refer Note 3-5)		<u>1,33,000</u>

**Notes:**

- 1) The original discount on issue of the increasing-rate preference shares is treated as amortised to retained earnings and treated as preference dividends for EPS purposes and adjusted against profit attributable to the ordinary equity holders. There is no adjustment in respect of dividend, because these do not commence until 20X5. Instead, the finance cost is represented by the amortisation of the discount in the dividend-free period. In future years, the accrual for the dividend of Rs. 20,000 will be deducted from profits.
- 2) The discount on repurchase of the 8% preference shares has been credited to equity so should be added to profit.
- 3) The dividend on the 5% preference shares has been charged to the income statement, because the preference shares are treated as liabilities, so no adjustment is required for it from the profit.
- 4) No accrual for the dividend on the 8% preference shares is required, because they are non-cumulative. If a dividend had been declared for the year, it would have been deducted from profit for the purpose of calculating basic EPS, because the shares are treated as equity and the dividend would have been charged to equity in the financial statements.
- 5) The 7% preference shares were converted at the beginning of the year, so there is no adjustment in respect of the 7% preference shares, because no dividend accrued in respect of the year. The payment of the previous year's cumulative dividend is ignored for EPS purposes, because it will have been adjusted for in the prior year. Similarly, the excess of the fair value of additional ordinary shares issued on conversion of the convertible preference shares over the fair value of the ordinary shares to which the shareholders would have been entitled under the original conversion terms would already have been deducted from profit attributable to the ordinary shareholders, and no further adjustment is required.

It may be noted that as per Sections 53 and 55 of the Companies Act, 2013, a company cannot issue shares at discount or any irredeemable preference shares. However, the above illustration has been given only to explain the concept given in Ind AS.

**Question 96 (ICAI Module):**

X Ltd.

1 January	1,000,000 shares in issue
28 February	Issued 200,000 shares at fair value
31 August	Bonus issue 1 share for 3 shares held
30 November	Issued 250,000 shares at fair value



Calculate the number of shares which would be used in the basic EPS calculation. Consider reporting date as December end.

**SOLUTION:**

Period	Calculations	Weighted average number of shares
1 January -28 February	$1,000,000 \times 2 / 12 \times 4 / 3$	222,222
1 March -31 August	$1,200,000 \times 6 / 12 \times 4 / 3$	800,000
1 September -30 November	$1,600,000 \times 3 / 12$	400,000
1 December -31 December	$1,850,000 \times 1 / 12$	154,167
		<b>1,576,389</b>

**Question 97 (ICAI Module):**

Consider the following information for the purpose of calculation of BEPS for the year ending 31.03.19:



Particulars	Amounts	Remarks
Earnings before Interest and Tax	35,00,000	
O/s Debentures as on 1.4.18	12,00,0000	8% interest
O/s Cumulative 9% Pref. Shares	8,00,000	Dividend not declared
10% Non-Cumulative Pref. shares issued on 1.06.2018	10,00,000	Dividend declared
Out of above 9% Cum. Pref. Shares, 25% redeemed in the beginning of year at	3,00,000	Extra paid is premium on redemption w/f from security premium a/c
Issued 9% Debentures with redemption right at premium of 10% after 5 years	7,50,000	
Preliminary expenses w/f from security premium	1,00,000	
O/s Equity shares during the year	1,00,000 Nos.	
Tax Expenses	1,50,000	

**ANSWER: BEPS – 19.55/-; ERI – 10.63%**

**QUESTION 98: (RTP May23)**

Company P has both ordinary shares and equity-classified preference shares in issue. The reconciliation of the number of shares during Year 1 is set out below:

**Number of shares**

Dates in Year 1	Transaction	Ordinary shares	Treasury shares	Preference shares
1st April	Balance	30,00,000	(5,00,000)	5,00,000
15th April	Bonus issue – 5% (no corresponding changes in resources)	1,50,000	(25,000)	-
1st May	Repurchase of shares for cash	-	(2,00,000)	-
1st November	Shares issued for cash	4,00,000	-	-
31st March	Balance	35,50,000	(7,25,000)	5,00,000

The following additional information is relevant for Year 1.

- Company P's net profit for the year is ₹ 46,00,000.



- On 15th February, non-cumulative preference dividends of ₹ 1.20 per share were declared. The dividends were paid on 15th March. Preference shares do not participate in additional dividends with ordinary shares.
  - Dividends on non-cumulative preference shares are deductible for tax purposes.
- The applicable income tax rate is 30%.  
The financial year of Company P ends on 31st March.  
Determine the Basic EPS of the Company P for Year 1. Use the number of months or part of months, rather than the number of days in the calculation of EPS.

**SOLUTION:**

The first step in the basic EPS calculation is to determine the profit or loss that is attributable to ordinary shareholders of Company P for the period.

Non-cumulative dividends paid on equity-classified preference shares are not deducted in arriving at net profit or loss for the period, but they are not returns to ordinary shareholders. Accordingly, these dividends are deducted from net profit or loss for the period in arriving at the numerator.

		(₹)
Net profit		46,00,000
Preference dividends (5,00,000 shares x 1.2)	(6,00,000)	
Related tax (₹ 6,00,000 x 30%)	1,80,000	(4,20,000)
Profit or loss attributable to P's ordinary shareholders		41,80,000
Accordingly, the numerator for calculation of Basic EPS is ₹ 41,80,000		

**Determination of denominator for calculation of Basic EPS**

The second step in the basic EPS calculation is to determine the weighted-average number of ordinary shares outstanding for the reporting period.

Number of shares	Time weighting	Weight	Weighted average number of shares
1st April – opening balance (30,00,000 – 5,00,000)	25,00,000	1	
15th April – bonus issue (1,50,000 – 25,000)	1,25,000		
1st April to 30th April	26,25,000	1/12	2,18,750
1st May – repurchase of shares	(2,00,000)		
1st May to 31st October	24,25,000	6/12	12,12,500
1st November – new shares issued	4,00,000		
1st November to 31st March	28,25,000	5/12	11,77,083
Weighted average number of shares for the year			26,08,333

The denominator for calculation of Basic EPS is 26,08,333 shares.

Basic EPS = ₹ 41,80,000 / 26,08,333 shares = ₹ 1.60 per share (approx.).

**Question 99 (ICAI Module):**

Calculate Basic EPS for period ending 20X0, 20X1 and 20X2, when

	20X0	20X1	20X2
Profit attributable to ordinary equity holders of the parent entity	Rs. 1,100	Rs. 1,500	Rs. 1,800

Shares outstanding before rights issue	500 shares
Rights issue Shares	One new share for each five outstanding
Exercise price	Rs. 5.00

Date of rights issue	1 January 20X1
Last date to exercise rights	1 March 20X1
Market price of one ordinary share immediately before exercise on 1 March 20X1:	Rs. 11.00
Reporting date	31 December

**SOLUTION:****Calculation of theoretical ex-rights value per share**

Fair value of all outstanding shares before the exercise of rights + total amount received from exercise of rights

Number of shares outstanding before exercise + number of shares issued in the exercise

$$\frac{(\text{Rs. } 11.00 \times 500 \text{ shares}) + (\text{Rs. } 5.00 \times 100 \text{ shares})}{500 \text{ shares} + 100 \text{ shares}}$$

500 shares + 100 shares

Theoretical ex-rights value per share = Rs.10.00

**Calculation of adjustment factor**

Fair value per share before exercise of rights

$$\frac{\text{Rs. } 11.00}{\text{Rs. } 10.00} = 1.10$$

Theoretical ex-rights value per share

$$\text{Rs. } 10.00$$

**Question 100 (ICAI Module):**

*(This illustration does not illustrate the classification of the components of convertible financial instruments as liabilities and equity or the classification of related interest and dividends as expenses and equity as required by Ind AS32).*



Profit attributable to equity holders of the parent entity	Rs. 100,000
Ordinary shares outstanding	10,000
Non-convertible preference shares	6,000
Non-cumulative annual dividend on preference shares (before any dividend is paid on ordinary shares)	Rs. 5.50 per share

Compute the allocation of earnings for the purpose of calculation of Basic EPS when an entity has ordinary shares & participating equity instruments that are not convertible into ordinary shares

**SOLUTION**

Dividends on preference shares paid (6000 x Rs. 5.50 per share) Rs. 33,000

Dividends on ordinary shares paid (10,000 x Rs. 2.10 per share) Rs. 21,000

**Basic earnings per share is calculated as follows:**

Profit attributable to equity holders of the parent entity Rs. 100,000

Less: Dividend paid:

Preference 33,000

Ordinary 21,000 (54,000)

**Undistributed earnings Rs. 46,000**

**Allocation of undistributed earnings:**

Allocation per ordinary share = A

Allocation per preference share = B; B = 1/4 A

$$(A \times 10,000) + (1/4 \times A \times 6,000) = \text{Rs. } 46,000$$

$$A = \text{Rs. } 46,000 \div (10,000 + 1,500)$$

$$A = \text{Rs. } 4.00$$

$$B = 1/4 A$$

$$B = \text{Rs. } 1.00$$

**Dividend per share:**

	Preference shares	Ordinary shares
Distributed earnings	Rs. 5.50	Rs. 2.10
Undistributed earnings	<u>Rs. 1.00</u>	<u>Rs. 4.00</u>
<b>Totals</b>	<b><u>Rs. 6.50</u></b>	<b><u>Rs. 6.10</u></b>

**Question 101 (ICAI Module):**

ABC Company wants to calculate diluted EPS for the year 20X5-20X6. The weighted average number of ordinary shares are 5,00,000 as on 31.3.20X6. Company has provided following details about the potential ordinary shares.



1. On 1 April 20X1 company has issued convertible preference shares for a period of 10 years. The face value of the share is Rs. 10 each and total value of preference share capital is Rs. 75,00,000
  2. On 1 January 20X3 company has issued convertible debentures having a face value of Rs. 10 each for a period of 3 years. The total value of debenture issue is Rs. 90,00,000. After completion of third year the debentures will be converted into equity shares.
  3. Company issued convertible preference shares 15th November 20X5, for a period of 5 years, having a face value of Rs. 10 and issue value of Rs. 60,00,000
- Calculate the weighted average number of potential shares.

**SOLUTION:**

**Situation 1:-** The potential shares were present on the first day of F.Y. 20X5-20X6 and will remain potential till the last date of F.Y. 20X5-20X6. Therefore, 7,50,000 will be considered as weighted average number for shares.

**Situation 2: -** Debentures were for 3 years period. So they will get converted into ordinary shares on 1st January 20X6. i.e. during the year 20X5-20X6.

As per the provisions, Potential ordinary shares are weighted for the period they are outstanding. Potential ordinary shares that are converted into ordinary shares during the period are included in the calculation of diluted earnings per share from the beginning of the period to the date of conversion; from the date of conversion, the resulting ordinary shares are included in both basic and diluted earnings per share

Thus their status is potential shares for the period from 1st April to 31st December 20X5. From 1st January 20X6 to 31.3.20X6 their status is ordinary shares. Therefore, April to December part will be included in calculation of Diluted EPS

Whereas January to March part will be included in ordinary equity shares

The weighted average number will be calculated as follows

For Diluted EPS =  $9,00,000 \times \frac{275}{365} = 6,78,082$  shares

For Basic EPS the calculation will be  $9,00,000 \times \frac{90}{365} = 2,21,918$  shares.

The number of ordinary shares that would be issued on conversion of dilutive potential ordinary shares is determined from the terms of the potential ordinary shares. When more than one basis of conversion exists, the calculation assumes the most advantageous conversion rate or exercise price from the standpoint of the holder of the potential ordinary shares.

Sometimes the number of shares that will get converted into ordinary shares will be expressed in terms of some ratio or percentage or occurring of some contingent event. In such cases the exact number of shares that will get converted into ordinary shares cannot be decided with precision. In such cases the abovementioned provisions direct the company to take the most advantageous route from holders perspective.

**Question 102 (ICAI Module):**

Calculate BEPS and DEPS from the following information:

Profit after Tax (15-16) – Rs. 5,00,000

Equity Shares as on 01.04.2015 – 40,000

12% Conv. Pref Shares as on 01.04.2015 – Rs. 10,00,000 (Face Value Rs. 100), Convertible on 1/1/2016 in 2:1



13% Conv. Debentures as on 01.04.2015 – Rs. 5,00,000 (Face Value Rs. 100), Convertible after 2 years in 3:1

**ANSWER: BEPS – 9.11; DEPS – 7.53**

**Question 103: (MTP OCT 20 & RTP May19)**

An entity issues 2,000 convertible bonds at the beginning of Year 1. The bonds have a three-year term and are issued at par with a face value of Rs. 1,000 per bond, giving total proceeds of Rs. 2,000,000. Interest is payable annually in arrears at a nominal annual interest rate of 6 per cent. Each bond is convertible at any time up to maturity into 250 ordinary shares. The entity has an option to settle the principal amount of the convertible bonds in ordinary shares or in cash.



When the bonds are issued, the prevailing market interest rate for similar debt without a conversion option is 9 per cent. At the issue date, the market price of one ordinary share is Rs. 3. Income tax is ignored.

Calculate basic and diluted EPS when

Profit attributable to ordinary equity holders of the parent entity Year 1Rs.	1,000,000
Ordinary shares outstanding	1,200,000
Convertible bonds outstanding	2,000

**SOLUTION**

Allocation of proceeds of the bond issue:	
Liability component (Refer Note 1)	Rs. 1,848,122
Equity component	Rs. 151,878
	<b>Rs. 2,000,000</b>

The liability and equity components would be determined in accordance with Ind AS 32. These amounts are recognised as the initial carrying amounts of the liability and equity components. The amount assigned to the issuer conversion option equity element is an addition to equity and is not adjusted.

**Basic earnings per share Year 1:**

$\frac{\text{Rs. } 1,000,000}{1,200,000} = \text{Rs. } 0.83$  per ordinary share

**Diluted earnings per share Year 1:**

It is presumed that the issuer will settle the contract by the issue of ordinary shares. The dilutive effect is therefore calculated in accordance with the Standard.

$\frac{\text{Rs. } 1,000,000 + \text{Rs. } 166,331}{1,200,000 + 500,000} = \text{Rs. } 0.69$  per ordinary share

**Notes:**

- 1) This represents the present value of the principal and interest discounted at 9% – Rs. 2,000,000 payable at the end of three years; Rs. 120,000 payable annually in arrears for three years.
  - 2) Profit is adjusted for the accretion of Rs. 166,331 (Rs. 1,848,122 x 9%) of the liability because of the passage of time. However, it is assumed that interest @ 6% for the year has already been adjusted.
- 500,000 ordinary shares = 250 ordinary shares x 2,000 convertible bonds

**Question 104: (Nov22 EXAM & RTP May20)**

CAB Limited is in the process of preparation of the consolidated financial statements of the group for the year ending 31st March, 20X3 and the extract of the same is as follows



Particulars	Attributable to CAB Limited	Non-controlling interest	Total (₹ in '000)
Profit for the year	39,000	3,000	42,000
Other Comprehensive Income	5,000	Nil	5,000
Total Comprehensive Income	44,000	3,000	47,000

The long-term finance of the company comprises of the following:

- (I) 20,00,00,000 equity shares at the beginning of the year and the company has issued 5,00,00,000 shares on 1st July, 20X2 at full market value.

- (II) 8,00,00,000 irredeemable preference shares. These shares were in issue for the whole of the year ended 31st March, 20X3. The dividend on these preference shares is discretionary.
- (III) ₹ 18 crores of 6% convertible debentures issued on 1st April, 20X1 and repayable on 31st March, 20X5 at par. Interest is payable annually. As an alternative to repayment at par, the holder on maturity can elect to exchange their convertible debentures for 10 crores ordinary shares in the company. On 1st April, 20X1, the prevailing market interest rate for four-year convertible debentures which had no right of conversion was 8%. Using an annual discount rate of 8%, the present value of ₹ 1 payable in four years is 0.74 and the cumulative present value of ₹ 1 payable at the end of years one to four is 3.31. In the year ended 31st March, 20X3, CAB Limited declared an ordinary dividend of 0.10 paise per share and a dividend of 0.05 paise per share on the irredeemable preference shares.

**Compute the following:**

- The finance cost of convertible debentures and its closing balance as on 31st March, 20X3 to be presented in the consolidated financial statements.
- The basic and diluted earnings per share for the year ended 31st March, 20X3.

Assume that income tax is applicable to CAB Limited and its subsidiaries at 25%.

**SOLUTION****Calculation of the liability and equity components on 6% Convertible debentures:**

Present value of principal payable at the end of 4th year (₹ 1,80,000 thousand x 0.74) = ₹ 1,33,200 thousand

Present value of interest payable annually for 4 years (₹ 1,80,000 thousand x 6% x 3.31) = ₹ 35,748 thousand

Total liability component = ₹ 1,68,948 thousand

Therefore, equity component = ₹ 1,80,000 thousand – ₹ 1,68,948 thousand = ₹ 11,052 thousand

**Calculation of finance cost and closing balance of 6% convertible debentures**

Year	Opening balance ₹ in '000	Finance cost @ 8% ₹ in '000	Interest paid @ 6% ₹ in '000	Closing balance (₹ in '000)
	a	b = a x 8%	c	d = a + b - c
31.3.20X2	1,68,948	13,515.84	10,800	1,71,663.84
31.3.20X3	1,71,663.84	13,733.11	10,800	1,74,596.95

Finance cost of convertible debentures for the year ended 31.3. 20X3 is ₹ 13,733.11 thousand and closing balance as on 31.3. 20X3 is ₹ 1,74,596.95 thousand.

Calculation of Basic EPS	₹ in '000
Profit for the year	39,000
Less: Dividend on preference shares (80,000 thousand x ₹ 0.05)	(4,000)
Profit attributable to equity shareholders	35,000

Weighted average number of shares = 20,00,00,000 + {5,00,00,000 x (9/12)}  
= 23,75,00,000 shares or 2,37,500 thousand shares

Basic EPS = ₹ 35,000 thousand / 2,37,500 thousand shares  
= ₹ 0.147

Calculation of Diluted EPS		₹ in '000
Profit for the year		39,000
Less: Dividend on preference shares (80,000 x 0.05)		(4,000)
Add: Finance cost (as given in the above table)	13,733.11	35,000
Less: Tax @ 25%	(3,433.28)	10,299.83
		45,299.83

Weighted average number of shares  
= 20,00,00,000 + {5,00,00,000 x (9/12)} + 10,00,00,000



= 33,75,00,000 shares or 3,37,500 thousand shares

Diluted EPS = ₹ 45,299.83 thousand / 3,37,500 thousand shares  
= ₹ 0.134

### Question 105: (MTP May22 & Nov20 EXAM)

The following information is available relating to Space India Limited for the Financial Year 2019-20.



Net profit attributable to equity shareholders	₹ 90,000
No. of equity shares outstanding	16,000
Average fair value of one equity share during the year	₹ 90

Potential Ordinary Shares:

Options	900 options with exercise price of ₹ 75
Convertible Preference Shares	7,500 shares entitled to a cumulative dividend of ₹ 9 per share. Each preference share is convertible into 2 equity shares.
Applicable corporate dividend tax	8%
10% Convertible Debentures of ₹ 100 each	₹ 10,00,000 and each debenture is convertible into 4 equity shares
Tax rate	25%

You are required to compute Basic and Diluted EPS of the company for the Financial Year 2019-20.

### SOLUTION

#### i. Basic Earnings per share

		Year ended 31.3.2020
Net profit attributable to equity shareholders	(A)	Rs. 90,000
Number of Equity shares outstanding	(B)	16,000
Earnings per share	(A/B)	Rs. 5.625

#### ii. Diluted earnings per share

Options are most dilutive as their earnings per incremental share is nil. Hence, for the purpose of computation of diluted earnings per share, options will be considered first. 10% convertible debentures being second most dilutive will be considered next and thereafter convertible preference shares will be considered (as per W.N.).

	Net profit attributable to equity shareholders Rs.	No. of equity shares	Net Profit attributable per share Rs.	
Net profit attributable to equity shareholders	90,000	16,000	5.625	
Options		150		
	90,000	16,150	5.572	Dilutive
10% Convertible debentures	75,000	40,000		
	1,65,000	56,150	2.939	Dilutive
Convertible Preference Shares	72,900	15,000		
	2,37,900	71,150	3.344	Anti-Dilutive

Since diluted earnings per share is increased when taking the convertible preference shares into account (Rs. 2.939 to Rs. 3.344), the convertible preference shares are anti-dilutive and are ignored in the calculation of diluted earnings per share for the year ended 31 March 2020. Therefore, diluted earnings per share for the year ended 31 March 2020 is Rs. 2.939.

**Working Note:****Calculation of incremental earnings per share and allocation of rank**

	Increase in earnings (1)	Increase in number of equity shares (2)	Earnings per incremental Share (3) = (1) ÷ (2)	Rank
	Rs.		Rs.	
Options				
Increase in earnings	Nil			
No. of incremental shares issued for no consideration $[900 \times (90-75)/90]$		150	Nil	1
Convertible Preference Shares				
Increase in net profit attributable to equity shareholders as adjusted by attributable dividend tax [[Rs. 9 x 7,500) + 8% (Rs. 9 x 7,500)]	72,900			
No. of incremental shares (2 x 7,500)		15,000	4.86	3
10% Convertible Debentures				
Increase in net profit [[Rs. 10,00,000 x 10% x (1 - 0.25)]	75,000			
No. of incremental shares (10,000 x 4)		40,000	1.875	2

**Note:** Grossing up of preference share dividend has been ignored here. At present dividend distribution tax has been abolished. However, the question has been solved on the basis of the information given in the question.

**\*Alternatively,**

Increase in earnings for equity holders = saving due to non-payment to preference shareholders (net of tax)  
=  $9 \times 7,500 = 67,500 - 8\% = 62,100$

Incremental no. of shares = 15,000

**Question 106 (ICAI Module):**

Ordinary shares outstanding during 20X1	1,000,000 (there were no options, warrants or convertible instruments outstanding during the period)
An agreement related to a recent business combination provides for the issue of additional ordinary shares based on the following conditions:	
	5,000 additional ordinary shares for each new retail site opened during 20X1
	1,000 additional ordinary shares for each Rs. 1,000 of consolidated profit in excess of Rs. 2,000,000 for the year ended 31 <sup>st</sup> December 20X1
Retail sites opened during the year:	one on 1 May 20X1
	one on 1 September 20X1
Consolidated year-to-date profit attributable to ordinary equity holders of the parent entity:	Rs. 1,100,000 as of 31 March 20X1
	Rs. 2,300,000 as of 30 June 20X1
	Rs. 1,900,000 as of 30 September 20X1 (including a Rs. 450,000 loss from a discontinued operation)
	Rs. 2,900,000 as of 31 December 20X1



**Calculate basic and diluted EPS.**

**SOLUTION:**

Basic earnings per share					
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full year
Numerator (Rs.)	1,100,000	1,200,000	(400,000)	1,000,000	2,900,000
Denominator:					

Ordinary shares outstanding	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Retail site contingency	–	3,333 <sup>6</sup>	6,667 <sup>7</sup>	10,000	5,000 <sup>#</sup>
Earnings contingency <sup>9</sup>	–	–	–	–	–
Total shares	1,000,000	1,003,333	1,006,667	1,010,000	1,005,000
Basic earnings per share (Rs.)	1.10	1.20	(0.40)	0.99	2.89

<sup>6</sup> 5,000 shares  $\times$  2/3

<sup>7</sup> 5,000 shares + (5,000 shares  $\times$  1/3)

<sup>8</sup> (5,000 shares  $\times$  8/12) + (5,000 shares  $\times$  4/12)

<sup>9</sup> The earnings contingency has no effect on basic earnings per share because it is not certain that the condition is satisfied until the end of the contingency period. The effect is negligible for the fourth quarter and full-year calculations because it is not certain that the condition is met until the last day of the period.

Diluted earnings per share					
	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full year
Numerator (Rs.)	1,100,000	1,200,000	(400,000)	1,000,000	2,900,000
Denominator:					
Ordinary shares outstanding	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Retail site contingency	–	5,000	10,000	10,000	10,000
Earnings contingency	– <sup>10</sup>	300,000 <sup>11</sup>	– <sup>12</sup>	900,000 <sup>13</sup>	900,000
Total shares	1,000,000	1,305,000	1,010,000	1,910,000	1,910,000
Diluted earnings per share (Rs.)	1.10	0.92	(0.40) <sup>14</sup>	0.52	1.52

<sup>10</sup> Company A does not have year does not permit projecting future earnings levels and including the related contingent shares.

<sup>11</sup> [(Rs. 2,300,000 – Rs. 2,000,000)  $\div$  1,000]  $\times$  1,000 shares = 300,000 shares.

<sup>12</sup> Year -to-date profit is less than Rs. 2,000,000.

<sup>13</sup> [(Rs. 2,900,000 – Rs. 2,000,000)  $\div$  1,000]  $\times$  1,000 shares = 900,000 shares.

<sup>14</sup> Because the loss during the third quarter is attributable to a loss from a discontinued operation, the anti-dilution rules do not apply. The control number (i.e., profit or loss from, continuing operations attributable to the equity holders of the parent entity) is positive. Accordingly, the effect of potential ordinary shares is included in the calculation of diluted earnings per share.

### Question 107: (MTP April19)

Calculate Subsidiary's and Group's Basic EPS and Diluted EPS, when

Parent:	
Profit attributable to ordinary equity holders of the parent entity	₹ 12,000 (excluding any earnings of, or dividends paid by, the subsidiary)
Ordinary shares outstanding	10,000
Instruments of subsidiary owned by the parent	800 ordinary shares
	30 warrants exercisable to purchase ordinary shares of subsidiary
	300 convertible preference shares



Subsidiary:	
Profit	₹ 5,400
Ordinary shares outstanding	1,000
Warrants	150, exercisable to purchase ordinary shares of the subsidiary
Exercise price	₹ 10
Average market price of one ordinary share	₹ 20
Convertible preference shares	400, each convertible into one ordinary share
Dividends on preference shares	₹ 1 per share
No inter-company eliminations or adjustments were necessary except for dividends.	
Ignore income taxes. Also, ignore classification of the components of convertible financial instruments as liabilities and equity or the classification of related interest and dividends as expenses and equity as required by Ind AS 32.	

**SOLUTION**

Subsidiary's earnings per share

Basic EPS	₹ 5.00 calculated:	₹ 5,400 (a) – ₹400 (b) 1,000 I
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Diluted EPS	₹ 3.66 calculated:	₹ 5,400 (d) (1,000 + 75 I + 400(f))
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**Notes:**

- Subsidiary's profit attributable to ordinary equity holders.
- Dividends paid by subsidiary on convertible preference shares.
- Subsidiary's ordinary shares outstanding.
- Subsidiary's profit attributable to ordinary equity holders (₹ 5,000) increased by ₹ 400 preference dividends for the purpose of calculating diluted earnings per share.
- Incremental shares from warrants, calculated:  $[(₹ 20 - ₹ 10) \div ₹ 20] \times 150$ .
- Subsidiary's ordinary shares assumed outstanding from conversion of convertible preference shares, calculated: 400 convertible preference shares  $\times$  conversion factor of 1.

**Consolidated earnings per share**

Basic EPS	₹ 1.63 calculated:	₹ 12,000(a) + ₹ 4,300(b) 10,000©
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Diluted EPS	₹ 1.61 calculated:	₹ 12,000 + ₹ 2,928(d) + ₹ 55I + ₹ 1,098(f) 10,000
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- Parent's profit attributable to ordinary equity holders of the parent entity.
- Portion of subsidiary's profit to be included in consolidated basic earnings per share, calculated:  $(800 \times ₹ 5.00) + (300 \times ₹ 1.00)$ .
- Parent's ordinary shares outstanding.
- Parent's proportionate interest in subsidiary's earnings attributable to ordinary shares, calculated:  $(800 \div 1,000) \times (1,000 \text{ shares} \times ₹ 3.66 \text{ per share})$ .
- Parent's proportionate interest in subsidiary's earnings attributable to warrants, calculated:  $(30 \div 150) \times (75 \text{ incremental shares} \times ₹ 3.66 \text{ per share})$ .
- Parent's proportionate interest in subsidiary's earnings attributable to convertible preference shares, calculated:  $(300 \div 400) \times (400 \text{ shares from conversion} \times ₹ 3.66 \text{ per share})$ .

**Question 108: (RTP Nov22)**

Company S is a subsidiary of Company P. Following facts are in respect of Company S:

- Company S has 10,000 ordinary shares and 1,000 options outstanding, of which Company P owns 9,000 shares and 500 options, respectively.
- The options have an exercise price of Rs. 40.
- The average market price of Company S's ordinary share was Rs. 50 in 20X1.
- In 20X1, Company S's profit was Rs. 30,000.

**Following facts are in respect of Company P:**

- Company P has 5,000 ordinary shares outstanding.
- In 20X1, Company P's profit (excluding any distributed and undistributed earnings of subsidiaries) was Rs. 7,000.
- The options outstanding are dilutive at P's level.

Determine the diluted EPS of Company P for the year 20X1. Ignore income tax.

**SOLUTION**

To determine the diluted EPS of Company P, the diluted EPS of Company S has to be calculated first.

**Calculation of Company S's diluted EPS:**

Company S's earnings for the period	Rs. 30,000
Weighted average ordinary shares	10,000
Incremental shares (refer W.N.)	200
Company S's diluted EPS $Rs. 30,000 / (10,000 + 200)$	Rs. 2.94

<b>Calculation of Company P's diluted EPS:</b>	
Company P's earning for the period	Rs. 7,000
Company P's share of Company S's earning attributable to ordinary shares $[(9,000 / 10,000) \times (2.94 \times 10,000)]$	Rs. 26,460
Company P's share of Company S's earning attributable to options $[(500 / 1,000) \times (2.94 \times 200)]$	Rs. 294
Company P's weighted average ordinary shares outstanding	5,000
Company P's diluted EPS $= (7,000 + 26,460 + 294) / 5,000$	Rs. 6.75

**Working Note:**

Computation of Incremental shares related to weighted average options outstanding:

All options are dilutive because their exercise price is below the average market price of Company S's ordinary shares for the period.

The incremental shares are calculated as follows:

Shares issued on assumed exercise of options	1,000
Less: Shares that would be issued at average market Price $[(40 \times 1,000) / 50]$	(800)
<b>Incremental shares</b>	<b>200</b>

**Question 109: (July 21 EXAM & MTP May 23)**

At 30 June 20X1, the issued share capital of an entity consisted of 1,500,000 ordinary shares of Rs. 1 each. On 1 October 20X1, the entity issued Rs. 1,250,000 of 8% convertible loan stock for cash at par. Each Rs. 100 nominal of the loan stock may be converted, at any time during the years ended 20X6 to 20X9, into the number of ordinary shares set out below:

30 June 20X6: 135 ordinary shares;

30 June 20X7: 130 ordinary shares;

30 June 20X8: 125 ordinary shares; and

30 June 20X9: 120 ordinary shares.

If the loan stocks are not converted by 20X9, they would be redeemed at par.

This illustration assumes that the written equity conversion option is accounted for as a derivative liability and marked to market through profit or loss. The change in the options' fair value reported in 20X2 and 20X3 amounted to losses of Rs. 2,500 and Rs. 2,650 respectively. It is assumed that there are no tax consequences arising from these losses.

The profit before interest, fair value movements and taxation for the year ended 30 June 20X2 and 20X3 amounted to Rs. 825,000 and Rs. 895,000 respectively and relate wholly to continuing operations. The rate of tax for both periods is 33%.

**Calculate Basic and Diluted EPS.**

**SOLUTION**

	20X3	20X2
Trading results	Rs.	Rs.
A. Profit before interest, fair value movements and tax	895,000	825,000
B. Interest on 8% convertible loan stock (20X2: $9/12 \times Rs. 100,000$ )	(1,00,000)	(75,000)
C. Change in fair value of embedded option	(2,650)	(2,500)
Profit before tax	792,350	747,500
Taxation @ 33% on (A-B)	(262,350)	(247,500)
<b>Profit after tax</b>	<b>530,000</b>	<b>500,000</b>
<b>Calculation of basic EPS</b>		





Number of equity shares outstanding	1,500,000	1,500,000
Earnings	Rs. 530,000	Rs. 500,000
<b>Basic EPS</b>	<b>35 paise</b>	<b>33 paise</b>

**Calculation of diluted EPS****Test whether convertibles are dilutive:**

The saving in after-tax earnings, resulting from the conversion of Rs. 100 nominal of loan stock, amounts to Rs.  $100 \times 8\% \times 67\% + \text{Rs. } 2,650/12,500 = \text{Rs. } 5.36 + \text{Rs. } 0.21 = \text{Rs. } 5.57$ .

There will then be 135 extra shares in issue.

Therefore, the incremental EPS is 4 paise (i.e., Rs.  $5.57/135$ ). As this incremental EPS is less than the basic EPS at the continuing level, it will have the effect of reducing the basic EPS of 35 paise. Hence the convertibles are dilutive.

	<b>20X3</b>	<b>20X2</b>
	<b>Rs.</b>	<b>Rs.</b>
Adjusted earnings		
Profit for basic EPS	530,000	500,000
Add: Interest and other charges on earnings saved	102,650	77,500
as a result of the conversion	(100,000 + 2,650)	(75000+ 2500)
Less: Tax relief thereon	(33,000)	(24,750)
Adjusted earnings for equity	599,650	552,750

**Adjusted number of shares**

From the conversion terms, it is clear that the maximum number of shares issuable on conversion of Rs. 1,250,000 loan stock after the end of the financial year would be at the rate of 135 shares per Rs. 100 nominal (that is, 1,687,500 shares).

	<b>20X3</b>	<b>20X2</b>
Number of equity shares for basic EPS	1,500,000	1,500,000
Maximum conversion at date of issue $1,687,500 \times 9/12$		1,265,625
Maximum conversion after balance sheet date	1,687,500	–
Adjusted shares	3,187,500	2,765,625
Adjusted earnings for equity	Rs. 599,650	Rs. 552,750
<b>Diluted EPS (approx.)</b>	<b>19 paise</b>	<b>20 paise</b>

**Question 110: (Dec21 EXAM)**

Assume the following facts for Company XY:



Income from continuing operations	INR 30,00,000
Loss from discontinued operations	(INR 36,00,000)
Net loss	(INR 6,00,000)
Weighted average Number of shares outstanding	10,00,000
Incremental common shares outstanding relating to stock options	2,00,000

(a) You are required to calculate the basic and diluted EPS for Company XY from the above information.

Assume, if in above case, Loss from continued operations is ₹10,00,000 and income from discontinued operations is ₹36,00,000 calculate the diluted EPS.

**SOLUTION:****(a) Step 1:**

Basic EPS = Profit for the year / Weighted average Number of shares outstanding  
 Basic EPS (Continued Operations) = Profit from continued operations / Weighted average Number of shares outstanding  
 $= ₹30,00,000 / 10,00,000 = ₹3.00$

Basic Loss per share (Discontinued operations) = Loss from discontinued operations / Weighted average Number of shares outstanding  
 $= ₹ (36,00,000) / 10,00,000 = (₹3.60)$

Overall Basic Loss per share =  $(₹6,00,000) / 10,00,000 = ₹ (0.60)$  (i)

*Step 2: Calculation of Diluted EPS*

Diluted EPS = Profit for the year / Adjusted Weighted average Number of shares outstanding EPS (Continued Operations)

$$= \text{Profit from continued operations} / \text{Adjusted Weighted average Number of shares outstanding} \\ = ₹ 30,00,000 / 12,00,000 = ₹2.50$$

Loss per share (Discontinued operations) = Loss from discontinued operations / Adjusted weighted average number of shares outstanding

$$= ₹ (36,00,000) / 12,00,000 = (₹3.00)$$

$$\text{Overall Diluted Loss per share} = ₹ 6,00,000 / 12,00,000 = ₹ (0.50) \quad (\text{ii})$$

The income from continuing operations is the control number, there is a dilution in basic EPS for income from continuing operations (reduction of EPS from ₹3.00 to ₹ 2.50).

Therefore, even though there is an anti-dilution [Loss per share reduced from ₹ 0.60 (i) to ₹0.50 (ii) above], Diluted loss per share of ₹0.50 is reported.

**(b)** In case of loss from continuing operations, the potential shares are excluded since including those shares would result into anti-dilution effect on the control number (loss from continuing operations). Therefore, the diluted EPS will be calculated as under:

$$\text{Diluted EPS} = \text{Profit for the year} / \text{Adjusted weighted average number of shares outstanding}$$

$$\text{Overall Profit} = \text{Loss from continuing operations} + \text{Gain from discontinued operations}$$

$$= ₹ (10,00,000) + ₹36,00,000$$

$$= ₹26,00,000$$

$$\text{Weighted average number of shares outstanding} = 10,00,000$$

$$\text{Diluted EPS} = ₹2.60$$

The dilutive effect of the potential common shares on EPS for income from discontinued operations and net income would not be reported because of the loss from continuing operations

*CA Final*  
*Financial Reporting (FR)*

**“Must do Questions” Before Exam**

*Topic -*  
**INDAS 103 – BUSINESS COMBINATION**

Question of No. 16

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### Question 111: (May22 EXAM & RTP Nov18)

ABC Ltd. prepares consolidated financial statements up to 31st March each year. On 1st July 20X1, ABC Ltd. acquired 75% of the equity shares of JKL Ltd. and gained control of JKL Ltd. The issued shares of JKL Ltd. is 1,20,00,000 equity shares. Details of the purchase consideration are as follows:

- On 1st July, 20X1, ABC Ltd. issued two shares for every three shares acquired in JKL Ltd. On 1st July, 20X1, the market value of an equity share in ABC Ltd. was ₹ 6.50 and the market value of an equity share in JKL Ltd. was ₹ 6.
- On 30th June, 20X2, ABC Ltd. will make a cash payment of ₹ 71,50,000 to the former shareholders of JKL Ltd. who sold their shares to ABC Ltd. on 1st July, 20X1. On 1st July, 20X1, ABC Ltd. would have to pay interest at an annual rate of 10% on borrowings.
- On 30th June, 20X3, ABC Ltd. may make a cash payment of ₹ 3,00,00,000 to the former shareholders of JKL Ltd. who sold their shares to ABC Ltd. on 1st July, 20X1. This payment is contingent upon the revenues of ABC Ltd. growing by 15% over the two-year period from 1st July, 20X1 to 30th June, 20X3. On 1st July, 20X1, the fair value of this contingent consideration was ₹ 2,50,00,000. On 31st March, 20X2, the fair value of the contingent consideration was ₹ 2,20,00,000.
- On 1st July, 20X1, the carrying values of the identifiable net assets of JKL Ltd. in the books of that company was ₹ 6,00,00,000. On 1st July, 20X1, the fair values of these net assets was ₹ 7,00,00,000. The rate of deferred tax to apply to temporary differences is 20%.
- During the nine months ended on 31st March, 20X2, JKL Ltd. had a poorer than expected operating performance. Therefore, on 31st March, 20X2 it was necessary for ABC Ltd. to recognize an impairment of the goodwill arising on acquisition of JKL Ltd., amounting to 10% of its total computed value.

Compute the impairment of goodwill in the consolidated financial statements of ABC Ltd. under both the methods permitted by Ind AS 103 for the initial computation of the non-controlling interest in JKL Ltd. at the acquisition date.

### SOLUTION:

Computation of goodwill impairment

	NCI at fair Value	NCI at of net Assets
	₹ in '000	₹ in '000
Cost of investment		
Share exchange (12,000 x 75% x 2/3 x ₹ 6.50)	39,000	39,000
Deferred consideration (7,150 / 1.10)	6,500	6,500
Contingent consideration	25,000	25,000
Non-controlling interest at date of acquisition:		
Fair value - 3000 x ₹ 6	18,000	
% of net assets - 68,000 (Refer W.N.) x 25%		17,000
Net assets on the acquisition date (Refer W.N.)	(68,000)	(68,000)
Goodwill on acquisition	20,500	19,500
Impairment @ 10%	2,050	1,950

### Working Note:

Net assets on the acquisition date	₹ in '000
Fair value at acquisition date	70,000
Deferred tax on fair value adjustments [20% x (70,000 - 60,000)]	(2,000)
	<b>68,000</b>

2. The consideration of Rs. 71,50,000 is payable after 1 year. Hence, it will be included in the purchase consideration at its present value.

3. Contingent considerations are to be included at their **Fair Value as on the Date of Acquisition**, and not at the actual amount payable. Hence, FV as on 1st July will be included.

4. Deferred Tax is calculated when there is a difference between the Carrying Amount and the Tax Base.

In the given question, it is assumed that the Tax base = carrying value in the books. Hence, the differences between the Tax Base and the Fair Value (which will be the carrying amount for Acquirer Company) will give rise to deferred tax adjustments.

$$\text{NCI shares} = 1,20,00,000 \times 25\% = 30,00,000$$

### Question 112: (RTP May21)

Monsoon Limited acquired, on 30 September, 20X2, 70% of the share capital of Mark Limited, an entity registered as a company in Germany. The functional currency of Monsoon Limited is Indian Rupee and its financial year ends on 31 March, 20X3.

The fair value of the net assets of Mark Limited was 23 million EURO and the purchase consideration paid was 17.5 million EURO on 30 September, 20X2.

The exchange rates as on 30 September, 20X2 was Rs. 82 per EURO and on 31st March, 20X3 was Rs. 84 per EURO.

On acquisition of Mark limited, what is the value at which the goodwill / capital reserve has to be recognized in the financial statements of Monsoon Limited as on 31 March 20X3?

### SOLUTION:

Ind AS 21 requires that goodwill arising on business combination shall be expressed in the functional currency of the foreign operation and shall be **translated at the closing rate**.

**In this case, the amount of goodwill will be as follows:**

Net identifiable asset	Dr.	Rs. 23 million	
Goodwill (bal. fig.)	Dr.	Rs. 1.4 million	
To Bank (Purchase Consideration)			Rs. 17.5 million
To NCI (23 X 30%)			Rs.6.9 million

Thus, goodwill on the reporting date in the books of Monsoon Limited would be = 1.4 million EURO x Rs. 84 = Rs. 117.6 million.

### Question 113 (ICAI Module):

Parent acquired 85% shares in Subsidiary Ltd. on 1/07/2017. From the following Balance Sheets as at end of 31.03.2018 prepare CFS

Particulars	Parent Ltd.	Subsidiary Ltd.
PPE	8,00,000	6,00,000
Investments in S Ltd.	8,00,000	-
Other Assets	4,00,000	2,00,000
Share Capital	10,00,000	4,00,000
Reserves and Surplus	7,50,000	3,00,000
Liabilities	2,50,000	1,00,000

Subsidiary Ltd declared and paid 10% dividend on 15/12/2017 for the year 16-17. Parent Ltd. received the proportionate dividend and credited to P&L a/c.

Following is the Statement of Profit and Loss of Parent and Subsidiary for the year ended 31.03.2018-

Particulars	Parent Ltd.	Subsidiary Ltd.
<b>Incomes</b>		
Revenue from Operation	12,50,000	7,50,000
Dividend Received	34,000	-
<b>Expenses</b>	8,40,000	6,15,000
Net Profits/Total Comprehensive Income	4,44,000	1,35,000

Balances of Reserves are Surplus are as follows through Statement of Changes in Equity:

### Parent Ltd.

Particulars	General Reserve	Profit and Loss a/c	Total
Opening Balances as on 1/04/2017	1,50,000	1,56,000	3,06,000
Total Comprehensive Income during the year	-	4,44,000	4,44,000
<b>Closing Balances as on 31/03/2018</b>	<b>1,50,000</b>	<b>6,00,000</b>	<b>7,50,000</b>



**Subsidiary Ltd.**

Particulars	General Reserve	Profit and Loss a/c	Total
Opening Balances as on 1/04/2017	65,000	1,40,000	2,05,000
Total Comprehensive Income during the year	-	1,35,000	1,35,000
Less-Dividend Paid	-	(40,000)	(40,000)
<b>Closing Balances as on 31/03/2018</b>	<b>65,000</b>	<b>2,35,000</b>	<b>3,00,000</b>

**SOLUTION:**

Date	Particulars	General Reserve & Profit & Loss balance of this date
01/07/2017	Date of Acquisition	GR – 65,000 & P/L – 1,40,000
31/03/2018	Date of Balance Sheet	GR – 65,000 & P/L – 2,35,000
15/12/2017	Dividend paid – 40,000	

**Working Note – 1: Statement of Changes in Net assets:**

Particulars	DOA 01/07/2017	Changes	Balance Sheet 31/03/2018
		<b>Profit &amp; Loss</b>	
Equity share Capital	4,00,000	-	4,00,000
Profit & Loss	1,40,000	95,000	2,35,000
General Reserve	65,000	-	65,000
(+/-) Dividend Paid	-	40,000	
<b>Normal Profits</b>	<b>6,05,000</b>	<b>1,35,000</b>	
(+/-) Time Adjustments for 3 months	33,750	(33,750)	
	<b>6,38,750</b>	<b>1,01,250</b>	
	100% Net Assets as on Date of Acquisition	85% - Holding- 86,063 15% -NCI- 15,187	

**Working Note – 2: Non - Controlling Interest:**

Particulars	Amount
Non-Controlling Interest on DOA (6,38,750 x 15%)	95,813
(+) Post Acquisition Profit	15,187
(-) Dividend already Received	(6,000)
<b>Non-Controlling Interest on 31/03/2018</b>	<b>1,05,000</b>

**Working Note – 3: Cost of Control:**

Particulars	Amount
Investment (Purchase Consideration)	8,00,000
(+) Non-Controlling Interest	95,813
(-) 100% Net Assets	(6,38,750)
<b>Goodwill</b>	<b>2,57,063</b>

**Working Note – 4: Consolidated Other Equity:**

Particulars	General Reserve	Profit & Loss
Balance with Holding Company	1,50,000	6,00,000
(+) Post Acquisition Share	-	86,063
(-) Dividend already to P/L Account in SFS	-	(34,000)
	<b>1,50,000</b>	<b>6,52,063</b>

**CONSOLIDATED BALANCE SHEET OF PARENT**

Particulars	Amount
Property, Plant & Equipment (8,00,000 + 6,00,000)	14,00,000
Goodwill	2,57,063

Other Assets (4,00,000 + 2,00,000)	6,00,000
	<b>22,57,063</b>
Share Capital	10,00,000
Other Equity (WN - 4)	8,02,063
Non-Controlling Interest (WN - 2)	1,05,000
Liabilities (2,50,000 + 1,00,000)	3,50,000
	<b>22,57,063</b>

**CONSOLIDATED STATEMENT OF PROFIT & LOSS OF GROUP**

Particulars	Amount
Revenue from Operations (12,50,000 + (7,50,000 x 9/12))	18,12,500
Other Income (dividend)	
Holding - 34,000	
(-) Inter Company Elimination - 34,000	
<b>(A)</b>	<b>18,12,500</b>
Expenses	
Holding	8,40,000
Subsidiary (6,15,000 x 9/12)	4,61,250
<b>(B)</b>	<b>13,01,250</b>
Profit (A - B)	5,11,250
(-) Dividend distributed and paid by subsidiary	
Subsidiary - 40,000	.
Inter - company eliminations - (34,000)	(6,000)
<b>Total Profit</b>	<b>5,05,250</b>
(A) Profit Attributable to Owners of Parent (4,10,000 + 86,063)	4,96,063
(A) Profit Attributable to NCI of Parent (15,187 - 6,000)	9,187

**Question 114 (ICAI Module):**

ABC Ltd. acquires XYZ Ltd. in a business combination on 15th January, 20X1. Few days before the date of acquisition, one of XYZ Ltd.'s customers had claimed that certain amounts were due by XYZ Ltd. under penalty clauses for completion delays included in the contract.

ABC Ltd. evaluates the dispute based on the information available at the date of acquisition and concludes that XYZ Ltd. was responsible for at least some of the delays in completing the contract. Based on the evaluation, ABC Ltd. recognizes Rs. 1 crore towards this liability which is its best estimate of the fair value of the liability to the customer based on the information available at the date of acquisition.

In October, 20X1 (within the measurement period), the customer presents additional information as per which ABC Ltd. concludes the fair value of liability on the date of acquisition to be Rs. 2 crore.

ABC Ltd. continues to receive and evaluate information related to the claim after October, 20X1. Its evaluation doesn't change till February, 20X2 (i.e. after the measurement period), when it concludes that the fair value of the liability for the claim at the date of acquisition is Rs. 1.9 crore. ABC Ltd. determines that the amount that would be recognized with respect to the claim under Ind AS 37, Provisions, Contingent Liabilities and Contingent Assets as at February, 20X2 is Rs. 2.2 crore.

How should the adjustment to the provisional amounts be made in the financial statements during and after the measurement period?

**SOLUTION:**

The consolidated financial statements of ABC Ltd. for the year ended 31st March, 20X1 should include Rs. 1 crore towards the contingent liability in relation to the customer claim. When the customer presents additional information in support of its claim, the incremental liability of Rs. 1 crore (Rs. 2 crore – Rs. 1 crore) will be adjusted as a part of acquisition accounting as it is within the measurement period. In its financial statements for the year ending on 31st March, 20X2, ABC Ltd. will disclose the amounts and explanations of the adjustments to the provisional values recognized during the current reporting period. Therefore, it will disclose that the comparative information for the year ending on 31st March, 20X1 is adjusted retrospectively to increase the fair value of the item of liability at the acquisition date by Rs. 1 crore, resulting in a corresponding increase in goodwill.

The information resulting in the decrease in the estimated fair value of the liability for the claim in February, 20X2 was obtained after the measurement period. Accordingly, the decrease is not recognized as an adjustment to the acquisition accounting. If the amount determined in accordance with Ind AS 37 subsequently exceeds the previous estimate of the fair value of the liability, then ABC Ltd. recognizes an increase in the liability. As the change has occurred after the end of the measurement period, the increase in the liability amounting to Rs. 20 lakh (Rs. 2.2 crore – Rs. 2 crore) is recognized in profit or loss

**Question 115: (July21 EXAM & Nov19 EXAM & RTP May19)**

As part of its business expansion strategy, KK Ltd. is in process of setting up a pharma intermediates business which is at very initial stage. For this purpose, KK Ltd. has acquired on 1st April, 20X1, 100% shares of ABR Ltd. that manufactures pharma intermediates. The purchase consideration for the same was by way of a share exchange valued at ₹ 35 crores. The fair value of ABR Ltd.'s net assets was ₹ 15 crores, but does not include:

- i) A patent owned by ABR Ltd. for an established successful intermediate drug that has a remaining life of 8 years. A consultant has estimated the value of this patent to be ₹ 10 crores. However, the outcome of clinical trials for the same are awaited. If the trials are successful, the value of the drug would fetch the estimated ₹15 crores.
- ii) ABR Ltd. has developed and patented a new drug which has been approved for clinical use. The cost of developing the drug was ₹12 crores. Based on early assessment of its sales success, the valuer has estimated its market value at ₹20 crores.
- iii) ABR Ltd.'s manufacturing facilities have received a favorable inspection by a government department. As a result of this, the Company has been granted an exclusive five-year license to manufacture and distribute a new vaccine. Although the license has no direct cost to the Company, its directors believe that obtaining the license is a valuable asset which assures guaranteed sales and the value for the same is estimated at ₹10 crores.

KK Ltd. has requested you to suggest the accounting treatment of the above transaction under applicable Ind AS.

**SOLUTION:**

As per para 13 of Ind AS 103 'Business Combination', the acquirer's application of the recognition principle and conditions may result in recognising some assets and liabilities that the acquiree had not previously recognized as assets and liabilities in its financial statements. This may be the case when the asset is developed by the entity internally and charged the related costs to expense.

Based on the above, the company can recognize following Intangible assets while determining Goodwill / Bargain Purchase for the transaction:

- i) **Patent owned by ABR Ltd.:** The patent owned will be recognized at fair value by KK Ltd. Even though it was not recognized by ABR Ltd. in its financial statements. The patent will be amortized over the remaining useful life of the asset i.e. 8 years. Since the company is awaiting the outcome of the trials, the value of the patent cannot be estimated at Rs. 15 crore and the extra Rs. 5 crore should only be disclosed as a Contingent Asset and not recognized.
- ii) **Patent internally developed by ABR Ltd.:** As per para 18 of Ind AS 103 'Business Combination', the acquirer shall measure the identifiable assets acquired and the liabilities assumed at their acquisition date fair values. Since the patent developed has been approved for clinical use, it is an identifiable asset, hence the same will be measured at fair value i.e. Rs. 20 crore on the acquisition date.
- iii) **Grant of License to ABR Ltd. by the Government:** As regards to the five-year license, applying para 18 of Ind AS 103, grant asset will be recognized at fair value on the acquisition date by KK Ltd. On acquisition date, the fair value of the license is Rs. 10 crore. However, since the question does not mention about the fair value of the identifiable liability with respect to grant of license for the acquirer, it is assumed that no conditions with respect to compliance of grant (if any) have been passed to the acquirer. Hence, the fair value of the liability with respect to grant, for acquirer would be nil. Only, the grant asset (license) would be recognized at Rs. 10 crore in the books of acquirer KK Ltd.

Hence the revised working would be as follows:

	₹
Fair value of net assets of ABR Ltd.	15 Crore
Add: Patent (10 + 20)	30 Crore
Add: License	10 Crore
Less: Grant for License	(Nil)

	55 Crores
Purchase Consideration	(35 Crores)
<b>Bargain purchase</b>	<b>20 Crores</b>

**Question 116:**

P Ltd. acquired 30% shares in S Ltd. for Rs. 3,50,000 on 1/04/2017, thereafter purchased another lot of 40% shares in S Ltd. for Rs. 5,25,000 on 1/10/2017. Followings are the Balance Sheets of P and S as on 31/03/2018:



Particulars	Parent Ltd.	Subsidiary Ltd.
PPE	15,00,000	9,00,000
Investments in S Ltd.	8,75,000	-
Other Assets	6,25,000	6,00,000
Share Capital	12,00,000	8,00,000
Other Equity	10,00,000	3,50,000
Liabilities	8,00,000	3,50,000

- At the time of acquiring control, NCI was calculated at Fair Value based on the shares acquired by P on that date.
- Fair value of previous equity investment of P on 30/09/2017 is to be calculated with reference to the transaction value of purchase of 2<sup>nd</sup> lot.
- Subsidiary co. paid dividend on 15/12/18 for the year 16-17 Rs. 80000.
- Abnormal loss on 21/08/2017 was Rs. 25000 in subsidiary co.

**Statement of Profit and Loss for the year ending 31/03/2018 of P and S**

Particulars	Parent Ltd.	Subsidiary Ltd.
<b>Incomes</b>		
Revenue from Operation	18,00,000	10,00,000
Dividend Received	56,000	-
<b>Expenses (including abnormal loss)</b>	12,00,000	8,50,000
Net Profits/ Total Comprehensive Income	6,56,000	1,50,000

**Statement of Changes in Equity are as under:****Parent Ltd.**

Particulars	General Reserve	Profit and Loss a/c	Total
Opening Balances as on 1/04/2017	3,00,000	44,000	3,44,000
Total Comprehensive Income during the year	-	6,56,000	6,56,000
<b>Closing Balances as on 31/03/2018</b>	<b>3,44,000</b>	<b>6,56,000</b>	<b>10,00,000</b>

**Subsidiary Ltd.**

Particulars	General Reserve	Profit and Loss a/c	Total
Opening Balances as on 1/04/2017	2,30,000	50,000	2,80,000
Total Comprehensive Income during the year	-	1,50,000	1,50,000
Dividend Paid	-	{80000}	(80000)
<b>Closing Balances as on 31/03/2018</b>	<b>2,30,000</b>	<b>1,20,000</b>	<b>3,50,000</b>

From the above information, prepare Consolidated Financial Statements (BS & SPL)

**SOLUTION:**

- NCI (FV) = 3,93,750
- FV of Previous Investment = 3,93,750  
FV Gain = 3,93,750 - 3,50,000 = 43,750
- Dividend Paid = 80,000  
Profit & Loss A/c - 56,000  
NCI - 24,000

**Consolidated Statement of P&L**

Revenue from operation	18,00,000	23,00,000
	5,00,000	
Other income (Dividend)	56,000	Nil

(-) Inter Co.	(56,000)	
		<b>23,00,000</b>
Expenses		16,12,500
P	12,00,000	
S	4,12,500	
<b>Net Profit</b>		<b>6,87,500</b>
Net Profit Attributable to NCI		26,250
NP attributable to SH of Parent		6,43,750
		<b>6,62,500</b>

Net NCI = 26,250  
 (-) Dividend = 24,000  
 = **2,250**

**W.N. 1: -****NCI: -**

NCI as on DOA (FV)	3,93,750
+ Post Acquisition share	26,250
(-) Dividend Paid	(24,000)
	<b>3,96,000</b>

**W.N.2: -****Cost of Control: -**

FV of 40% Consideration	5,25,0000
FV of 30% Investment	3,93,750
+ NCI 30% as on DOA	3,93,750
(-) 100% Net Assets	(11,42,500)
<b>Goodwill</b>	<b>1,70,000</b>

**W.N. 3: -**

	<u>DOA</u>	<u>Changes</u>	<u>Balance Sheet</u>
ESC	8,00,000	-	8,00,000
Other Equity	2,80,000	70,000	3,50,000
+ Dividend	-	80,000	
	10,80,000	1,50,000	
+ Abnormal Loss	-	25,000	
	10,80,000	1,75,000	
+/- T. Adjustment (6 Months)	87,500	(87,500)	
	11,67,500	87,500	
(-) Abnormal Loss	(25,000)	-	
	11,42,500	87,500	
	<b>100% Net Assets</b>	<b>P – 61,250</b>	
		<b>NCI – 26,250</b>	

**(Hint: Cons. P&L of Grp 1049000; BS Total 3795000)**

**Question 117 (ICAI Module):**

On 1st April, 20X1, PQR Ltd. acquired 30% of the voting ordinary shares of XYZ Ltd. for Rs. 8,000 crore. PQR Ltd. accounts its investment in XYZ Ltd. using equity method as prescribed under Ind AS 28. At 31st March, 20X2, PQR Ltd. recognized its share of the net asset changes of XYZ Ltd. using equity accounting as follows:

	<b>(Rs. in crore)</b>
Share of profit or loss	700
Share of exchange difference in OCI	100
Share of revaluation reserve of PPE in OCI	50



The carrying amount of the investment in the associate on 31st March, 20X2 was therefore Rs. 8,850 crore (8,000 + 700 + 100 + 50).

On 1st April, 20X2, PQR Ltd. acquired the remaining 70% of XYZ Ltd. for cash Rs. 25,000 crore. The following additional information is relevant at that date:

	(Rs. in crore)
Fair value of the 30% interest already owned	9,000
Fair value of XYZ's identifiable net assets	30,000

How should such business combination be accounted for?

### SOLUTION:

Paragraph 42 of Ind AS 103 provides that in a business combination achieved in stages, the acquirer shall remeasure its previously held equity interest in the acquiree at its acquisition-date fair value and recognize the resulting gain or loss, if any, in statement of profit and loss or other comprehensive income, as appropriate. In prior reporting periods, the acquirer may have recognized changes in the value of its equity interest in the acquiree in other comprehensive income. If so, the amount that was recognized in other comprehensive income shall be recognized on the same basis as would be required if the acquirer had disposed directly of the previously held equity interest.

Applying the above, PQR Ltd. records the following entry in its consolidated financial statements

		(Rs. in crore)	
		Debit	Credit
Identifiable net assets of XYZ Ltd.	Dr.	30,000	
Goodwill (W.N.1)	Dr.	4,000	
Foreign currency translation reserve	Dr.	100	
PPE revaluation reserve	Dr.	50	
To Cash			25,000
To Investment in associate -XYZ Ltd.			8,850
To Retained earnings (W.N.2)			50
To Gain on previously held interest in XYZ recognized in P or l (W.N.3)			250
Recognize acquisition of XYZ Ltd.)			

### Working Notes:

#### 1. Calculation of Goodwill

	(Rs. in crore)
Cash consideration	25,000
Add: Fair value of previously held equity interest in XYZ Ltd.	9,000
Total consideration	34,000
Less: Fair value of identifiable net assets acquired	(30,000)
Goodwill	4,000

2. The credit to retained earnings represents the reversal of the unrealized gain of Rs. 50 crore in Other Comprehensive Income related to the revaluation of property, plant and equipment. In accordance with Ind AS 16, this amount is not reclassified to profit or loss.

3. The gain on the previously held equity interest in XYZ Ltd. is calculated as follows:

	(Rs. in crore)
Fair Value of 30% interest in XYZ Ltd. at 1st April, 20X2	9,000
Carrying amount of interest in XYZ Ltd. at 1st April, 20X2	(8,850)
	150
Unrealised gain previously recognized in OCI	100
Gain on previously held interest in XYZ Ltd. recognized in profit or loss	250

**Question 118: (RTP Nov19 & MTP March19)**

H Ltd. acquired equity shares of S Ltd., a listed company, in two tranches as mentioned in the below table

Date	Equity stake purchased	Remarks
1st November, 2016	15%	The shares were purchased based on the quoted price on the stock exchange on the relevant dates.
1st January, 2017	45%	

Both the above-mentioned companies have INR as their functional currency. Consequently, H Ltd. acquired control over S Ltd. on 1st January, 2017. Following is the Balance Sheet of S Ltd. as on that date

Particulars	Carrying value (Rs. in crore)	Fair value (Rs. in crore)
<b>ASSETS:</b>		
<b>Non-current assets</b>	40.0	90.0
(a) Property, plant and equipment	20.0	30.0
(b) Intangible assets	100.0	350.0
(c) Financial assets		
- Investments		
<b>Current assets</b>		
(a) Inventories	20.0	20.0
(b) Financial assets		
- Trade receivables	20.0	20.0
- Cash held in functional currency	4.0	4.5
(c) Other current assets		
Non-current asset held for sale	4.0	4.5
<b>TOTAL ASSETS</b>		
<b>EQUITY AND LIABILITIES:</b>		
<b>Equity</b>		
(a) Share capital (face value Rs.100)	12.0	50.4
(b) Other equity	141.0	Not applicable
<b>Non-current liabilities</b>		
(a) Financial liabilities		
- Borrowings	20.0	20.0
<b>Current liabilities</b>		
(a) Financial liabilities	28.0	28.0
- Trade payables		
(b) Provision for warranties	3.0	3.0
(c) Current tax liabilities	4.0	4.0
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>208.0</b>	

**Other information:**

Following is the statement of contingent liabilities of S Ltd. as on 1st January, 2017:

Particulars	Fair value (Rs. in crore)	Remarks
Law suit filed by a customer for a claim of Rs. 2 crore	0.5	It is not probable that an outflow of resources embodying economic benefits will be required to settle the claim. Any amount which would be paid in respect of law suit will be tax deductible.
Income tax demand of Rs. 7 crore raised by tax authorities; S Ltd. has challenged the demand in the court.	2.0	It is not probable that an outflow of resources embodying economic benefits will be required to settle the claim.

In relation to the above-mentioned contingent liabilities, S Ltd. has given an indemnification undertaking to H Ltd. up to a maximum of Rs. 1 crore.

Rs. 1 crore represents the acquisition date fair value of the indemnification undertaking.

Any amount which would be received in respect of the above undertaking shall not be taxable.

The tax bases of the assets and liabilities of S Ltd. is equal to their respective carrying values being recognized in its Balance Sheet.

Carrying value of non-current asset held for sale of Rs. 4 crore represents its fair value less cost to sell in accordance with the relevant Ind AS.

In consideration of the additional stake purchased by H Ltd. on 1st January, 2017, it has issued to the selling shareholders of S Ltd. 1 equity share of H Ltd. for every 2 shares held in S Ltd. Fair value of equity shares of H Ltd. as on 1st January, 2017 is Rs. 10,000 per share.

On 1st January, 2017, H Ltd. has paid Rs. 50 crore in cash to the selling shareholders of S Ltd. Additionally, on 31st March, 2019, H Ltd. will pay Rs. 30 crore to the selling shareholders of S Ltd. if return on equity of S Ltd. for the year ended 31st March, 2019 is more than 25% per annum. H Ltd. has estimated the fair value of this obligation as on 1st January, 2017 and 31st March, 2017 as Rs. 22 crore and Rs. 23 crore respectively. The change in fair value of the obligation is attributable to the change in facts and circumstances after the acquisition date.

Quoted price of equity shares of S Ltd. as on various dates is as follows:

As on November, 2016	Rs. 350 per share
As on 1st January, 2017	Rs. 395 per share
As on 31st March, 2017	Rs. 420 per share

On 31st May, 2017, H Ltd. learned that certain customer relationships existing as on 1st January, 2017, which met the recognition criteria of an intangible asset as on that date, were not considered during the accounting of business combination for the year ended 31st March, 2017. The fair value of such customer relationships as on 1st January, 2017 was Rs. 3.5 crore (assume that there are no temporary differences associated with customer relations; consequently, there is no impact of income taxes on customer relations).

On 31st May, 2017 itself, H Ltd. further learned that due to additional customer relationships being developed during the period 1st January, 2017 to 31st March, 2017, the fair value of such customer relationships has increased to Rs. 4 crore as on 31st March, 2017.

On 31st December, 2017, H Ltd. has established that it has obtained all the information necessary for the accounting of the business combination and that more information is not obtainable.

H Ltd. and S Ltd. are not related parties and follow Ind AS for financial reporting. Income tax rate applicable is 30%.

You are required to provide your detailed responses to the following, along with reasoning and computation notes:

- What should be the goodwill or bargain purchase gain to be recognized by H Ltd. in its financial statements for the year ended 31st March, 2017. For this purpose, measure non-controlling interest using proportionate share of the fair value of the identifiable net assets of S Ltd.
- Will the amount of non-controlling interest, goodwill, or bargain purchase gain so recognized in (a) above change subsequent to 31st March, 2017? If yes, provide relevant journal entries.

What should be the accounting treatment of the contingent consideration as on 31st March, 2017?

### **SOLUTION:**

- The requirements in Ind AS 37 'Provisions, Contingent Liabilities and Contingent Assets', do not apply in determining which contingent liabilities to recognize as of the acquisition date as per Ind AS 103 'Business Combination'. Instead, the acquirer shall recognize as of the acquisition date a contingent liability assumed in a business combination if it is a present obligation that arises from past events and its fair value can be measured reliably. Therefore, contrary to Ind AS 37, the acquirer recognizes a contingent liability assumed in a business combination at the acquisition date even if it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation. Hence H Ltd. will recognize contingent liability of Rs. 2.5 cr.

Since S Ltd. has indemnified for Rs. 1 cr., H Ltd. shall recognize an indemnification asset at the same time for Rs. 1 cr.

As per the information given in the question, this indemnified asset is not taxable. Hence, its tax base will be equal to its carrying amount. No deferred tax will arise on it.

- (ii) As per Ind AS 103, non-current assets held for sale should be measured at fair value less cost to sell in accordance with Ind AS 105 'Non-current Assets Held for Sale and Discontinued Operations'. Therefore, its carrying value as per balance sheet has been considered in the calculation of net assets.
- (iii) Any equity interest in S Ltd. held by H Ltd. immediately before obtaining control over S Ltd. is adjusted to acquisition-date fair value. Any resulting gain or loss is recognized in the profit or loss of H Ltd.

Calculation of purchase consideration as per Ind AS 103

Rs. in lakh

Investment in S Ltd.			
On 1st Nov. 2016	15%	$[(12/100) \times 395 \times 15\%]$	7.11
On 1st Jan. 2017	45%	$10,000 \times 12\% \times 45\% \times 1/2$	270
Own equity given			50
Cash			22
Contingent consideration			<b>349.11</b>

- (iv) Calculation of defer tax on assets and liabilities acquired as part of the business combination, including current tax and goodwill

Item	Rs. in crore				
	Book value	Fair value	Tax base	Taxable (deductible) temporary difference	Deferred tax assets (liability) @ 30%
Property, plant and equipment	40	90	40	50	(15)
Intangible assets	20	30	20	10	(3)
Investments	100	350	100	250	(75)
Inventories	20	20	20	-	-
Trade receivables	20	20	20	-	-
Cash held in functional currency	4	4	4	-	-
Non-current asset held for sale	4	4	4	-	-
Indemnified asset	-	1	1	-	-
Borrowings	20	20	20	-	-
Trade payables	28	28	28	-	-
Provision for warranties	3	3	3	-	-
Current tax liabilities	4	4	4	-	-
Contingent liability		0.5	-	(0.5)	0.15
<b>Deferred tax Liability</b>					<b>(92.85)</b>

- (v) Calculation of identifiable net assets acquired

	Rs. in crore	
Property, plant and equipment	90	
Intangible assets	30	
Investments	350	
Inventories	20	
Trade receivables	20	
Cash held in functional currency	4	
Non-current asset held for sale	4	
Indemnified asset	1	
Total asset		519
Less: Borrowings		
Trade payables	20	
Provision for warranties	28	
Current tax liabilities	3	
Contingent liability (2 + 0.5)	4	
Deferred tax liability (W.N.2)	2.50	
Net identifiable assets	92.85	(150.35)
		<b>368.65</b>

- (a) Calculation of NCI by proportionate share of net assets

Net identifiable assets of S Ltd. on 1.1.2017 (Refer W.N.3) = 372.85 crore

NCI on 1.1.2017 = 368.65 crore x 40% = 147.46 crore

**Calculation of Goodwill as per Ind AS 103**

$$\begin{aligned} \text{Goodwill on 1.1.2017} &= \text{Purchase consideration} + \text{NCI} - \text{Net assets} \\ &= 349.11 + 147.46 - 368.65 \\ &= 127.92 \text{ crore} \end{aligned}$$

- (b)** As per para 45 of Ind AS 103 'Business Combination', if the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the acquirer shall report in its financial statements provisional amounts for the items for which the accounting is incomplete.

During the measurement period, the acquirer shall retrospectively adjust the provisional amounts recognized at the acquisition date to reflect new information obtained about facts and circumstances that existed as of the acquisition date and, if known, would have affected the measurement of the amounts recognized as of that date.

During the measurement period, the acquirer shall also recognize additional assets or liabilities if new information is obtained about facts and circumstances that existed as of the acquisition date and, if known, would have resulted in the recognition of those assets and liabilities as of that date.

The measurement period ends as soon as the acquirer receives the information it was seeking about facts and circumstances that existed as of the acquisition date or learns that more information is not obtainable. However, the measurement period shall not exceed one year from the acquisition date.

Further, as per para 46 of Ind AS 103, the measurement period is the period after the acquisition date during which the acquirer may adjust the provisional amounts recognized for a business combination. The measurement period provides the acquirer with a reasonable time to obtain the information necessary to identify and measure the following as of the acquisition date in accordance with the requirements of this Ind AS:

- (a)** the identifiable assets acquired, liabilities assumed and any non-controlling interest in the acquiree;
- (b)** .....
- (c)** .....; and
- (d)** The resulting goodwill or gain on a bargain purchase.

Para 48 states that the acquirer recognizes an increase (decrease) in the provisional amount recognized for an identifiable asset (liability) by means of a decrease (increase) in goodwill.

Para 49 states that during the measurement period, the acquirer shall recognize adjustments to the provisional amounts as if the accounting for the business combination had been completed at the acquisition date.

Para 50 states that after the measurement period ends, the acquirer shall revise the accounting for a business combination only to correct an error in accordance with Ind AS 8 'Accounting Policies, Changes in Accounting Estimates and Errors'.

On 31st December, 2017, H Ltd. has established that it has obtained all the information necessary for the accounting of the business combination and the more information is not obtainable. Therefore, the measurement period for acquisition of S Ltd. ends on 31st December, 2017.

On 31st May, 2017 (i.e. within the measurement period), H Ltd. learned that certain customer relationships existing as on 1st January, 2017 which met the recognition criteria of an intangible asset as on that date were not considered during the accounting of business combination for the year ended 31st March, 2017. Therefore, H Ltd. shall account for the acquisition date fair value of customer relations existing on 1st January, 2017 as an identifiable intangible asset. The corresponding adjustment shall be made in the amount of goodwill.

Accordingly, the amount of goodwill will be changed due to identification of new asset from retrospective date for changes in fair value of assets and liabilities earlier recognized on provisional amount (subject to meeting the condition above for measurement period). NCI changes would impact the consolidated retained earnings (parent's share). Also NCI will be increased or decreased based on the profit during the post-acquisition period.

Journal entry

Customer relationship	Dr.	3.5 crore	
To NCI			1.4 crore
To Goodwill			2.1 crore



However, the increase in the value of customer relations after the acquisition date shall not be accounted by H Ltd., as the customer relations developed after 1st January, 2017 represents internally generated intangible assets which are not eligible for recognition on the balance sheet

- (c) Since the contingent considerations payable by H Ltd is not classified as equity and is within the scope of Ind AS 109 Financial Instruments, the changes in the fair value shall be recognized in profit or loss. Change in Fair value of contingent consideration (23-22) Rs. 1 crore will be recognized in the Statement of Profit and Loss.

### Question 119 (ICAI Module):

A Ltd. (which is involved in the business of selling capital equipment) a parent company sold a capital equipment costing ₹100 lakh to its 80% subsidiary B Ltd. At ₹120 lakh. The capital equipment is recorded as PPE by B Ltd. The useful life of the PPE on the date of transfer was 10 years. Show the necessary adjustment in the consolidated financial statements (CFS).



#### SOLUTION:

A Ltd. shall reduce the value of PPE of ₹120 lakh of B Ltd., by ₹20 lakh in CFS This will increase expenses and reduce consolidated profit by ₹20 lakh. Further, A Ltd. should also reduce the depreciation charge of B Ltd. to the extent of value of PPE reduced as above. Hence, A Ltd. should reduce the depreciation by ₹2 lakh (₹20 lakh ÷ 10 years). Further, the sales and cost of goods sold recorded by parent A Ltd. shall also be eliminated.

The double entry on consolidation is as follows:

		₹in lakhs	
		Dr.	Cr.
Consolidated revenue	Dr.	120	
To Cost of sales			100
To PPE			18
To Depreciation			2

#### Alternative Journal Entry for above transaction based on BS approach:

		₹in lakhs	
		Dr.	Cr.
Consolidated P&L of A Ltd.	Dr.	20	
To PPE A/c			18
To Consolidated P&L of A Ltd. A/c			1.6
To NCI A/c			0.4

### Question 120:

The Balance Sheets of three companies Sun Ltd., Moon Ltd. and Light Ltd. as at 31st March, 2018 are given below:

	Sun Ltd.	Moon Ltd.	Light Ltd.
<b>Equity &amp; Liabilities:</b>			
<b>Shareholder Funds:</b>			
Share Capital (of Rs.10 each)	1,50,000	1,00,000	60,000
Reserves	50,000	40,000	30,000
Profit and Loss A/c	60,000	50,000	40,000
<b>Current Liabilities:</b>			
Sundry Creditors	30,000	35,000	25,000
Sun Ltd.	-	10,000	8,000
	<b>2,90,000</b>	<b>2,35,000</b>	<b>1,63,000</b>
<b>Assets:</b>			
<b>Non-Current Assets:</b>			
Fixed Assets	70,000	1,20,000	1,03,000
Investments (at Cost)			
Shares in Moon Ltd.	90,000	-	-
Shares in Light Ltd.	40,000	-	-
Shares in Light Ltd.	-	50,000	-
<b>Current Assets:</b>			

Stock-in-Trade	40,000	30,000	20,000
Debtors	20,000	25,000	30,000
Due from Moon Ltd.	12000	-	-
Due from Light Ltd.	8,000	-	-
Cash in Hand	10,000	10,000	10,000
	<b>2,90,000</b>	<b>2,35,000</b>	<b>1,63,000</b>

(a) Sun Ltd. held 8,000 shares of Moon Ltd. and 1,800 shares of Light Ltd.

(b) Moon Ltd. held 3,600 shares of Light Ltd.

(c) All investments were made on 1st July, 2017.

(d) The following balances were there on 1st July, 2017:

	<b>Moon Ltd.</b>	<b>Light Ltd.</b>
Reserves	25,000	15,000
Profit and Loss A/c	20,000	25,000

(e) Moon Ltd. invoiced goods to Sun Ltd. for Rs. 40,000 as cost plus 25% in December, 2017. The Closing stock of Sun Ltd. includes such goods valued at Rs. 5,000

Prepare the Consolidated Balance Sheet of the group as at 31<sup>st</sup> March, 2018. Working should be part of the answer.

### SOLUTION:

Sun Ltd. hold 8% in Moon Ltd.

Moon Ltd. hold 60% in Light Ltd.

Sun Ltd. hold 30% in Light Ltd.

### Working Note - 1:

a) Sun to Moon:

Sun's Share in Moon	80%
NCI in Moon	20%

B) Sun to Light

Sun's Share in Light (60% x 80%) + 30%	= 78%
NCI in Light	= 22%

### Working Note - 2:

#### Statement of Changes in Net assets:

Particulars	DOA	Changes		Balance Sheet
		Profit & Loss	General Reserve	
Equity share Capital	1,00,000	-	-	1,00,000
Profit & Loss	20,000	30,000	-	50,000
General Reserve	25,000	-	15,000	40,000
(-) Eliminate	-	(1,000)	-	-
	<b>1,45,000</b>	<b>29,000</b>	<b>15,000</b>	
	100% Net Assets as on Date of Acquisition	80% - Holding- 23,200 20% -NCI- 5,800	80% - Holding- 12,000 20% -NCI- 3,000	

### Moon Limited:

Particulars	DOA	Changes		Balance Sheet
		Profit & Loss	General Reserve	
Equity share Capital	60,000	-	-	60,000
Profit & Loss	25,000	15,000	-	40,000
General Reserve	15,000	-	15,000	30,000
	-	(1,000)	-	-

	1,00,000	15,000	15,000	15,000
	100% Net Assets as on Date of Acquisition	78% - Holding- 11,700 22% -NCI- 3,300	78% - Holding- 11,700 22% -NCI- 3,300	

**Working Note – 3:****Cost of Control:**

Particulars	For Moon	For Light
Investment by Sun in Moon	90,000	-
Investment by Sun in Light (Direct) (30%)	-	40,000
Investment by Sun in Light (Indirect) (50,000 x 80%)	-	40,000
	90,000	80,000
(+) Non-Controlling Interest :	-	-
(1,45,000 x 20%) in Moon @ 20%	29,000	-
(1,00,000 x 22%) in Light @ 22%	-	22,000
(-) 100% Met Assets	(1,45,000)	(1,00,000)
<b>Goodwill / (Gain from Bargain Purchase)</b>	<b>(26,000)</b>	<b>2,000</b>

**Working Note – 4:****Calculation of Non-Controlling Interest:**

Particulars	For Moon	For Light
NCI on DOA	29,000	22,000
(+) Post Acquisition share	8,800	6,600
	37,800	28,600
<b>(-) Investment held by NCI in Moon</b>	<b>(10,000)</b>	-

**Working Note – 5:****Consolidated other Equity:**

Particulars	Profit & Loss	General Reserve	Other Income Reserve	Comprehensive / Capital
Balance of Sun limited	60,000	50,000	-	
(+) Post Acquisition share	-	-	-	
From Moon	23,200	12,000	-	
From Light	11,700	11,700	-	
Gain from Bargain Purchase	-	-	26,000	
<b>Total</b>	<b>94,900</b>	<b>73,700</b>	<b>26,000</b>	

Total Other Equity = 1,94,600

Particulars	Amount
Fixed Assets	2,93,000
Goodwill	2,000
Stock (40,000 + 30,000 + 20,000 - 1,000)	89,000
Debtors	75,000
Cash in hand	30,000
Cash in Transit	2,000
	<b>4,91,000</b>
Equity share Capital	1,50,000
Consolidated Other Equity	1,94,600
Non-Controlling Interest	-
Moon (37,800 - 10,000)	= 27,800
Light (Remaining Share in Net Assets of Moon)	= 28,600
Equity share Capital	90,000
	<b>4,91,000</b>

**Question 121 (ICAI Module):**

How will the financial statement of the prior periods be restated under common control in the following scenarios:

**a) Common Control period extends beyond the start of comparative period**

XYZ Ltd acquired PQR Ltd in a common control transaction on 1 October 20X9. The year-end of XYZ Ltd is 31 March. Both XYZ Ltd and PQR Ltd have been controlled by shareholders since their incorporation.

**b) Common Control period started in the comparative period**

ABC Ltd acquired DEF Ltd in a common control transaction on 1 October 20X9. The year-end of ABC Ltd is 31 March. Both ABC Ltd and DEF Ltd are controlled by shareholder A. A made investment in ABC Ltd in 20X0 and made investment in DEF Ltd on 1 October 20X8.

**Solution:**

Paragraph 9(iii) of Appendix C to Ind AS 103 states that the financial information in the financial statements in respect of prior periods should be restated as if the business combination had occurred from the beginning of the preceding period in the financial statements, irrespective of the actual date of the combination. However, if business combination had occurred after that date, the prior period information shall be restated only from that date.

- a) In accordance with Paragraph 9(iii) above, the entity will be required to restate its financial statements as if the business combination had occurred from the beginning of the preceding period in the financial statements, accordingly in the present case XYZ Ltd will have to restate its comparatives for the financial year 20X8-20X9 as if the acquisition had occurred before 1 April 20X8. Additionally, the results of current year of PQR Ltd will be required to include XYZ's financial statements for the period from 1 April 20X9 to 30 September 20X9.
- b) In accordance with paragraph 9(iii) above, ABC Ltd will have to restate its comparatives for the financial year ended 20X8-20X9 as if the acquisition had occurred on 1 October 20X8, but not earlier. Additionally, the results of current year of will be required to include the financial statements of ABC Ltd for the period from 1 April 20X9 to 1 October 20X9.

**Question 122: (Dec21 EXAM & MTP Oct18)**

AX Ltd. and BX Ltd. amalgamated on and from 1<sup>st</sup> January 20X2. A new Company ABX Ltd. was found to take over the businesses of the existing companies.

**Summarized Balance Sheet as on 31-12-20X2**

INR in '000

Assets	AX Ltd.	BX Ltd.
<b>Non-current assets</b>		
Property, Plant and Equipment	8500	7500
Financial assets		
Investments	1050	550
<b>Current assets</b>		
Inventory	1250	2750
Trade receivable	1800	4000
Cash and Cash equivalent	450	400
	13050	15200
<b>Equity and Liabilities</b>		
<b>Equity</b>		
Equity share capital (of face value of INR 10 each)	6000	7000
Other Liabilities	3050	2700
<b>Liabilities</b>		
<b>Non-current liabilities</b>		
Financial liabilities		
Borrowings	3000	4000
<b>Current Liabilities</b>		
Trade payable	1000	1500
	13050	15200

ABX Ltd. issued requisite number of shares to discharge the claims of the equity shareholders of the transferor companies.

Prepare a note showing purchase consideration and discharge thereof and draft the Balance Sheet of ABX Ltd:

(a) Assuming that both the entities are under common control

(b) Assuming BX Ltd is a larger entity and their management will take the control of the entity. The fair value of net assets of AX and BX limited are as follows;

Assets	AX Ltd. ('0000)	BX Ltd. ('000)
Fixed assets	9500	1000
Inventory	1300	2900
Fair value of the business	11000	14000

## SOLUTION

(a) (Assumption: Common control transaction)

### 1. Calculation of Purchase Consideration

		AX Ltd. (Rs. '000)		BX Ltd. (Rs. '000)
<b>Assets taken over:</b>				
Fixed assets		8500		
Investments		1050		
Inventory		1250		
Trade receivable		1800		
Cash & bank		450		
Gross Assets		13050		
Less: Liabilities				
12% Debenture	300		4000	
Trade payables	1000	(4000)	1500	(5500)
Net Assets taken over		9050		9700
Less: Reserve and surplus:				
General Reserve	1500		2000	
P & L A/c	1000		500	
Investment Allowance Reserve	500		100	
Export Profit Reserve	50	(3050)	100	(2700)
<b>Purchase Consideration</b>		<b>6000</b>		<b>7000</b>

Total Purchase Consideration- 13,000(6000 of AX Ltd. & 7000 of BX Ltd.)

### 2. Discharge of Purchase Consideration

**No. of shares to be issued to AX Ltd=**

Net assets taken over of AX Ltd/Net assets taken over of AX Ltd. and BX Ltd \* Purchase Consideration

**No. of shares to be issued to BX Ltd=**

Net assets taken over of AX Ltd/Net assets taken over of AX Ltd. and BX Ltd x Purchase Consideration

	AX Ltd. Rs '000	BX Ltd. Rs '000
13000*9050/18750=6,27,500 Equity shares of Rs 10 each	6275	
13000*9700/18750=6,27,500 Equity shares of Rs 10 each		6725

The total purchase consideration is to be discharged by ABX Ltd. in such a way that the rights of the shareholders of AX Ltd. and BX Ltd. remain unaltered in the future profit of ABX Ltd.

### Balance Sheet of ABX Ltd. as on 1.1.20X2

INR in '000

Assets	Note No.	Amount
<b>Non-current assets</b>		
Property, Plant and Equipment		16000
Financial assets		
Investments		1600



<b>Current assets</b>		
Inventory		4000
Trade receivable		5800
Cash and Cash equivalent		850
		28250
<b>Equity and Liabilities</b>		
<b>Equity</b>		
Equity share capital (of face value of INR 10 each)	1	13000
	2	5750
Other Liabilities		
<b>Liabilities</b>		
<b>Non-current liabilities</b>		
Financial liabilities		
Borrowings	3	7000
<b>Current Liabilities</b>		
Trade payable		2500
		28250

**Notes to Accounts**

		(Rs. 000)	Rs. 000)
<b>1</b>	<b>Share capital</b>		
	13,00,000 Equity Shares of Rs 10 each		13000
<b>2.</b>	<b>Reserve and surplus</b>		
	General Reserve (1500+2000)	3500	
	Profit & Loss (1000+500)	1500	
	Investment Allowance Reserve (500+100)	600	
	Export Profit Reserve (50+100)	150	5750
<b>3</b>	<b>Long term Borrowing</b>		
	12% debenture (Assumed that new debenture were issued in exchanged of the old series) (3000+4000)		7000

(b) **Assessment:** In this case BX Ltd. and AX Ltd. are not under common control and hence Ind AS 103 for business combination accounting will be applied. A question arises here is who is the accounting acquirer AXBCX Ltd which is issuing the share or AX Ltd. or BX Ltd. As per the accounting guidance provided in Ind AS 103 sometimes the legal acquirer may not be the accounting acquirer. In the given scenario although AX BX Ltd. is issuing the share but the BX Ltd. post-merger will have control and is bigger in size which is a clear indicator that BX Ltd. will be accounting acquirer. Accordingly, the following accounting steps has to be followed:

- ❖ BX Ltd. assets will be recorded at historical cost in the merged financial statements.
- ❖ Shares issued to the shareholders of BX Ltd. will be recorded at nominal value and the shares issued to the members of AX Ltd. will be recorded at the fair value of the business which is 11000.
- ❖ The above purchase price will be allocated to the assets and liabilities of AX Ltd. at fair value and the resultant amount will be recorded as goodwill.

**JUSTIFICATION FOR ABOVE STEPS -**

In the given scenario, although XY Ltd. is issuing the shares but Y Ltd. post-merger will have control and is bigger in size which is a clear indicator that Y Ltd. will be an accounting acquirer. This can be justified by the following table:

	(In '000s)	
	X Ltd.	Y Ltd.
Fair Value	11,000	14,000
Value per share	10	10
No. of shares	1,100	1,400
i.e. Total No. of shares in XY Ltd. = 2,500 thousand shares		
Thus, % Held by each Company in Combined Entity	44%	56%

**Note:** It is a case of Reverse Acquisition.

Accordingly, Y Ltd.'s assets will be recorded at historical cost in the merged financial statements.

**(1) Calculation of Purchase Consideration**

		AX Ltd. (RsRs.000)		BX Ltd. (RsRs.000)
Assets taken over:				
Fixed assets		9500		7500
Investment		1050		550
Inventory		1300		2750
Trade receivables		1800		4000
Cash & Bank		450		400
Goodwill		900		-
Gross Assets		15000		15200
Less: Liabilities				
12% Debentures	3000		4000	
Trade payables	1000	(4000)	1500	(5500)
Purchase consideration		11000		9700

**(2) Discharge of Purchase Consideration (PC):**

	AX Ltd. (Rs.000)	BX Ltd. (Rs.000)
Fair value of BX Ltd. business is 11000 and accordingly per share fair value is 20. Considering the above AXBX Ltd. will issue 5,50,000 shares as PC to the members of AX Ltd. 5,50,000 Equity shares of Rs 10 each at a premium of 10 each 7,00,000 Equity Shares of Rs 10 each	11,000	
		70,000

**Balance Sheet of ABX Ltd. as on 1.1.20X2**

INR in '000

Assets	Note No.	Amount
<b>Non-current assets</b>		
Goodwill		900
Property, Plant and Equipment (9500+7500)		17000
Financial assets		
Investments (1050+550)		1600
<b>Current assets</b>		
Inventory (1300+2750)		4050
Trade receivable (1800+4000)		5800
Cash and Cash equivalent (450+400)		850
		30200
<b>Equity and Liabilities</b>		
<b>Equity</b>	1	12500
Other Liabilities	2	8200
<b>Liabilities</b>		
<b>Non-current liabilities</b>		
Financial liabilities		
Borrowings	3	7000
<b>Current Liabilities</b>		
Trade payable		2500
		30200

**Notes to Accounts**

		Rs ('000)	Rs ('000)
<b>1.</b>	<b>Share Capital</b>		
	1,25,000 Equity Shares of Rs 10 each (700,000) to BX Ltd and 550,000 as computed above to AX Ltd)		12500

<b>2.</b>	<b>Reserves and Surplus</b>		
	Security Premium	5500	
	General reserve of BX Ltd	2200	
	P & L BX Ltd	500	
	Export Profit Reserve of BX Ltd	100	
	Investment Allowance Reserve of BX Ltd	100	8200
<b>3.</b>	<b>Long Term Borrowings</b>		
	12% Debenture (Assumed that new debenture were issued in exchanged of the old series)		7000

**Question 123 (ICAI Module):**

On September 30, 20X1 Entity A issues 2.5 shares in exchange for each ordinary share of Entity B. All B's shareholders exchanges their shares in Entity B. Therefore, Entity A issues 150 ordinary shares in exchanges for all 60 ordinary shares of Entity B.



The fair value of each ordinary shares of Entity B at September 30, 20X1 is 40. The quoted market as their carrying amounts, expects that the fair value of Entity A non-current assets at September 30, 20X1 is 1,500. The statements of financial position of Entity A Entity B immediately before the business combinations are

	<b>Entity A</b> (legal parent accounting acquire)	<b>Entity B</b> (legal subsidiary accounting acquirer)
Current assets	500	700
Non-current assets	1300	3000
Total assets	1800	3700
Current liabilities	300	600
Non-current liabilities	400	1100
Total liabilities	700	1700
Shareholders' equity		
Retained earnings	800	1400
Issued Equity		
100 ordinary shares	300	
60 ordinary shares		600
Total shareholder's equity	1100	2000
Total liabilities and shareholder's equity	1800	3700

Calculate Fair value of Consideration and EPS for CFS if Consolidated Earnings are Rs. 800/-

**SOLUTION:****Identifying the acquirer**

As a result of Entity A issuing 150 ordinary shares, Entity B's shareholders own 60 percent of the issued shares of the combined entity (i.e., 150 of the 250 total issued shares). The remaining 40 percent are owned by Entity A's shareholder's. Thus, the transaction is determined to be a reverse acquisition in which entity B is identified as the accounting acquirer (while Entity A is the legal acquirer)

**Calculating the fair value of the consideration transferred**

If the business combination had taken the form of Entity B issuing additional ordinary shares to Entity A's shareholders in exchanges for their ordinary shares in Entity A, Entity B would have had to issue 40 shares for the ratio of ownership interest in the combined entity B-60 percent of the combined entity. As a result, the fair value of the consideration effectively transferred by Entity B and the group interest in Entity A is 1600 (40 shares with a fair value per share of 40).

The fair value of the consideration effectively transferred should be based on the most reliable measure. In this example, the quoted market price of Entity A's shares provides a more reliable basis for measuring the consideration is measured using the market price of Entity A's shares -100 shares with a fair value per share of 16

**Measuring goodwill**

Goodwill is measured as the excess of the fair value of the consideration effectively transferred (the group's interest in Entity A) over the net amount of Entity A's recognised identifiable assets and liabilities, as follows:

Consideration effectively transferred		1600
Net recognized value of Entity A's identifiable assets and liabilities		
Currents assets	500	
Non-currents assets	1500	
Current liabilities	300	
Non-current liabilities	400	1300
<b>Goodwill</b>		<b>300</b>

### **Consolidated statement of financial position at September 30, 20X1**

The consolidated statement of financial position immediately after the business combination is:

Current assets [700+500]	1200
Non-current assets [3000+1500]	4500
Goodwill	300
<b>Total assets</b>	<b>6000</b>
Current liabilities [600+300]	900
Non-current liabilities [1100+400]	1500
Total liabilities	2400
Shareholder's equity	
Issued equity 20 ordinary shares [600+1600]	2200
Retained earnings	1400
Total shareholder's equity	3600
<b>Total liabilities and shareholder's equity</b>	<b>6000</b>

The amount recognized as issued equity interest in the consolidated financial statements (2200) is determined by adding the issued equity of the legal subsidiary immediately before the business combination (600) and the fair value of the consideration effectively transferred (1600). However, the equity interest appearing in the consolidated financial statements (i.e. the number and type of equity interest issued) must reflect the equity structure of the legal parent, including the equity interest issued by the legal parent to effect the combination.

### **Earnings per share**

Assume that Entity B's earning for the annual period ended December 31, 20X0 were 600 and that the consolidated earnings for the annual period December 31, 20X1 were 800. Assume also that there was no changes in the number of ordinary shares issued by Entity B during the annual period ended December 31, 20X0 and during the period from January 1, 2006 to the date of the reverse acquisition on September 30, 20X1. Earnings per shares for the annual period ended December 31, 20X1 is calculated as follows:

Number of shares deemed to be outstanding for the period from January 1, 20X1 to the acquisition date (i.e. the number of ordinary shares issued by Entity A legal parent, according acquire in the reverse acquisition)	150
Number of shares outstanding from the acquisition date to December 31, 20X1	250
Weighted average number of ordinary shares outstanding [(150*9/12)+(250*3/12) (assuming calendar year)]	175
Earnings per shares [800/175]	4.75

Restated earnings per shares for the annual period ended December 31, 20X0 is 4.00 [calculated as the earnings of the Entity B 600 dividend by the number of ordinary shares Entity A issued in the reverse acquisition (150)].

**Question 124: (SIMILAR Nov19, May22 EXAM & MTP April19, April21)**

The balance sheet of Professional Ltd. and Dynamic Ltd. as of 31st March, 20X2 is given below:



	Professional Ltd.	Dynamic Ltd.
<b>Assets</b>		
<b>Non-Current Assets:</b>		
Property, plant and equipment	300	500
Investment	400	100
Current assets: inventories	250	150
Financial assets		
Trade receivables	450	300
Cash and cash equivalents	200	100
others	400	230
<b>Total</b>	<b>2,000</b>	<b>1,380</b>
<b>Equity and Liabilities</b>		
<b>Equity Share Capital</b>		
Equity shares of ₹ 100 each of Dynamic Ltd. And ₹ 10 of Professional Ltd.	500	400
Other Equity	810	225
<b>Non-current liabilities:</b>		
Financial liabilities		
Long term borrowings	250	200
Long term provisions	50	70
Deferred tax	40	35
<b>Current Liabilities</b>		
<b>Financial liabilities</b>		
Short term borrowings	100	150
Trade payables	250	300
<b>Total</b>	<b>2,000</b>	<b>1,380</b>

**Other information**

- Professional Ltd. acquired 70% shares of Dynamic Ltd. on 1st April, 20X2 by issuing its own shares in the ratio of 1 share of Professional Ltd. for every 2 shares of Dynamic Ltd. The fair value of the shares of Professional Ltd was ₹ 40 per share.
- The fair value exercise resulted in the following: (all nos in Lakh)
  - Fair value of PPE on 1st April, 20X2 was ₹ 350 lakhs.
  - Professional Ltd also agreed to pay an additional payment as consideration that is higher of 35 lakh and 25% of any excess profits in the first year, after acquisition, over its profits in the preceding 12 months made by Dynamic Ltd. This additional amount will be due after 2 years. Dynamic Ltd has earned ₹ 10 lakh profit in the preceding year and expects to earn another ₹ 20 Lakh.
  - In addition to above, Professional Ltd also had agreed to pay one of the founder shareholder a payment of ₹ 20 lakh provided he stays with the Company for two year after the acquisition.
  - Dynamic Ltd had certain equity settled share based payment award (original award) which got replaced by the new awards issued by Professional Ltd. As per the original term the vesting period was 4 years and as of the acquisition date the employees of Dynamic Ltd have already served 2 years of service. As per the replaced awards the vesting period has been reduced to one year (one year from the acquisition date). The fair value of the award on the acquisition date was as follows:
    - Original award- ₹ 5 lakh
    - Replacement award- ₹ 8 lakh.
  - Dynamic Ltd had a lawsuit pending with a customer who had made a claim of ₹ 50 lakh. Management reliably estimated the fair value of the liability to be ₹ 5 lakh.
  - The applicable tax rate for both entities is 30%.



You are required to prepare opening consolidated balance sheet of Professional Ltd as on 1st April, 20X2. Assume 10% discount rate.

### **SOLUTION**

Consolidated Balance Sheet of Professional Ltd as on 1st April, 20X2

(₹ in Lakhs)	
	Amount
<b>Assets</b>	
<b>Non-Current Assets:</b>	
Property, plant and equipment	650
Investments	500
<b>Current assets:</b>	
Inventories	400
<b>Financial assets:</b>	
Trade receivables	750
Cash and cash equivalents	300
Others	630
<b>Total</b>	<b>3,230</b>
<b>Equity and Liabilities</b>	
<b>Equity share capital</b>	
Equity shares of ₹ 100 each	514
Other Equity	1,128.62
NCI	154.95
<b>Non-Current liabilities:</b>	
Long term borrowings	450
Long term provisions (50+70+28.93)	148.93
Deferred tax	28.5
<b>Current Liabilities:</b>	
Short term Borrowings	250
Trade payables	550
Provision for law suit damages	5
<b>Total</b>	<b>3,230</b>

### **Notes:**

- Fair value adjustment- As per Ind AS 103, the acquirer is required to record the assets and liabilities at their respective fair value. Accordingly, the PPE will be recorded at ₹ 350 lakhs.
- The value of replacement award is allocated between consideration transferred and post combination expense. The portion attributable to purchase consideration is determined based on the fair value of the replacement award for the service rendered till the date of the acquisition. Accordingly, 2.5 (5 x 2/4) is considered as a part of purchase consideration and is credited to Professional Ltd equity as this will be settled in its own equity. The balance of 2.5 will be recorded as employee expense in the books of Dynamic Ltd over the remaining life, which is 1 year in this scenario.
- There is a difference between contingent consideration and deferred consideration. In the given case 35 is the minimum payment to be paid after 2 years and accordingly will be considered as deferred consideration. The other element is if company meet certain target then they will get 25% of that or 35 whichever is higher. In the given case since the minimum what is expected to be paid the fair value of the contingent consideration has been considered as zero. The impact of time value on deferred consideration has been given @ 10%.
- The additional consideration of ₹ 20 lakhs to be paid to the founder shareholder is contingent to him/her continuing in employment and hence this will be considered as employee compensation and will be recorded as post combination expenses in the income statement of Dynamic Ltd.

**Working for Purchase consideration Rs. in lakhs**

Particulars		Amount
Share capital of D Ltd		400,00,000
Number of shares	4,00,000	
Shares to be issued 2:1	2,00,000	
Fair value per share		<u>40</u>
PC (2,00,000 x 70% x Rs. 40 per share) (A)		56.00
Deferred consideration after discounting Rs. 35 lakhs for 2 years @ 10% (B)		28.93
Replacement award Market based measure of the acquiree award (5) x ratio of the portion of the vesting period completed (2) / greater of the total vesting period (3) or the original vesting period (4) of the acquiree award ie (5 x 2 / 4) (C)		<u>2.50</u>
<b>PC in lakhs (A+B+C)</b>		<b><u>87.43</u></b>

**Purchase price allocation workings**

Particulars	Book value (A)	Fair value (B)	FV adjustment (A-B)
Property, plant and equipment	500	350	(150)
Investment	100	100	-
Inventories	150	150	-
Financial assets:		-	
Trade receivables	300	300	-
Cash and cash equivalents	100	100	-
Others	230	230	
Less: Long term borrowings	(200)	(200)	-
Long term provisions			-
Deferred tax	(70)	(70)	-
Short term borrowings	(35)	(35)	-
Trade payables	(150)	(150)	-
Contingent liability	(300)	(300)	
Net assets (X)	-	<u>(5)</u>	<u>(5)</u>
Deferred tax Asset on FV adjustment (155 x 30%) (Y)	625	470	(155)
Net assets (X+Y)		46.50	155
Non-controlling interest (516.50 x 30%) rounded off		516.5	
Capital Reserve (Net assets - NCI - PC)		154.95	
<b>Purchase consideration (PC)</b>		<b>274.12</b>	
		<b>87.43</b>	

**Consolidation workings**

	P Ltd.	D Ltd. (pre-acquisition)	PPA Allocation	Total
<b>Assets</b>				
<b>Non-Current Assets:</b>				
Property, plant and equipment	300	500	(150)	650
Investment	400	100		500
<b>Current assets:</b>				
Inventories	250	150		400
Financial assets:				
Trade receivables	450	300		750
Cash and cash equivalents	200	100		300
Others				
<b>Total</b>	<u>400</u>	<u>230</u>		<u>630</u>

<b>Equity and Liabilities</b>	<b>2,000</b>	<b>1,380</b>	(150)	<b>3,230</b>
<b>Equity</b>				
Share capital-				
Equity shares of Rs. 100 each	500			
Shares allotted to D Ltd. (2,00,000 x 70% x Rs. 10 per share)			14	514
Other Equity	810		318.62	1128.62
<b>Non-controlling interest</b>	0		154.95	154.95
<b>Non-Current liabilities:</b>				
Long term borrowings	250	200		450
Long term provisions	50	70	28.93*	148.93
Deferred tax	40	35	(46.5)	28.5
<b>Current Liabilities:</b>				
Short term borrowings	100	150		250
Trade payable	250	300	0	550
Liability for lawsuit damages			5	5
<b>Total</b>	<b>2,000</b>	<b>755</b>	<b>475</b>	<b>3,230</b>
<b>Other Equity</b>				
Other Equity	810			810
Replacement award			2.5	2.5
Security premium Reserve (2,00,000 shares x 70% x Rs.30)			42	42
Capital Reserve			<u>274.12</u>	<u>274.12</u>
	<b>810</b>		<b>318.62</b>	<b>1,128.62</b>

\*28.93 is the deferred consideration

### Question 125 (ICAI Module):

ABC Ltd. acquires PQR Ltd. for a consideration of Rs. 1 crore. Four years ago, ABC Ltd. had granted a ten-year license allowing PQR Ltd. to operate in Europe. The cost of the license was Rs. 2,50,000. The contract allows either party to terminate the franchise at a cost of the unexpired initial fee plus 20%. At the date of acquisition, the settlement amount is Rs. 1,80,000 [(Rs. 2,50,000 x 6/10) + 20%].

ABC Ltd. has acquired PQR Ltd., because it sees high potential in the European market and wishes to exploit it. ABC Ltd. calculates that under current economic conditions and at current prices it could grant a six-year franchise for a price of Rs. 4,50,000.

How is the license accounted for as part of the business combination?

### SOLUTION:

Paragraph B51 of Ind AS 103 provides that “the acquirer and acquiree may have a relationship that existed before they contemplated the business combination, referred to here as a ‘pre-existing relationship’. A pre-existing relationship between the acquirer and acquiree may be contractual (for example, vendor and customer or licensor and licensee) or non-contractual (for example, plaintiff and defendant).”

Further, paragraph B52 of Ind AS 103 provides that “if the business combination in effect settles a pre-existing relationship, the acquirer recognizes a gain or loss, measured as follows:

- a) For a pre-existing non-contractual relationship (such as a lawsuit), fair value.
- b) For a pre-existing contractual relationship, the lesser of (i) and (ii):
  - i) The amount by which the contract is favorable or unfavorable from the perspective of the acquirer when compared with terms for current market transactions for the same or similar items. (An unfavorable contract is a contract that is unfavorable in terms of current market terms. It is not necessarily an onerous contract in which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received under it.)
  - ii) The amount of any stated settlement provisions in the contract available to the counterparty to whom the contract is unfavorable.

If (ii) is less than (i), the difference is included as part of the business combination accounting.

The amount of gain or loss recognized may depend in part on whether the acquirer had previously recognized a related asset or liability, and the reported gain or loss therefore may differ from the amount

calculated by applying the above requirements.” Based on the above in the instant case, the license is recognized at Rs. 4,50,000, the fair value at market rates of a license based on the remaining contractual life.

The gain or loss on settlement of the contract is the lower of:

- Rs. 3,00,000, which is the amount by which the right is unfavorable to ABC Ltd. compared to market terms. This is the difference between the amount that ABC Ltd. could receive for granting a similar right, Rs. 4,50,000, compared to the carrying value (or the unamortized value) that it was granted for, Rs. 1,50,000 (2,50,000 X 6/10).
- Rs. 1,80,000, which is the amount that ABC Ltd. would have to pay to terminate the right at the date of acquisition.

The loss on settlement of the contract is Rs. 1,80,000. Therefore, out of the Rs. 1 crore paid, Rs. 98.2 lakh is accounted for as consideration for the business combination and Rs. 1,80,000 is accounted for separately as a settlement loss on the re-acquired right.

### Question 126: (MTP Aug18)

In March 2018, Pharma Ltd. acquired Dorman Ltd. in a business combination for a total cost of Rs. 12,000 lakhs. At that time Dorman Ltd.'s assets and liabilities are as follows:



Item	Rs. in lakhs
<b>Assets</b>	
Cash	780
Receivables (net)	5,200
Plant and equipment	7,000
<b>Deferred tax asset</b>	<b>360</b>
<b>Liabilities</b>	
Payables	1,050
Borrowings	4,900
Employee entitlement liabilities	900
<b>Deferred tax liability</b>	<b>300</b>

The plant and equipment has a fair value of Rs. 8,000 lakhs and a tax written down value of Rs. 6,000 lakhs.

The receivables are short-term trade receivables net of a doubtful debts allowance of Rs. 300 lakhs.

Bad debts are deductible for tax purposes when written off against the allowance account by Dorman Ltd.

Employee benefit liabilities are deductible for tax when paid.

Dorman Ltd. owns a popular brand name that meets the recognition criteria for intangible assets under Ind AS 103 'Business Combinations'. Independent valuers have attributed a fair value of Rs. 4.300 lakhs for the brand. However, the brand does not have any cost for tax purposes and no tax deductions are available for the same.

The tax rate of 30% can be considered for all items. Assume that unless otherwise stated, all items have a fair value and tax base equal to their carrying amounts at the acquisition date.

**You are required to:**

- (i) Calculate deferred tax assets and liabilities arising from the business combination (do not offset deferred tax assets and liabilities)

Calculate the goodwill that should be accounted for in consolidation.

### SOLUTION:

- (i) **Breakdown of assets and liabilities acquired as part of the business combination, including deferred taxes and goodwill**

Item	Rs. In lakhs				
	Book value	Fair value		Tax base	Taxable (deductible) temporary difference
Cash	780	780 <sup>1</sup>	780 <sup>1</sup>	-	-
Receivables	5,200	5,200 <sup>2</sup>	5,500 <sup>3</sup>	(300)	90
Plant and equipment	7,000	8,000 <sup>2</sup>	6,000 <sup>4</sup>	2,000	(600)

Brands		4,300 <sup>2</sup>	- <sup>5</sup> )	4,300	(1,290)
Goodwill (Balancing figure)		2,100 <sup>9</sup>			
Deferred tax asset	360			3,60 <sup>7</sup>	
<b>Total assets</b>		<b>20,740</b>			
Payables	(1,050)	(1,050) <sup>1</sup>	(1,050) <sup>1</sup>		
Borrowings	(4,900)	(4,900) <sup>1</sup>	(4,900) <sup>1</sup>		
Employee Entitlement liabilities	(900)	(900) <sup>1</sup>	- <sup>6</sup> )	(900)	270
Deferred tax liability		(300)		(1,890) <sup>8</sup>	
<b>Total liabilities</b>		<b>(8,740)</b>			
<b>Consideration paid</b>		<b>12,000</b>			

**Notes**

- (1) This amount has been derived from Dorman Ltd.'s Balance Sheet as it is stated that 'unless otherwise stated, all items have a fair value and tax base equal to their carrying amounts in Dorman Ltd.'s Balance Sheet at the acquisition date'.
- (2) Stated fair value in the fact pattern (different to the carrying amount in Dorman Ltd.'s Balance Sheet at the acquisition date).
- (3) Because bad debts are only deductible when written off against the allowance account by Dorman Ltd. the tax base of the receivables is their gross value, i.e., (Rs. 5,200 + Rs. 300) lakhs allowance account.
- (4) Tax written down value of the plant and equipment as stated in the fact pattern.
- (5) As the brand name does not have a cost for tax purposes and no tax deduction is available in relation to it, its tax base is nil.
- (6) As the employee entitlement liabilities are only deductible for tax purposes when paid, their tax base is nil.
- (7) The aggregate deferred tax asset is Rs. 360 lakhs, comprising Rs.90 lakhs in relation to the receivables and Rs.270 lakhs in relation to the employee entitlement liabilities.
- (8) The aggregate deferred tax liability is Rs. 1,890 lakhs calculated as follows:

Rs. In lakhs	DTL amount in Dorman Ltd.'s Balance Sheet	Deferred tax impact of fair value adjustments	Total DTL in Pharma Ltd's consolidated financial statements
Plant and equipment	300 ((7,000-6,000) × 30%)	300 ((1,000 × 30%)	600
Brand names	0	1,290 (4,300 × 30%)	1,290
<b>TOTAL</b>	<b>300</b>	<b>1,590</b>	<b>1,890</b>

- (ii) Goodwill is effectively the 'balancing item' in the equation, applying the requirements of Ind AS 103, para 32. The consideration transferred is Rs. 12,000 lakhs and the net of the acquisition date amounts of the identifiable assets acquired and the liabilities assumed measured in accordance with Ind AS 103, including the deferred tax assets and liabilities arising, is Rs. 9,900 lakhs.  
Therefore, Goodwill = 12,000 - 9,900 = 2,100 lakhs

**Author's Note:** DTL on Branch should not be created since it is clearly mentioned in the question that "No tax deductions are available for the same"  
Hence instead of 9900 lacs of Net Assets, it should be 11250 lacs



## Master Problem on Consolidation & Business Combination

Balance Sheet as on 31/03/25

Particular	H Ltd	S Ltd
Esc (10/-)	50,00,000	30,00,000
Other equity (P&I only)	45,00,000	27,00,000
Non current Liability (Debenture)	70,00,000	48,00,000
Current Liability	15,00,000	25,00,000
	1,80,00,000	1,30,00,000
PPE	62,00,000	75,00,000
Investments:-		
a) 80% equity	52,00,000	-
b) 25% Debenture	15,00,000	-
c) Current Assets	51,00,000	55,00,000
	1,80,00,000	1,30,00,000

Additional Information :-

- Date of Acquisition of Investment = 01/07/24
- On 01/04/24, opening balance of P&L of S Ltd was ₹ 15,00,000
- In the month of May, there was Abnormal loss of ₹ 54,000 in Subsidiary P&L.
- Depreciation Rate of PPE = 20 % p.a. on WDV
- Fair value of PPE as 01/07/24 was ₹ 92,00,000
- Current Assets includes Inventory of ₹ 20 lakhs whose NRV is ₹ 18,50,000 as Date Of Acquisition.
- There are contingent liabilities for subsidiary:-
  - Due to present obligation = 5,00,000
  - Due to possible obligation = 3,00,000
- Subsidiary has indemnified to parent for above liabilities for 2,00,000 /- & 1,00,000 respectively.
- On 1/11 subsidiary has paid Interim Dividend of ₹ 1,50,000.
- On 1/12, subsidiary sold some goods costing ₹ 2,00,000 at ₹ 2,50,000. Out of which 40% of goods are unsold.
- After DOA, parent has announced share Based awards for employees of subsidiary to replace original award of subsidiary. (Entry is not yet parsed by parent)

FV of Original award	12,00,000
FV of New awards	15,00,000
Vesting Period already lapsed	2 years
Total Vesting Period	Original award = 4 years New award = 5 years

- Tax Rate = 30%
- Acquisition of 80% was as under

DOA	% Acquired	Cost of Acquisition
1/4/24	30%	10,00,000
1/7/24	50%	42,00,000

- NCI to be measure initially (DOA) at Fair value
- Goodwill if any Shall be Impaired at 25 % of value
- Before 1/7/24. Parent filed a law suit against subsidiary for claim of ₹ 12 lacs.  
S Ltd has already made a provision in its Balance Sheet for ₹ 7 lacs.  
On DOA fair value of claim is ₹ 10,00,000  
Entire Consideration paid by H as 1/7/24 was net settled after adjusting above claim.
- Bonus issue by subsidiary = 1:2 (entry not yet passed)

**SOLUTION:****WN-1) PPE Fair Valuation**

Particulars	Amount
BV as on 31/3	75,00,000
BV as on 1/4 (20% Depreciation)	93,75,000
BV as on 1/7 (3m 20% Depreciation)	89,06,250
MV as on 1/7	92,00,000
FV Gain	2,93,750
DTL @30%	88,125

**Depreciation:-**

a) Depreciation on Fair Value for 9 months in CFS (92,00,000 × 20% × 7/12)	13,80,000
b) Depreciation on Book Value for 9 months in SFS (89,06,250 – 75,00,000)	14,06,250
Saving in Depreciation	26,250
DTL @ 30%	7,875

**WN-2) Calculation of Deferred tax**

Particular	Temporary Difference	Differed Tax
PPE Valuation	2,93,750 (L)	88,125 (L)
Depreciation as PPE	26,250 (L)	7,875 (L)
Inventory	1,50,000 (A)	45,000 (A)
Contingent Liabilities	5,00,000 (A)	1,50,000 (A)
Identified Assets	2,00,000 (L)	60,000 (L)
Elimination of Unrealised Profit of Stock	20,000 (A)	6,000 (A)
DTA (DOA)		46,875
DTL (change)		1,875

**WN-3) New Share Based Awards**

15,00,000	
Pre Combination	Post Combination
12,00,000 × 2/5 = 4,80,000	10,20,000 (3years)
Part of investment by parent	P&L of parent in future years
	9m Employee Benefit Expense
	10,20,000 / 36m X 9m = 2,55,000

**WN-4) Pre-existing relation**

Settlement Value of Law Suit = 10 Lacs

Compensation Receivable A/c Dr	10
To P&L	10

Gross Consider. For 50% acquisition = 42+10 = 52 Lacs (PC for 50% Acquisition)

**WN-5) Step Acquisition:-**

Fr of previous 30 % equity Interest	52,00,000/50% X 30% = 31,20,000
Carrying amt of earlier 30% investment	10,00,000
Gain on – previous equity (P&L)	21,20 ,000

## WN-6)

Bonus issue amount 1:2	= 30,00,000 / 2
	= 15,00,000/-
	DOA + ESC
	DOA – R&S

## WN-7)

Purchase Consideration Wrong entry passed in SFS		
For 50% acquisition	Invest A/c Dr.	42,00,000
	To Bank A/c	42,00,000

Correct value = 5,00,000 (Gross) + 4,80,000 (pre Comb. SBP) = 56,80,000

1) Investment A/c Dr.	56,80,000
To SBP Reserves	4,80,000
To Consideration Payable	52,00,000
2) Comparison Receive. Dr	10
To P&L	10
3) Consider. Payable.	52
To Comp receive	10
To Bank	42

## WN-8) SCNA

Particular	DOA	Changes	B/S
ESC	30,00,000	-	30,00,000
P&L	15,00,000 (1/4)	12,00,000	27,00,000
(+) Abnormal Loss	-	54,000	
(+) Interim Dividend	-	1,50,000	
(+/-) Bonus	15,00,000 (15,00,000)	- -	
Revised Bal.	45,00,000	14,04,000	
(+/-) To adj. For 3 month	35,000	14,04,000 X3/12	
	48,51,000	10,53,000	
(-) A. Loss	(54,000)	-	
(+/-) Assets /Liabilities adjust			
(+) PPE FV Gain & Depreciation	2,93,750	26,450	
(-) Inventory	(1,50,000)	-	
(-) count Liability	(5,00,000)	-	
(+) Indemnification Asset	(2,00,000)	-	
(+) Elimination of Law suit prov.	7,00,000	-	
(-) Unrealised profit elimination	-	(20000)	
(+/-) DTA /DTL	46,875	(1,875)	
	53,87,625	10,57,375	
	100% FV of N. Assets On DOA	H 8,45,900 NCI 2,11,475	

## WN-9) Cost of control

Investment in subsidiary	56,80,000 + 31,20,000	88,00,000	
(+) NCI as an DOA at FV	52,00,000/50%×20%	20,80,000	
(-) 100% Net Assets at FV		53,87,625	
Goodwill		54,92,375	
Amortisation @ 25%		13,73,094	
		H	NCI
		80%	20%
		10,98,475 P&L	2,74,619

Net Goodwill in B/S	41,19,281
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**WN-10) NCI**

NCI at FV on DOA	20,80,000
(+) Share of Rev. profit	2,11,475
(-) Inter. Dividend receive	(30,000)
(-) Goodwill amortization share	(27,4619)
NCI as an B/S date	19,86,856

**WN-11) Consolidated R/E (P&L)**

R\E an per H's (SFS)	45,00,000
(+) RP Share	8,45,900
(-) Dividend received by H	(1,20,000)
(+) gain as prev	21,20,000
(-) Goodwill Impairment	(10,98,475)
(+) Law suit settlement	10,00,000
(-) 9m post comb. Exp. as SBP	(2,55,000)
(-) loss as cancel of Debenture	(3,00,000)
Closing R/E	66,92,425
(+) SBP reserves	7,35,000
Cons. other equity	74,27,425

**Consolidated B/S**

ESC	50,00,000
Consolidated Other equity	74,27,425
NCI	19,86,856
Non-Current. Liability H 70 lac. S 36 lac.	1,06,00,000
Current liability H 15,00,000 S 18,00,000 (+) count liability 5,00,000	38,00,000
	28,814,281
PPE H 62,00,000 S 75,00,000 (+) FV Gain 2,93,750 (+) Depreciation saving 26,250	14,020,000
Goodwill	41,19,281
DTA (net = 46,875-1,875)	45,000
Current Assets:- H 51,00,000 S 55,00,000 (-) Inv. of S =(1,50,000) (-) Inv. of H = (20,000) (+) Indemnify Asset = 2,00,000	1,06,30,000
	28,814,281