



# **CHIRANJEEV JAIN** **CLASSES**

**EXPECTED QUESTION**

**CA FINAL**

**NOV 2018 EXAMS**

Applicable for Old syllabus

## ABOUT THE AUTHOR



**CA Chiranjeev Jain has qualified Chartered Accountancy Course in 2005 and has completed all the levels of this course in his very first attempt. He is among the top rank holders Delhi University having done his graduation from Sri Ram College of Commerce. He scored more than 90% in accounts at all levels of CA and university examinations. He has done Diploma in Information System Audit conducted by the ICAI. He has also done Masters in Business Administration (MBA) with specialization in Finance.**

**After completing Academic & Professional Education, he has worked with Deloitte Haskin & Sells as a chartered accountant and developed immense skills in the practical application of various accounting standards. Finally he exposed himself to the practice as chartered accountant and adapted to teaching accounts (the subject he loves the most) as his career.**

**He possesses a vast experience in teaching accountancy to students of CA CPT, IPCC & Final. He is also into Corporate Training in the industry and has addressed a number of courses and seminars organized by Professional Institutions. He has served as an examiner of accounts at CA IPCC and Final level. He is an expert in both Indian Accounting Standards and IFRS.**

**He has conducted face to face classes at Hyderabad, Bangalore, Kolkata and Ahmadabad apart from VSAT classes in the Southern region with ETEN CA. His easy way of teaching Accountancy from the very basic and his motivational lectures are very famous among CA students' fraternity.**

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Thanks  
Chiranjeev Jain TEAM

**POSITIVE FEEDBACK ABOUT SIR'S CLASSES**

<p><b>Shalaka Tiwari - Shastri, Hyderabad</b>          I have taken the classes for CA Final FR from Chiranjeev Jain sir and I believe he is an great teacher and a amazing mentor.          His methodology of teaching is unique, while in class there's no concept untaught. He teaches whole heartedly and makes sure that you get your basics right.          I have no other words to express this better.          I will say, just join him and u will see the results !!          CJ sir ROCKS !!!!!</p>	<p><b>Amit Jain, Kolkata</b>          Hi Students, I am CA Amit Kumar Jain, practicing in Gurgaon. I am one of the old students of CA Chiranjeev Sir, and belong to his first CA final batch in kolkata. Today, on Teacher's Day, I would love to convey my gratitude to him for his wonderful coaching classes. The learnings shared by him both related to course and related to practical life after CA, has been very useful in my journey. He is one of the best CA Final teacher in India and I recommend all students to join him.</p>
<p><b>Navneet Singh, Hyderabad</b>          When I started my journey to become a Chartered accountant, the only fear I had was will I be able to have that conceptual knowledge which is needed the most in a profession like ours!!          Now after completing my CA I can tell you that starting from Accounts in CPT then with Accounts in IPCC and to end with Financial reporting in CA Final, the conceptual understanding of the subject which I gained from you helped me become what I am now.. Thank you Sir once again to be available whenever asked for and help me achieve my dream of becoming a CA.</p>	<p><b>Obaid Khan, Hyderabad</b>          To begin with a quote "It takes a big heart to help shape little minds."          Thank You Sir, for being an Amazing faculty throughout CA journey. Now that I completed my journey, I feel immensely honoured for being your student and learning the concepts precisely in a manner that helps in application too.          Words might fall short to express the gratitude, for you have been an Amazing teacher, mentor and a friend.          Just a small appreciation post from a student, moreover from a Fan of your ideas and teaching.</p>
<p><b>Isan Singh, Kolkata</b>          i have taken FR classes from CA Chiranjeev Jain Sir....He is best in this subject.... It's because of Sir I get to know so much about accounts especially IND AS,          I have also taken accounts from him in CA IPCC and I scored very good marks in IPCC even though I was average in accounts subject. He teach from base which makes easy for average students to score high in exams. He gives through conceptual knowledge do that students will able to write worst paper in exams with ease.          Thanks sir for ur valuable teaching.</p>	<p><b>Arihant Kothari, Hyderabad</b>          Thanks to the man with great caps,a perfect guide who has really helped us at every point and gave his helpful hands without any complaints .. You be the best sir 😊😊😊          It is to thankyou for those priceless teachings 😊 I m really thankful for all you good words that kept me motivated and focussed towards my goal . I feel lucky to get a place under your umbrella .. Whatever be the results your imprints will always be there sir .Thanks a lot sir !😊</p>
<p><b>Ashutosh Lahoti, Hyderabad</b>          Thank you sir for providing us the best lectures with an ease. It was an amazing time spending with you. I'm very lucky to learn the subject of Accountancy that too of IPCC level under your guidance. You made this subject very easy with your experience and teaching quality. Actually your friendly nature towards the students made it more easier to understand the subject. Even your scoldings were like roses without thorns.          Thank you so much sir for helping us get through our targets. Will be missing those class fun but hope to see you soon in CA final classes.          😊Proud to be CHIRANJEEVIAN 😊</p>	<p><b>Niharika Phalod, Hyderabad</b>          "A good teacher can inspire hope, ignite the imagination and instill a love of learning"          I would truly like to appreciate the great effort you have put into tutoring and enlightening my way. Because of your guidance and patience, I've come this far in my CA journey. Thankyou for always being there in all my confusions and helping me deal with all the stress during ipcc days!          Accounts couldn't be more easier and all the credit goes to your easy techniques.          Thankyou for being my mentor. I'm truly blessed to be your student! Wish you a very happy teachers day Sir. 😊</p>
<p><b>Nikita Simran, Hyderabad</b>          I'm so grateful to be your student. Thank you for instilling in me the passion for learning. You've put in selfless efforts in shaping our career! We're truly blessed to have a mentor like you 😊 Lastly I would like to say-Now I see the world in a different light          I can discriminate between wrong and right, I perceive things in a different style, I have learnt to go the extra mile, I have a deeper understanding of things Dear teacher you have truly given me wings 🦋          Thank you for everything sir 🦋</p>	<p><b>Shalaka Tiwari - Shastri, Hyderabad</b>          I have taken the classes for CA Final FR from Chiranjeev Jain sir and I believe he is an great teacher and a amazing mentor.          His methodology of teaching is unique, while in class there's no concept untaught. He teaches whole heartedly and makes sure that you get your basics right.          I have no other words to express this better.          I will say,just join him and u will see the results !!          CJ sir ROCKS !!!!!</p>

**Chinna Poojari , Bangalore**

Sir,. It's very glad to have these words to you..u r d person who stands with me not only as my guru but as a family member during my tough times.. The way you teach us makes ourself to Mold towards subject conceptually...Coz of u only I have got AIR's in IPCC and CMA.... Being ur student makes me proud...gives me confidence that I can achieve all thru success.....finally thank you is not enough for ur services...Just will show thanks in the form of results in our exams....

Not only the subject your personality as a Chartered Accountant tis the Perfect Example for all Budding CA's.

One word about my guru ."CA Chiranjeevi sir is the BAADSHAH OF IND AS " in india.

**Venkata Sumanth, Vijaywada**

Teachers usually make us study... Chiranjeev Jain sir made us enjoy the subject...We stepped out of the class with tonnes of confidence and belief .....

Thank you very much sir....

We never found in your class, a teacher- student relationship...We always felt that we are being taught by a best friend and well-wisher...

We will be grateful forever sir....

With tonnes of love...

One word about Chiranjeevi Jain sir ....

You taught us from your Heart...not from book...

**Afsar Shaik, Hyderabad**

Sir...trust me...before starting of this batch...I wondered how ur gonna complete this in 70 days...wr as other faculies r taking for 3 or 4 mnths....but finally I got my answer....u gave us the main thing what we want actually i.e, conceptual clarity....thank u soo much sir

**Ashish Soni, Hyderabad**

Sir you can inspire hope, ignite the imagination, and instill a love of learning..motivating...Thank You Sir ## CJ Sir the Best#

**Ankitha Baldwa, Hyderabad**

Thank you so much sir u be the best lecturer of my life 🙏 Apka padane ka style baat karne ka style Apki shyaris Kya baat sir, missing all my memorable moments of ur class

**Chaitanya, Hyderabad**

Your way of teaching is something different that we will be in a thought that you are teaching slow but we'll get to know your fast once we missed your class and seeing the notes the next day. Really loved the class very much sir. Thankuuuuu so much sir.

The real life stories you teaches in class are inspired. Sir, we will go through many teachers in life sir. But only few we can remember lifelong. You're one among them and one you got the position with 70 days time while with everyone I spent not less than 2 years. Once again Thank you sir.

Sir, I may not score 90+ in exam, But I'm sure I'll give my 200% for getting 90+. Because we have only two options. Either 90+ or 90+.

**Sakshi Sharma, Hyderabad**

I have been taught by so many teachers but amongst them all you made the greatest impact by not only teaching by guiding us too. The loving ways of teachers like you is difference between teaching and educating thanks for teaching us, educating us, and empowering us thanks a lot sir

**Khushi Srivastava, Hyderabad**

I pursued 61 in accounting just because of Chiranjeev Jain Sir. His notes are not less than a face to face teaching...he covers each and every minute stuff...lucky to be his student.

**Soujanya V M, Bangalore**

I have attended his classes and he is very knowledgeable..He teaches the complex things in a very simple manner...He is a good guide for a student ...Because of him I got exemption in IPCC accounts...Students who are interested in conceptual learning can join his classes without any second thought...!

The chart prepared by him is simple and easily understandable...Very much useful for the students for last minute revision...

Thank you sir for all the teaching and guidance....!!

**Rakhi Jha, Hyderabad**

#SIR Ji # THANK YOU, I joined Yeshas just because you were teaching us ACCOUNTS #Your the most coolest & friendly faculty #You always motivated us #You always guided us on right path #Yet I can't believe that today was our last IPCC class # I personally never ever saw a great faculty like YOU # We all gonna miss you so much #You always helped us SIR Ji # You were just like our friend's #A BIG BIG THANK YOU SIR Ji # See you soon in CA-FINAL #WILL MISS YOU SIR Ji #LOVE YOU TONS & TONS ❤️

**Shams Afaq, Hyderabad**

I have done my schooling from science stream,so at the start of CPT only I was nervous, if I will be able to do accounts. But my whole nervousness was transformed into interest of learning by Chiranjeev Sir. He created a strong foundation for me with conceptual clarity. It was his easy going approach even when the concepts were challenging, I scored 44/60 in CPT and then 76/100 in IPCC. I will always be grateful to you. You are phenomenal. Keep up the good work!

**Nithin Mundada, Hyderabad**

The way you teach..The knowledge you share.. The care you take..The love you shower..Makes you.. The world's best sir....It's my pleasure to have such a nice sir with charming smile..and I have never seen such a sir like.....

**Jaya Chandra, Visakhapatnam**

Sir's notes is very helpful during revision and he teaches from basics on which we generally don't pay much attention. The way he links each topic is good and he has much clarity in how to teach complex topics.

**Naveen Pspk , Hyderabad**

Scored 75 in Accounts..its just because of Mr.CA chiranjeevjain sir...initially I was bothered about DAT subject as I was from science background... But then I met with sir classes it changed whole scenario ....&d result is dis....tq sir tq so much....

**For more Feedback Visit [www.cachiranjeevjain.com](http://www.cachiranjeevjain.com)**

**EXPECTED QUESTIONS FOR NOV 2018**

**VALUE ADDED STATEMENT**

**Question 1:**

From the following Profit and Loss Account of Brightex Co. Ltd. prepare a gross value added statement for the year ended 31-12-1998:

Show also the reconciliation between gross value added and profit before taxation.

**Profit & Loss Account for the year ended 31-12-1998**

	Notes	(Rs. '000)	(Rs. '000)
Income:			
Sales			6,240
Other income			55
			6,295
Expenditure:			
Production and operational exp.	1	4,320	
Administration expenses	2	180	
Interest & other charges	3	624	
Depreciation		16	5,140
Profit before tax			1,155
Provision for tax			55
			1,100
Balance as per last balance sheet			60
			1,160
Transferred to fixed assets replacement reserve		400	
Dividend paid		<u>160</u>	560
Surplus carried to Balance Sheet			600

Notes:

(1)	Production & operation	
	Consumption of raw materials	3,210
	Consumption of stores	40
	Local tax	8
	Salaries to administrative staff	620
	Other manufacture expenses	442
		4,320

(2)	Administration expenses include salaries and commission to directors	5
(3)	Interest and other charges include:	
	Interest on bank overdraft (Overdraft is of temporary nature)	109
	Fixed loan from I.C.I.C.I.	51
	Working capital loan from I.F.C.I.	20
	Excise duties amount to one-tenth of total value added by manufacturing and trading activities	

**Answer**

**Brightex Co. Ltd**

**Value Added Statement For the year ended 31st December, 1998**

	Rs. In Thousands	Rs. In thousands
Sales		6,240
Less: Cost of bought in material and services:		
Production and operational expenses (4,320 - 8 - 620)	3,692	
Administration expenses (180 - 5)	175	
Interest on bank overdraft	109	
Interest on working capital loan	20	
Excise duties (Refer to working note)	180	
Other/miscellaneous charges(444 -180)	264	4,440
Value added by manufacturing and trading activities		1,800
Add: Other income		55
Total Value Added		1,855

**Application of Value Added:**

			%
To pay Employees :			
Salaries to Administrative staff	620		33.42
To pay Directors:			
Salaries and Commission	5		0.27
To Pay Government :			
Local Tax	8		
Income Tax	55	63	3.40
To Pay Providers of Capital :			
Interest on Fixed Loan	51		
Dividend	160	211	11.37
To provide For Maintenance and Expansion of the Company :			
Depreciation	16		
Fixed Assets Replacement Reserve	400		



Retained Profit (600 - 60)	540	956	51.54
		1,855	100.00

Reconciliation Between Total Value Added and Profit Before Taxation:

	Rs. In Thousands	Rs. In thousands
Profit before Tax		1,155
Add back:		
Depreciation	16	
Salaries to Administrative Staff	620	
Director's Remuneration	5	
Interest on Fixed Loan	51	
Local Tax	8	700
Total Value Added		1,855

Working Note :

Calculation of Excise Duty		Rs. In thousands
Interest and other charges		624
Less : Interest on bank overdraft	109	
Interest on loan from ICICI	51	
Interest on loan from IFCI	20	180
Excise duties and other/miscellaneous charges		444

Assuming that these miscellaneous charges have to be taken for arriving at Value Added (in the first part of Value Added Statement), the excise duty will be computed as follows.

Let excise duty be x; thus miscellaneous/ other charges = 444 - x

Thus  $x = 1/10 \times [6,240 - \{3692 + 175 + 109 + 20 + x + (444 - x)\}]$

$= 1/10 \times [6240 - 4440] = 180$

Other/ miscellaneous charges = 444 - 180 = 264

### Question 2:

Hindusthan Corporation Limited (HCL) has been consistently preparing Value Added Statement (VAS) as part of Financial Reporting. The Human Resource department of the Company has come up with a new scheme to link employee incentive with 'Value Added' as per VAS. As per the scheme an Annual Index of Employee cost to Value Added annually (% of employee cost to Value Added rounded off to nearest whole number) shall be prepared for the last 5 years and the best index out of results of the last 5 years shall be selected as the 'Target Index'. The Target Index percentage shall be applied to the figure of 'Value Added' for a given year to ascertain the target employee cost. Any saving in the actual employee cost for the given year compared to the target employee cost will be rewarded as 'Variable incentive' to the extent of 70% of the savings. From the given data, you are requested to ascertain the eligibility of 'Variable Incentive' for the year 2011-2012 for the employees of the HCL.

Value added statement of HCL for last 5 years (Rs. lakhs)

Year	2006-07	2007-08	2008-09	2009-10	2010-11
Sales	3,200	3,250	2,900	3,800	4,900
Less: Bought out goods and services	2,100	2,080	1,940	2,510	3,200
Value added	1,100	1,170	960	1,290	1,700
Application of Value Added					
Year	2006-07	2007-08	2008-09	2009-10	2010-11
To Pay Employees	520	480	450	600	750
To Providers of Capital	160	170	120	190	210
To Government Tax	210	190	220	300	250
For Maintenance and expansion	210	330	170	200	490

Summarized Profit and Loss Account of the HCL for 2011-2012 (Rs. in lakhs)

Sales		5,970
Less:		
Material consumed	1,950	
Wages	400	
Production salaries	130	
Production expenses	500	
Production depreciation	150	
Administrative salaries	150	
Administrative expenses	200	
Administrative depreciation	100	
Interest	150	
Selling and distribution salaries	120	
Selling expenses	350	
Selling depreciation	120	4,320
Profit		1,650

**Answer:**

1.	Calculation of Target index	(Rs. in lakhs)				
Year	2006-07	2007-08	2008-09	2009-10	2010-11	
Employees cost	520	480	450	600	750	
Value added	1,100	1,170	960	1,290	1,700	
Percentage of 'Employee cost' to 'Value added' (to the nearest whole number)	47%	41%	47%	47%	44%	

Target index percentage is taken as least of the above from companies viewpoint on conservative basis i.e. 41%.

2.	Value Added Statement for the year 2011-12	(Rs. in lakhs)	(Rs. In lakhs)
	Sales		5,970
	Less: Cost of bought in goods & services		

	Material consumed	1,950	
	Production expenses	500	
	Administrative expenses	200	
	Selling expenses	350	3,000
	Added value		2,970
<b>3.</b>	<b>Employee cost for 2011-12</b>		<b>(Rs. in lakhs)</b>
	Wages		400
	Production salaries		130
	Administrative salaries		150
	Selling salaries		120
			800

4. Calculation of target employee cost = Target Index Percentage x Value added  
 = 41% x Rs. 2,970 lakhs = Rs. 1217.70 lakhs
5. Calculation of savings  
 Target employee cost = Rs. 1,217.70 lakhs  
 Less: Actual Cost = Rs. 800 lakhs  
 Saving = Rs. 417.70 lakhs
6. Calculation of Variable incentive for the year 2011-12:  
 70% of saving is variable incentive = 70% x Rs. 417.70 lakhs = Rs. 292.39 lakhs

**Question 3:**

Following information is provided in respect of Pradeep Ltd. as on 31st March, 2017:

	(Rs. in lakh)
Turnover (including discounts and returns worth Rs. 35 lakh)	2,500
Plant and machinery (net)	785
Depreciation on plant and machinery	132
Debtors	205
Dividend to ordinary shareholders	85
Creditors	180
Stock (net) of all raw materials, WIP, finished goods	
Opening stock	180
Closing stock	240
Raw material purchased	714
Cash at bank	98
Printing and stationery	24
Auditor's remuneration	15
Retained profit (opening balance)	998
Retained profit for the year	445
Transfer to reserve	120
Rent paid	172

Other expenses	88
Ordinary share capital (Rs. 100 each)	1700
Interest on borrowings	40
Income tax for the year	280
Wages and salaries	352
Employees state insurance	32
Provident fund contribution	26

You are required to:

- Prepare Value Added Statement and its application for the period 31.3.2017.
- Value Added per Employee (If 87 employees work in Pradeep Ltd.)
- Average Earnings per Employee (If 87 employees work in Pradeep Ltd.)
- Sales per Employee (If 87 employees work in Pradeep Ltd.)

**Answer:**

(i) Value Added Statement of Pradeep Ltd. for the period ended on 31.3.2017

		(Rs. in lakhs)
Sales (net) (2,500 – 35)		2,465
Less: Cost of Bought in Materials and Services:		
Raw material consumed (180 + 714 – 240)	654	
Printing and stationary	24	
Auditors' remuneration	15	
Rent paid	172	
Other expenses	88	(953)
Value added by manufacturing and trading activities		1,512

Application of Value Added

		(Rs. in lakh)	(Rs. in lakh) %
To Pay Employees: Wages and salaries	352		
Employees state insurance	32		
Provident fund contribution	26	410	27.12
To Pay Government:			
Income-tax		280	18.52
To Pay Providers of Capital: Interest on borrowings	40		
Dividend	85	125	8.27
To Provide for maintenance and expansion of the company:			
Depreciation	132		
Transfer to reserve	120		
Retained profit	445	697	46.09
		1,512	100

- (ii) Value Added Per Employee = Value Added/ No. of Employee = 1,512 \ 87 = 17.38
- (iii) Average Earnings Per Employee = Average Earnings of Employee / No. of Employees  
= 410/87 = 4.71
- (iv) Sales Per Employee = Sales / No. of Employees = 2,465 / 87 = 28.33

## ECONOMIC VALUE ADDED

### Question 4:

Calculate economic value added (EVA) with the help of the following information Sun Limited.

Financial leverage:	1.4 times;
Equity Capital	Rs.170 lakh;
Reserve and surplus	Rs.130 lakh;
10% Debentures	Rs.400 lakh;
Cost of Equity:	17.5%
Income Tax Rate:	30%.

### Answer:

Financial Leverage =  $[EBIT/(EBIT - Interest)] = [EBIT/(EBIT - 10\% \text{ of } 400)] = 1.40$

$EBIT = \{(10\% \text{ of } 400) \times 1.40\} / 0.40 = 140$

$EBIT (1 - t) = 140 (1 - 0.30) = 98$

Equity capital = 170 + 130 = 300

Debt Capital = 400

Post-tax cost of debt =  $10\% (1 - 0.30) = 7\%$

Overall cost of capital [Post-tax] =  $17.5\% \text{ of } 300 + 7\% \text{ of } 400 = 80.5$

Economic Value Added (EVA) =  $EBIT (1 - t) - \text{Overall cost of capital (Post-tax)}$   
 $= 98 - 80.5 = 17.5 \text{ (Rs. Lakh)}$

### Question 5:

Prime Commercial Bank has a criterion that it will give loan to companies that have an economic value added greater than zero for the past three years on average. The bank is considering lending money to a small company that has the economic value characteristics shown below. Does that company meet the bank's criterion for a positive economic value added? The data relating to the company is as follows:

- (i) Average operating income after tax equals Rs. 25,00,000 per year for the last three years.
- (ii) The average total assets of company over the past three years equals Rs. 75,00,000.
- (iii) The weighted average cost of capital appropriate for the company equals 10% which is applicable to all three years.

(iv) The company's average current liabilities over the past three year equals Rs. 15,00,000.

**Answer:**

Computation of Economic Value Added

E.V.A. (Economic Value Added) = NOPAT – COCE

NOPAT = Net Operating Profit after Tax

COCE = Cost of Capital Employed

**Particulars**

	Rs.
a. Net operating profit after taxes	25,00,000
b. Less: Cost of Capital (WN 2)	6,00,000
c. Economic Value Added	19,00,000

Decision:

The company qualifies for the loan because the economic value added is greater than zero.

Working Notes:

- Capital Employed Particulars Rs.

Average total assets	75,00,000
Less: Average current liabilities	15,00,000
Total capital employed	60,00,000
- Cost of capital = Capital employed x Weighted average cost of capital  
 = Rs. 60,00,000 x 10% = Rs. 6,00,000

**Question 6:**

The following information (as of 31-03-2012) is supplied to you by M/s Fox Ltd.:

	(Rs. in crores)
(i) Profit after tax (PAT)	205.90
(ii) Interest	4.85
(iii) Equity Share Capital	40.00
Accumulated surplus	700.00
Shareholders fund	740.00
Loans (Long term)	37.00
Total long term funds	777.00
(iv) Market capitalization	2,892.00
Additional information:	
(a) Risk free rate	12.00 percent
(b) Long Term Market Rate (Based on BSE Sensex)	15.50 percent
(c) Effective tax rate for the company	25.00 percent
(d) Beta (β) for last few years	

Year	
1	0.48
2	0.52
3	0.60
4	1.10
5	0.99

Using the above data you are requested to calculate the Economic Value Added of Fox Ltd. as on 31st March, 2012.

**Answer:**

Net Operating Profit After Tax (NOPAT)	
Profit After Tax (PAT)	205.90 crores
Add: Interest (net of tax) = $4.85 \times (1-0.25)$	3.64 crores
	Rs. 209.54 crores
Debt Capital	Rs. 37 crores
Equity capital (40 + 700) =	Rs. 740 crores
Capital employed = Rs. 37 + Rs. 740 =	Rs. 777 crores
Debt to capital employed = $\text{Rs. 37 crores} / \text{Rs. 777 crores} =$	0.0476
Equity to capital employed = $\text{Rs. 740 crores} / \text{Rs. 777 crores} =$	0.952
Interest cost before Tax	Rs. 4.85 crores
Less: Tax (25% of Rs. 4.85 crores)	(Rs. 1.21 crores)
Interest cost after tax	Rs. 3.64 crores
Cost of debt = $(\text{Rs. 3.64 crores} / \text{Rs. 37 crores}) \times 100 =$	9.83%

According to Capital Asset Pricing Model (CAPM)

Beta for calculation of EVA should be the highest of the given beta for the last few years. Accordingly, Cost of Equity Capital = Risk Free Rate + Beta (Market Rate – Risk Free Rate)

$$= 12\% + 1.10 \times (15.50\% - 12\%)$$

$$= 12\% + 1.10 \times 3.5\% = 15.85\%$$

Weighted Average Cost of Capital (WACC)

$$= \text{Equity to Capital Employed (CE)} \times \text{Cost of Equity Capital} + \text{Debt to CE} \times \text{Cost of Debt}$$

$$= 0.952 \times 15.85\% + 0.0476 \times 9.83\%$$

$$= 15.09\% + 0.47\% = 15.56\%$$

Cost of Capital Employed (COCE) = WACC X Capital Employed

$$= 15.56\% \times \text{Rs. 777 crores} = \text{Rs. 120.90 crores}$$

$$\text{E.V.A.} = \text{NOPAT} - \text{COCE} = \text{Rs. 209.54 crores} - \text{Rs. 120.90 crores} = \text{Rs. 88.64 crores}$$

## MARKET VALUE ADDED

**Question 7:**

The capital structure of W Ltd. whose shares are quoted on the NSE is as under:

Equity Shares of Rs. 100 each fully paid	Rs. 505 lakhs
9% Convertible Pref. Shares of Rs. 10 each	Rs. 150 lakhs
12% Secured Debentures of Rs. 10 each	5,00,000
Reserves	Rs. 101 lakhs
Statutory Fund	Rs. 50,50,000

The Statutory Fund is compulsorily required to be invested in Government Securities.

The ordinary shares are quoted at a premium of 500%; Preference Shares at Rs. 30 per share and debentures at par value.

You are required to ascertain the Market Value added of the company and also give your assessment on the market value added as calculated by you.

**Answer:**

Market Value Added (MVA) is the difference between the current market value of a firm and the capital contributed by investors (both debentureholders and shareholders). In other words, it is the sum of all capital claims held against the company plus market value of debt and equity. If MVA is positive, firm has added value.

Market Value Added = Market value of firm less amount invested in the firm

	Rs. in lakhs	Rs. in lakhs
Equity Share Capital (market value) (505 lakhs x 600%)		3030
Preference share capital (15,00,000 x 30)		450
Debentures		50
Current market value of firm		3,530
Less: Equity Share Capital	505	
Preference share capital	150	
Reserves	101	
Debentures	50	
Statutory Reserve	50.50	(856.50)
Market Value Added		2,673.50

The significant Market Value addition implies that the management of W Ltd. has created wealth for its shareholders and that market investors are willing to pay a price greater than the historical net worth of the company.

## HUMAN RESOURCE REPORTING

**Question 8:**



From the following in respect of Jalan Limited, calculate the total value of human capital by Lev and Schwartz Model. **Distribution of Employees of Jalan Limited**

Age	Unskilled		Semiskilled		Skilled	
	No.	Avr. Annual earning	No.	Avr. Annual earning	No.	Avr. Annual earning
30-39	100	18,000	60	36,000	40	84,000
40-49	50	30,000	30	48,000	20	1,20,000
50-54	30	36,000	20	60,000	10	1,80,000

Retirement Age is 55 years. Apply discount factor of 10%. In calculations of total value of human factor lowest value of each class should be taken.

Annuity Factor @ 10%

For 05 Years = 3.7908

For 10 Years = 6.1446

For 15 Years = 7.6061

For 20 Years = 8.5136

For 25 Years = 9.0770.

**Question 9:**

A Company has a capital base of Rs. 3 crores and has earned profits of Rs. 33 lakhs. Return on investment of the particular industry to which the company belongs is 12.5%. If the services of a particular executive are acquired by the company, it is expected that the profits will increase by Rs. 7.5 lakhs over and above the target profit. Determine the amount of maximum bid price for that particular executive and the maximum salary that could be offered to him.

Capital base	3,00,00,000
Actual profit	33,00,000
Target profit	37,50,000

**Answer:**

Target Profit = Rs. 3,00,00,000 x 12.5% =	Rs. 37,50,000
Expected profit on employing the particular executive	
= Target profit + Increase in profit = Rs. 37,50,000 + Rs. 7,50,000 =	Rs. 45,00,000
Additional profit = Expected profit – Actual profit = Rs. 45,00,000 – Rs. 33,00,000 =	Rs. 12,00,000
Maximum bid price = Additional profit /Rate of return on investment = [12,00,000 /12.5] x 100 =	Rs. 96,00,000
Maximum salary that can be offered = 12.5% of Rs. 96,00,000 =	Rs. 12,00,000

**Question 10:**

The following information is supplied to you about Lookdown Ltd.

Capital & Reserves	
Equity Shares of Rs. 100 each of which Rs. 75 has been called up	5,00,000
Equity Shares in respect of which calls are in arrear @ 25 per share	Rs. 1,00,000
General Reserve	Rs. 10,00,000
Profit & Loss account (balance at beginning of the year)	Rs. (25,00,000)
Profit/(loss) for the year	Rs. (1,80,000)
Industry Average Profitability	12.50%
8% Debentures of Rs. 10 each	8,00,000
Lookdown Ltd. is proposing to hire the services of Mr. X to turn the company around.	
Minimum take home salary per month demanded by Mr. X	Rs. 4,00,000
Average Income tax rate on salaries above Rs. 3 lakhs per annum	25%
Provident Fund contribution by Employer per month	Rs. 50,000
Profits over and above target expected by hiring Mr. X	10%

You are required to analyze the proposal and see whether it is worthwhile to employ Mr. X and also suggest the maximum emoluments that could be paid to him.

Note:

- PF contributions are tax exempt.
- Take home salary is that remaining after employee's contribution to PF @ Rs. 50,000 per month and after deduction of Income-tax on salary.

**Answer:**

<b>Cost to Company in employing to Mr. X</b>	<b>Rs.</b>
Salary before tax $Rs. 4,00,000 \times 12 = 48,00,000/0.75$	64,00,000*
Add: Employee's PF contribution $(50,000 \times 12)$	6,00,000
	70,00,000
Add: Employer's PF contribution $(50,000 \times 12)$	6,00,000
	76,00,000
<b>Capital base</b>	<b>Rs.</b>
Equity Share Capital paid up (5,00,000 shares of Rs. 75 each)	3,75,00,000
Less: Calls in arrears	(1,00,000)
	3,74,00,000
General Reserve	10,00,000
Profit & Loss A/c (balance) at the beginning of the year	(25,00,000)
Loss for the year	(1,80,000)
8% Debentures	8,00,000
Capital base	4,37,20,000
Target Profit 12.5% of capital base (4,37,20,000)	54,65,000
Profits achieved due to Mr. X $54,65,000 + 10\% (54,65,000)$	60,11,500
<b>Maximum emoluments that can be paid to Mr. X =</b>	<b>60,11,500</b>

Thus, the company is advised not to hire him as his CTC Rs. 76,00,000 is more than Rs. 60,11,500

Note: It is assumed that the average income tax rate of 25% given in the question is after considering the impact of Rs. 3 lakhs p.a. i.e., the exemption amount.

## VALUATION

### Question 11:

The following is the extract from the Balance Sheets of Popular Ltd.:

Liabilities	As at	As at	Assets	As at	As at
	31.3.2004	31.3.2005		31.3.2004	31.3.2005
	Rs. in lakhs	Rs. in lakhs		Rs. in lakhs	Rs. in lakhs
Share capital	500	500	Fixed assets	550	650
General reserve	400	425	10% investment	250	250
Profit and Loss account	60	90	Stock	260	300
18% term loan	180	165	Debtors	170	110
Sundry creditors	35	45	Cash at bank	46	45
Provision for tax	11	13	Fictitious assets	10	8
Proposed dividend	100	125			
	<b>1,286</b>	<b>1,363</b>		<b>1,286</b>	<b>1,363</b>

#### Additional information:

Replacement values of Fixed assets were Rs. 1,100 lakhs on 31.3.04 and Rs. 1,250 lakhs on 31.3.2005 respectively.

Rate of depreciation adopted on Fixed assets was 5% p.a.

50% of the stock is to be valued at 120% of its book value.

50% of investments were trade investments.

Debtors on 31st March, 2005 included foreign debtors of \$ 35,000 recorded in the books at Rs. 35 per U.S. Dollar. The closing exchange rate was \$ 1 = Rs. 39.

Creditors on 31st March, 2005 included foreign creditors of \$ 60,000 recorded in the books at \$ 1 = Rs. 33. The closing exchange rate was \$ 1 = Rs. 39.

Profits for the year 2004-05 included Rs. 60 lakhs of government subsidy which was not likely to recur.

Rs. 125 lakhs of Research and Development expenditure was written off to the Profit and Loss Account in the current year. This expenditure was not likely to recur.

Future maintainable profits (pre-tax) are likely to be higher by 10%.

Tax rate during 2004-2005 was 50%, effective future tax rate will be 40%.

Normal rate of return expected is 15%.

One of the directors of the company Arvind, fears that the company does not enjoy a goodwill in the prevalent market circumstances.

Critically examine this and establish whether Popular Co. has or has not any goodwill.

If your answers were positive on the existence of goodwill, show the leverage effect it has on the company's result.

Industry average return was 12% on long-term funds and 15% on equity funds.

**Answer**

**Calculation of Capital employed (CE)**

**Rs. in lakhs**

	<b>As on 31.3.04</b>	<b>As on 31.3.05</b>
Replacement Cost of Fixed Assets	1100.00	1250.00
Trade Investment (50%)	125.00	125.00
Current cost of stock	286.00	330.00
Debtors	170.00	111.40
Cash-at-Bank	46.00	45.00
<b>Total (A)</b>	<b>1727.00</b>	<b>1861.40</b>
Less: Outside Liabilities		
18% term loan	180.00	165.00
Sundry creditors	35.00	48.60
Provision for tax	11.00	13.00
<b>Total (B)</b>	<b>226.00</b>	<b>226.60</b>
<b>Capital employed (A-B)</b>	<b>1501.00</b>	<b>1634.80</b>

Average Capital employed at current value = [CE as on 31.3.2004 + CE as on 31.3.2005]/2

= [1501 + 1634.80]/2 = 1567.90 Lakhs

		<b>Rs. in Lakhs</b>
Future Maintainable Profit		
Increase in General Reserve		25
Increase in Profit and Loss Account		30
Proposed Dividends		125
Profit After Tax		180
Pre-Tax Profit = 180/.50		360
Less: Fictitious Assets written off (10 - 8)	2.00	
Non-Trading investment income (10% of Rs.125)	12.50	
Subsidy	60.00	
Exchange Loss on creditors [0.6 lakhs x(39-33)]	3.60	
Additional Depreciation on increase in value of Fixed Assets (current year) (1250 – 650 = 600 x 5/100)	30.00	108.10
		251.90
Add: Exchange Gain on Debtors [0.35 lakhs x(39-35)]	1.40	
Research and development expenses written off	125.00	
Stock Adjustment (30-26)	4.00	130.40

		382.30
Add: Expected increase of 10%		38.23
Future Maintainable Profit before Tax		420.53
Less: Tax @ 40% (40% of Rs.420.53)		168.21
Future Maintainable Profit		252.32

**Valuation of Goodwill Rs. in lakhs**

(i)	<b>According to Capitalisation of Future Maintainable Profit Method</b>	<b>Rs. in lakhs</b>
	Capitalised value of Future Maintainable Profit = $[256.28/15 \times 100]$	1,682.13
	Less: Average capital employed	1567.90
	Value of Goodwill	114.23
	Or	
(ii)	<b>According to Capitalisation of Super Profit Method</b>	<b>Rs. in lakhs</b>
	Future Maintainable Profit	252.32
	Less: Normal Profit @ 15% on average capital employed $(1567.90 \times 15\%)$	235.19
	Super Profit	17.13
	Capitalised value of super profit $[17.13/15 \times 100]$ i.e. Goodwill	114.2
	Goodwill exists, hence director's fear is not valid.	

**Leverage Effect on Goodwill**

			<b>Rs. in lakhs</b>
	Future Maintainable Profit on equity fund		252.32
	Future Maintainable Profit on Long-term Trading Capital employed		
	Future Maintainable Profit After Tax	252.32	
	Add: Interest on Long-term Loan (Term Loan)		
	(After considering Tax) $165 \times 18\% = 29.7 \times 50/100$	14.85	267.17
	Average capital employed (Equity approach)		1567.90
	Add: 18% Term Loan $(180+165)/2$		172.50
	Average capital employed (Long-term Fund approach)		1740.40
	<b>Value of Goodwill</b>		
(A)	Equity Approach		
	Value of Goodwill		114.23
(B)	Long-Term Fund Approach		
	Capitalised value of Future Maintainable Profit = $[267.17/12 \times 100]$		2226.42
	Less: Average capital employed		1740.40
	Value of Goodwill		486.02

**Comments on Leverage effect of Goodwill:** Adverse Leverage effect on goodwill is 371.79 lakhs (i.e., Rs.486.02-114.23). In other words, Leverage Ratio of Popular Ltd. is low as compared to

industry for which its goodwill value has been reduced when calculated with reference to equity fund as compared to the value arrived at with reference to long term fund.

**Working Notes:**

(1)	Stock adjustment	Rs. in lakhs	
	(i) Excess current cost of closing stock over its Historical cost (330 – 300)	30.00	
	(ii) Excess current cost of opening stock over its Historical cost (286-260)	26.00	
	(iii) Difference [(i– ii)]		4.00
(2)	Debtors' adjustment		
	(i) Value of foreign exchange debtors at the closing exchange rate (\$35,000 x 39)	13.65	
	(ii) Value of foreign exchange debtors at the original exchange rate (\$35,000 x 35)	12.25	
	(iii) Difference [(i) – (ii)]		1.40
(3)	Creditors' adjustment		
	(i) Value of foreign exchange creditors at the closing exchange rate (\$60,000 x 39)	23.40	
	(ii) Value of foreign exchange creditors at the original exchange rate(\$60,000 x 33)	19.80	
	(iii) Difference [(i) – (ii)]		3.60

**Question 12:**

The following Balance Sheet of X Ltd. is given:

**Balance Sheet as on 31st March, 2005**

Liabilities	Rs.	Assets	Rs.
5,000 shares of Rs. 100 each fully paid	50,00,000	Goodwill	4,00,000
Bank overdraft	18,60,000	Land & Building at cost	32,00,000
Creditors	21,10,000	Plant & Machinery at cost	28,00,000
Provision for taxation	5,10,000	Stock	32,00,000
P & L Appropriation A/c	21,20,000	Debtors considered good	20,00,000
	<b>1,16,00,000</b>		<b>1,16,00,000</b>

In 1986 when the company commenced operation the paid up capital was same. The Loss/Profit for each of the last years was – Yrs. 2000-01- Loss (Rs.5,50,000); 2001-02 Rs. 9,82,000; 2002-03 Rs. 11,70,000; 2003-04 Rs.14,50,000 2004-05 Rs. 17,00,000.

Although Income-tax has so far been paid @ 40% and the above profit have been arrived at on the basis of such tax rate, it has been decided that with effect from next year the Income-tax rate of 45% should be taken into consideration. 10% dividend in 2001-02 and 2002-03 and 15% dividend in 2003-04 and 2004-05 have been paid. Market price of shares of the company on 31st March, 2005 is Rs. 125. With effect from 1st April, 2005 Managing Director's remuneration has been approved

by the Government to be Rs. 8,00,000 in place of Rs. 6,00,000. The company has been able to secure a contract for supply of materials at advantageous prices. The advantage has been valued at Rs. 4,00,000 per annum for the next five years.

Ascertain goodwill at 3 year's purchase of super profit (for calculation of future maintainable profit weighted average is to be taken).

**Answer:**

<b>1 Future Maintainable Profit</b>				
Year	Profit (P) Rs.	Weight (W)	Product (PW) Rs.	
2001-2002	9,82,000	1	9,82,000	
2002-2003	11,70,000	2	23,40,000	
2003-2004	14,50,000	3	43,50,000	
2004-2005	17,00,000	4	68,00,000	
		10	1,44,72,000	
Weighted average annual profit (after tax) =			14,47,200	
Weighted average annual profit before tax			24,12,000	
Less: Increase in Managing Director's remuneration			2,00,000	
			22,12,000	
Add: Saving in cost of materials			4,00,000	
			26,12,000	
Less: Taxation @ 45%			11,75,400	
Future maintainable profit			14,36,600	
<b>ii Average Capital Employed</b>		Rs.	Rs.	
Assets:				
Land and Buildings			32,00,000	
Plant and Machinery			28,00,000	
Stock			32,00,000	
Sundry Debtors			20,00,000	
			1,12,00,000	
Less: Outside liabilities:				
Bank overdraft		18,60,000		
Creditors		21,10,000		
Provision for taxation		5,10,000	44,80,000	
Capital employed at the end of the year			67,20,000	
Add: Dividend @ 15% paid during the year			7,50,000	
			74,70,000	
Less: Half of the profit (after tax) for the year i.e.		Rs. 17,00,000 x ½	8,50,000	
Average capital employed			66,20,000	
<b>(iii) Normal Profit</b>				
Average dividend for the last 4 years =			12.5%	
Market price of share			Rs. 125	
Normal rate of return =				

	Normal profit (10% of Rs. 66,20,000) =	Rs. 6,62,000
<b>(iv)</b>	<b>Valuation of goodwill</b>	<b>Rs.</b>
	Future maintainable profit	14,36,600
	Less: Normal profit	6,62,000
	Super profit	7,74,600
	Goodwill at 3 years' purchase of super profits (Rs. 7,74,600 × 3)	23,23,800

**Question 13:**

Following are the information of two companies for the year ended 31st March, 2002:

Particular	Company A	Company B
Equity Shares of Rs. 10 each	8,00,000	10,00,000
10% Pref. Shares of Rs. 10 each	6,00,000	4,00,000
Profit after tax	3,00,000	3,00,000

Assume the Market expectation is 18% and 80% of the Profit are distributed.

What is the rate you would pay to the Equity Shares of each Company?

1. If you are buying a small lot.
2. If you are buying controlling interest shares.
3. If you plan to invest only in preference shares which company's preference shares would you prefer?

Would your rates be different for buying small lot, if the company 'A' retains 30% and company 'B' 10% of the profits?

**Answer:**

(i)

- (a) Buying a small lot of equity shares: If the purpose of valuation is to provide data base to aid a decision of buying a small (non-controlling) position of the equity of the companies, dividend capitalisation method is most appropriate. Under this method, value of equity share is given by:

$$[\text{Dividend per share} / \text{Market capitalisation rate}] \times 100$$

$$\text{Company A : Rs. } [2.4/18] \times 100 = \text{Rs. } 13.33$$

$$\text{Company B : Rs. } [208/18] \times 100 = \text{Rs. } 11.56$$

- (b) Buying controlling interest equity shares

If the purpose of valuation is to provide data base to aid a decision of buying controlling interest in the company, EPS capitalisation method is most appropriate. Under this method, value of equity is given by:

$$[\text{Earning per share (EPS)} / \text{Market capitalisation rate}] \times 100$$

$$\text{Company A : Rs. } [3/18] \times 100 = \text{Rs. } 16.67$$

$$\text{Company B : Rs. } [2.6/18] \times 100 = \text{Rs. } 14.44$$



- (ii) Preference Dividend coverage ratios of both companies are to be compared to make such decision.

Preference dividend coverage ratio is given by:

$[\text{Profit after tax} / \text{Preference Dividend}] \times 100$

Company A : Rs.3,00,000/ Rs.60,000 = 5 times

Company B : Rs.3,00,000/ Rs.40,000 = 7.5 times

If we are planning to invest only in preference shares, we would prefer shares of B Company as there is more coverage for preference dividend.

- (iii) Yes, the rates will be different for buying a small lot of equity shares, if the company 'A' retains 30% and company 'B' 10% of profits.

The new rates will be calculated as follows:

Company A : Rs.  $[2.1/18] \times 100 = \text{Rs. } 11.67$

Company B : Rs.  $[2.34/18] \times 100 = \text{Rs. } 13.00$

**Working Notes:**

<b>1. Computation of earnings per share and dividend per share (companies distribute 80% of profits)</b>			
		<b>Company A</b>	<b>Company B</b>
	Profit before tax	3,00,000	3,00,000
	Less: Preference dividend	60,000	40,000
	Earnings available to equity shareholders (A)	2,40,000	2,60,000
	Number of Equity Shares (B)	80,000	1,00,000
	Earnings per share (A/B)	3.0	2.60
	Retained earnings 20%	48,000	52,000
	Dividend declared 80% (C)	1,92,000	2,08,000
	Dividend per share (C/B)	2.40	2.08
<b>2. Computation of dividend per share (Company A retains 30% and Company B 10% of profits)</b>			
	Earnings available for Equity Shareholders	2,40,000	2,60,000
	Number of Equity Shares	80,000	1,00,000
	Retained Earnings	72,000	26,000
	Dividend Distribution	1,68,000	2,34,000
	Dividend per share	2.10	2.34

**Question 14:**

The following is the Balance Sheet of N Ltd. as on 31st March, 2002:

<b>Assets</b>	<b>Rs.</b>
---------------	------------

Goodwill	4,00,000
Building	24,00,000
Machinery	22,00,000
Furniture	10,00,000
Vehicles	18,00,000
Investments	16,00,000
Stock	11,00,000
Debtors	18,00,000
Bank Balance	3,20,000
Preliminary Expenses	2,00,000
	<b>1,28,20,000</b>
<b>Liabilities</b>	
4,00,000 Equity shares of Rs. 10 each fully paid	40,00,000
13.5% Redeemable preference shares of Rs. 100 each fully paid	20,00,000
General Reserve	16,00,000
Profit and Loss Account	3,20,000
Bank Loan (Secured against fixed assets)	12,00,000
Bills Payable	6,00,000
Creditors	31,00,000
	<b>1,28,20,000</b>

**Further information**

- a) Return on capital employed is 20% in similar business.
- b) Fixed assets are worth 30% more than book value. Stock is overvalued by Rs. 1,00,000, Debtors are to be reduced by Rs. 20,000. Trade investments, which constitute 10% of the total investments, are to be valued at 10% below cost.
- c) Trade investments were purchased on 01-04-2001. 50% of non-Trade Investments were purchased on 01-04-2000 and the rest on 01-04-1999. Non Trade Investments yielded 15% return on cost.
- d) In 1999-2000 new machinery costing Rs. 2,00,000 was purchased, but wrongly charged to revenue. This amount should be adjusted taking depreciation at 10% on reducing value method.
- e) In 2000-2001 furniture with a book value of Rs. 1,00,000 was sold for Rs. 60,000.
- f) For calculating goodwill two years purchase of super profits based on simple average profits of last four years are to be considered. Profit of last four years are as under:
- g)
 

1998-1999	Rs.16,00,000
1999-2000	Rs.18,00,000
2000-2001	Rs.21,00,000
2001-2002	Rs.22,00,000.
- h) Additional depreciation provision at the rate of 10% on the additional value of Plant and Machinery alone may be considered

Find out the intrinsic value of the equity share. Income-tax and Dividend tax are not to be considered.

**Answer:**

Calculation of intrinsic value of equity shares of N Ltd.

1.	Calculation of Goodwill				
	(i)	Capital employed			Rs.
		Fixed Assets			
		Building	24,00,000		
		Machinery (Rs. 22,00,000 + Rs. 1,45,800)	23,45,800		
		Furniture	10,00,000		
		Vehicles	18,00,000		
			75,45,800		
		Add: 30% increase	22,63,740		
			98,09,540		
		Trade investments (Rs.16,00,000 × 10% × 90%)	1,44,000		
		Debtors (Rs. 18,00,000 – Rs. 20,000)	17,80,000		
		Stock (Rs. 11,00,000 – Rs. 1,00,000)	10,00,000		
		Bank balance	3,20,000	1,30,53,540	
		Less: Outside liabilities			
		Bank Loan	12,00,000		
		Bills payable	6,00,000		
		Creditors	31,00,000	49,00,000	
		Capital employed		81,53,540	
	(ii)	<b>Future Maintainable Profit</b>			
		<b>Calculation of average profit</b>	<b>1998-99</b>	<b>1999-2000</b>	<b>2000-2001</b>
			<b>Rs.</b>	<b>Rs.</b>	<b>Rs.</b>
		Profit given	16,00,000	18,00,000	21,00,000
		Add: Capital expenditure of machinery charged to revenue		2,00,000	
		Loss on sale of furniture			40,000
			16,00,000	20,00,000	21,40,000
		Less: Depreciation on Machinery		20,000	18,000
		Income from nontrade investments		1,08,000	2,16,000
		Reduction in value of stock			1,00,000
		Bad debts			20,000
		Adjusted profit	16,00,000	18,72,000	19,06,000
					<b>Rs.</b>
		Total adjusted profit for four years (1998-1999 to 2001-2002)			72,25,800
		Average profit (Rs. 72,25,800/4)			18,06,450
		Less: Depreciation at 10% on additional value of machinery (22,00,000 + 1,45,800) × 30/100 i.e. Rs. 7,03,740			70,374

	Adjusted average profit		17,36,076
(iii)	<b>Normal Profit</b>		
	20% on capital employed i.e. 20% on Rs. 81,53,540		Rs. 16,30,708
(iv)	<b>Super profit</b>		
	Expected profit – normal profit = Rs. 17,36,076 – Rs. 16,30,708 =		Rs. 1,05,368
(v)	<b>Goodwill</b>		
	2 years' purchase of super profit = Rs. 1,05,368 × 2 =		Rs. 2,10,736
2.	<b>Net assets available to equity shareholders</b>	<b>Rs.</b>	<b>Rs.</b>
	Goodwill as calculated in 1(v) above	2,10,736	
	Sundry fixed assets	98,09,540	
	Trade and Non-trade investments	15,84,000	
	Debtors	17,80,000	
	Stock	10,00,000	
	Bank balance	3,20,000	1,47,04,276
	Less: Outside liabilities		
	Bank loan	12,00,000	
	Bills payable	6,00,000	
	Creditors	31,00,000	49,00,000
	Preference share capital		20,00,000
	Net assets for equity shareholders		78,04,276
3.	<b>Valuation of equity shares</b>		
	Value of equity share =		
	Net assets available to equity shareholders/Number of equity shares= Rs. 78,04,276/4,00,000=		Rs. 19.51

**Note:**

1. Depreciation on the overall increased value of assets (worth 30% more than book value) has not been considered. Depreciation on the additional value of only plant and machinery has been considered taking depreciation at 10% on reducing value method while calculating average adjusted profit.
2. Loss on sale of furniture has been taken as non-recurring or extraordinary item.
3. It has been assumed that preference dividend has been paid till date.

**Question 15:**

The Capital Structure of M/s XYZ Ltd., on 31st March, 2003 was as follows:

	Rs.
Equity Capital-18,000 Shares of Rs. 100 each	18,00,000
12% Preference Capital-5,000 Shares of Rs. 100 each	5,00,000
12% Secured Debentures	5,00,000
Reserves	5,00,000
Profit earned before Interest and Taxes during the year	7,20,000
Tax rate	40%

Generally the return on equity shares of this type of Industry is 15%

Subject to:

1. The profit after tax covers Fixed Interest and Fixed Dividends at least 4 times;
2. The Debt Equity ratio is at least 2 ;
3. Yield on shares is calculated at 60% of distributed Profits and 10% of undistributed Profits;
4. The Company has been paying regularly an Equity dividend of 15%.
5. The risk premium is generally assumed at 1%.

Find out the value of Equity shares of the Company.

**Answer:**

Calculation of profit after tax (PAT)

		Rs.
Profit before interest & tax (PBIT)		7,20,000
Less: Debenture interest (Rs. 5,00,000 x 12/100)		60,000
Profit before tax (PBT)		6,60,000
Less: Tax @ 40%		2,64,000
Profit after tax (PAT)		3,96,000
Less: Preference dividend [Rs.5,00,000 x12]/100	60,000	
Equity dividend [Rs.18,00,000 x 15]/100	2,70,000	3,30,000
Retained earnings (undistributed profit)		66,000

**Calculation of Interest and Fixed Dividend Coverage**

$$= \frac{[PAT + \text{Debenture interest}]}{[\text{Debenture interest} + \text{Preference dividend}]}$$

$$= \frac{[Rs.3,96,000 + 60,000]}{[Rs.60,000 + 60,000]}$$

$$= Rs. 4,56,000 / Rs.1,20,000 = 3.8 \text{ times}$$

**Calculation of Debt Equity Ratio**

$$\text{Debt Equity Ratio} = \frac{\text{Debt (long term loans)}}{\text{Equity (shareholders' funds)}}$$

$$= \frac{\text{Debentures}}{[\text{Preference share capital} + \text{Equity share capital} + \text{Reserves}]}$$

$$= \frac{Rs.5,00,000}{[Rs.5,00,000 + 18,00,000 + 5,00,000]}$$

$$= \text{Debt Equity Ratio} = Rs.5,00,000 / Rs.28,00,000 = .179$$

The ratio is less than the prescribed ratio.

**Calculation of Yield on Equity Shares**

Yield on equity shares is calculated at 60% of distributed profits and 10% of undistributed profits:

60% of distributed profits (60% of Rs. 2,70,000)	1,62,000	
10% of undistributed profits (10% of Rs. 66,000)	<u>6,600</u>	1,68,600

$$\text{Yields on equity shares} = \frac{[\text{Yield on shares} / \text{Equity share capital}] \times 100}{}$$

$$= \frac{[Rs.1,68,600 / Rs.18,00,000] \times 100}{} = 9.37\%$$

**Calculation of Expected Yield on Equity Shares**

Normal return expected 15%

Add: Risk premium for low interest and fixed dividend coverage ( $3.8 < 4$ )      1%\*

Risk for debt equity ratio not required      Nil\*\*      16%

### Value of an Equity Share

= [Actual yield / Expected yield] x Paid up value of a share

=  $[9.37/16] \times 100 = \text{Rs.}58.56$

\* When interest and fixed dividend coverage is lower than the prescribed norm, the riskiness of equity investors is high. They should claim additional risk premium over and above the normal rate of return. Hence, the additional risk premium of 1% has been added.

\*\* The debt equity ratio is lower than the prescribed ratio, that means outside funds (Debts) are lower as compared to shareholders' funds. Therefore, the risk is less for equity shareholders. Therefore, no risk premium is required to be added in this case.

### Question 16:

The summarized Balance Sheet of 'Janmejaya' Private Ltd. as on 31.03.2010 is as under:

Liabilities	Amount Rs.	Assets		Amount Rs.
Share Capital:		Fixed Assets:		
Equity Shares of		Goodwill		1,75,000
Rs. 10 each	5,00,000	Leasehold Property	1,60,000	
8% Preference Shares		(-) Depreciation	70,000	90,000
of Rs. 10 each fully paid	2,00,000	Plant & Machinery	2,50,000	
Reserve & Surplus:		(-) Depreciation	25,000	2,25,000
General Reserve	1,00,000	Investment at cost		4,00,000
Profit & Loss Account	2,20,250	Current Assets:		
Current Liabilities:		Stock at cost		82,500
Bank Loan	1,00,000	Sundry Debtors		40,500
Sundry Creditors	49,750	Balance at Bank		1,57,000
	<b>11,70,000</b>			<b>11,70,000</b>

A holder of 10,000 equity shares in the company has agreed to sell these shares at a value based on the above Balance Sheet, but subject to adjustment of the valuation of the following:

- (1) The leasehold property was acquired on 1.4.2000 and at the Balance Sheet date the lease has a further six years to run. The cost should be written off over the term of the lease by equal annual charges. Till date, Rs. 7,000 per annum had been written off.
- (2) In 2007-08, goods costing Rs. 6,000 were purchased and have been included since that date at cost in the Stock lists. The goods were valueless on the Balance Sheet date.
- (3) An expense Creditor Rs. 3,750 of the current year has been omitted from being recorded in the books.
- (4) A General Reserve of 10 per cent on total Debtors, after specific provision for Doubtful Debts, has been made for the first time in the current year accounts.

- (5) Goodwill is to be valued at two years' purchase of the average profits, after the above adjustments, of three years 2007-08; 2008-09; and 2009-10, such profits being those available for dividend for Equity shareholders.
- (6) The profits of the company as shown by the accounts before appropriations and before providing for preference dividends were as follows:

Year	Rupees
2007-08	80,400
2008-09	92,900
2009-10	89,650

You are required to compute the total consideration due to the Vending Shareholder.

**Answer:**

<b>(a) Calculation of Adjusted Profits of Janmejy Ltd</b>				
Year	2007-08	2008-09	2009-10	
	Rs.	Rs.	Rs.	
Profit before appropriation and preference dividend	80,400	92,900	89,650	
Less: Under provision of writing off of lease	3,000	3,000	3,000	
Stock written off	-	-	6,000	
Expenses omitted	-	-	3,750	
Dividend on preference shares	16,000	16,000	16,000	
	61,400	73,900	60,900	
Add: General reserve created on 31.3.10 on debtors in excess of specific provision	-	-	4,500	
Adjusted profits	61,400	73,900	65,400	
Adjusted average profits = [Rs.61,400 + Rs.73,900 + Rs.65,400]/3			Rs. 66,900	
Goodwill = Rs. 66,900 x 2			Rs. 1,33,800	
<b>2</b>	<b>Net Assets owned by Equity Shareholders</b>			<b>Rs.</b>
	Goodwill			1,33,800
	Leasehold property [Rs.1,60,000/16] x6			60,000
	Plant and machinery			2,25,000
	Investments			4,00,000
	Stock (Rs. 82,500 – Rs. 6,000)			76,500
	Sundry debtors (Rs. 40,500 + Rs. 4,500)			45,000
	Bank balance			1,57,000
				10,97,300
	Less: Current liabilities:			
	Bank loan			1,00,000
	Sundry creditors (Rs. 49,750 + Rs. 3750)			53,500
				(1,53,500)
				9,43,800
	Less: Preference share capital			(2,00,000)
	Net assets owned by equity shareholders			7,43,800

	Value per equity share = Rs.7,43,800/50,000 =	Rs. 14.876
<b>3</b>	<b>Total consideration due to vending shareholder = 10,000 Equity shares @ Rs. 14.876 =</b>	<b>Rs. 1,48,760</b>

**Question 17:**

From the following data, compute the 'Net Assets' value of each category of equity shares of Smith Ltd.:

Shareholders' funds

10,000 'A' Equity shares of Rs.100 each, fully paid

10,000 'B' Equity shares of Rs.100 each, Rs.80 paid

10,000 'C' Equity shares of Rs.100 each, Rs.50 paid

Retained Earnings Rs.9,00,000

[May 2008, 6 Marks]

**Answer:**

Computation of Net assets

Worth of net assets is equal to shareholders' fund, i.e.	<b>Rs</b>
Paid up value of 'A' equity shares 10,000 x Rs.100	10,00,000
Paid up value of 'B' equity shares 10,000 x Rs. 80	8,00,000
Paid up value of 'C' equity shares 10,000 x Rs. 50	5,00,000
Retained earnings	<u>9,00,000</u>
Net assets	32,00,000
Add: Notional calls (10,000 x Rs.20 + 10,000 x Rs.50)	<u>7,00,000</u>
	39,00,000
Value of each equity share of Rs.100 fully paid up = Rs. 39,00,000 / 30,000=	Rs.130
Net asset values of each category of equity shares	Rs.
Value of 'A' equity shares of Rs. 100 fully paid up	130
Value of 'B' equity shares of Rs. 100 each, out of which Rs. 80 paid up (130-20)	110
Value of 'C' Equity shares of Rs.100 each, out of which Rs. 50 paid up (130-50)	80

**Question 18:**

Timby Ltd. is in the business of making sports equipment. The Company operates from Thailand. To globalise its operations Timby has identified Fine Toys Ltd. an Indian Company, as a potential takeover candidate.

After due diligence of Fine Toys Ltd. the following information is available

(a) Cash Flow Forecasts (Rs. in crore):

Year	10	9	8	7	6	5	4	3	2	1
Fine Toys Ltd.	24	21	15	16	15	12	10	8	6	3



Timby Ltd.	108	70	55	60	52	44	32	30	20	16
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(b) The net worth of Fine Toys Ltd. (in lakh Rs.) after considering certain adjustments suggested by the due diligence team reads as under:

Tangible		750
Inventories		145
Receivables		75
		970
Less: Creditors	165	
Bank Loans	250	(415)
Represented by equity shares of Rs. 1000 each		555

Talks for takeover have crystallized on the following:

1. Timby Ltd. will not be able to use Machinery worth Rs.75 lakhs which will be disposed of by them subsequent to take over. The expected realization will be Rs.50 lakhs.
2. The inventories and receivables are agreed for takeover at values of Rs.100 and Rs.50 lakhs respectively which is the price they will realize on disposal.
3. The liabilities of Fine Toys Ltd. will be discharged in full on take over along with an employee settlement of Rs.90 lakhs for the employees who are not interested in continuing under the new management.
4. Timby Ltd. will invest a sum of Rs.150 lakhs for upgrading the Plant of Fine Toys Ltd. on takeover. A further sum of Rs.50 lakhs will also be incurred in the second year to revamp the machine shop floor of Fine Toys Ltd.
5. The Anticipated Cash Flows (in Rs. crore) post takeover are as follows:

Year	1	2	3	4	5	6	7	8	9	10
	18	24	36	44	60	80	96	100	140	200

You are required to advise the management the maximum price which they can pay per share of Fine Toys Ltd. if a discount factor of 20 per cent is considered appropriate.

**Answer:**

Calculation of Maximum Price that can be quoted for takeover of Fine Toys Ltd.

	Rs. in lakhs	Rs. in lakhs
Present (Discounted) value of incremental cash flows (Refer Working Note)		7,845.02
Add: Proceeds from disposal of fixed assets	50.00	
Proceeds from disposal of inventories	100.00	
Receipts from debtors	50.00	200.00
		8,045.02
Less: Settlement of creditors	165.00	
Bank Loans	250.00	
Employee settlement	90.00	
Renovation of Plant	150.00	
Revamp of machine shop floor (Rs. 50 lakhs × 0.6944)*	34.72	689.72

Maximum value that can be offered	7,355.30
Maximum price per share of Fine Toys Ltd. (Rs.7,355.30 lakhs / 55,500shares)	
= Rs. 13,252.79	

**Working Note:**

Present Value of Incremental Cash Flows (Rs. in lakhs)

Year	Cash flow After takeover	Cash flows before takeover	Incremental Cash flows	Discount factor@20%	Discounted Cash flows
1	1,800	1600	200	0.8333	166.66
2	2,400	2000	400	0.6944	277.76
3	3,600	3000	600	0.5787	347.22
4	4,400	3200	1200	0.4823	578.76
5	6,000	4400	1600	0.4019	643.04
6	8,000	5200	2800	0.3349	937.72
7	9,600	6000	3600	0.2791	1,004.76
8	10,000	5500	4500	0.2326	1,046.70
9	14,000	7000	7000	0.1938	1,356.60
10	20,000	10800	9200	0.1615	1,485.80
					7,845.02

**BRAND VALUE ADDED**

**Question 19:**

Rough-use Ltd. has hired a Marketing Consultancy Firm for doing market research and provide data relating to Tyre Industry for the next 10 years. The following were the observations and projections made by the consultancy firm:

1. The Tyre Industry in the target area i.e. whole of India, is expected to grow at 5% per annum for the next 3 years, and thereafter at 7% per annum over the subsequent seven years.
2. The market size in terms of unencumbered basic sales of tyres was estimated at Rs. 8,000 crores in the last year, dominated by medium and large players. This includes roughly 10% of fake brands and locally manufactured tyres. Market share of this segment is expected to increase by 0.5% over the decade.
3. Cheap Chinese Imports accounted for 40% of the business (but 60% of the volume) last year. This is expected to be increase by 0.25% over the next decade.
4. The other large players accounted for roughly 34% of the business value last year, which is expected to go down by 0.5% over the next ten years, due to expansion of Rough-use Ltd.'s product portfolio.
5. The Company is in the process of business process re-engineering, which will start yielding results in 2 years time, and increase its profitability by 3% from its existing 8%.

What is the Brand Value of Rough-use Ltd., under Market Oriented Approach, if the appropriate discount rate is 10%?

**Answer:**

**Market Share of Rough-use Ltd.**

- (a) Last year's market share = 100% – Fake Brands 10% - Chinese Imports 40% - Other Domestic Brands (large players) 34% = 16%
- (b) Increase or decrease in market share: Chinese Imports 0.25% + Local Brands 0.5% - Other Domestic Brands (large players) 0.5% = 0.25% i.e. increase in others' market share.

Hence, market share of Rough-use Ltd. is expected to fall by 0.25% every year over the decade, from the current level of 16%. Therefore, this year it will be 15.75%, next year 15.50%, the year after 15.25% etc.

**Brand Valuation under Market Approach**

(Rs. in Crores)

Year	Market Size	Market Share	Market Share of Co.	Expected Profit	Discount Factor @10%	Discounted Cash Flow
1	8,000.00 + 5% = 8,400.00	15.75%	1,323.00	@ 8% = 105.84	0.909	96.22
2	8,400.00 + 5% = 8,820.00	15.50%	1,367.10	@ 8% = 109.37	0.826	90.34
3	8,820.00 + 5% = 9,261.00	15.25%	1,412.30	@11% = 155.32	0.751	116.65
4	9,261.00 + 7% = 9,909.27	15.00%	1,486.39	@11% = 163.50	0.683	111.67
5	9,909.27 + 7% = 10,602.92	14.75%	1,563.93	@11% = 172.03	0.621	106.83
6	10,602.92 + 7% = 11,345.12	14.50%	1,645.04	@ 11% = 180.95	0.564	102.06
7	11,345.12 + 7% = 12,139.28	14.25%	1,729.85	@11% = 190.28	0.513	97.62
8	12,139.28 + 7% = 12,989.03	14.00%	1,818.46	@11% = 200.03	0.467	93.41
9	12,989.03 + 7% = 13,898.26	13.75%	1,911.01	@11% = 210.21	0.424	89.13
10	13,898.26 + 7% = 14,871.14	13.50%	2,007.60	@11% = 220.84	0.386	85.24
	Brand Value					989.17

Brand Value of Rough-use Ltd. under Market Oriented Approach is Rs. 989.17 crores.

**EMPLOYEE SHARES BASED PAYMENT**

**Question 20:**

PQ Ltd. grants 100 stock options to each of its 1,000 employees on 1-4-2013, conditional upon the employee remaining in the company for 2 years. The fair value of the option is Rs. 18 on the grant date and the exercise price is Rs. 55 per share. The other information is given as under:

- (i) The no. of employees expected to satisfy service condition are 930 in the 1st year and 850 in the 2nd year.
- (ii) 40 employees left the company in the 1st year of service and 880 employees have actually completed 2 year vesting period.
- (iii) The profit of the enterprise before amortization of the compensation cost on account of ESOPs is as follows:
- (A) Rs. 18,50,000
- (B) Rs. 22,00,000
- (iv) The fair value of share for these years was Rs. 80 and Rs. 88 respectively.
- (v) The company has 6 lakhs shares of Rs. 10 each outstanding at the end of both years.

Compute basic and diluted EPS for both the years (ignore the tax impacts).

**Answer:**

Calculation of Basic & Diluted EPS	2013-14	2014-15
Profit before amortization of ESOP cost	18,50,000	22,00,000
Less: ESOP cost amortised	(8,37,000)	(7,47,000)
Net profit for shareholders	10,13,000	14,53,000
No. of shares outstanding	6,00,000	6,00,000
Basic EPS	1.69	2.42
Potential equity	19,200	33,000
Total no. of equity shares	6,19,200	6,33,000
Diluted EPS	1.64	2.30

**Working Notes:**

	2013-2014	2014-2015
1. Calculation of Potential Equity		
a. Actual no. of employees	960	880
b. Options granted per employee	100	100
c. No. of options outstanding	96,000	88,000
d. Unamortised ESOP cost per option (Rs.)	(Rs. 18-18/2)	
	9	0
e. Exercise price (Rs.)	55	55
f. Expected exercise price to be received (c x e) (Rs.)	52,80,000	48,40,000
g. Unamortised ESOP cost (c x d) (Rs.)	8,64,000	0
h. Total proceeds (Rs.)	61,44,000	48,40,000
i. Fair value per share	80	88
j. No. of shares issued for consideration (h/i)	76,800	55,000
k. Potential Equity (c-j)	19,200	33,000
2. Calculation of ESOP cost to be amortised	2013-2014	2014-15
Fair value of options per share	Rs. 18	Rs. 18
No. of options expected to vest under the scheme	(930 x 100)	(880 x 100)

		93,000	88,000
	Fair value of options	16,74,000	Rs. 15,84,000
	Value of options recognized as expenses	(Rs. 16,74,000 / 2)	(Rs. 15,84,000 – Rs. 8,37,000)
		8,37,000	7,47,000

**Question 21:**

Kush Ltd. announced a Share Based Payment Plan for its employees who have completed 3 years of continuous service, on 1st of April, 2010. The plan is subject to a 3 year vesting period. The following information is supplied to you in this regard:

- (i) The eligible employees can either have the option to claim the difference between the exercise price of Rs. 144 per share and the market price in respect of the share on vesting date in respect of 5,000 shares or such employees are entitled to subscribe to 6,000 shares at the exercise price.
- (ii) Any shares subscribed to by the employees shall carry a 3 year lock in restriction. All shares carry face Value of Rs. 10.
- (iii) The Current Fair Value of the shares at (ii) above is Rs. 60 and that in respect of freely tradable shares is higher by 20%.
- (iv) The Fair Value of the shares not subjected to lock in restriction at the end of each year increases by a given % from its preceding value as under:

	% of Increase
Year 2010-11	6
Year 2011-12	10
Year 2012-13	15

You are required to draw up the following accounts under both options:

- (I) Employee Compensation Account,
- (II) Provision for Liability Component Account,
- (III) ESOP Outstanding Account

**Answer**

Working Notes:

1.	Computation of Fair values.	
	Fair value of shares subject to Lock in as on 1st April, 2010	Rs. 60/-
	% of increase in Fair Value of shares not subjected to Lock in	20%
	Fair Value as on 1st April, 2010 of Shares not subjected to lock in (60+20%)	Rs. 72/-
	% increase over previous value in respect of Fair Value on 31.03.2011	6%
	Fair Value of Shares not subjected to Lock in restriction on 31.03.2011 (72 + 6%)	Rs. 76.32
	% increase over previous value in respect of Fair Value on 31.03.2012	10%

	Fair Value of Shares not subjected to Lock in restriction on 31.03.2012 (76.32 + 10%)			Rs. 83.95
	@ increase over previous value in respect of Fair Value on 31.03.2013			15%
	Fair Value of Shares not subjected to Lock in restriction on 31.03.2013 (83.95 + 15%)			Rs. 96.54
2.	Expense to be recognized in respect of Equity Component			
	Fair Value under Equity Settlement Option (6,000 x Rs. 60/-)			3,60,000
	Less: Fair Value under Cash Settlement (Liability Component) option (5,000 x Rs. 72)			3,60,000
	Equity Component			Nil
	Expenses to be recognized each year for Equity Component			Nil
3.	Expenses to be recognized for Liability Component	2011-11	2011-12	2012-13
	Number of Shares (A)	5000	5000	5000
	Fair Value at the end of each year (B)	76.32	83.95	96.54
	Fair Value of Liability Component (A x B)	3,81,600	4,19,750	4,82,700
	Expenses to be recognized*	1,27,200	1,52,633	2,02,867

\*Expenses to be recognized each year has been calculated on the basis:

[Fair Value X No. of years/ Vesting Period]- Expired Expenditure recognised till previous year

**Employee Compensation Account**

Year	Particulars	Rs.	Year	Particulars	Rs.
2010-11	To Provision for Liability (W.N. 3)	1,27,200	2010-11	By Profit & Loss A/c	1,27,200
2011-12	To Provision for Liability (W.N. 3)	1,52,633	2011-12	By Profit & Loss A/c	1,52,633
2012-13	To Provision for Liability (W.N. 3)	2,02,867	2012-13	By Profit & Loss A/c	2,02,867

**Provision for Liability Component Account**

Year	Particulars	Rs.	Year	Particulars	Rs.
2010-11	To Balance c/d	1,27,200	2010-11	By Employees Compensation	1,27,200
2011-12	To Balance c/d	2,79,833	2011-12	By Balance c/d	1,27,200
				By Employees Compensation A/c	1,52,633
		2,79,833			2,79,833
2012-13	To Balance c/d	4,82,700	2012-13	By Balance c/d	2,79,833
				By Employees compensation A/c	2,02,867
		4,82,700			4,82,700

**If Employee opts for Cash settlement**

**Provision for Liability Component Account**

Year	Particulars	Rs.	Year	Particulars	Rs.
2013-14	To Bank (5000 x Rs96.54)	4,82,700	2013-14	By Balance c/d	4,82,700

**If employee opts for Equity Settlement**

**Provision for Liability Component Account**

Year	Particulars	Rs.	Year	Particulars	Rs.
2013-14	To ESOP outstanding A/c	4,82,700	2013-14	By Balance c/d	4,82,700

**ESOP Outstanding Account**

Year	Particulars	Rs.	Year	Particulars	Rs.
2013-14	To Equity Share Capital		2013-14	By Provision for	
	(6000 x Rs. 10)	60,000		Liability Component A/c	4,82,700
	To Securities Premium	12,86,700		By Bank (6,000 x Rs. 144)	8,64,000
		13,46,700			13,46,700

**Question 22:**

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

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

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

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

**Answer**

**Provision for SARs Account**

Year	Particulars	Amount	Year	Particulars	Amount
2011-12	To Balance c/d	3,56,667	2011-12	By Employees Compensation	3,56,667
		<b>3,56,667</b>			<b>3,56,667</b>
2012-13	To Balanced c/d	8,18,100	2012-13	By Balanced B/d	3,56,667
				By Employees Compensation	4,61,433
		<b>8,18,100</b>			<b>8,18,100</b>
2013-14	To Balance c/d	15,79,500	2013-14	By Balance B/d	8,18,100
				By Employees Compensation	7,61,400
		<b>15,79,500</b>			<b>15,79,500</b>
2014-15	To Bank	17,55,000	2014-15	By Balance B/d	15,79,500
	(975x60x30)			By Employees Compensation	1,75,500
		<b>17,55,000</b>			<b>17,55,000</b>

**Working Notes:**

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

	2011-12	2012-13	2013-14
No. of SARs to Vest			
$1040 \times 0.95 \times 0.95 \times .95 \times 60 =$	53,500*		
$1040 - (35-5) \times 0.90 \times 0.90 \times 60 =$		49,086*	
$1040 - (35-5) - 20 - (20-5) \times 60 =$			58,500*
Fair Value of SAR	20	25	27
Total Fair Value	10,70,000	12,27,150	15,79,500
Expenses to be recognized each year			
$10,70,000 \times 1/3 =$	3,56,667		
$12,27,150 \times 2/3 - 3,56,667 =$		4,61,433	
$15,79,500 - (3,56,667 + 4,61,433) =$			7,61,400

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

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

Total intrinsic Value of SARs less expense recognized till date.

$$= (975 \times 60 \times 30) - 15,79,500 = 1,75,500.$$

**CORPORATE RESTRUCTURING**

**Question 23:**



The following are the Balance Sheet of A Ltd. and B Ltd. as on 31-12-1994:

**A Ltd.**

	Rs.		Rs.
15,000 Equity Shares of Rs. 100 each	15,00,000	Fixed Assets	17,00,000
5,000 Preference Shares of Rs. 100 each	5,00,000	Stock (Pledged with Secured Loan holders)	92,00,000
Development Rebate Reserve	2,00,000	Other Current Assets	18,00,000
Secured Loans (Secured against pledge of stocks)	80,00,000	Profit & Loss A/c	83,00,000
Unsecured Loans	43,00,000		
Current Liabilities	65,00,000		
	<b>2,10,00,000</b>		<b>2,10,00,000</b>

**B Ltd.**

	Rs.		Rs.
50,000 Equity Shares of Rs. 10 each	5,00,000	Fixed Assets	34,00,000
General Reserves	14,00,000	Current Assets	48,00,000
Secured Loans	40,00,000		
Current Liabilities	23,00,000		
	<b>82,00,000</b>		<b>82,00,000</b>

Both of the companies go into liquidation and C Ltd. is formed to take over their business.

The following information is given:

- All current assets of the two companies except pledged stock are taken over by C Ltd. The realizable value of all current assets is 80% of book values in case of A Ltd. and 70% for B Ltd.
- The break-up of current liabilities is as follows:

	A Ltd.	B Ltd.
Statutory Liabilities		
(including Rs. 11,00,000 in case of A Ltd. in respect of a claim not having been admitted shown as contingent liability)	36,00,000	5,00,000
Liability of Employees.	15,00,000	9,00,000
Balance current liability represents miscellaneous creditors.		

- Secured loans includes Rs. 8,00,000 accrued interest in the case of B Ltd.
- 1,00,000 equity shares of Rs. 10 each are allotted at par against cash payment of entire face value by C Ltd. to the shareholders of A Ltd. and B Ltd. in the ratio of face values of shares held by them in A Ltd. and B Ltd.
- Preference shareholders are issued equity shares worth Rs. 1,00,000 in lieu of present holdings.

- (f) Secured loan holders agree to continue the balance amount of their loans to C Ltd. after adjusting, value of pledged security in case of A Ltd. and after waiving 50% of interest due in the case of B Ltd.
- (g) Unsecured loans are taken over by C Ltd. at 25% of loan amounts.
- (h) Employees are issued fully paid up equity shares in C Ltd. at par in full settlement of their dues.
- (i) Statutory liabilities are taken over by C Ltd. at full values and miscellaneous creditors are taken over at 80% of the book values.

Show the opening Balance Sheet of C Ltd.

**Question 24:**

The following are the Balance Sheets of Big Ltd. and Small Ltd. as at 31.3.06:

(Rs. in lakhs)

	Big	Small		Big	Small
Share Capital	40.0	15.0	Sundry Assets	56.0	20.0
Profit & Loss A/c	7.5	---	(including cost of Shares)		
Sundry Creditors	12.5	12.5	Goodwill	4.0	5.0
			Profit and Loss A/c	-----	2.5
	60.0	27.5		60.0	27.5

Additional Information:

- a) The two companies agree to amalgamate and form a new company, Medium Ltd.
- b) Big Ltd. holds 10,000 shares in Small Ltd. acquired at a cost of Rs. 2,50,000 and Small Ltd. holds 5,000 shares in Big Ltd. acquired at a cost of Rs. 7,00,000.
- c) The shares of Big Ltd. are of Rs. 100 and are fully paid and the shares of Small Ltd. are of Rs. 50 each on which Rs. 30 has been paid-up.
- d) It is agreed that the goodwill of Big Ltd. would be valued at Rs. 1,50,000 and that of Small Ltd. at Rs. 2,50,000.
- e) The shares which each company holds in the other are to be valued at book value having regard to the goodwill valuation decided as given in
- f) The new shares are to be of a nominal value of Rs. 50 each credited as Rs. 25 paid.

You are required to:

- a) Prepare the Balance Sheet of Medium Ltd., as at 31st March, 2006 after giving effect to the above transactions; and
- b) Prepare a statement showing the shareholdings in the new company attributable to the shareholders of the merged companies.

**Answer**

(i) Balance Sheet of Medium Ltd. as on 31st March, 2006

Liabilities	Rs.	Assets	Rs.
1,82,000 shares of Rs.50/- each, Rs.25 paid up [Issued for consideration other than cash]	45,50,000	Goodwill (Rs.1,50,000+Rs.2,50,000)	4,00,000
Sundry Creditors	25,00,000	Sundry Assets (Rs. 53,50,000+ Rs.13,00,000)	66,50,000
	<b>70,50,000</b>		<b>70,50,000</b>

(ii) Statement of Shareholding in Medium Ltd.		Big Ltd.	Small Ltd.
		Rs.	Rs.
Total value of Assets		44,20,513	8,52,564
Less: Pertaining to shares held by the other company		5,52,564	1,70,513
		38,67,949	6,82,051
Rounded off to		38,67,950	6,82,050
Shares of new company (at Rs. 25 per share)		1,54,718	27,282
Total purchase consideration to be paid to Big Ltd and Small Ltd. (Rs.38,67,950 + Rs.6,82,050)			Rs. 45,50,000
Number of shares in Big Ltd. (40,00,000/100)			40,000 shares
Number of shares in Small Ltd. (15,00,000/30)			50,000 shares
Holding of Small Ltd. in Big Ltd. (5,000/40,000)			1/8
Holding of Big Ltd. in Small Ltd. (10,000/50,000)			1/5
Number of shares held by outsiders in Big Ltd. (40,000 - 5,000) =			35,000
Number of shares held by outsiders in Small Ltd. (50,000 - 10,000)			40,000
<b>Workings Note:</b>			
<b>1</b>	<b>Calculation of Book Value of Shares</b>	<b>Big Ltd</b>	<b>Small Ltd.</b>
		Rs.	Rs.
	Goodwill	1,50,000	2,50,000
	Sundry Assets other than shares in other company (56,00,000 - 2,50,000)	53,50,000	
	(20,00,000 - 7,00,000)		13,00,000
		55,00,000	15,50,000
	Less: Sundry Creditors	12,50,000	12,50,000
		42,50,000	3,00,000

If x is the Book Value of Assets of Big Ltd and y of Small Ltd.

$$x = 42,50,000 + 1/5y$$

$$y = 3,00,000 + 1/8x$$

$$x = 42,50,000 + 1/5 (3,00,000 + 1/8x)$$

$$x = 42,50,000 + 60,000 + 1/40x$$

$$39/40x = 43,10,000$$

$$x = 44,20,513 \text{ (approx.)}$$

$$\begin{aligned}
 y &= 3,00,000 + 1/8(44,20,513) \\
 &= 3,00,000 + 5,52,564 \\
 &= \text{Rs. } 8,52,564 \text{ (approx.)}
 \end{aligned}$$

Book Value of one share of Big Ltd. = Rs. 44,20,513/40 000=Rs. 110.513(approx.)

Book Value of one share of Small Ltd. = Rs. 8,52,564/50 000 = Rs. 17.05 (approx.)

**Question 25:**

XY Limited has been incorporated with an authorised capital of Rs. 70 lacs equity shares of Rs. 10each and Rs. 4 lacs preference shares of Rs. 100 each. The subscribers to the Memorandum of Association have subscribed and paid for 1 lac equity shares. The expenses for incorporation incurred amounted to Rs. 8.09 lacs. XY Limited desires to amalgamate X Limited and Y Limited as at 31<sup>st</sup> March, 2015. Following information is available:

**Balance Sheet as on 31st March, 2015**

(Rs. in lacs)

	X Limited	Y Limited
<b>Liabilities</b>		
Equity Shares (FV Rs. 100)	750	725
10% Preference shares (FV Rs. 100)	420	180
Reserves and Surplus		
Revaluation Reserve	125	75
Capital reserve	270	190
Statutory Reserves	60	40
Profit and Loss Account	35	12
Loan funds		
Secured Loans		
12.5% Debentures (FV Rs. 100)	50	28
Unsecured Loans	25	0
Current Liabilities		
Trade Payables	165	75
<b>Total</b>	<b>1,900</b>	<b>1,325</b>
<b>Assets</b>		
Fixed Assets		
Land and Building	470	290
Plant and Machinery	310	210
Investments	75	50
Current Assets		
Trade Receivables	345	270
Inventories	345	254
Cash and cash equivalents	355	251
<b>Total</b>	<b>1,900</b>	<b>1,325</b>

Before amalgamation, X Ltd. and Y Ltd. will make the following adjustments in their balance sheets:

- (i) Pay off the unsecured loans
- (ii) X Limited will revalue its Land and Building by enhancing the book value by 10% and Y Limited will revalue the Land and Building at Rs. 330 lacs.
- (iii) Y Limited will revalue its Plant and Machinery at Rs. 220 lacs.
- (iv) Investment will be disposed off. X Limited sold its investments for Rs. 67 lacs and Y Limited disposed the same for Rs. 52 lacs.
- (v) Debenture holders of X Limited and Y Limited will be discharged by XY Limited by issue of 15% debentures of Rs. 100 each for such an amount which will not put any additional burden of interest outgo on XY Limited than presently payable by X Limited and Y Limited.
- (vi) Preference shareholders of X Limited and Y Limited will be issued 15% Preference Shares in XY Limited in the ratio 2: 3 i.e. 2 shares will be issued for every 3 shares held at a premium of Rs. 25.
- (vii) Equity shares in XY Limited will be issued as under:
  - (a) Shareholders of X Limited in the ratio of 4:1 @ Rs. 35 per share; and
  - (b) Shareholders of Y Limited in the ratio of 3:1 @ Rs. 32 per share.
- (viii) Statutory reserves having met its purpose will be merged with Capital Reserves.

Prepare the amalgamated Balance Sheet of XY Limited as on 31st March, 2015 as per Schedule III to the Companies Act, 2013 with Notes to Accounts.

**Answer**

**Balance Sheet of XY Ltd. As on 31st March, 2015**

	<b>Particulars</b>	<b>Note No.</b>	<b>(Rs. in lacs)</b>
I.	Equity and Liabilities		
	(1) Shareholder's Funds		
	(a) Share Capital	1	927.50
	(b) Reserves and Surplus	2	2060.41
	(2) Non-Current Liabilities		
	Long-term borrowings	3	65.00
	(3) Current Liabilities		
	Trade payables	4	240.00
	Total		3,292.91
II.	Assets		
	(1) Non-current assets		
	(a) Fixed assets		
	Tangible assets	5	1,377
	(2) Current assets		
	(a) Inventories	6	599
	(b) Trade Receivables	7	615

	(c) Cash & Cash equivalents	8	701.91
	Total		3,292.91
	<b>Notes to Accounts</b>	<b>(Rs. in lacs)</b>	<b>(Rs. in lacs)</b>
1.	Share Capital		
	Authorised share capital		
	70 lacs Equity shares @ Rs. 10 each		700
	4 lacs 15% Preference shares @ Rs. 100 each		400
			1,100
	Issued share capital		
	52.75 lacs Equity Shares of Rs. 10 each		527.50
	4 lacs 15% Preference shares of 100 each 400.00		927.50
	(Out of the above 51.75 lacs Equity shares and 4 lacs Preference shares are issued for consideration other than cash)		
2.	Reserves and surplus		
	Capital Reserve (W.N.1)		740.00
	Securities Premium (W.N.5)		1,328.50
	Profit and Loss A/c (Incorporation expenses)		(8.09)
			2,060.41
3.	Long Term Borrowings		
	15% Debentures of Rs. 100 each		
	X Ltd.	41.67	
	Y Ltd.	23.33	65.00
4.	Trade payables		
	X Ltd.	165.00	
	Y Ltd.	75.00	240.00
5.	Tangible assets		
	Land & Building		
	X Ltd.	517.00	
	Y Ltd.	330.00	847.00
	Plant & Machinery		
	X Ltd.	310.00	
	Y Ltd.	220.00	530.00
			1,377.00
6.	Inventories		
	X Ltd.	345.00	
	Y Ltd.	254.00	599.00
7.	Trade Receivables		
	X Ltd.	345.00	
	Y Ltd.	270.00	615.00
8.	Cash and Cash equivalents		
	X Ltd. (W.N.2)	397.00	
	Y Ltd. (W.N.2)	303.00	700.00
	XY Ltd.		

	Received from subscribers of shares	10.00	
	Less: Incorporation expenses paid	(8.09)	1.91
			701.91

Note: As per AS 26 preliminary expenses are charged to Profit and loss account in the year in which it is incurred. Accordingly, the treatment for incorporation expense has been done .

**Working Note**

1.	Calculation of Capital Reserve on amalgamation	(Rs. in lacs)	
		X Ltd.	Y Ltd.
	Assets taken over:		
	Land and Building (470 x 110%)	517	330
	Plant and Machinery	310	220
	Inventory	345	254
	Trade receivables	345	270
	Cash and Bank (W.N.2)	397	303
		1,914	1,377
	Less : Liabilities taken over:		
	13% Debentures (W.N.3)	41.67	23.33
	Trade payables	165.00	75.00
	Net Assets taken over	1707.33	1,278.67
	Less: Purchase consideration (W.N.4)	(1,400)	(846)
	Capital Reserve	307.33	432.67
	Total capital reserve (307.33 + 432.67) = 740.00 lacs		
2.	Calculation of Cash and Cash Equivalents	X Ltd.	Y Ltd.
		Rs. in lacs	Rs. in lacs
	Balance as per Balance Sheet	355.00	251.00
	Less: Payment for unsecured loans	(25.00)	-
	Add: Receipt from sale of investments	67.00	52.00
		397.00	303.00
3.	Calculation of 15% Debentures issued by XY Ltd. to	X Ltd.	Y Ltd.
		Rs. In lacs	Rs. In lacs
	50 × 12.5/15	41.67	
	28 × 12.5/15		23.33
4.	Computation of Purchase consideration (On Payment Basis)	(Rs. in lacs)	
		X Ltd.	Y Ltd.
	(1) 15% Preference Shares:		
	(4.20/3) × 2 = 2.80 lacs shares @ Rs. 125 each	350	
	(1.80/3) × 2 = 1.20 lacs shares @ Rs. 125 each		150
	2. Equity Shares:		
	(4 × 7,50,000) = 30,00,000 equity shares @ Rs. 35 each	1050	
	(3 × 7,25,000) = 21,75,000 equity shares @ Rs. 32 each		696
		1,400	846
5.	Calculation of Securities Premium		Rs. in lacs

	15% Preference Shares issued at premium of Rs. 25 each		
	(4 lacs x Rs.25 each)		100
	Equity Shares issued to - X Ltd. (30 lacs x Rs. 25 each)		750
	Y Ltd. (21.75 lacs x Rs. 22 each)		478.50
			1328.50

**Question 26:**

The following is the Balance Sheet of RS Ltd. and XY Ltd. as on 31-03-2002:

(Rs. In '000s)

<b>Liabilities</b>	<b>RS Ltd.</b>	<b>XY Ltd</b>
Share Capital: Equity shares of Rs. 100 each fully paid up	2,000	1,000
Reserves and Surplus	800	—
10% Debentures	500	—
Loan from Financial Institutions	250	400
Bank Overdraft	—	100
Sundry Creditors	300	300
Proposed Dividend	200	—
	<b>4,050</b>	<b>1,800</b>
<b>Assets</b>	<b>RS Ltd.</b>	<b>XY Ltd</b>
Fixed Assets net of Depreciation	2,700	850
Investments	700	—
Sundry Debtors	400	150
Cash & Bank	250	—
Profit and Loss Account	—	800
	<b>4,050</b>	<b>1,800</b>

It was decided that XY Ltd. will acquire the business of RS Ltd. for enjoying the benefit of carry forward of business loss. After acquisition, the XY Ltd. will be renamed as XYZ Ltd. The following scheme has been approved for the merger:

- XY Ltd. will reduce its shares to Rs. 10 and then consolidate 10 such shares into one share of Rs. 100 each (New Share).
- Financial institutions agreed to waive 15% of the loan of XY Ltd.
- Shareholders of RS Ltd. will be given one new share of XY Ltd. in exchange of every share held in RS Ltd.
- RS Ltd., will cancel 20% holding of XY Ltd. Investments were held at Rs. 250 thousands.
- After merger the proposed dividend of RS Ltd. will be paid to the shareholders of RS Ltd.
- Authorized Capital of XY Ltd. will be raised accordingly to carry out the scheme.
- Sundry creditors of XY Ltd. include payable to RS Ltd. Rs. 1,00,000.



Pass the necessary entries to implement the scheme in the books of RS Ltd., and XY Ltd. and prepare a Balance Sheet of XYZ Ltd.

**Answer:**

Journal Entries in the books of RS Ltd.

(Rs. '000)

		Dr.	Cr.
		Rs.	Rs.
10% Debentures Account	Dr.	500	
Loan from Financial Institutions Account	Dr.	250	
Sundry Creditors Account	Dr.	300	
Proposed Dividend Account	Dr.	200	
Realisation Account	Dr.	2,800	
To Fixed Assets Account			2,700
To Investments Account			700
To Sundry Debtors Account			400
To Cash and Bank Account			250
(Transfer of assets and liabilities to realisation account)			
Share Capital Account	Dr.	2,000	
Reserve and Surplus Account	Dr.	800	
To Equity Shareholders Account			2,800
(Transfer of share capital, reserve and surplus to shareholders account)			
Equity Shareholders Account	Dr.	250	
To Realisation Account			250
(Cancellation of 20% holding of XY Ltd. held as investments)			
Shares in XYZ Ltd.	Dr.	2,000	
To Realisation Account			2,000
(Issue of shares by XYZ Ltd. in the ratio of 1 : 1)			
Equity Shareholders Account	Dr.	550	
To Realisation Account			550
(Transfer of loss on realisation)			
Equity Shareholders Account	Dr.	2,000	
To Shares in XYZ Ltd.			2,000
(Distribution of Shares of XYZ Ltd. among the shareholders)			

Journal Entries in the books of XY Ltd.

(Rs. '000)

		Dr.	Cr.
		Rs.	Rs.
Equity Share Capital (Face value – Rs. 100) Account	Dr.	1,000	
To Equity Share Capital (Face value – Rs. 10) To			100
Reconstruction Account			900
(Face value of equity shares of Rs. 100 each reduced to Rs.			

10 each)			
Equity Share Capital (Face value – Rs. 10 each) Account	Dr.	100	
To Equity Share Capital Account			100
(Face value – Rs. 100 each)			
(Consolidation of 10,000 equity shares of Rs. 10 each to 1,000 equity shares of Rs. 100 each)			
Loan from Financial Institutions Account	Dr.	60	
To Reconstruction Account			60
(Waiver of 15% of loan by financial institutions)			
Reconstruction Account (900 + 60)	Dr.	960	
To Profit and Loss Account			800
To Capital Reserve			160
(Utilisation of Reconstruction account balance to write off the Profit and Loss Account)			
Proposed Dividend Account	Dr.	200	
To Bank Account			200
(Payment of Proposed dividend to shareholders of RS Ltd.)			
Fixed Assets Account	Dr.	2,700	
Other Investments Account	Dr.	450	
Sundry Debtors Account	Dr.	400	
Cash and Bank Account	Dr.	250	
To Reserves Account			570
To 10% Debentures Account			500
To Loan from Financial Institutions Account			250
To Sundry Creditors Account			300
To Proposed Dividend Account			200
To Business Purchase Account			1,980
(Incorporation of various assets and liabilities acquired from RS Ltd. after cancellation of investment held by RS Ltd. in XY Ltd., profit on acquisition credited to Reserves Account)			
Business Purchase Account	Dr.	1,980	
To Liquidator of RS Ltd.			1,980
(Consideration Payable on business acquired from RS Ltd.)			
Liquidator of RS Ltd.	Dr.	1,980	
To Equity Share Capital of XYZ Ltd.			1,980
(Discharge of purchase consideration in the form of equity shares of XYZ Ltd.)			
Sundry Creditors Account	Dr.	100	
To Sundry Debtors Account			100
(Cancellation of intercompany owings)			

**Balance Sheet of XYZ Ltd. as on 31st March, 2002 (immediately after acquisition)**

(Rs. in 000's)

Liabilities	Rs.	Assets	Rs.
Share Capital:		Fixed Assets net of depreciation	3,550
20,800 Equity Shares @ Rs. 100 each (1,980 + 20 + 80)	2,080	Investments	450
Capital Reserve	160	Sundry Debtors	450
General Reserve	570		
10% Debentures	500		
Loan from financial institutions	590		
Bank Overdraft (100 – 250 + 200)	50		
Sundry Creditors	500		
	4,450		4,450

Working Notes:

Rs.

1.	Original Share Capital of XY Ltd.		
	10,000 Equity Shares of Rs. 100 each		10,00,000
	Share Capital of XY Ltd. after Reduction		
	10,000 Equity Shares of Rs. 10 each		1,00,000
2.	Share Capital of XY Ltd. after Reconsolidation		
	1,000 Equity Shares of Rs. 100 each		1,00,000
3.	Reduced value of holdings of RS Ltd. in XY Ltd.		
	RS Ltd. was holding 20% of XY Ltd., that is,		
	2,000 Equity Shares of Rs. 100 each		2,00,000
	which has now reduced to 200 Equity Shares of Rs. 100 each		20,000
4.	Calculation of Purchase Consideration		
	Equity Share Capital of RS Ltd. 20,000 Equity Shares of Rs. 100 each		20,00,000
	Exchange Ratio = 1 : 1		
	No. of Equity Shares to be given		20,000
	Less: No. of Equity Shares already held by RS Ltd.		200
	19,800		
	Purchase consideration		
	19,800 Equity Shares of Rs. 100 each		19,80,000
5.	Aggregate Reserves in the new company on acquisition		
	Reserves of RS Ltd. acquired		8,00,000
	Less: Loss on investments held by RS Ltd.		
	Value of investments cancelled	2,50,000	
	Less: Reduced value of shares of XY Ltd.	20,000	2,30,000
	Amount of Reserves to be carried to Balance Sheet		5,70,000
6.	Share Capital in Combined Balance Sheet of XYZ Ltd.		
	Holding of RS Ltd. (200 Equity Shares @ Rs. 100 each)		20,000
	Other Existing Shares (800 Equity Shares of Rs. 100 each)		80,000
	Given as Purchase Consideration (19,800 equity shares @ Rs.100 each)		19,80,000
			20,80,000
7.	It has been assumed that the bank overdraft and cash balance can be netted of.		

**Question 27:**

The following was the abridged Balance Sheet of X Co. Ltd, as at 31st March, 2012:

Liabilities	Rs.	Assets	Rs.
Capital: Authorized:		Plant and machinery at	
10,000 Equity shares of Rs. 100		depreciated value	8,60,000
each	10,00,000	Land	7,00,000
Issued and paid up:		Current assets	8,00,000
8,000 Equity shares of Rs.100		Patents, trademarks and	
each, fully paid up	8,00,000	Copyrights	6,00,000
Reserves and surplus:			
General reserve	5,00,000		
Securities premium	4,00,000		
Profit and loss	3,60,000		
11% Debentures secured			
against the assets of the Co.	5,00,000		
Sundry Creditors	4,00,000		
	<b>29,60,000</b>		<b>29,60,000</b>

The Company ran two distinct departments utilizing the trademarks and copyrights owned and generated by it. The assets and liabilities of one of the departments as on the date of Balance Sheet were:

	Rs.
Plant and machinery	4,00,000
Land (used for business)	2,00,000
Current assets	2,00,000
Trademarks and copyrights	3,50,000
	<b>11,50,000</b>
Sundry creditors	2,50,000
	<b>9,00,000</b>

Due to managerial constraints, X is unable to develop this department. An overseas buyer is interested to acquire this department and after due diligence, offers a consideration of Rs. 20,00,000 to the company for transfer of business. The buyer offered to discharge the purchase consideration immediately after 31st March, 2012, in the following manner:

Issue of equity shares of the buyer's company for Rs. 10,00,000 nominal value at a premium of 20% over the face value; and

Payment of the balance consideration in £ Sterling. The exchange rate agreed upon is Rs. 80 per £ Sterling. This amount will be retained in London, till the actual takeover of the business is done by the buyer.

- (a) expenses to put through the transaction come to Rs. 8,00,000 initially to be incurred by X but to be shared equally by the parties.

- (b) the balance value of trademarks, copyrights and patents left with X does not enjoy any market value and has to be written off.
- (c) the value of the balance of land in X's possession will be taken at its market value in the books of account. Such a value, determined by an approved valuer, is 200 percent of the book value.
- (d) the parties agree that the date of legal ownership of the transferred business shall be 31st March, 2012 though certain formalities may have to be gone through and agree that the actual transfer to the buyer will be effected before 30th April, 2012. X Co. Ltd to carry on the business in the normal course and account for the profits of the transferred department to the foreign buyer. X made a net profit of Rs.2,40,000 from the whole business for April, 2012; 40 percent of the net profit related to the business of the transferred department.
- (e) the shares of the overseas buyer's company were quoted on the London Stock Exchange and on 30th April, 2012 were quoted at 95 percent of their face value.
- (f) the cash received by X at London was remitted by it to its Indian banking account on 30th April 2012 when the rupee sterling rate was Rs. 75 per UK sterling pound.

Draw the Balance Sheet of X Co. Ltd. as at 30th April, 2012, after the transfer of the business to the overseas buyer.

**Answer:**

**Balance Sheet of X Co. Ltd. as at 30th April, 2012 (after demerger)**

Liabilities	Rs.	Assets	Rs.
Authorised share capital:		Plant & Machinery	
10,000 Equity shares (Rs.100)	10,00,000	(8,60,000-4,00,000)	4,60,000
Issued share capital:		Land (W.N.6)	10,00,000
8,000 Equity shares (Rs.100)	8,00,000	Current Assets	
Revaluation reserve (W.N.6)	5,00,000	(8,00,000-2,00,000)	6,00,000
General reserve	5,00,000	Investments in shares of	
Securities Premium	4,00,000	Overseas Buyers (at	
Profit and Loss Account (W.N.1)	6,54,000	market value)	9,50,000
11% Debentures secured		Cash and bank (W.N.2)	4,94,000
against the assets of the Co.	5,00,000		
Sundry Creditors	1,50,000		
	<b>35,04,000</b>		<b>35,04,000</b>

Working Notes:

1.	Computation of Profit and Loss Account as on 30th April, 2012		Rs.
	Balance as on 31st March, 2012		3,60,000
	Add: Profit on sale of one of the department (W.N.3)	11,00,000	
	Profit earned during the month of April, 2012 (W.N.4)	1,44,000	12,44,000
			16,04,000
	Less: Expenses on sale of department (share of X Co.)		
	(Rs. 8,00,000 x 50%)	4,00,000	
	Patents, trademarks and copyrights written off (W.N.5)	2,50,000	

	Diminution in the value of investment (W.N.7)	2,50,000	
	Loss on foreign exchange translation (W.N.8)	50,000	9,50,000
			6,54,000
<b>2.</b>	<b>Cash and bank</b>		<b>Rs.</b>
	Cash received from Overseas buyer on 30th April, 2012 (£ 10,000 x Rs. 75)		7,50,000
	Add: Cash reimbursed by Overseas buyer (Rs. 8,00,000 x 50%)		4,00,000
	Cash profit earned during the month of April, 2012 by X Co. Ltd. (See Note)		2,40,000
			13,90,000
	Less: Expenses on sale of department to overseas buyer	8,00,000	
	Share of profit (for April, 2012) paid to Overseas buyer (W.N.4)	96,000	8,96,000
			4,94,000
<b>3.</b>	<b>Calculation of gain on sale of department and discharge of purchase consideration</b>		<b>Rs.</b>
	Purchase consideration		20,00,000
	Less: Net assets sold		9,00,000
	Gain on sale of department		11,00,000
	Purchase consideration		20,00,000
	Less: Discharged by issue of Overseas Buyer's Equity shares of Rs. 10,00,000 at 20% premium		12,00,000
	Balance discharged in cash i.e. (8,00,000/80) = £ 10,000		8,00,000
<b>4.</b>	<b>Profit earned during the month of April, 2012</b>		<b>Rs.</b>
	Total profit earned by X Co. Ltd. during the month of April, 2012		2,40,000
	Less: 40% Profit of the sold department		96,000
	Profit of X Co. Ltd. on the retained department		1,44,000
<b>5.</b>	<b>Patents, trademarks and copyrights written off</b>		<b>Rs.</b>
	Patents, trademarks and copyrights as per balance sheet of X Co. Ltd.		6,00,000
	Less: Patents, trademarks and copyrights taken over by Overseas buyer		(3,50,000)
	Patents, trademarks and copyrights written off (charged to Profit and Loss Account)		2,50,000
<b>6.</b>	<b>Land</b>		<b>Rs.</b>
	Land as per balance sheet of X Co. Ltd.		7,00,000
	Less: Land taken over by Overseas buyer		(2,00,000)
	Book value of land retained by X Co. Ltd.		5,00,000
	Revalued value (200% of book value)		10,00,000
	Revaluation reserve (10,00,000-5,00,000)		5,00,000
<b>7.</b>	<b>Diminution in the market value of equity shares of Overseas Buyer</b>		<b>Rs.</b>
	Nominal value of shares		10,00,000
	Issued at 20% Premium		12,00,000
	Market value of shares on 30th April, 2012 is 95% of nominal		9,50,000

	value(10,00,000 x 95%)		
	Diminution charged to Profit and Loss Account		2,50,000
<b>8.</b>	<b>Loss on foreign exchange translation</b>		<b>Rs.</b>
	Cash payment by overseas buyer £ 10,000 due on 31st March, 2012 @Rs. 80 per £		8,00,000
	Exchange rate on 30th April, 2012 is Rs. 75 per £		
	Less: Amount remitted in Indian Currency (£ 10,000 x Rs. 75)		(7,50,000)
	Loss on foreign exchange translation transferred to Profit and Loss Account		50,000

Note:

- The above solution has been given on the assumption that X Co. Ltd intends to hold investment in shares of overseas buyer as temporary investment. Therefore, its carrying value has been shown in the balance sheet at market value and reduction to market value has been included in the profit and loss account. In case it is assumed as long term investment, then investment in shares of Overseas buyer will be shown at cost i.e. Rs. 12,00,000 and Profit and Loss account balance will be Rs. 9,04,000. The Balance Sheet total will be Rs. 37,54,000.
- It is also assumed that the profit earned during the month of April, 2012 is entirely the cash profit and also the amount of current assets and current liabilities of X Co. Ltd. Has been same as on 31.3.2012.

## CONSOLIDATED FINANCIAL STATEMENT

### Question 28:

The following information relates to the results of the parent and subsidiary (jointly) and the investment in associate and joint venture:

Summarised Balance Sheet as at 31.3.2015

	Holding and subsidiary	Associate	Joint Venture
Called up equity shares of Rs. 1 each	1,00,000	40,000	10,000
General reserve	40,000		-
Profit and loss account	37,000	27,000	83,000
Minority Interest	20,000	-	-
Creditors	20,000	32,000	6,000
Provision for tax	9,000	11,000	7,000
Proposed dividend	10,000	-	4,000
	2,36,000	1,10,000	1,10,000
Fixed assets	1,95,000	74,000	41,000
Investments:			
8,000 shares in Associate	15,000	-	-
5,000 shares in Joint Venture	5,000	-	-
Current assets	21,000	36,000	69,000
	2,36,000	1,10,000	1,10,000

**Profit and Loss account for the year ended 31.3.2015**

	Holding and subsidiary	Associate	Joint venture
Turnover	3,00,000	4,00,000	2,00,000
Less: Cost of sales	(2,14,000)	(2,80,000)	(1,40,000)
Gross profit	86,000	1,20,000	60,000
Less: Administration expenses	(53,200)	(90,000)	(20,000)
Operating profit	32,800	30,000	40,000
Less: Exceptional charge	(5,400)	(3,000)	(1,000)
Add: Dividends from Associate	1,600		
Dividends from Joint venture	5,000		
Profit before taxation	34,000	27,000	39,000
Less: Tax	(7,000)	(8,000)	(6,000)
Profit after taxation	27,000	19,000	33,000
Less: Minority interest	(2,000)	-	-
Dividend paid		(8,000)	(6,000)
Dividend proposed	(10,000)	-	(4,000)
Retained profit for the year	15,000	11,000	23,000
Add: Retained profit brought forward	22,000	16,000	60,000
Retained profit carried forward	37,000	27,000	83,000

You are given the following additional information:

- The parent company purchased its investment in the associate two years ago when the balance on the profit and loss account was Rs. 17,000. The useful life of the goodwill is estimated at ten years and there are no signs of impairment of the goodwill.
- The parent company entered into a joint venture to access a lucrative market in the former East Germany. It set up a company two years ago and has 50 per cent of the voting rights of the company set up for this joint venture.

Prepare the consolidated balance sheet and profit and loss account for the Group for the year ended 31.3.2015.

**[CA Final RTP, Nov 2015]**

**Answer:** Consolidated Balance Sheet as on 31.3.2015

	Particulars	Note No.	Rs.
I.	Equity and Liabilities		
(1)	Shareholder's Funds		
	(a) Share Capital	1	1,00,000
	(b) Reserves and Surplus	2	1,20,700
(2)	Minority Interest (W.N.)		20,000
(3)	Current Liabilities		
	(a) Trade Receivables	3	23,000
	(b) Short Term Provisions	4	12,500
	(c) Other Current Liabilities	5	10,000
	Total		2,86,200



II.		Assets		
	(1)	Non-current assets		
		(a) Fixed assets	6	2,15,500
		(b) Non-current investment	7	17,200
	(2)	Current assets	8	53,500
		Total		2,86,200
<b>Notes to Accounts</b>				<b>Rs.</b>
1.		Share Capital		
		Called up equity shares of Rs. 1 each		1,00,000
2.		Reserves and Surplus		
		General Reserve	40,000	
		Profit and Loss A/c (W.N.3)	80,700	1,20,700
3.		Trade Receivables		
		Holding & Subsidiary	20,000	
		Joint Venture (50%)	3,000	23,000
4.		Short term provisions		
		Provisions for Tax		
		Holding & Subsidiary	9,000	
		Joint Venture (50%)	3,500	12,500
5.		Other Current Liabilities		
		Proposed Dividend		
		Holding & Subsidiary	10,000	
		Joint Venture (50%)	2,000	
			12,000	
		Less: Mutual owings	(2,000)	10,000
6.		Fixed Assets		
		Holding & Subsidiary	1,95,000	
		Joint Venture (50%)	20,500	2,15,500
7.		Non-current investment		
		Investment in Associate (W.N.4)		17,200
8.		Current Asset		
		Holding & Subsidiary	21,000	
		Joint Venture	34,500	
			55,500	
		Less: Mutual Owings (Dividend Receivable from Joint Venture included in Current Asset)	(2,000)	53,500

Working Notes:

1.	Analysis of Profit & Loss of Associate	Pre-acquisition	Post-acquisition
		Rs.	Rs.
	Profit as on 31.3.2015	27,000	
	Share of Associate company (20%)	16,000	11,000
		3,200	2,200
2	Analysis of Profit and Loss of Joint Venture		

		Nil	83,000
	Share of Joint Venture	(50%)	41,500
3.	Calculation of Goodwill/Capital Reserve	Associate	Joint Venture
		Rs.	Rs.
	Investment	15,000	5,000
	Less: Nominal Value	(8,000)	(5,000)
	Capital Profit	(3,200)	
	Goodwill	3,800	Nil
4.	Calculation of Consolidated Profit and Loss Account		Rs.
	Profit and Loss Account of Holding & Subsidiary		37,000
	Add: Share of Associate		2,200
	Joint Venture		41,500
			80,700
5.	Calculation of Investment in Associate		Rs.
	Goodwill (W.N.2)		3,800
	Net worth		11,200
	Cost		15,000
	Add: Share of Revenue Profit		2,200
			17,200

Notes:

- Dividend income is booked without the receipt. This meant that income was on receivable stage appearing on the asset side.
- JCE was formed, by the Venturers two years ago. All the reserves as on the date of consolidation are to be treated as revenue.
- Out of Rs. 17,000 existed at the time of acquisition, only Rs. 16,000 (Opening Balance) is continuing in the books of the associate. Therefore, Rs. 16,000 is taken as capital profit assuming that it is a part of that Rs. 17,000 existed at the time of acquisition.

## MUTUAL FUND

### Question 29:

Calculate the NAV of a Mutual Fund scheme from the information given below –

Beginning of the year :

Number of Units outstanding 1 Crore of Rs. 10 each

Investments at Cost Rs. 10 Crores (Market Value Rs. 16 Crores)

Outstanding Liabilities Rs. 5 Crore

Other Information –

- Another 20 Lakh units were sold during the year at Rs. 24.

2. No additional investments were made during the year and as at the year-end, 50% of the Investments at year beginning were quoted at 80% of the book value.
3. 10% of the Investments had witnessed a permanent fall of 10% below cost.
4. The balance investments were quoted at Rs. 13.60 Crores.
5. Outstanding liabilities towards Custodian Charges, Salaries and Commission etc. applicable to the Scheme were Rs. 1 Crore.

**Answer:** Units as at the end of the year (units in crores)

Number of Units at beginning of the year	1.00
Add: Units issued during the year	0.20
Units as at the end of the year (A)	1.20
Net Asset Value (NAV) of the Scheme (Rs. in crores)	
Market Value of Investments (50% x Rs.10 Crores) x 80%	4.00
10% x Rs.10 Crores – (10% below Cost)	.90
Balance Investments (at Market Price)	13.60
Total Market Value	18.50
Less: Mutual Fund Scheme Liabilities	1.00
Net Asset Value of the Scheme (B)	17.50
NAV per Unit = B ÷ A = Rs. 17.50 Crores ÷ 1.2 Crore units = Rs. 14.58	

**Question 30:**

Ramesh Goyal has invested in three mutual funds. From the details given below, find out effective yield on per annum basis in respect of each of the schemes to Ramesh Goyal upto 31-03-2012.

Mutual Fund	X	Y	Z
Date of Investment	1-12-2011	1-1-2012	1-3-2012
Amount of investment (Rs.)	1,00,000	2,00,000	1,00,000
NAV at the date of investment (Rs.)	10.50	10.00	10.00
Dividend received upto 31-3-2012 (Rs.)	1,900	3,000	Nil
NAV as on 31-3-2012 (Rs.)	10.40	10.10	9.80

**Answer:** Calculation of effective yield on per annum basis in respect of three mutual fund schemes of Ramesh Goyal upto 31.03.2012

	X	Y	Z
1 Amount of Investment (Rs.)	1,00,000	2,00,000	1,00,000
2 Date of investment	1.12.2011	1.1.2012	1.3.2012
3 NAV at the date of investment (Rs.)	10.50	10.00	10.00
4 No. of units on date of investment [1/3]	9,523.809	20,000	10,000
5 NAV per unit on 31.03.2012 (Rs.)	10.40	10.10	9.80
6 Total NAV of mutual fund investments on			
31.03.2012 [4 x 5]	99,047.61	2,02,000	98,000
7 Increase/ decrease of NAV [6-1]	(952.39)	2,000	(2,000)

8	Dividend received upto 31.3.2012	1,900	3,000	Nil
9	Total yield [7+8]	947.61	5,000	(2,000)
10	Yield % [9/1] x 100	0.95%	2.5%	(2%)
11	Number of days*	122	91	31
12	Effective yield p.a. [10/11]x 366 days	2.85%	10.05%	(23.61%)

**Question 31:**

Sparrow Holdings is a SEBI Registered Mutual Fund which made its maiden N F O (New Fund Offer) on 10th April, 2010 Rs.10 face value per unit. Subscription was received for 90 lakhs units. An underwriting arrangement was also entered into with Affinity Capital Markets Ltd. that agreed to underwrite the entire NFO of 100 lakh units on a commission of 1.5%.

Out of the monies received Rs. 892.50 lakhs was invested in various capital market instruments. The marketing expenses for the N.F.O amounted to Rs. 11.25 lakhs. During the financial year ended March 2011 the Fund sold securities having cost of Rs.127.25 lakh (FV Rs. 54.36 lakhs) for Rs.141.25 lakhs. The fund in turn purchased securities for Rs. 130 lakhs. The management expenses of the fund are regulated by SEBI stipulations which state that the same shall not exceed 0.25% of the average funds invested during the year. The actual amount spent towards management expenses was Rs. 2.47 lakhs of which Rs. 47,000 was in arrears. The dividends earned on the investments held amounted to Rs. 2.51 lakhs of which a sum of Rs. 25,000 is yet to be collected. The fund distributed 80% of realized earnings. The closing market value of the portfolio was Rs. 1120.23 lakhs You are required to determine the closing per unit NAV of the fund.

**Answer:** Calculation of closing per unit of NAV of the fund

	Rs. in lakhs
Net Assets of Sparrow holding	
Closing cash balance ( W.N.2)	79.99
Closing Market Value of Investments	1,120.23
Accrued Dividends (collectable)	0.25
	1,200.47
Less: Current Liabilities	
Outstanding Management Fee (payable)	(0.47)
Closing Net Assets (A)	1,200.00
Units outstanding (in lakhs) (B)	100.00
NAV per unit (A/B)	12.00

**Working Notes:**

		Rs. Lakh
1.	Computation of opening cash balance:	
	Proceeds of NFO in full including Underwriters commitment	1000.00
	Less: Initial Purchase of Securities	(892.50)
		107.50
	Less: Underwriting Commission	15.00
	Marketing Expenses	11.25
	Opening Cash Balance	81.25
2.	Computation of Closing cash balance	

	Opening bank balance (W.N. 1)	81.25	
	Add: Proceeds from sale of securities	141.25	
	Dividends received on investment	2.26	143.51
		224.76	
	Less: Cost of Securities purchased	130.00	
	Management Expenses (W.N.3)	1.76	
	Capital Gains Distributed Rs. (141.25 - 127.25 x 80%)	11.20	
	Dividends Distributed Rs. (2.26 x 80%)	1.81	(144.77)
		79.99	
3.	Computation of Management Expenses Chargeable		
	Actual Expense Incurred [A]	2.47	
	Opening Investment Made	892.50	
	Closing Funds Invested (892.50 - 127.25 + 130)	895.25	
	Total	1,787.75	
	Average Funds Invested (1,787.75/2)	893.875	
	0.25% of Average Funds Invested [B]	2.23	
	Lower of A or B	2.23	
	Less: Amount unpaid	(0.47)	
	Management expenses paid	1.76	

## NON-BANKING FINANCE COMPANY

### Question 32:

Syria Finance Ltd., a non-banking finance company provides to you the costs and market price of various investments held by it as on 31.3.2009:

		(Rs. Lakhs)	
		Cost	Market Price
Scripts:			
A. Equity Shares-			
	A	60.00	61.20
	B	31.50	24.00
	C	60.00	36.00
	D	60.00	120.00
	E	90.00	105.00
	F	75.00	90.00
	G	30.00	6.00
B. Mutual funds-			
	MF-1	39.00	24.00
	MF-2	30.00	21.00
	MF-3	6.00	9.00

C. Government securities-			
	GV-1	60.00	66.00
	GV-2	75.00	72.00

- (i) Can the company adjust depreciation of a particular item of investment within a category?
- (ii) What should be the value of investments as on 31.3.2009?
- (iii) Is it possible to offset depreciation investment in mutual funds against appreciation of value of investments in Equity Shares and Government Securities.

**Answer:**

- (i) Quoted current investments for each category shall be valued at cost or market value, whichever is lower. For this purpose, the investments in each category shall be considered scrip-wise and the cost and market value aggregated for all investments in each category. If the aggregate market value for the category is less than the aggregate cost for that category, the net depreciation shall be provided for or charged to the profit and loss account. If the aggregate market value for the category exceeds the aggregate cost for the category, the net appreciation shall be ignored. Therefore, depreciation of a particular item of investments can be adjusted within the same category of investments.
- (ii) Value of Investments as on 31.3.2009

Type of Investment	Valuation Principle	Value
		Rs. in lakhs
Equity Shares (Aggregated)	Lower of cost or market Value	406.50
Mutual Funds	NAV (Market value, assumed)	54.00
Government securities	Cost	135.00
		595.50

As per para 14 of AS 13 "Accounting for Investments", the carrying amount for current investments is the lower of cost and market price. Sometimes, the concern of an enterprise may be with the value of a category of related current investments and not with each individual investment, and accordingly, the investments may be computed at the lower of cost and market value computed category wise.

- (iii) Inter category adjustments of appreciation and depreciation in values of investments cannot be done. It is possible to offset depreciation investment in mutual funds against appreciation of value of investments in Equity Shares and Government Securities.

**Question 33:**

Samvedan Limited is a non-banking finance company. It accepts public deposit and also deals in hire purchase business. It provides you with the following information regarding major hire purchase deals as on 31-03-2010.

Few machines were sold on hire purchase basis. The hire purchase price was set as Rs. 100 lakhs as against the cash price of Rs. 80 lakhs. The amount was payable as Rs. 20 lakhs down payment and balance in 5 equal instalments. The hire vendor collected first instalment as on 31-03-2011, but could not collect the second instalment which was due on 31-03-2012. The company was finalising

accounts for the year ending 31-03-2012. Till 15-05-2012, the date on which the Board of Directors signed the accounts, the second instalment was not collected. Presume IRR to be 10.42%.

Required :

- (i) What should be the principal outstanding on 1-4-2011? Should the company recognize finance charge for the year 2011-12 as income?
- (ii) What should be the net book value of assets as on 31-03-12 so far Samvedan Ltd. is concerned as per NBFC prudential norms requirement for provisioning?
- (iii) What should be the amount of provision to be made as per prudential norms for NBFC laid down by RBI?

**Answer:**

- (i) Since, the hire-purchaser paid the first instalment due on 31.3.2011, the notional principal outstanding on 1-4-2011 was Rs. 50.25 lakhs (refer W.N.). In the year ended 31.03.2012, the instalment due of Rs. 16 lakhs has not been received. However, it was due on 31.3.2012 i.e on the balance sheet date, and therefore, it will be classified as standard asset. Samvedan Ltd. will recognise Rs. 5.24 lakhs as interest income included in that due instalment as this should be treated as finance charge.
- (ii) The net book value of the assets as on 31.3.2012

	Rs. in lakhs
Overdue instalment	16.00
Instalments not due (Rs. 16 lakhs x 3)	48.00
	64.00
Less: Finance charge not matured and hence not credited to Profit and loss account (4.11 + 2.88 + 1.52)	(8.51)
	55.49
Less: Provision as per para 9(2)(i) of NBFC prudential norms (Refer point (iii))	7.49
Net book value of assets for Samvedan Ltd.	48.00
(iii) Amount of Provision	Rs. in lakhs
Overdue instalment	16.00
Instalments not due (Rs. 16 lakhs x 3)	48.00
	64.00
Less: Finance charge not matured and hence not credited to Profit and loss account (4.11 + 2.88 + 1.52)	
	(8.51)
	55.49
Less: Depreciated value (cash price less depreciation for two years on SLM @ 20%*)	(48.00)
Provision to be created as per para 9(2)(i) of NBFC prudential norms	7.49

Since, the instalment of Rs. 16 lakhs not paid, was due on 31.3.12 only, the asset is classified as standard asset. Therefore, no additional provision has been made for it.

Working Notes:

It is necessary to segregate the instalments into principal outstanding and interest components by using I.R.R. @ 10.42%. (Rs. in lakhs)

Time	Opening Outstanding Amount (a)	Cash flow (b)	Interest @ 10.42% (c) = (a x 10.42%)	Principal repayment (d) = (b - c)	Closing Outstanding (e) = (a - d)
31-3-2010		(60)	-----	---	60.00
31-3-2011	60.00	16	6.25	9.75	50.25
31-3-2012	50.25	16	5.24	10.76	39.49
31-3-2013	39.49	16	4.11	11.89	27.60
31-3-2014	27.60	16	2.88	13.12	14.48
31-3-2015	14.48	16	1.52	14.48	0.00

## FINANCIAL INSTRUMENT

### Question 34:

Target Ltd. took a borrowing from Z Ltd. for Rs.10,00,000. Z Ltd. enters into an arrangement with Target Ltd. for settlement of the loan against issue of a certain number of equity shares of Target Ltd. whose value equals Rs.10,00,000. For this purpose, fair value per share (to determine total number of equity shares to be issued) shall be determined based on the market price of the shares of Target Ltd. at a future date, upon settlement of the contract. Evaluate this under definition of financial instrument.

### Solution:

In the above scenario, Target Ltd. is under an obligation to issue variable number of equity shares equal to a total consideration of Rs. 10,00,000. Hence, equity shares are used as currency for purpose of settlement of an amount payable by Target Ltd. Since this is variable number of shares are to be issued in a non-derivative contract for fixed amount of cash, it tantamounts to use of equity shares as 'currency' and hence, this contract meets definition of financial liability in books of Target Ltd.

### Question 34:

Entity XYZ enters into a fixed price forward contract to purchase 10,00,000 kilograms of copper in accordance with its expected usage requirements.

The contract permits XYZ to take physical delivery of the copper at the end of 12 months or to pay or receive a net settlement in cash, based on the change in fair value of copper. Is the contract covered under Financial Instruments standard?

**Solution:** The above contract needs to be evaluated to determine whether it falls within the scope of the financial instruments standards. The contract is a derivative instrument because there is no initial net investment, the contract is based on the price of copper and it is to be settled at a future date.



However, if XYZ intends to settle the contract by taking delivery and has no history for similar contracts of settling net in cash, or of taking delivery of the copper and selling it within a short period after delivery for the purpose of generating a profit from short term fluctuations in price or dealer's margin, the contract is not accounted for as a derivative under Ind AS 109.

Instead, it is accounted for as an executory contract and if it becomes onerous then Ind AS 37 would apply.

**Question 35:**

X Co. Ltd. (issuer) issues debentures to Y Co. Ltd. (holder). Those debentures are redeemable at the end of 10 years from the date of issue. Interest of 15% p.a. is payable at the discretion of the issuer. The rate of interest is commensurate with the credit risk profile of the issuer. Examine the nature of the financial instrument.

**Solution:** This instrument has two components – (1) mandatory redemption by the issuer for a fixed amount at a fixed future date, and (2) interest payable at the discretion of the issuer. The first component is a contractual obligation to deliver cash (for repayment of principal with or without premium, as per terms) to the debenture holder that cannot be avoided. This component of the instrument is a financial liability.

**Question 36:**

DF Ltd. issues convertible debentures to JL Ltd. for a subscription amount of Rs. 100 crores. Those debentures are convertible after 5 years into 15 crore equity shares of Rs. 10 each. Examine the nature of the financial instrument.

**Solution:** This contract is an equity instrument because changes in the fair value of equity shares arising from market related factors do not affect the amount of cash or other financial assets to be paid or received, or the number of equity instruments to be received or delivered.

**Question 36:**

WC Ltd. writes an option in favour of GT Ltd. wherein the holder can purchase issuer's equity instruments at prices that fluctuate in response to the share price of issuer.

As per the terms, if the share price of issuer is less than Rs. 50 per share, option can be exercised at Rs. 40 per share. If the share price is equal to or more than Rs. 50 per share, option can be exercised at Rs. 60 per share. Explain the nature of the financial instrument.

**Solution:** As the contract will be settled by delivery of fixed number of instruments for a variable amount of cash, it is a financial liability.

**Question 37:**

P Co. Ltd. (issuer) takes a loan from Q Co. Ltd. (holder) for Rs. 12 lakhs. The loan is perpetual and entitles the holder to fixed interest of 8% p.a. The rate of interest commensurate with credit risk profile of the issuer is 12% p.a. Calculate the value of the liability and equity components.

**Solution:** The values of the liability and equity components are calculated as follows:

Present value of interest payable in perpetuity (Rs. 96,000 discounted at 12%) = Rs. 800,000

Therefore, equity component = fair value of compound instrument, say, Rs. 1,200,000 less financial liability component i.e. Rs. 800,000 = Rs. 400,000.

In subsequent years, the profit and loss account is charged with interest of 12% on the debt instrument.

**Question 38:**

On 1 July 20X1, D Ltd. issues preference shares to G Ltd. for a consideration of Rs. 10 lakhs. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer anytime up to a period of 3 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 3 years. The preference shares carry a fixed coupon of 6% p.a. The prevailing market rate for similar preference shares, without the conversion feature, is 9% p.a.

Calculate the value of the liability and equity components.

**Solution:** The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 3 years (Rs. 10 lakhs discounted at 9% for 3 years) = Rs. 772,183

Present value of interest payable in arrears for 3 years (Rs. 60,000 discounted at 9% for each of 3 years) = Rs. 151,878

Total financial liability = Rs. 924,061

Therefore, equity component = fair value of compound instrument, say, Rs. 1,000,000 less financial liability component i.e. Rs. 924,061 = Rs. 75,939.

In subsequent years, the profit and loss account is charged with interest of 9% on the debt instrument.

**Question 39:**

D Ltd. issues callable preference shares to G Ltd. for a consideration of Rs. 10 lakhs. The holder has an option to convert these preference shares to a fixed number of equity instruments of the issuer anytime up to a period of 3 years. If the option is not exercised by the holder, the preference shares are redeemed at the end of 3 years. The preference shares carry a coupon of RBI base rate plus 1% p.a.

The prevailing market rate for similar preference shares, without the conversion feature or issuer's redemption option, is RBI base rate plus 4% p.a. On the date of contract, RBI base rate is 9% p.a. The value of call as determined using Black and Scholes model for option pricing is Rs. 29,165

Calculate the value of the liability and equity components.

**Solution**

The values of the liability and equity components are calculated as follows:

Present value of principal payable at the end of 3 years (Rs. 10 lakhs discounted at 13% for 3 years) = Rs. 6,93,050

Present value of interest payable in arrears for 3 years (Rs. 100,000 discounted at 13% for each of 3 years) = Rs. 2,36,115

The issuer's right to call the instrument in the event that interest rates go up makes a callable instrument less attractive to the holder than a plain vanilla instrument. This results in a derivative asset. The value of that early redemption option is Rs. 29,165

Net financial liability (A + B – C) = Rs. 9,00,000

Therefore, equity component = fair value of compound instrument, say, Rs. 1,000,000 less net financial liability component i.e. Rs. 9,00,000 = Rs. 1,00,000.

In subsequent years, the profit and loss account is charged with interest of RBI base rate plus 4% p.a. on the liability component at (A) above.

**Question 40:**

A company borrowed Rs. 50 lacs @ 12% p.a. Tenure of the loan is 10 years. Interest is payable every year and the principal is repayable at the end of 10th year. The company defaulted in payment of interest for the year 4, 5 and 6.

A loan reschedule agreement took place at the end of 7 year. As per the agreement the company is required to pay Rs. 90 lacs at the end of 8th year. Calculate the additional amount to be paid on account of rescheduling and also the book value of loan at the end of 8th year when reschedule agreement took place.

**Sol:** Assumption: Interest is compounded in case of default.

Outstanding Amount at the end of 8th year = Rs. 50,00,000 x 1.12 x 1.12 x 1.12 x 1.12 x 1.12  
= Rs. 88,11,708 (i.e. adding interest for 4th to 8th year)

Rescheduled amount to be paid at the end of the 8th year = Rs. 90,00,000

Additional amount to be paid on rescheduling

= Rs. 90,00,000 - Rs. 88,11,7081 = Rs. 1,88,291

**Question 41:**

ABC Company issued 10,000 compulsory cumulative convertible preference shares (CCCPS) as on 1 April 20X1 @ Rs 150 each. The rate of dividend is 10% payable every year. The preference shares are convertible into 5,000 equity shares of the company at the end of 5th year from the date of allotment. When the CCCPS are issued, the prevailing market interest rate for similar debt without conversion options is 15% per annum. Transaction cost on the date of issuance is 2% of the value of the proceeds.

**Key terms:**

Date of Allotment	01-Apr-20X1
Date of Conversion	01-Apr-20X6
Number of Preference Shares	10,000
Face Value of Preference Shares	150
Total Proceeds	15,00,000

Rate Of dividend	10%
Market Rate for Similar Instrument	15%
Transaction Cost	30,000
Face value of equity share after conversion	10
Number of equity shares to be issued	5,000
The effective interest rate for liability component	15.86%

Ans: This is a compound financial instrument with two components – liability representing present value of future cash outflows and balance represents equity component.

a. Computation of Liability & Equity Component

Date	Particulars	Cash Flow	Discount Factor	Net present Value
01-Apr-20X1		0	1	0.00
31-Mar-20X2	Dividend	150,000	0.869565	130,434.75
31-Mar-20X3	Dividend	150,000	0.756144	113,421.6
31-Mar-20X4	Dividend	150,000	0.657516	98,627.4
31-Mar-20X5	Dividend	150,000	0.571753	85,762.95
31-Mar-20X6	Dividend	150,000	0.497177	74,576.55
Total Liability Component				502,823.25
Total Proceeds				1,500,000.00
Total Equity Component (Bal fig)				997,176.75

b. Allocation of transaction costs

Particulars	Amount	Allocation	Net Amount
Liability Component	502,823	10,056	492,767
Equity Component	997,177	19,944	977,233
Total Proceeds	1,500,000	30,000	1,470,000

c. Accounting for liability at amortised cost:

- Initial accounting = Present value of cash outflows less transaction costs

- Subsequent accounting = At amortised cost, ie, initial fair value adjusted for interest and repayments of the liability.

	Opening Financial Liability A	Interest B	Cash Flow C	Closing Financial Liability A+B-C
01-Apr-20X1	492,767	-	-	4,92,767
31-Mar-20X2	492,767	78,153	150,000	4,20,920
31-Mar-20X3	420,920	66,758	150,000	3,37,678
31-Mar-20X4	337,678	53,556	150,000	2,41,234
31-Mar-20X5	241,234	38,260	150,000	1,29,494
31-Mar-20X6	129,494	20,506	150,000	-

**Question 41:**

A Limited issues INR 1 crore convertible bonds on 1 July 20X1. The bonds have a life of eight years and a face value of INR 10 each, and they offer interest, payable at the end of each financial year, at a rate of 6 per cent annum. The bonds are issued at their face value and each bond can be converted into one ordinary share in A Limited at any time in the next eight years. Companies of a similar risk profile have recently issued debt with similar terms, without the option for conversion, at a rate of 8 per cent per annum.

Required:

- (a) Identify the present value of the bonds, and, allocating the difference between the present value and the issue price to the equity component, provide the appropriate accounting entries.
- (b) Calculate the stream of interest expenses across the eight years of the life of the bonds.
- (c) Provide the accounting entries if the holders of the option elect to convert the options to ordinary shares at the end of the third year.

Ans

- (a) Applying the guidance for compound instruments, the present value of the bond is computed to identify the liability component and then difference between the present value of these bonds & the issue price of INR 1 crore shall be allocated to the equity component. In determining the present value, the rate of 8 per cent will be used, which is the interest rate paid on debt of a similar nature and risk that does not provide an option to convert the liability to ordinary shares.

Present value of bonds at the market rate of debt

Present value of principal to be received in eight years discounted at 8%

$$(10,000,000 \times 0.5403) = 5,403,000$$

Present value of interest stream discounted at 8% for 8 years

$$(6,00,000 \times 5.7466) = 3,447,960$$

$$\text{Total present value} = 8,850,960$$

$$\text{Equity component} = 1,149,040$$

$$\text{Total face value of convertible bonds} = 10,000,000$$

The accounting entries will be as follows:

	Dr. Amount	Cr. Amount
<b>1 July 20X1</b>		
Cash	Dr. 10,000,000	
To Convertible bonds (liability)		8,850,960
To Convertible bonds (equity component)		1,149,040

(Being entry to record the convertible bonds and the recognition of the liability and equity components)

**30 June 20X2**

Interest expense	Dr. 708,077	
To Cash		600,000
To Convertible bonds (liability)		108,077

(Being entry to record the interest expense, where the expense equals the present value of the opening liability multiplied by the market rate of interest).

- (b) The stream of interest expense is summarised below, where interest for a given year is calculated by multiplying the present value of the liability at the beginning of the period by the market rate of interest, this is being 8 per cent.

Date	Payment	Interest expense at 8%	Increase in bond liability	Total bond liability
01 July 20X1				8,850,960
30 June 20X2	600,000	708,077	108,077	8,959,037
30 June 20X3	600,000	716,723	116,723	9,075,760
30 June 20X4	600,000	726,061	126,061	9,201,821
30 June 20X5	600,000	736,146	136,146	9,337,967
30 June 20X6	600,000	747,037	147,037	9,485,004
30 June 20X7	600,000	758,800	158,800	9,643,804
30 June 20X8	600,000	771,504	171,504	9,815,308
30 June 20X9	600,000	784,692*	184,692	10,000,000

\*for rounding off

- (c) if the holders of the options elect to convert the options to ordinary shares at the end of the third year of the debentures (after receiving their interest payments), the entries in the third would be:

	Dr. Amount	Cr. Amount
<b>30 June 20X4</b>		
Interest expense	Dr. 726,061	
To Cash		600,000
To Convertible bonds (liability)		126,061

(Being entry to record interest expense for the period)

**30 June 20X4**

Convertible bonds (liability)	Dr. 9,201,821	
Convertible bonds (equity component)	Dr. 1,149,040	
To Contributed equity		10,350,861

(Being entry to record the conversion of bonds into shares of A Limited).

**Question 42:**

COFEE Ltd., borrows a sum of Rs. 20 crore from COFEE Ltd., repayable as a single bullet payment at the end of 5 years. The interest thereon @ 5% p.a. is payable at yearly rests. Since the market is 8% FEE Ltd paid an origination fee of Rs. 2,40 crores to COFEE Ltd., to compensate COFEE Ltd., for the lower rate of interest. Apart from the above, there are no other transactions between the two parties. You are required to show the value at which COFEE Ltd., would recognize the loan and the annual interest thereon. **[Nov 2011, 4 Marks]**

**Ans:** Therefore, the fair value of the loan to Cofee Ltd. Is the present value of the interest it will receive over the next 5 years & the present value of repayment it will at the end of the 5th year.

P.V. of interest discounted @ 8% =  $[(20,00,00,000 \times 5\%) \times 3.9926] = \text{Rs. } 3,99,36,000$  (A)

P.V. of principal amount =  $\text{Rs. } 20,00,00,000 \times \text{discounted @ } 8\% = 20,00,00,000 \times 0.6806 = 13,61,20,000$  (B)

FV of Loan (A + B) i.e. Rs.17,60,46,000 (i.e. approximately 17,60,00,000 which is loan amount net of origination fees.

COFEE Ltd. will recognize the loan at Rs. 17.60 crores only.

COFEE Ltd will recognize the interest using the effective interest rate method as worked out below:

Year	Amortised Cost (Opening)	Interest income @ 8% to be Recognised	Total	Payment received	Amortised Cost (Closing Balance)
	(1)	(2)	(3)	(4)	(5) = (3) – (4)
1	17,60,00,000	1,40,80,000	19,00,80,000	1,00,00,000	18,00,80,000
2	18,00,80,000	1,44,06,400	19,44,86,400	1,00,00,000	18,44,86,400
3	18,44,86,400	1,47,58,912	19,92,45,312	1,00,00,000	18,92,45,312
4	18,92,45,312	1,51,39,625	20,43,84,937	1,00,00,000	19,43,84,937
5	19,43,84,937	1,56,15,063*	21,00,00,000	21,00,00,000	Nil

\*Note: The interest in the 5th year, has been adjusted in accordance to the value received on closure.

**Question 43:**

A Ltd. has lent Rs. 50,000 yielding 18% interest p.a. for 10 years. The company transferred the right to receive principal Rs. 50,000 on maturity and the right to receive 14% interest per year. Of the balance 4% interest, 2% is due to the transferor, i.e. A Ltd. as service fee for collection of principal and interest. The expected cost for collection etc. is Rs. 400. A Ltd. has retained the right to receive the remaining 2% interest per year. Show important accounting entries in books of A Ltd. Assume expected yield rate 13% p.a.

**Ans:**

	Interest Transferred	Principal Transferred	Interest Retained	Service Fee
Cash inflow	7,000	50,000	1,000	1,000
Less: Cost of servicing loan	---	---	---	400
Net cash flow	7,000	50,000	1,000	600
Year	1 - 10	10	1 - 10	1 - 10
DF (13%)	5.43	0.29	5.43	5.43
Fair value of components	38,010	14,500	5,430	3,258
<b>Allocation of carrying amount</b>				
		Fair value	Carrying amount	
	Rs.	Rs.	Rs.	
Principal transferred	38,010			
Interest transferred	14,500	52,510	42,902	
Servicing asset		3,258	2,662	
Interest strip		5,430	4,436	
Total		61,198	50,000	
<b>Journal Entries in the Books of A Ltd.</b>				
Cash	Dr.	52,510		
To Loan			42,902	
To Profit & Loss A/c			9,608	
Servicing Asset	Dr.	2,662		
Interest Strip	Dr.	4,436		
To Loans			7,098	

**Question 44:**

On 1st January 20X1, SamCo. Ltd. agreed to purchase USD (\$) 20,000 from JT Bank in future on 31st December 20X1 for a rate equal to Rs. 68 per USD. SamCo. Ltd. did not pay any amount upon entering into the contract. SamCo Ltd. is a listed company in India and prepares its financial statements on a quarterly basis.

Following the principles of recognition and measurement as laid down in Ind AS 109, you are required to record the entries for each quarter ended till the date of actual purchase of USD.

For the purposes of accounting, please use the following information representing marked to market fair value of forward contracts at each reporting date:

As at 31st March 20X1 – Rs. (25,000)

As at 30th June 20X1 - Rs. (15,000)

As at 30th September 20X1 - Rs. 12,000

Spot rate of USD on 31st December 20X1 - Rs. 66 per USD

Ans:

- (i) **Assessment of the arrangement using the definition of derivative included under Ind AS 109.**



Derivative is a financial instrument or other contract within the scope of this Standard with all three of the following characteristics:

- a) its value changes in response to the change in a Specified 'underlying'.
- b) it requires no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors.
- c) it is settled at a future date.

Upon evaluation of contract in question it is noted that the contract meets the definition of a derivative as follows:

- a) the value of the contract to purchase USD at a fixed price changes in response to changes in foreign exchange rate.
- b) the initial amount paid to enter into the contract is zero. A contract which would give the holder a similar response to foreign exchange rate changes would have required an investment of USD 20,000 on inception.
- c) the contract is settled in future

The derivative is a forward exchange contract.

As per Ind AS 109, derivatives are measured at fair value upon initial recognition and are subsequently measured at fair value through profit and loss.

(ii) Accounting on 1st January 20X1:

As there was no consideration paid and without evidence to the contrary the fair value of the contract on the date of inception is considered to be zero. Accordingly, no accounting entries shall be recorded on the date of entering into the contract.

(iii) Accounting on 31st March 20X1:

Profit and loss A/c	Dr.	25,000	
To derivative financial liability			25,000

(Being mark to market loss on forward contract recorded)

(iv) Accounting on 30th June 20X1:

The change in value of the derivative forward contract shall be recorded as a derivative financial liability in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr.	10,000	
To Profit and loss A/c			10,000

(being partial reversal of mark to market loss on forward contract recorded)

(v) Accounting on 30th September 20X1:

The value of the derivative forward contract shall be recorded as a derivative financial asset in the books of SamCo Ltd. by recording the following journal entry:

Derivative financial liability A/c	Dr	15,000	
Derivative financial asset A/c	Dr	12,000	
To Profit and loss A/c			27,000

(being gain on mark to market of forward contract booked as derivative financial asset and reversal of derivative financial liability)

(vi) Accounting on 31st December 20X1:

The settlement of the derivative forward contract by actual purchase of USD 20,000 shall be recorded in the books of SamCo Ltd. by recording the following journal entry:

Cash (USD Account) @ 20,000 * 66	Dr.	13,20,000	
Profit and loss A/c	Dr.	52,000	
To Cash @ 20,000 x 68			13,60,000
To Derivative financial asset A/c			12,000

(being loss on settlement of forward contract booked on actual purchase of USD)

**Question 45:**

On February 1, 2009, Future Ltd. entered into a contract with Son Ltd. to receive the fair value of 1000 Future Ltd.'s own equity shares outstanding as on 31-01-2010 in exchange for payment of Rs. 1,04,000 in cash i.e., Rs. 104 per share. The contract will be settled in net cash on 31.01.2010. The fair values of this forward contract on the different dates were:

- (i) Fair value of forward on 01-02-2009 Nil
- (ii) Fair value of forward on 31-12-2009 Rs. 6,300
- (iii) Fair value of forward on 31-01-2010 Rs. 2,000

Presuming that Future Ltd. closes its books on 31st December each year, pass entries:

- (i) If net settled is in cash
- (ii) If net is settled by Son Ltd. by delivering shares of Future Ltd.

**Ans:**

(i)	If net is settled in cash			
1.2.09	No entry is required because fair value of derivative is zero and no cash is paid or received			
31.12.2009	Forward Asset A/c	Dr.	6,300	
	To Gain A/c			6,300
31.01.2010	Loss A/c	Dr.	4,300	
	To Forward Asset A/c			4,300
31.1.2010	Cash A/c	Dr.	2,000	

		To Forward Asset A/c			2,000
(ii)	<b>If net settled by delivery of share</b>				
	<b>First three entries will be same. Only the last entry will change as under:</b>				
		Equity A/c	Dr.	2,000	
		To Forward Asset A/c			2,000

## ACCOUNTING STANDARD

### AS 5

**Q 1:** Discuss with reference to the Accounting Standards the nature of classification and disclosure requirements in the statement of Profit & Loss of an entity in the following cases:

- (a) Losses sustained as a result of enemy action.
- (b) Setting up of group gratuity scheme where there was none.
- (c) Payment of arrears of Bonus for the earlier year as a result of settlement with the workers in the current year.

**Ans:**

- (a) Losses sustained as a result of enemy action constitute an extraordinary item since it is an event which is clearly distinct from the ordinary activities of the enterprise and is not expected to recur frequently or regularly. The nature and amount of each extraordinary item should be separately disclosed in a manner that its impact on current profit or loss can be perceived.
- (b) As the group gratuity scheme has been introduced for the first time, a lot of amount would be paid for the scheme and thus a separate disclosure is called for since the nature and amount of such items would be relevant to users of financial statements in understanding the financial position better.
- (c) As per AS-5 on Net Profit or Loss for the Period, Prior Period Items and Changes in Accounting Policies payment of arrears of bonus for earlier years as a result of settlement of the dispute in the current year is an event in the ordinary course and relates to normal activities of business. If the possibility of the bonus was highly probable based on circumstances existing in the previous year and yet management decided not to make the provision, the current year charge should be disclosed as a prior period item, otherwise, it is not a prior period item.

**Q 2:** ABC Ltd. was making provision for non-moving stocks based on no issues for the last 12 months upto 31-03-2002. The company wants to provide during the year ending 31-03-2003 based on technical evaluation:

Total value of stock

Rs. 100 lakhs

Provision required based on 12 months issue	Rs. 3.5 lakhs
Provision required based on technical evaluation	Rs. 2.5 lakhs
Does this amount to change in accounting policy? Can the Company change the method of provision?	

**Ans:** Basis of provisioning whether on no issues or on technical evaluation is the basis of making estimates and cannot be considered as Accounting Policy. As per AS 5, due to uncertainties inherent in business activities, many financial statement items cannot be measured with precision but can only be estimated. The estimation process involves judgments based on the latest information available. An estimate may have to be revised if changes occur regarding the circumstances on which the estimate was based, or as a result of new information, more experience or subsequent developments.

The basis of change in provisioning is a guideline and the better way of estimating the provision for non-moving stock on account of change. Hence, it is not a change in accounting policy. Accounting policy is the valuation of inventory on cost or on net realizable value or on lower of cost or net realizable value. Any interchange of this valuation base would have constituted change in accounting policy.

Further, the company should be able to demonstrate satisfactorily that having regard to circumstances provision made on the basis of technical evaluation provides more satisfactory results than provision based on 12 months issue. If that is the case, then the company can change the method of provision.

## AS 9

**Ex 3:** Moon Ltd. entered into agreement with Sun Ltd. for sale of goods of Rs 8 lakhs at a profit of 20 % on cost. The sale transaction took place on 1st February, 2009. On the same day Sun Ltd. entered into another agreement with Moon Ltd. to resell the same goods at Rs 10.80 lakhs on 1st August, 2009. State the treatment of this transaction in the financial statements of Moon Ltd. as on 31.03.09. The pre-determined re-selling price covers the holding cost of Sun Ltd. Give the Journal Entries as on 31.03.09 and 31.03.2010 in the books of Moon Ltd.

**Ans:** In the given case, Moon Ltd. concurrently agreed to repurchase the same goods from Sun Ltd. on 1st Feb., 2009. Also the re-selling price is pre-determined and covers purchasing and holding costs of Sun Ltd. Hence, the transaction between Moon Ltd. and Sun Ltd. on 1st Feb., 2009 should be accounted for as financing rather than sale. The resulting cash flow of Rs 9.60 lakhs received by Moon Ltd., cannot be considered as revenue as per AS 9 "Revenue Recognition".

**Journal Entries in the books of Moon Ltd.**

Accounting Year 2008-09				
				Rs in lakhs
1.02.09	Bank Account	Dr.	9.60	
	To Advance from Sun Ltd**			9.60
	(Being advance received from Sun Ltd			

	amounting [Rs8 lakhs + 20% of Rs 8 lakhs= 9.60 lakhs] under sale and re-purchase agreement)			
31.03.09	Financing Charges Account	Dr.	0.40	
	To Sun Ltd.			0.40
	(Financing charges for 2 months at Rs1.20 lakhs [10.80 – 9.60] i.e. 1.2 lakhs x 2/6)			
31.03.09	Profit and Loss Account	Dr.	0.40	
	To Financing Charges Account			0.40
	(Being amount of finance charges transferred to P& L Account)			
** The balance of Sun Ltd. account will be disclosed as an advance under the heading liabilities in the balance sheet of Moon Ltd. as on 31st March, 2009.				
<b>Accounting Year 2009-10</b>				
01.08.09	Financing Charges Account	Dr.	0.80	
	To Sun Ltd.			0.80
	(Financing charges for 4 months at Rs1.20 lakhs [10.80 – 9.60] i.e. 1.2 lakhs x 4/6)			
01.08.09	Advance from Sun Ltd	Dr	10.80	
	To Bank			10.80
	(Being advance from sun Ltd. paid)			
31.03.10	Profit and Loss Account	Dr.	0.80	
	To Financing Charges Account			0.80
	(Being amount of finance charges transferred to P& L Account)			

**Q 4:** Given the following information of M/s. Paper Products Ltd.

- (i) Goods of Rs. 60,000 were sold on 20-3-2015 but at the request of the buyer these were delivered on 10-4-2015.
- (ii) On 15-1-2015 goods of Rs. 1,50,000 were sent on consignment basis of which 20% of the goods unsold are lying with the consignee as on 31-3-2015.
- (iii) Rs. 1,20,000 worth of goods were sold on approval basis on 1-12-2014. The period of approval was 3 months after which they were considered sold. Buyer sent approval for 75% goods up to 31-1-2015 and no approval or disapproval received for the remaining goods till 31-3-2015.
- (iv) Apart from the above, the company has made cash sales of Rs. 7,80,000 (gross). Trade discount of 5% was allowed on the cash sales.

You are required to advise the accountant of M/s. Paper Products Ltd., with valid reasons, the amount to be recognized as revenue in above cases in the context of AS-9 and also determine the total revenue to be recognized for the year ending 31-3-2015.

**Ans:** As per AS 9 "Revenue Recognition", in a transaction involving the sale of goods, performance should be regarded as being achieved when the following conditions are fulfilled:

- (i) the seller of goods has transferred to the buyer the property in the goods for a price or all significant risks and rewards of ownership have been transferred to the buyer and the seller retains no effective control of the goods transferred to a degree usually associated with ownership; and
- (ii) no significant uncertainty exists regarding the amount of the consideration that will be derived from the sale of the goods.

In case (i):

The sale is complete but delivery has been postponed at buyer's request. M/s Paper Products Ltd. should recognize the entire sale of Rs. 60,000 for the year ended 31<sup>st</sup> March, 2015.

In case (ii):

20% goods lying unsold with consignee should be treated as closing inventory and sales should be recognized for Rs. 1,20,000 (80% of Rs. 1,50,000). In case of consignment sale revenue should not be recognized until the goods are sold to a third party.

In case (iii):

In case of goods sold on approval basis, revenue should not be recognized until the goods have been formally accepted by the buyer or the buyer has done an act adopting the transaction or the time period for rejection has elapsed or where no time has been fixed, a reasonable time has elapsed. Therefore, in case (iii) revenue should be recognized for the total sales amounting Rs. 1,20,000 as the time period for rejecting the goods had expired.

In case (iv):

Trade discounts given should be deducted in determining revenue. Thus Rs. 39,000 should be deducted from the amount of turnover of Rs. 7,80,000 for the purpose of recognition of revenue. Thus, revenue should be Rs. 7,41,000.

Thus total revenue amounting Rs. 10,41,000 (60,000 + 1,20,000 + 1,20,000 + 7,41,000) will be recognized for the year ended 31<sup>st</sup> March, 2015 in the books of M/s Paper Products Ltd.

**Q 5** A company sells the goods with right to return. The following pattern has been observed:

Timeframe of return from date of purchase	% of cumulative sales
Within 10 days	5%
Between 11 days and 20 days	7 %
Between 21 days and 30 days	8%
Between 31 days and 45 days	9 %

Company has made sale of Rs. 30 lacs in the month of February 2015 and of Rs. 36 lacs in the month of March, 2015. The total sales for the financial year have been Rs. 450 lacs and the cost of sales was Rs. 360 lacs.

Determine the amount of provision to be made and revenue to be recognised in accordance with AS 9. A year may be considered of 360 days. **[May 2015]**

**Ans: Accounting treatment for recognition of revenue**

Revenue in respect of sale of goods is recognised fully at the time of sale itself assumed that the company has complied with the conditions stated in AS 9 relating to recognition of revenue in the case of sale of goods. AS 9 also provides that in case of retail sales offering a guarantee of 'money back, if not completely satisfied, it may be appropriate to recognize the sale but to make a suitable provisions for returns based on previous experiences.

Therefore, sale of Rs. 30,00,000 and Rs. 36,00,000 made in the month of February and March, 2015 will be recognized at full value.

**Amount of provision**

The goods are sold with a right to return. The existence of such right gives rise to a present obligation on the company as per AS 29, 'Provisions, Contingent Liabilities and Contingent Assets'. According to the standard, a provision should be created on the Balance sheet date, for sales returns after the Balance Sheet date, at the best estimate of the loss expected, along with any estimated incremental cost that would be necessary to resell the goods expected to be returned.

It is assumed that the sales has been made evenly throughout the month and every month is of 30 days based on the information given in the question i.e. a year is of 360days.

Sales during	Sales value (Rs. in lacs)	Sales value (cumulative) (Rs. in lacs)	Likely returns (%)	Likely returns (Rs. in lacs)	Provision @ 20% (Rs. in lacs) (Refer W.N.)
Last 10 days of March	36/3 or 12	12	5%	0.600	0.120
Previous 10 days of March	36/3 or 12	24	7%	1.680	0.336
Previous 10 days of March	36/3 or 12	36	8%	2.880	0.576
Last 15 days of February	30/2 or 15	51	9%	4.590	0.918
<b>Total</b>				<b>9.75</b>	<b>1.950</b>

Working Note:

Calculation of Profit % on sales	(Rs. in lacs)
Sales for the year	450
Less: Cost of sales	(360)
Profit	90

Profit mark up on sales $(90/450) \times 100 =$	20%
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Note: The above solution is on the basis of the facts given in the question.

## AS 20

**Q 6:** Determine the order to include dilutive securities in the computation of weighted average number of shares and calculate the diluted earnings per share on the basis of the following information pertaining to financial year ended 31st March, 2012:

Earnings, i.e., Net profit attributable to equity shareholders	Rs. 1,00,00,000
No. of equity shares outstanding	20,00,000
Average fair value of one equity share during the year	Rs. 75.00

Details of Potential Equity Shares:

Options	1,00,000 with exercise price of Rs. 60
Convertible Preference Shares	8,00,000 shares entitled to a cumulative dividend of Rs. 8 per share. Each preference share is convertible into 2 equity shares.
Attributable tax, e.g. Dividend distribution tax (DDT)	16.2225%
12% Convertible Debentures of Rs. 100 each	Nominal amount Rs. 10,00,00,000. Each debenture is convertible into 4 equity shares.
Tax rate	30%

**Ans:** Manner of determining the order in which dilutive securities should be included in computation of Weighted Average Number of Shares As per para 42 of AS 20 'Earnings Per Share', in order to maximise the dilution of basic earnings per share, each issue or series of potential equity shares is considered in sequence from the most dilutive to the least dilutive. For the purpose of determining the sequence from most dilutive to least dilutive potential equity shares, the earnings per incremental potential equity share is calculated. Where the earnings per incremental share is the least, the potential equity share is considered most dilutive and vice-versa.

Increase in Earnings Attributable to Equity Shareholders on Conversion of Potential Equity Shares

	Increase in Earnings	Increase in no. of Equity Shares	Earnings per Incremental Share
Options	Nil	20,000	Nil
Convertible Preference Shares	Rs. 74,38,240	16,00,000	Rs. 4.6489
12% Convertible Debentures	Rs. 84,00,000	40,00,000	Rs. 2.10



WN

1. For Option:

No. of incremental shares issued for no consideration =  $\{1,00,000 \times (75 - 60) / 75\}$

2. For Convertible Preference Shares

Increase in net profit attributable to equity shareholders as adjusted by attributable tax (DDT) =  $[(Rs. 8 \times 8,00,000) + 16.2225\% \text{ of } (8 \times 8,00,000)]$

No. of incremental shares =  $\{2 \times 8,00,000\}$

3. For 12% Convertible Debentures

Increase in net profit =  $\{Rs. 10,00,00,000 \times 0.12 \times (1 - 0.30)\}$

No. of incremental shares =  $\{10,00,000 \times 4\}$

It may be noted from the above that 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. 12% convertible debentures being second most dilutive will be considered next and convertible preference shares will be considered at the end.

Computation of Diluted Earnings Per Share				
	Net Profit	No. of Equity	EPS	
	Attributable	Shares		
As reported	1,00,00,000	20,00,000	5.00	
Options		20,000		
	1,00,00,000	20,20,000	4.95	Dilutive
12% Convertible Debentures	84,00,000	40,00,000		
	1,84,00,000	60,20,000	3.06	Dilutive
Convertible Preference Shares	74,38,240	16,00,000		
	2,58,38,240	76,20,000	3.39	Anti-Dilutive

Since, diluted earnings per share is increased while taking the convertible preference shares into account (from Rs. 3.06 to Rs. 3.39), the convertible preference shares are anti-dilutive and are ignored in the calculation of diluted earnings per share. Therefore, diluted earnings per share is Rs. 3.06.

## AS 19

**Q 7** Global Ltd. has initiated a lease for three years in respect of an equipment costing Rs. 1,50,000 with expected useful life of 4 years. The asset would revert to Global Limited under the lease agreement. The other information available in respect of lease agreement is:

- (i) The unguaranteed residual value of the equipment after the expiry of the lease term is estimated at Rs.20,000.
- (ii) The implicit rate of interest is 10%

- (iii) The annual payments have been determined in such a way that the present value of the lease payment plus the residual value is equal to the cost of asset.

Ascertain in the hands of Global Ltd.

- (i) The annual lease payment.  
 (ii) The unearned finance income  
 (iii) The segregation of finance income, and also  
 (iv) Show how necessary items will appear in its profit and loss account and balance sheet for the various years. **[May 2006]**

**Answer:**

<b>(i) Calculation of Annual Lease Payment"</b>					
Cost of the equipment					1,50,000
Unguaranteed Residual Value					20,000
PV of residual value for 3 years @ 10% (Rs.20,000 x 0.751)					15,020
Fair value to be recovered from Lease Payment (Rs.1,50,000 – Rs.15,020)					1,34,980
PV Factor for 3 years @ 10% 2.487					
Annual Lease Payment (Rs. 1,34,980 / PV Factor for 3 years @ 10% i.e. 2.487)					54,275
<b>(ii) Unearned Financial Income</b>					
Total lease payments [Rs. 54,275 x 3]					1,62,825
Add: Residual value					20,000
Gross Investments					1,82,825
Less: Present value of Investments (Rs.1,34,980 + Rs.15,020)					1,50,000
Unearned Financial Income					32,825
<b>(iii) Segregation of Finance Income</b>					
<b>Year</b>	<b>Lease Rentals</b>	<b>Finance Charges @ 10%</b>	<b>Repayment</b>	<b>Outstanding Amount</b>	
0	-	-	-	1,50,000	
I	54,275	15,000	39,275	1,10,725	
II	54,275	11,073	43,202	67,523	
III	74,275**	6,752	67,523	—	
	1,82,825	32,825	1,50,000		

\* Annual lease payments are considered to be made at the end of each accounting year.

\*\* Rs. 74,275 includes unguaranteed residual value of equipment amounting Rs. 20,000.

<b>(iv) Profit and Loss Account ( Relevant Extracts)</b>			
Credit side			Rs.
I Year	By Finance Income		15,000
II year	By Finance Income		11,073
III year	By Finance Income		6,752
<b>Balance Sheet ( Relevant Extracts)</b>			
Assets side			Rs.

I year	Lease Receivable	1,50,000
	Less: Amount Received	39,275
		1,10,725
II year	Lease Receivable	1,10,725
	Less: Received	43,202
		67,523
III year :	Lease Amount Receivable	67,523
	Less: Amount received	47,523
	Residual value	20,000
		NIL

**Notes to Balance Sheet**

Year 1		Rs.
	Minimum Lease Payments (54,275 + 54,275)	1,08,550
	Residual Value	20,000
		1,28,550
	Unearned Finance Income(11,073+ 6,752)	17,825
	Lease Receivables	1,10,725
	Classification:	
	Not later than 1 year	43,202
	Later than 1 year but not more than 5 years	67,523
	Total	1,10,725
Year II:		
	Minimum Lease Payments	54,275
	Residual Value (Estimated)	20,000
		74,275
	Unearned Finance Income	6,752
	Lease Receivables (not later than 1 year)	67,523
III Year:		
	Lease Receivables (including residual value)	67,523
	Amount Received	67,523
		NIL

**AS 22**

**Q 8:** PQR Ltd's accounting ends on 31-03-2001. The company made a loss of Rs. 200,000 for the year ending 31-03-2001. For the years ending 31-03-2002 and 31-03-2003, it made profits of Rs. 100,000 and Rs. 120,000 respectively. It is assumed that the loss of a year can be carried forward for eight years and tax rate is 40%. By the end of 31.03.2001, the company feels that there will be sufficient taxable income in the future years against which carry forward loss can be set-off. There is no difference between taxable income and accounting income except that the carry forward loss is allowed in the years ending 2002 and 2003 for tax purposes. Prepare a statement of profit and loss for the years ending 2001, 2002 and 2003.

**Ans:** Statement of Profit and Loss

	31.3.2001	31.3.2002	31.3.2003
Profit (Loss)	(2,00,000)	1,00,000	1,20,000
Less: Current tax	---	---	(8,000)
Deferred tax:			
Tax effect of timing differences originating during the year	80,000	---	----
Tax effect of timing differences reversed/adjusted during the year	---	(40,000)	(40,000)
<b>PROFIT (LOSS) AFTER TAX EFFECT</b>	<b>(1,20,000)</b>	<b>60,000</b>	<b>72,000</b>

## AS 15

**Q 9:** P Ltd. has three business segments which are FMCG, Batteries and Sports Equipment. The Battery segment has been consistently underperforming and P Ltd. after several discussions with Labour unions have finally decided on closure of this segment. Under the agreement with the Labour Union the employees of the Battery Segment will earn no further benefit as the arrangement is a curtailment without settlement wherein the employees of the discontinued segment will continue to receive benefits for services rendered when the segment was functioning. As a result of the curtailment, the company's obligations that were arrived on the basis of actuarial valuations before the curtailment have come down. The following information is also furnished:

- The value of gross obligations before the curtailment calculated on actuarial basis was Rs. 4,000 lakhs.
- The value of Unamortized past service costs is Rs. 100 lakhs.
- The Curtailment will bring down gross obligations by Rs. 500 lakhs and P Ltd. anticipates a proportional decline in the value of unamortized past service costs also.
- The Fair Value of plan assets on date is estimated at Rs. 3,250 lakhs.

You are required to calculate the gain from curtailment and also show the liability to be recognized in the Balance Sheet of P Ltd. after the curtailment.

**Ans:**

Gain from curtailment	(Rs.) in lakhs
Reduction in gross obligation (12.5% of 4,000)	500.00
Less: Proportion of unamortised past service cost(12.5% of Rs. 100)	(12.50)
Gain from curtailment	487.50

The liability to be recognised after curtailment in the balance sheet of P Ltd. is estimated as under:

	Rs.
--	-----

Reduced gross obligation (Rs. 4,000 less Rs. 500)	3,500.00
Less: Fair value of plan assets	(3,250.00)
	250.00
Less: Unamortised past service cost (87.5% of Rs. 100)	(87.50)
Liability to be recognised in the balance sheet	162.50

**Q 10:** As on 1st April, 2008 the fair value of plan assets was Rs. 1,00,000 in respect of a pension plan of Zeleous Ltd. On 30th September, 2008 the plan paid out benefits of Rs. 19,000 and received inward contributions of Rs.49,000. On 31st March, 2009 the fair value of plan assets was Rs. 1,50,000 and present value of the defined benefit obligation was Rs.1,47,920. Actuarial losses on the obligations for the year 2008-09 were Rs.600. On 1st April, 2008 the company made the following estimates, based on its market studies, understanding and prevailing prices.

	%
Interest & dividend income, after tax payable by the fund	9.25
Realised and unrealised gains on plan assets (after tax)	2.00
Fund administrative costs	(1.00)
Expected Rate of Return	10.25

You are required to find the expected and actual returns on plan assets

**Ans:** Computation of Expected and Actual Returns on Plan Assets

		Rs.
Return on Rs. 1,00,000 held for 12 months at 10.25%		10,250
Return on Rs. 30,000 (49,000-19,000) held for six months at 5% (equivalent to 10.25% annually, compounded every six months)		1,500
Expected return on plan assets for 2008-09		11,750
Fair value of plan assets as on 31 March, 2009		1,50,000
Less: Fair value of plan assets as on 1 April, 2008	1,00,000	
Contributions received	49,000	1,49,000
		1,000
Add: Benefits paid		19,000
Actual return on plan assets		20,000

## AS 2

**Q 11:** Calculate the value of raw materials and closing stock based on the following information:

Raw material X

Closing balance

500 units

	Rs. per unit
Cost price including excise duty	200
Excise duty (Cenvat credit is receivable on the excise duty paid)	10
Freight inward	20
Unloading charges	10
Replacement cost	150
Finished goods Y	
Closing Balance	1200 units
	Rs. per unit
Material consumed	220
Direct labour	60
Direct overhead	40

Total Fixed overhead for the year was Rs. 2,00,000 on normal capacity of 20,000 units.

Calculate the value of the closing stock, when

- (i) Net Realizable Value of the Finished Goods Y is Rs. 400.
- (ii) Net Realizable Value of the Finished Goods Y is Rs. 300.

**Ans: Working Notes:**

<b>Raw Material X</b>	<b>Rs.</b>
Cost Price	200
Less: Cenvat Credit	(10)
	190
Add: Freight Inward	20
Unloading charges	10
Cost	220
<b>Finished goods Y</b>	<b>Rs.</b>
Materials consumed	220
Direct Labour	60
Direct overhead	40
Fixed overheads (Rs. 2,00,000/20,000 units)	10
Cost	330

**Situation (i)**

When Net Realisable Value of the Finished Goods Y is Rs. 400

NRV is greater than the cost of Finished Goods Y i.e. Rs. 330

Hence, Raw Material and Finished Goods are to be valued at cost

**Value of Closing Stock:**

	Qty	Rate	Amount (Rs.)
Raw Material X	500	220	1,10,000
Finished Goods Y	1,200	330	3,96,000
Total Cost of Closing Stock			5,06,000

**Situation (ii)**

When Net Realisable Value of the Finished Goods Y is Rs. 300

NRV is less than the cost of Finished Goods Y i.e. Rs. 330

Hence, Raw Material is to be valued at replacement cost and Finished Goods are to be valued at NRV since NRV is less than the cost

**Value of Closing Stock:**

	Qty	Rate	Amount (Rs.)
Raw Material X	500	150	75,000
Finished Goods Y	1,200	300	3,60,000
Total Cost of Closing Stock			4,35,000

**Note:** It has been considered that Raw Material X is used for the production of Finished Goods Y.

**AS 26**

**Q 12:** Religare Ltd. acquired a patent of a drug at a cost of Rs. 20,00,000 for a period of 4 years and the product life-cycle is also 4 years. The company capitalized the cost and started amortizing the asset at Rs. 5,00,000 per annum. After one year, it was found that the product life-cycle may continue for another 5 years from then. The net cash flows from the product during these 5 years were expected to be Rs. 8,00,000, Rs. 12,00,000, Rs. 10,00,000, Rs. 12,50,000 and Rs. 7,50,000. Find out the amortization of the patent for each of the years?

**Ans:** As per para 78 of AS 26 'Intangibles Assets', the amortisation period and the amortisation method should be reviewed at least at each financial year end. If the expected useful life of the asset is significantly different from previous estimates, the amortisation period should be changed accordingly. If there has been a significant change in the expected pattern of economic benefits from the asset, the amortisation method should be changed to reflect the changed pattern.

Accordingly, Religare Ltd. amortized Rs. 5,00,000 per annum for the first year. The remaining carrying cost of Rs. 15,00,000 (Rs. 20,00,000 – Rs. 5,00,000) will be amortized during next 5 years on the basis of net cash flows arising from the sale of the product. The amortization may be calculated as follows:

Year	Net Cash flows (Rs.)	Amortization basis	Amortization Amount (Rs.)
1	-	Rs. 20,00,000/4 years	5,00,000

2	8,00,000	0.160	2,40,000
3	12,00,000	0.240	3,60,000
4	10,00,000	0.200	3,00,000
5	12,50,000	0.250	3,75,000
6	7,50,000	0.150	2,25,000
	50,00,000	1.000	20,00,000

**Q 13** Dell International Ltd. is developing a new production process. During the financial Year 31st March, 2006, the total expenditure incurred on this process was Rs 40 lakhs. The production process met the criteria for recognition as an intangible asset on 1st Dec 2005. Expenditure incurred till this date was Rs 16 lakhs. Further expenditure incurred on the process for the financial year ending 31st March 2007, was Rs 70 lakhs. As at 31-3-2007, the recoverable amount of know-how embodied in the process is estimated to be Rs 62 lakhs. This includes estimates of future cash outflows as well as inflows. You are required to work out:

- What is the expenditure to be charged to the profit and loss account for the financial year ended 31st March 2006? (Ignore depreciation for this purpose)
- What is the carrying amount of the intangible asset as at 31st March 2006?
- What is the expenditure to be charged to the profit and loss account for the financial year ended 31st March 2007? (Ignore depreciation for this purpose)
- What is the carrying amount of the intangible asset as at 31st March 2007?

**Ans:**

- Rs 16 lakhs
- Carrying amount as on 31-3-2006 will be expenditure incurred after 1-12-2005 = Rs 24 lakhs
- Book cost of intangible asset as on 31-3-2007 is as follows  
 Total Book cost = Rs(70 + 24) lakhs = Rs 94 lakhs  
 Recoverable amount as estimated = Rs 62 lakhs  
 Difference to be charged to Profit and Loss account = Rs 32 lakhs
- Rs 62 lakhs

**AS 28**

**Q 14:** A significant raw material used for plant Y's final production is an intermediate product bought from plant X of the same enterprise. X's products are sold to Y at a transfer price that passes all margins to X. 80% of Y's final production is sold to customers outside of the reporting enterprise. 60% of X's final production is sold to Y and the remaining 40% is sold to customers outside of the reporting enterprise.

For each of the following cases, what are the cash-generating units for X and Y?

Case 1: X could sell the products it sells to Y in an active market. Internal transfer prices are higher than market prices.



Case 2: There is no active market for the products X sells to Y.

**Ans: Case 1**

X could sell its products on an active market and, so, generate cash inflows from continuing use that would be largely independent of the cash inflows from Y. Therefore, it is likely that X is a separate cash-generating unit, although part of its production is used by Y.

It is likely that Y is also a separate cash-generating unit. Y sells 80% of its products to customers outside of the reporting enterprise. Therefore, its cash inflows from continuing use can be considered to be largely independent.

Internal transfer prices do not reflect market prices for X's output. Therefore, in determining value in use of both X and Y, the enterprise adjusts financial budgets/forecasts to reflect management's best estimate of future market prices for those of X's products that are used internally.

**Case 2**

It is likely that the recoverable amount of each plant cannot be assessed independently from the recoverable amount of the other plant because:

- (a) the majority of X's production is used internally and could not be sold in an active market. So, cash inflows of X depend on demand for Y's products. Therefore, X cannot be considered to generate cash inflows that are largely independent from those of Y; and
- (b) the two plants are managed together.

As a consequence, it is likely that X and Y together is the smallest group of assets that generates cash inflows from continuing use that are largely independent.

**Q 15:** Rajesh Industries Ltd., is in the business of manufacturing and export. In 2005, the Government put a restriction on export of goods exported by Rajesh industries Ltd. leading to impairment of its assets. Rajesh Industries acquired at the end of 2001, identifiable assets worth Rs. 400 lakhs for Rs. 600 lakhs, the balance being treated as goodwill. The useful life of the identifiable assets is 15 years and depreciated on straight-line basis. When Government put the restriction at the end of 2005, the company recognized the impairment loss by determining the recoverable amount of assets at Rs. 272 lakhs. In 2007, the "restriction" was withdrawn by the Government and due to this favourable change Rajesh Industries Ltd. estimates its recoverable amount at Rs. 342 lakhs. You are required to:

- (a) Calculate and allocate impairment loss in 2005.
- (b) Compute amount of Reversal of impairment loss and its allocation in 2007. **[RTP]**

**Ans:** Calculation and allocation of impairment loss for the year ended 31.12.2005

		(Rs. in lakhs)		
<b>End of 2005</b>		<b>Goodwill</b>	<b>Identifiable Asset</b>	<b>Total</b>
(a)	Historical cost	200	400	600

(b)	Accumulated /Amortisation for the period			
	1.1.2002 to 31.12.2005	160*	106	266
(c)	Carrying amount (a-b)	40	294	334
(d)	Recoverable amount as on 31.12.2005			272
(e)	Impairment loss			62
(f)	Impairment loss allocated first to goodwill and balance to other assets	(40)	(22)	(62)
(g)	Carrying amount after impairment loss (c-f)	Nil	272	272
	*Amortisation period 5 years as per AS-14.			

**Reversal of impairment loss as on 31.3.2007.**

		Goodwill	Identifiable Asset	Total
	Carrying amount after impairment loss as on 1/1/2006	Nil	272	272
	Less : Depreciation (2 years) $[272/10*2]$		49	49
(a)	Carrying amount of asset at the end of 2007 after recognizing impairment loss in 2005 and depreciation for 2 years.	Nil	223	223
(b)	Carrying amount of asset in 2007 had there been no impairment loss in 2005	Nil	240	240
(c)	Recoverable amount as on 31.12.2007			342
(d)	Lower of recoverable amount and carrying amount of identifiable assets had there been no impairment loss			240
(e)	Impairment loss that can be reversed (b-a)(240 – 223)			17

**Carrying amount at 31 December 20X4 after reversing the impairment**

	Goodwill	Identifiable assets	Total
Historical cost	200	400	600
Accumulated amortisation/depreciation	160	155	315
Accumulated impairment loss	40	22	62
Carrying amount	--	223	223
Reversal of impairment loss	--	17	17
Carrying amount after reversal of impairment loss	--	240	240

**AS 16**

**Q 16:** X Ltd. began construction of a new building on 1<sup>st</sup> January, 2007. It obtained Rs.1 lakh special loan to finance the construction of the building on 1<sup>st</sup> January, 2007 at an interest rate of 10%. The company's other outstanding two non-specific loans were:

Amount	Rs.
Rs.5,00,000	11%
Rs.9,00,000	13%

The expenditure that were made on the building project were as follows:

	Rs.
January 2007	2,00,000
April 2007	2,50,000
July 2007	4,50,000
December 2007	1,20,000

Building was completed by 31st December, 2007. Following the principles prescribed in AS-16 'Borrowing Cost,' calculate the amount of interest to be capitalized and pass one Journal Entry for capitalizing the cost and borrowing cost in respect of the building.

**Ans:**

<b>(i)</b>	<b>Computation of average accumulated expenses</b>		
	Rs.2,00,000 x 12 / 12 =		2,00,000
	Rs. 2,50,000 x 9 / 12 =		1,87,500
	Rs. 4,50,000 x 6 / 12 =		2,25,000
	Rs. 1,20,000 x 1 / 12 =		10,000
			6,22,500
<b>(ii)</b>	<b>Calculation of average interest rate other than for specific borrowings</b>		
	<b>Amount of loan (in Rs.)</b>	<b>Rate of interest</b>	<b>Amount of interest (in Rs.)</b>
	5,00,000	11%	55,000
	9,00,000	13%	1,17,000
	14,00,000		1,72,000
	Weighted average rate of interest = (1,72,000/14,00,000)*100 = 12.285% (approx)		
<b>(iii)</b>	<b>Interest on average accumulated expenses</b>		
	Specific borrowings (Rs. 1,00,000 X 10%) =		10,000
	Non-specific borrowings (Rs. 5,22,500* X 12.285%) =		64,189
	Amount of interest to be capitalized =		74,189
	*(Rs. 6,22,500 – Rs. 1,00,000)		
<b>(iv)</b>	<b>Total expenses to be capitalized for building</b>		
	Cost of building Rs.(2,00,000 + 2,50,000 + 4,50,000 + 1,20,000)		10,20,000

	Add: Amount of interest to be capitalised			74,189
				10,94,189
<b>(v)</b>	<b>Journal Entry</b>			
	<b>Date</b>	<b>Particulars</b>		<b>Dr. (Rs.)</b>
	31.12.2007	Building account -To Bank account (Being amount of cost of building and borrowing cost thereon capitalized)	Dr.	10,94,189
				<b>Cr. (Rs.)</b>

## AS 17

**Q 17:** Following details are given for Sunder Ltd. for the year ended 31st March, 2011:

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

Other information:

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

You are required to identify reportable segments.

**[RTP]**

**Ans:** Calculation of Segment Result

	Sales (Rs. in lakhs)	Expenses (Rs. in lakhs)	Segment result (Rs. in lakhs)
Food products	10,000	7,170	2,830
Plastic & packaging	1,240	800	440
Health & scientific	690	444	246
Other	364	400	(36)

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

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

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

**Q 18** A healthcare goods producer has changed the product line as follows:

	Washing soap	Bathing soap
January 2004 – September, 2004 per month	2,00,000	2,00,000
October 2004 – December, 2004 per month	1,00,000	3,00,000
January 2005 – March, 2005 per month	0	4,00,000

The company has enforced a gradual enforcement of change in product line on the basis of an overall plan. The Board of Directors of the Company has passed a resolution in March, 2004 to this effect. The company follows calendar year as its accounting year. Should it be treated as discontinuing operation? **[RTP]**

**Ans:** Business enterprises frequently close facilities, abandon products, or even product lines, and can reduce the size of their work force in response to market forces. These kinds of terminations, generally, are not in themselves discontinuing operations unless they satisfy the definition criteria. By gradually reducing the size of operations in the product line of Washing Soap, the company has increased its scale of operations in Bathing Soap. Such a change is a gradual or evolutionary, phasing out of a product line or class of services and does not meet definition criteria in paragraph 3(a) of AS 24 – namely, disposing of substantially in its entirety, a component of the enterprise. Hence, this change over is not a discontinuing operation.

## AS 25

**Q 19:** An enterprise reports quarterly, estimates an annual income of Rs. 10 lakhs. Assume tax rates on 1st Rs. 5,00,000 at 30% and on the balance income at 40%. The estimated quarterly income are Rs. 75,000, Rs. 2,50,000, Rs. 3,75,000 and Rs. 3,00,000. Calculate the tax expense to be recognized in each quarter. **[May 2011]**

**Ans:** As per para 29 of AS 25 'Interim Financial Reporting', income tax expense is recognised in each interim period based on the best estimate of the weighted average annual income tax rate expected for the full financial year.

Estimated Annual Income	Rs.10,00,000
Tax expense:	
30% on Rs. 5,00,000	Rs. 1,50,000
40% on remaining Rs. 5,00,000	Rs.2,00,000
	Rs.3,50,000
Weighted average annual income tax rate = 3,50,000/10,00,000 =	35%
Tax expense to be recognised in each of the quarterly reports	
Quarter I - Rs. 75,000 x 35%	Rs. 26,250
Quarter II - Rs. 2,50,000 x 35%	Rs. 87,500
Quarter III - Rs. 3,75,000 x 35%	Rs. 1,31,250
Quarter IV - Rs. 3,00,000 x 35%	Rs. 1,05,000
	Rs. 3,50,000

**Q 20:** ABC India Ltd. has Rs. 1,02,000 net income for the quarter ended 31st December, 2003 including the following items:-

- (a) Rs. 60,000 extraordinary gain received on July 30 2003, was allocated equally to the second, third and fourth quarter of financial year 2003-2004.
- (b) Rs. 16,000 cumulative effect loss resulting from change in method of inventory valuation method was recognized on November 2, 2003. Out of this loss Rs. 10,000 relates to the previous quarters.

Compute the profit as per AS-25 for the quarter ended 31st December, 2003 of ABC India Ltd.

**Ans:** ABC India Ltd.

Statement showing computation of the correct amount of profit attributable for the quarter

	Amount (Rs.)
Net income for the quarter as shown by the company	1,02,000
Extra ordinary gains should be recognized in the quarter in which it is accrued.	
Hence, allocation of Rs. 20,000 for current quarter should be adjusted	(20,000)
Effect of change in the method of inventory valuation pertaining to earlier period, to be adjusted	10,000
Net profit for the period	92,000

When different rates of tax are applicable to different portions of the estimated annual accounting income

Estimated annual income Rs. 1 lakh  
 (inclusive of Estimated Capital Gains (earned in Quarter II) Rs. 20,000

Assumed Tax Rates:

On Capital Gains	10%
On other income:	
First Rs. 40,000	30%
Balance income	40%

Assuming there is no difference between the estimated taxable income and the estimated accounting income, calculate tax expense and weighted average annual effective tax rate. Also, calculate tax expense for each quarter, when the estimated income of each quarter is Rs. 25,000 and income for 2nd quarter of Rs. 25,000 includes capital gain of Rs. 20,000.

**Answer:**

Tax Expense:	
On Capital Gains portion of annual income:	
10% of Rs. 20,000	Rs. 2,000
On other income: 30% of Rs. 40,000 + 40% of Rs.40,000	Rs.28,000
Total:	Rs.30,000
Weighted Average Annual Effective Tax Rate:	

On Capital Gains portion of annual income: $2000/20000 \times 100 =$	10%
On other income: $28,000/80,000 \times 100 =$	35%

The estimated income of each quarter is Rs.25,000, when income of Rs.25,000 for 2nd Quarter includes capital gains of Rs.20,000, the tax expense for each quarter will be calculated as below:

	Income	Tax Expense
Quarter I:	Rs. 25,000	35% of Rs. 25,000 = Rs. 8,750
Quarter II:	Capital Gains: Rs. 20,000	10% of Rs. 20,000 = Rs. 2,000
	Other: Rs. 5,000	35% of Rs. 5,000 = Rs. 1,750
Quarter III:	Rs. 25,000	35% of Rs. 25,000 = Rs. 8,750
Quarter IV:	Rs. 25,000	35% of Rs. 25,000 = Rs. 8,750
Total tax expense for the year		Rs. 30,000

## AS 18

**Q 21:** A Ltd., owns 30% of the equity capital of B Ltd. B Ltd. in turn owns 35% of equity capital C Ltd., and 40% of equity capital in D Ltd. You are required to answer the following questions.

- Whether B Ltd. is a related party to A Ltd?
- Whether C Ltd., is a related party to A Ltd.?
- Whether C Ltd. and D Ltd. are related parties?

[RTP Nov 2009]

**Ans:**

- As per AS 18, associates and joint ventures of the reporting enterprise are related parties. Since A Ltd. holds more than 20% of the voting power in B Ltd. by virtue of this it has substantial interest and significant influence in B Ltd. Therefore B Ltd. is an associate and is related party to A Ltd.
- An associate of an associate is not a related party. Only in the case of a holding company a subsidiary of a subsidiary (sub-subsidiary) also becomes a related party.
- C Ltd. and D Ltd. are co-associates. Co-subsidiaries become related parties because of common control. In the case of this common control is missing and therefore they are not related parties.

**Q 22:** Kismis Ltd. is a 100% subsidiary of Kaju Ltd. Which of the followings are related party transactions for the purpose of consolidated financial statements?

- Salary paid to employees of Kismis Ltd.
- Loans given to employees of Kaju Ltd.
- Inter-company sales between Kaju Ltd. and Kismis Ltd.
- Loan given by Kismis Ltd. to managing director of Kaju Ltd.
- Transfer of Asset by Kaju Ltd. to Kismis Ltd.



**Answer:** As per para 3 of AS 18 'Related Party Disclosures', employees are not considered as Related Party for an entity. Salaries and loans given to employees are in the course of normal dealings of business. Therefore, the first two transactions cannot be considered as related party transactions.

As per para 3(a) of the standard, holding and subsidiary companies are said to be related parties since they are said to be under common control for the purpose of consolidated financial statements. Therefore, 'inter-company sales between holding and subsidiary companies' is a related party transaction. However, as per para 7 of the standard, no disclosure is required for the same in consolidated financial statements.

Since, managing director of Kaju Ltd. directly or indirectly owns an interest in the voting power of the reporting enterprise that gives him control or significant influence over its subsidiary Kismis Ltd., the loan given to him by Kismis Ltd. will be treated as related party transaction. Since, holding and subsidiary companies are said to be related parties as per para 3(a) of the standard, transfer of asset by holding company Kaju Ltd. to its subsidiary Kismis Ltd. will be considered as related party transaction.

## AS 10

**Q 23** On 1 January 20X1 an entity acquired a machine for Rs. 500,000. Management estimated the machine's residual value as nil. Furthermore, management believed that the diminishing balance method computed at the rate of 8 per cent per year reflects the pattern in which the entity expects to consume the machine's future economic benefits.

At the entity's 31 December 20X5 financial year-end its assessment of the machine changed. Management now estimates that the straight-line method of depreciation, at the rate of 6 per cent per year, better reflects the pattern in which the entity expects to consume the machine's remaining future economic benefits.

How must the entity account for the revised assessment of its machine for the year ended 31 December 20X5?

Ans:	Debit Profit or loss (depreciation expense)	Rs. 21,492
	Credit Accumulated depreciation	Rs. 21,492

To record depreciation expense for the year ended 31 December 20X5.

(a) Carrying amount at 31/12/20X1 = Rs. 500,000 cost x 92% (ie 8% depreciation per year) = Rs. 460,000

Carrying amount at 31/12/20X2 = Rs. 460,000 x 92% = Rs. 423,200.

carrying amount at 31/12/20X3 = Rs. 423,200 x 92% = Rs. 389,344.

Carrying amount at 31/12/20X4. = Rs. 389,344 x 92% = Rs. 358,196

(a) depreciation expense for the year ended 31 December 20X5

= Rs. 358,196 x 6% = Rs. 21,492

**Q 24** On 1st April 20X1, an item of property is offered for sale at Rs. 10 million, with payment terms being three equal installments of Rs. 33,33,333 over a two years period (payments are made on 1st April 20X1, 31st March 20X2 and 31st March 20X3).

The property developer is offering a discount of 5 percent (i.e. Rs0.5 million) if payment is made in full at the time of completion of sale. Implicit interest rate of 5.36 percent p.a.

Show how the property will be recorded in accordance of AS 10.

Ans: AS 10 requires that the cost of an item of PPE is the cash price equivalent at the recognition date. Hence, the purchaser that takes up the deferred payment terms will recognise the acquisition of the asset as follows:

	(INR)	(INR)
<b>On 1st April 20X1</b>		
Property, Plant and Equipment Dr.	95,00,000	
To Cash		33,33,333
To Accounts Payable		61,66,667
(Initial recognition of property)		
<b>On 31st March 20X2</b>		
Interest Expense Dr.	3,30,533	
Accounts payable Dr.	30,02,800	
To Cash		33,33,333
(Recognition of interest expense and payment of second installment)		
<b>On 31st March 20X3</b>		
Interest Expense Dr.	1,69,467	
Accounts payable Dr.	31,63,867	
To Cash		33,33,334
(Recognition of interest expense and payment of final installment)		

**Q 25** Jupiter Ltd. has an item of plant with an initial cost of Rs. 100,000. At the date of revaluation accumulated depreciation amounted to Rs. 55,000. The fair value of asset, by reference to transactions in similar assets, is assessed to be Rs. 65,000. Find out the entries to be passed?

Ans: Method – I:

Accumulated depreciation	Dr.	55,000	
To Asset Cost			55,000
Asset Cost	Dr.	20,000	
To Revaluation reserve			20,000

The net result is that the asset has a carrying amount of Rs. 65,000 (100,000 – 55,000 + 20,000).

Method – II:

Carrying amount (100,000 – 55,000) =	45,000
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Fair value (revalued amount)	65,000
Surplus	20,000

% of surplus (20,000/ 45,000) 44.44%

Entries to be Made:

Asset (1,00,000 x 44.44%)	Dr.	44,444	
To Accumulated Depreciation (55,000 x 44.44%)			24,444
To Surplus on Revaluation			20,000

**Q 26** 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.

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

**Ans:** 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.

**Q 27.** ABC Ltd. is installing a new plant at its production facility. It has incurred these costs:

1.	Cost of the plant (cost per supplier's invoice plus taxes)	Rs.25,00,000
2.	Initial delivery and handling costs	Rs.2,00,000
3.	Cost of site preparation	Rs.6,00,000
4.	Consultants used for advice on the acquisition of the plant	Rs.7,00,000
5.	Interest charges paid to supplier of plant for deferred credit	Rs.2,00,000
6.	Estimated dismantling costs to be incurred after 7 years	Rs.3,00,000

7.	Operating losses before commercial production	Rs.4,00,000
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Ans: According to AS 10, these costs can be capitalized:

1.	Cost of the plant	Rs. 25,00,000
2.	Initial delivery and handling costs	Rs. 2,00,000
3.	Cost of site preparation	Rs. 6,00,000
4.	Consultants' fees	Rs. 7,00,000
5.	Estimated dismantling costs to be incurred after 7 years	Rs. 3,00,000
		Rs. 43,00,000

Note: Interest charges paid on "Deferred credit terms" to the supplier of the plant (not a qualifying asset) of Rs. 2,00,000 and operating losses before commercial production amounting to Rs. 4,00,000 are not regarded as directly attributable costs and thus cannot be capitalized. They should be written off to the Statement of Profit and Loss in the period they are incurred.

CA Chiranjeev Jain