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Chapter

AMALGAMATION AND CORPORATE RESTRUCTURING

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	NA	NA	Yes	Yes
2009	Yes	Yes	Yes	Yes
2010	Yes	Yes	Yes	Yes
2011	Yes	Yes	Yes	Yes
2012	Yes	Yes	Yes	Yes
2013	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes

2008

Question 1 **NOV RTP – 2008**

The balance sheet of Z Ltd. as at 31st March, 2003 is given below. In it, the respective shares of the company's two divisions namely S Division and W Division in the various assets and liabilities have also been shown. (All amounts in crores of Rupees)

	S Division	W Division	Total
Fixed assets :			
Cost	875	249	
Less: Depreciation	360	81	
Written-down value	515	168	683
Investments			97
Net Current assets:			
Current assets	445	585	
Less: Current liabilities	(270)	(93)	
	175	492	667
			1,447
Financed by :			
Loan funds		15	417
Own funds			
Equity share capital: Shares of ` 10 each			345
Reserves and surplus			685
			1,447

(1)

Loan funds included, inter alia, bank loans of ` 15 crore specifically taken for W Division and debentures of the paid up value of ` 125 crore redeemable at any time between 1st October, 2002 and 30th September,2003.

On 1st April, 2003 the company sold all of its investments for ` 102 crore and redeemed all the debentures at par, the cash transactions being recorded in the bank account pertaining to S division.

Then a new company named Y Ltd. was incorporated with an authorized capital of ` 900 crore divided into shares of ` 10 each. All the assets and liabilities pertaining to W division were transferred to the newly formed company; Y Ltd allotting to Z Ltd's shareholders its two fully paid equity shares of Rs.10 each at par for every fully paid equity share of ` 10 each held in Z Ltd. as discharge of consideration for the division taken over.

Y Ltd. recorded in its books the fixed assets at ` 218 crore and all other assets and liabilities at the same values at which they appeared in the books of Z Ltd.

You are required to:

i. Show the journal entries in the books of Z Ltd.

ii. Prepare Z Ltd's balance sheet immediately after the demerger and the initial balance sheet of Y Ltd. (Schedules in both cases need not be prepared).

iii. Calculate the intrinsic value of one share of Z Ltd. immediately before the demerger and immediately after the demerger; and

iv. Calculate the gain, if any, per share to the shareholders of Z Ltd. arising out of the demerger.

Solution

Calculation of Purchase Consideration		Calculation of Capital Reserve for Z		Calculation of Capital Reserve For Y Ltd	
		Fixed Assets	168		
New	Old	Current Assets	585	Fixed Assets	218
2	1		753	Current Assets	585
		Current Liabilities	93		803
69	34.5	Loan	15	Current Liabilities	93
X 10			108	Loan	15
690 --- Purchase Consideration		Net Assets	645		108
		PC	690	Net Assets	695
		Capital Reserve	45	PC	690
				Capital Reserve	5

I. Journal Entries in the Books of Z Ltd

Date	Particulars	L.F	Dr (`in	Dr (` in Crores)

			rores)	
1	<u>Before Demerger</u> Cash/Bank A/c Dr. To Investments To Profit/Loss (Being Investment Sold)		 102	 97 5
2	Debenture A/c Dr. To Cash/Bank (Being Debentures Redeemed)		125	 125
3	<u>After Demerger</u> Y Ltd A/c Dr. PFD A/c Dr. Current Liabilities A/c Dr. Loan A/c Dr. To Capital Reserve A/c To Fixed Assets A/c To Current Assets A/c (Being Assets and liabilities transferred)		 690 81 93 15	 45 249 585
4	Capital Reserve A/c Dr. Profit and loss A/c Dr. To Y Ltd (Being Amount Due from Y Ltd. written off)		45 645	 690

II. Balance Sheet of Z Ltd **` in Crores**

Particulars	After De-Merger	Before De-Merger
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	345	345
2. Reserves and Surplus	45	690
II. Non Current Liabilities		
1. Long Term Borrowing	277	292
III Current Liabilities	270	363
Total	**937**	**1690**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets	515	683
II. Current Assets	422	1007
Total	**937**	**1690**

II. Balance Sheet of Y Ltd

Particulars	` in Crores
Equity and Liabilities	
I. Share holders Fund	
1. Share Capital	690

2. Reserves and Surplus	5
II. Non Current Liabilities	
1. Long Term Borrowing	15
III. Current Liabilities	93
Total	803
Assets	
I. Non Current Assets	
1. Fixed Assets	
Tangible Assets	218
II. Current Assets	
	585
Total	**803**

III. Calculation of Intrinsic Value

	Before (Z)	After(Z)	After (Y)
Assets	1690	937	803
LESS: Liabilities	855	547	108
	1033	390	695
No of Shares	34.5	34.5	69
IV	30	11.304	10.072

iv. Gain per share to share holders of Z Ltd

Before De – Merger	`	`
IV of Z Ltd		30
After De – Merger		
IV of Z Ltd.	11.304	
IV of Y Ltd. (x 2)	20.1448	31.4491
Gain Per Share		1.4491

Note : The Gain per share can be proved by = [1.4491 x 34.5] = 50

Question 2 **Nov Paper – 2008**

System Ltd. and HRD Ltd. decided to amalgamate as on 1.4.2008. Their Balance Sheets as on 31.3.2008 were as follows:

(`. in '000)

Particulars	System Ltd.	HRD Ltd.
Source of Funds:		
Equity share capital (`.10 each)	150	140
9% preference share capital (`.100 each)	30	20
Investment allowance reserve	5	2
Profit and Loss Account	10	6
10% Debentures	50	30

Sundry Creditors	25	15
Tax provision	7	4
Equity Dividend Proposed	30	28
Total	307	245
Application of Funds:		
Building	60	50
Plant and Machinery	80	70
Investments	40	25
Sundry Debtors	45	35
Stock	36	40
Cash and Bank	40	25
Preliminary expenses	6	–
Total	**307**	**245**

From the following information, you are to prepare the draft Balance Sheet as on 1.4.2008 of a new company, Intranet Ltd. which was formed to take over the business of both the companies and took over all the assets and liabilities:

(i) 50% Debentures are to be converted into equity shares of the new company

(ii) Out of the investments, 20% are non-trade investments.

(iii) Fixed assets of Systems Ltd were valued at 10% above cost and that of HRD Ltd at 5% above cost.

(iv) 10% of sundry debtors were doubtful for both the companies. Stocks to be carried at cost.

(v) Preference shareholders were discharged by issuing equal number of 9% preference shares at par.

(vi) Equity shareholders of both the transferor companies are to be discharged by issuing equity shares of ` 10 each of the new company at a premium of ` 5 per share.

Amalgamation is in the nature of purchase.

Solution

I. Calculation of Purchase Consideration (Net Asset Method)

Particulars	System Ltd.	HRD Ltd.
Assets t/o (R.V)		
Building	66,000	52,500
Plant and Machinery	88,000	73,500
Investments	40,000	25,000
Debtors	45,000	35,000
Stock	36,000	40,000
Cash and Bank	40,000	25,000
Total	3,15,000	2,51,000
Less Liabilities t/o (R.V)		
R.D.D	4,500	3,500

10% Debentures Creditors Tax Provision Total	50,000 25,000 7,000 86,500	30,000 15,000 4,000 52,500
Purchase Consideration	**2,28,500**	**1,98,500**
Discharge Preference share holders Equity share holders No. of shares	 30,000 1,98,500 $\frac{1,98,500}{15}$ = 1,32,33.33 i.e 13,233 shares 1.e 13,233 x 15 = 1,98,495 And cash 5	 20,000 1,78,500 $\frac{1,78,500}{15}$ = 11,900 shares

Adjustment 1 : Conversion of Debentures

10% Debentures 80,000

Converted to Equity 80,000 x 50% = 40,000

No of Equity shares = $\frac{40,000}{14}$ = 2,666 shares x 15 = 39,990 } 40,000

Cash 10

Balance Sheet of Intranet Ltd. After Amalgamation

	Particulars	Note	`
	Equity & Liabilities		
I	Share holders funds		
a	Share Capital	1	3,27,990
b	Reserves & Surplus	2	1,38,995
II	Non current liabilities		
a	Long term borrowings	3	40,000
III	Current liability		
a	Trade payable	4	40,000
b	Short term provisions	5	11,000
			5,57,985
	Assets		
I	Non current assets		
a	Fixed Assets		
	Tangible Assets	6	2,80,000
b	Non current investments	7	65,000
II	Current Assets		
a	Inventory	-	76,000

b	Trade receivable	8	72,000
c	Cash & Equivalents (40,000 + 25,000 - 15)	-	64,985
			5,57,985

Note to Balance Sheet

Note 1 : Share capital	
27,799 shares of Rs.10/- each	2,77,990
500, 9% Preference share capital	50,000
	3,27,990
Note 2 : Reserves & Surplus	
Security premium (27,799 x 5)	1,38,995
	1,38,995
Note 3 : Long term borrowings	
10% Debentures	40,000
Note 4 : Trade payable	
Creditor	40,000
Note 5 : Short term provisions	
Tax provisions	11,000
Note 6 : Tangible assets	
Building	1,18,500
Plant & Machinery	1,61,500
	2,80,000
Note 7 : Non current investments	
Trade investments (65,000 x 20%)	13,000
Non trade investments (65,000 x 80%)	52,000
	65,000
Note 8 : Trade Receivable	
Debtor	80,000
- R.D.D. (10%)	8,000
	72,000

Question 3 **Nov Paper – 2008**

The Balance Sheet of Gunshot Ltd. as on 31.3.2008 is given:

Liabilities	Amount	Assets	Amount
Share Capital :		Fixed Assets:	
Equity shares of ` 10 each	800	Fixed Assets	2,700
Securities Premium	100	Non-Trade Investments	300
General Reserve	780	Stock	600
Profit & Loss Account	120	Sundry Debtors	360
10% Debentures	2,000	Cash and Bank	160
Creditors	320		
	4,120		4,120

Gunshot Limited buy back 16000 shares of ` 20 per share. For this purpose, the company sold its all non trade investments for ` 3,20,000. Give the Journal entries giving the effect of the buy back.

Solution

Journal Entries for Buyback of Shares of Gun Shot Ltd

Date	Particulars		L.F	Dr. ` in	Cr. `
i)	Bank A/c	Dr		3,20,000	
	To Investments (Non-Trade)				3,00,000
	To Profit/Loss A/c				20,000
	(Being Entry for sale of Non-Trade Investments)				
ii)	Equity Share Capital A/c	Dr		1,60,000	
	Premium on Buyback A/c	Dr		1,60,000	
	To Equity shareholders A/c				3,20,000
	(Being Amount due transferred to shareholders A/c)				
iii)	Equity Shareholders A/c	Dr		3,20,000	
	To Bank A/c				3,20,000
	(Being Cancelation of Shares Bought back)				
iv)	Securities Premium A/c	Dr		1,00,000	
	General Reserve A/c	Dr		60,000	
	To Premium on Buyback A/c				1,60,000
	(Being Adjustment of Buyback Premium)				
v)	General Reserve A/c	Dr		1,60,000	
	To Capital Redemption Reserve A/c				1,60,000
	(Being Amount transferred to CRR A/c)				

2009

Question 4 – **May RTP – 2009**

The summarized Balance sheets of X Ltd. and its subsidiary Y Ltd. as at 31.3.2009 were as follows:

Liabilities	X Ltd. `	Y Ltd. `	Assets	X Ltd. `	Y Ltd. `
Share capital (Share	50,00,000	10,00,000	Fixed assets	60,00,000	18,00,000

of `10					
General reserves	50,00,000	20,00,000	Investment in Y Ltd. (60,000 shares)	6,00,000	-
Profit & Loss A/c.	20,00,000	15,00,000	Sundry debtors	35,00,000	5,00,000
Secured loan	20,00,000	2,50,000	Inventories	30,00,000	25,00,000
Current liabilities	30,00,000	2,50,000	Cash and bank	39,00,000	2,00,000
	1,70,00,000	**50,00,000**		**1,70,00,000**	**50,00,000**

X Ltd. holds 60% of the paid-up capital of Y Ltd. and the balance is held by a foreign company.

A memorandum of understanding has been entered into with the foreign company by X Ltd. to the following effect:

(a) The shares held by the foreign company will be sold to X Ltd. at a price per share to be calculated by capitalizing the yield at 15%. Yield, for this purpose, would mean 50% of the average of pre-tax profits for the last 3 years, which were ` 12 lakhs, 18 lakhs and 24 lakhs respectively. (Average tax rate was 40%).

(b) The actual cost of shares to the foreign company was ` 4,40,000 only. Gains accruing to the foreign company are taxable at 20%. The tax payable will be deducted from the sale proceeds and paid to government by X. 50% of the consideration (after payment of tax) will be remitted to the foreign company by X Ltd. and also any cash for fractional shares allotted.

(c) For the balance of consideration, X Ltd. would issue its shares at their intrinsic value.

It was also decided that X Ltd. would absorb Y Ltd. Simultaneously by writing down the Fixed assets of Y Ltd. by 10%. The Balance Sheet figures included a sum of ` 1,00,000 due by Y Ltd. to X Ltd. and stock of X Ltd. included stock of ` 1,50,000 purchased from Y Ltd., who sold them at cost plus 20%.

The entire arrangement was approved and put through by all concern effective from 1.4.2009.

You are required to indicate how the above arrangements will be recorded in the books of X Ltd. and also prepare a Balance Sheet after absorption of Y Ltd. Workings should form part of your answer.

Solution

I. Calculation of Purchase Consideration

Yield $= \frac{12 + 18 + 24}{3} \times 50\% = 9$ Lakhs

Value of the company $= \frac{9}{15\%} = 60$ lakhs

Value per share $= \frac{60,00,000}{1,00,000}$ = ` 60 / share

Purchase Consideration = 40,000 x 60 = ` 24,00,000

Discharge = 24,00,000

Tax 3,92,000
[20% (24,00,000 – 4,40,000)

20,08,000

10,04,000

Cash

10,04,000 shares at IV

i.e $\frac{10,04,000}{30}$ = 33466 shares

33,466 x 30 = 10,03,980

Cash = `. 20

Calculation of Intrinsic Value of X Ltd.

Assets (RV)		
Fixed Assets	60,00,000	
Investment in Y	36,00,000	
Debtors	35,00,000	
Inventories	30,00,000	
Cash / Bank	39,00,000	2,00,00,000
Less Liabilities (RV)		
Secured Loan	20,00,000	
Current Liabilities	30,00,000	50,00,000
		15,00,000

Intrinsic Value $= \frac{1,50,00,000}{5,00,000}$ = ` 30 / shares

II. Journal of X Ltd.

Date	Particulars		J.F	Dr (Amount)	Cr (Amount)
	Business Purchase A/c	Dr		24,00,000	
	To Foreign Co A/c				20,08,000
	To Tax payable to Government A/c				3,92,000
	Tax Payable to Government A/c	Dr		3,92,000	
	To Cash / Bank A/c				3,92,000
	Fixed Assets A/c	Dr		16,20,000	
	Debtors A/c	Dr		5,00,000	
	Inventories A/c	Dr		25,00,000	
	Cash / Bank A/c	Dr		2,00,000	
	To capital Reserve A/c (Capital Reserve)				13,20,000
					2,50,000
	To Secured Loan A/c				2,50,000
	To Current Liabilities A/c				24,00,000

	To Business Purchase A/c				6,00,000
	To Investment A/c				
		Dr		20,08,000	
	Foreign Company A/c				10,04,020
	To Cash / Bank				3,34,660
	To Equity share Capital A/c				6,69,320
	To Security Premium A/c				
		Dr		1,00,000	
	Creditors A/c				1,00,000
	To Debtors A/c				
		Dr		25,000	
	Capital Reserve A/c				25,000
	To Stock A/c				
	(1,50,000 x 1/6)				

III. Balance Sheet in the Books of Y

Particulars	
Equity and Liabilities	
I. Share holders Fund	
1. Share Capital	53,34,660
2. Reserves and Surplus	89,64,320
II Non Current Liabilities	
Long Term Borrowing	22,50,000
III Current Liabilities	31,50,000
Total	1,96,98,980
Assets	
I. Non Current Assets	
1. Fixed Assets	
Tangible Assets	76,20,000
II. Current Assets	
Inventories	54,75,000
Trade Receivable	39,00,000
Cash and Cash Equivalent	27,03,980
Total	1,96,98,980

Notes to Accounts

1. Share Capital	
Authorized Share Capital	?
Issued, Subscribed and Paid up	
5,33,466 shares of Rs. 10 each	53,34,660
(out of the above 33,466 shares are issued for consideration other than cash)	
2. Reserves and Surplus	
General Reserve	50,00,000
Profit and Loss A/c	20,00,000
Capital Reserve	12,95,000
Security Premium	6,69,320

	89,64,320
3. Long Term Borrowing Secured Loan	22,50,000
4. Trade Receivable Debtors	39,00,000

Question 5 **May Paper – 2009**

The Balance sheet of Munna Ltd. as on 31st March, 2009 is as follows:

Liabilities	Amount	Assets	Amount
Authorised Share Capital		Goodwill	2,00,000
20,000 Equity Share of Rs.100 each, fully paid	20,00,000	Plant & Machinery	18,00,000
		Stock	3,00,000
10,000, 7% Preference shares of `. 100 each, fully paid	10,00,000	Debtors	7,50,000
Sundry Creditors	7,00,000	Cash	1,50,000
Bank Overdraft	3,00,000	Preliminary expenses	1,00,000
		Profit and Loss A/c	7,00,000
	40,00,000		40,00,000

Additional Information:

Two years 'preference share dividend is in arrears. The company had bad time during the last two years and hopes better business in future, earning profit and paying dividend, provided the capital base is reduced.

An internal reconstruction, agreed to by all concerned, is as follows:

(i) Creditors agreed to forego 50% of their claim.

(ii) Preference shareholders withdrew arrear dividend claim. They also agreed to lower down their capital claim by 20% by reducing nominal value consideration of 9% dividend effective after reconstruction, in case equity after reconstruction, in case equity shareholder's loss exceeded 50% on the application of the scheme.

(iii) Bank has agreed to convert overdraft into term loan to the extent required for making current ratio to 2 : 1

(iv) A revalued amount for plant and machinery was accepted as ` 15 Lakhs.

(v) Debtors to the extent of ` 4 lakhs were considered as good.

(vi) Equity shares shall be exchanged for the same no of Equity shares at a revised denomination as required after the reconstruction.

You are required to show the following

1. Total loss to be borne by the equity and preference shareholders for reconstruction
2. Share of loss to the individual class of share holders
3. New structure of share capital after reconstruction
4. Working Capital of reconstructed Company

5. Proforma Balance sheet after reconstruction.

Solution

I. Total Loss to be Borne by Equity and Preference shareholders

Dr **Capital Redemption A/c** **Cr**

Particulars	`	Particular	`
To Goodwill To Preliminary Expenses To Profit/Loss A/c To Plant and Machinery A/c Debtors	2,00,000 1,00,000 7,00,000 3,00,000 3,50,000	By Creditors By Loss to be borne by Equity and Preference shareholders	3,50,000 13,00,000
Total	**16,50,000**	**Total**	**16,50,000**

II. Share of individual class of shareholders

Total Loss 13,00,000

11,00,000 — Equity Share Holders

2,00,000 — Preference Share Holders

III. New Structure of Share Capital

Share Capital [20,000 Shares of ` 45/- each fully paid up]  10,000 9% Preference Capital of ` 80 each fully paid.	9,00,000 8,00,000 17,00,000

IV. Working Capital of reconstructed Company

Particulars	Amount (`)	Amount (`)	
Current Assets			
Stock	3,00,000		
Debtors	4,00,000		
Cash	1,50,000	8,50,000	2
Less Current Liabilities			
Creditors	3,50,000		
Bank O/D (Balancing Fig)	75,000	4,25,000	1
Working Capital		4,25,000	

V. Performa Balance Sheet (And Reduced)

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		17,00,000
2. Reserves and Surplus		-
II Non Current Liabilities		2,25,000

Long Term Borrowing		
<u>III Current Liabilities</u>		
Short Term Borrowing		75,000
Trade Payables		3,50,000
Total		**23,50,000**
<u>Assets</u>		
<u>I. Non Current Assets</u>		
1. Fixed Assets		15,00,000
Tangible Assets		
<u>II. Current Assets</u>		
Inventories		3,00,000
Trade Receivables		4,00,000
Cash and Cash Equivalent		1,50,000
Total		**23,50,000**

Question 6 **Nov RTP – 2009**

The Balance Sheet of Y Limited as on 31st March, 2009 was as follows:

Liabilities	**Amount (`)**	**Assets**	**Amount (`)**
5,00,000 Equity Shares of ` 10 each	50,00,000	Goodwill	10,00,000
9% 20,000 Preference shares of ` 100	20,00,000	Patent	5,00,000
10% First debentures	6,00,000	Land and Building	30,00,000
10% Second debentures	10,00,000	Plant and Machinery	10,00,000
Debentures interest outstanding	1,60,000	Furniture and Fixtures	2,00,000
Trade creditors	5,00,000	Computers	3,00,000
Directors' loan	1,00,000	Trade Investment	5,00,000
Bank O/D	1,00,000	Debtors	5,00,000
Outstanding liabilities	40,000	Stock	10,00,000
Provision for Tax	1,00,000	Discount on issue of debentures	1,00,000
		Profit & Loss A/c. (Loss)	15,00,000
	96,00,000		**96,00,000**

Note: Preference dividend is in arrears for last three years.

A holds 10% first debentures for ` 4,00,000 and 10% second debentures for ` 6,00,000. He is also creditors for ` 1,00,000. B holds 10% first debentures for ` 2,00,000 and 10% second debentures for ` 4,00,000 and is also creditors for ` 50,000.

The following scheme of reconstruction has been agreed upon and duly approved by the court.

(a) All the equity shares be converted into fully paid equity shares of ` 5 each.

(b) The preference shares be reduced to ` 50 each and the preference shareholders agree to forego their arrears of preference dividends in consideration of which 9% preference shares are to be converted into 10% preference shares.

(c) Mr. 'A' is to cancel ` 6,00,000 of his total debt including interest on debentures and to pay ` 1 lakh to the company and to receive new 12% debentures for the Balance amount.

(d) Mr. 'B' is to cancel ` 3,00,000 of his total debt including interest on debentures and to accept new 12% debentures for the balance amount.

(e) Trade creditors (other than A and B) agreed to forego 50% of their claim.

(f) Directors to accept settlement of their loans as to 60% thereof by allotment of equity shares and balance being waived.

(g) There were capital commitments totalling ` 3,00,000. These contracts are to be cancelled on payment of 5% of the contract price as a penalty.

(h) The Directors refund ` 1,10,000 of the fees previously received by them.

(i) Reconstruction expenses paid ` 10,000.

(j) The taxation liability of the company is settled at ` 80,000 and the same is paid immediately.

(k) The assets are revalued as under:

	`
Land and Building	28,00,000
Plant and Machinery	4,00,000
Stock	7,00,000
Debtors	3,00,000
Computers	1,80,000
Furniture and Fixtures	1,00,000
Trade Investment	4,00,000

Pass Journal entries for all the above mentioned transactions including amounts to be written off of Goodwill, Patents, Loss in Profit & Loss Account and Discount on issue of debentures. Prepare Bank Account and working of allocation of Interest on Debentures between A and B.

Solution

I. Journal of Y Ltd.

Date	Particulars		L.F	Dr. `	Cr. `
i)	Equity Shares Capital A/c	Dr		50,00,000	
	To Equity Shares Capital A/c				25,00,000
	To Capital Reduction A/c				25,00,000
	(Being Equity shares to be converted into shares ` 5 each)				
ii)	9% Preference Shares Capital A/c	Dr			

iii)	To 10% Preference Shares Capital A/c		20,00,000	
	To Capital Reduction A/c			10,00,000
	(Being Preference shares reduced to ` 50 each and converted into 10%)			10,00,000
iv)	10% First Debenture A/c Dr		2,40,000	
	10% Second Debenture A/c Dr		3,60,000	
	Debenture Interest O/s A/c Dr		60,000	
	To Capital Reduction A/c			6,60,000
	(Being 'A' to cancel his debt)			
v)	10% First Debenture A/c Dr		1,60,000	
	10% Second Debenture A/c Dr		2,40,000	
	Debenture Interest O/s A/c Dr		40,000	
	Creditors A/c Dr		1,00,000	
	To 10% Debenture A/c			5,40,000
	(Being New debenture issued for Balance payment)			
vi)	Bank A/c Dr		1,00,000	
	To Capital Reduction A/c			1,00,000
	(Being 'A' paid to the Company)			
vii)	10% First Debenture A/c Dr		2,00,000	
	10% Second Debenture A/c Dr		4,00,000	
	Debenture Interest O/s A/c Dr		60,000	
	Creditors A/c Dr		50,000	
	To Capital Reduction A/c			3,00,000
	To 12% Debenture A/c			4,10,000
	(Being 12% debenture issued for balance)			
viii)	Creditors A/c Dr		1,75,000	
	To Capital Reduction A/c			1,75,000
	(Being 50% of Creditors forego their claim)			
ix)	Directors Loan A/c Dr		1,00,000	
	To Equity Share Capital A/c			60,000
	To Capital Reduction A/c			40,000
	(Being Directors Loan Settled)			
x)	Capital Reduction A/c Dr		15,000	
	To Bank A/c			15,000
	(Being Penalty Paid)			
xi)	Bank A/c Dr		1,10,000	
	To Capital Reduction A/c			

	(Being directors Refund Fees)			1,10,000
			90,000	
	Capital Reduction A/c Dr			
	To Bank A/c			
xii)	(Being reconstruction Expenses paid and tax			90,000
	Liability settled)			
			47,20,00	
	Capital Reduction A/c Dr		0	
	To Land and Building A/c			
	To Plant and Machinery			2,00,000
	To Stock A/c			6,00,000
	To Debtors A/c			3,00,000
	To Computers A/c			2,00,000
	To Furniture & Fixtures			1,20,000
	To Trade Investment			1,00,000
	To Goodwill A/c			1,00,000
	To Patent A/c			10,00,00
	To Profit & Loss A/c			0
xiii)	To Discount on Issued on Debenture A/c			5,00,000
	(Being Assets Revalued and Intangible Assets			15,00,00
	written off)			0
			60,000	1,00,000
	Capital Reduction A/c Dr			
	To Capital Redemption Reserve			
	(Being Balance Transferred to CRR A/c)			
				60,000

II. **Bank A/c**

Particulars	`	**Particular**	`
To Capital Reduction To Capital Reduction (Director's)	1,00,000 1,10,000	By Balance B/d BY Capital Reduction (Penalty) By Capital Reduction (Exp.) By Balance C/d	1,00,000 15,000 90,000 5,000
Total	**2,10,000**	**Total**	**2,10,000**

III. Interest on debenture between A & B

O/s Interest 1,60,000

A 1,00,000 B. 60,000

10% 1st Debentures 40,000 20,000

10% 2nd Debentures 60,000 40,000

Question 7 – **Nov RTP – 2009**

The following is the Balance Sheet of A Ltd. as at 31st March, 2009:

Liabilities	`	Assets	`
8,000 equity shares of `.100 each	8,00,000	Building	3,40,000
10% debentures	4,00,000	Machinery	6,40,000
Loan from A	1,60,000	Stock	2,20,000
Creditors	3,20,000	Debtors	2,60,000
General Reserve	80,000	Bank	1,36,000
		Goodwill	1,30,000
		Misc. Expenses	34,000
	17,60,000		**17,60,000**

B Ltd. agreed to absorb A Ltd. on the following terms and conditions:

(1) B Ltd. would take over all Assets, except bank balance at their book values less 10%. Goodwill is to be valued at 4 year's purchase of super profits, assuming that the normal rate of return be 8% on the combined amount of share capital and general reserve.

(2) B Ltd. is to take over creditors at book value.

(3) The purchase consideration is to be paid in cash to the extent of ` 6,00,000 and the balance in fully paid equity shares of ` 100 each at ` 125 per share.

The average profit is ` 1,24,400. The liquidation expenses amounted to ` 16,000. B Ltd. sold prior to 31st March, 2009 goods costing ` 1,20,000 to A Ltd. for ` 1,60,000. ` 1,00,000 worth of goods are still in stock of A Ltd. on 31st March, 2009. Creditors of A Ltd. include ` 40,000 still due to B Ltd.

Show the necessary Ledger Accounts to close the books of A Ltd. and prepare the Balance Sheet of B Ltd. as at 1st April, 2009 after the takeover.

Solution

Calculation of PC – Net Assets Method

Assets taken over (Revised Value)		
Goodwill [1,24,400 – 8% (8,80,000)x 4]	2,16000	
Building	3,06,000	
Machinery	5,76,000	
Stock	1,98,000	
Debtors	2,34,000	15,30,000
Less : Liabilities taken over (Revised Value)		3,20,000
Creditors		
Purchase Consideration		12,10,000
Discharge		
Cash		6,00,000

Equity shares (6,10,000 / 125 = 4,880 shares)		6,10,000

II. In Books of A Ltd.

Dr **Realization A/c** **Cr**

Particulars	**Dr `**	**Particular**	**Cr `**
To Building	3,40,000	By Loan from A	1,60,000
To Machinery	6,40,000	By Creditors A/c	3,20,000
To Stock A/c	2,20,000	By 10% Debentures A/c	4,00,000
To Debtors	2,60,000	By B Ltd	12,10,000
To Goodwill	1,30,000	By Equity shareholders A/c	76,000
To Bank Expenses	16,000	(Loss on Realisation)	
To Bank (Loan & Debentures)	5,60,000		
Total	**21,66,000**	**Total**	**21,66,000**

Dr **Cash/Bank A/c** Cr

Particulars	**(`)**	**Particulars**	**(`)**
To Balance Ltd	1,36,000	By Realization A/c (Exp)	16,000
To B Ltd	6,00,000	By Realization A/c	5,60,000
		By Equity Shareholders A/c	1,60,000
Total	**7,36,000**	**Total**	**7,36,000**

Dr **Equity Shareholders A/c** Cr

Particulars	**(`)**	**Particulars**	**(`)**
To Miscellaneous Expenses	34,000	By Equity Share Capital	8,00,000
To Realization A/c	76,000	By General Reserve	80,000
To Equity Shares in B	6,10,000		
To Cash/Bank	1,60,000		
Total	**8,80,000**	**Total**	**8,80,000**

Dr **B Ltd A/c** **Cr**

Particulars	**(`)**	**Particulars**	**(`)**
To Realization A/c	12,10,000	By Equity Shares in B Ltd	6,10,000
		By Cash	6,00,000
Total	**12,10,000**	**Total**	**12,10,000**

Dr **Equity Shares in B Co A/c** Cr

Particulars	**(`)**	**Particulars**	**(`)**
To B Ltd	6,10,000	By Equity Shareholders A/c	6,10,000
Total	**6,10,000**	**Total**	**6,10,000**

II. Balance of B Ltd.

Particulars	**Note No**	**Amount**
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		
1. Share Capital	1	4,88,000
2. Reserves and Surplus	2	1,22,000
<u>II Non Current Liabilities</u>		

III Current Liabilities Trade Payables	3	2,80,000
Total		8,90,000
Assets I. Non Current Assets 1. Fixed Assets Tangible Assets Non Tangible Assets II. Current Assets Inventories Trade Receivables Cash and Cash Equivalent	 4 5 6 7	 8,82,000 2,41,000 1,73,000 1,94,000
Total		**8,90,000**

Notes to Accounts

Share Capital Authorized Share Capital Issued, Subscribed and Paid up 4,880 Shares @ ` 100 each(Out of the above 4,880 shares are issued for consideration other than cash)		 ? 4,88,000
Reserves and Surplus Security Premium [25 x 4880]		1,22,000
Trade Payables Creditors [3,20,000 – 40,000]		2,80,000
Tangible Assets Building Machinery	3,06,000 5,76,000	8,82,000
Intangible Assets Goodwill [216+25]		2,41,000
Inventories Stock [1,98,000 – 25,000]		1,73,000
Trade Receivables Debtors [2,34,000 – 40,000]		1,94,000

Question 8 **Nov Paper - 2009 – Similar to RTP – May 2009 – Question no 4**

2010

Question 9 **May RTP – 2010**

The following are the Balance Sheets of Andrew Ltd. and Barry Ltd., as at 31.12.2009:

Andrew Ltd. **(in `'000s)**

Liabilities	`	Assets	`
Share capital		Fixed assets	3,400
3,00,000 Equity shares of `10 each	3,000	Stock (pledged with secured loan Creditors)	18,400
10,000 Preference shares of `.100 each	1,000	Other Current assets	3,600
General reserve	400	Profit and Loss account	16,600
Secured loans (secured against pledge of stocks)	16,000		
Unsecured loans	8,600		
Current liabilities	13,000		
	42,000		**42,000**

Barry Ltd. (in `'000s)

Liabilities	`	Assets	`
Share capital		Fixed assets	6,800
1,00,000 Equity shares of `.10 each	1,000	Current assets	9,600
General reserve	2,800		
Secured loans	8,000		
Current liabilities	4,600		
	16,400		**16,400**

Both the companies go into liquidation and Charlie Ltd., is formed to take over their businesses. The following information is given:

(a) All Current assets of two companies, except pledged stock are taken over by Charlie Ltd. The realisable value of all Current assets are 80% of book values in case of Andrew Ltd. and 70% for Barry Ltd. Fixed assets are taken over at book value.

(b) The break up of Current liabilities is as follows:

	Andrew Ltd. `	**Barry Ltd.** `
Statutory liabilities (including Rs.22 lakh in case of Andrew Ltd. in case of a claim not having been admitted shown as contingent liability)	72,00,000	10,00,000
Liability to employees	30,00,000	18,00,000

The balance of Current liability is miscellaneous creditors.

(c) Secured loans include ` 16,00,000 accrued interest in case of Barry Ltd.

(d) 2,00,000 equity shares of Rs.10 each are allotted by Charlie Ltd. at par against cash payment of entire face value to the shareholders of Andrew Ltd. and Barry Ltd. in the ratio of shares held by them in Andrew Ltd. and Barry Ltd.

(e) Preference shareholders are issued Equity shares worth ` 2,00,000 in lieu of present holdings.

(f) Secured loan creditors agree to continue the balance amount of their loans to Charlie Ltd. after adjusting value of pledged security in case of Andrew Ltd. and after waiving 50% of interest due in the case of Barry Ltd.

(g) Unsecured loans are taken over by Charlie Ltd. at 25% of Loan amounts.

(h) Employees are issued fully paid Equity shares in Charlie Ltd. in full settlement of their dues.

(i) Statutory liabilities are taken over by Charlie Ltd. at full values and miscellaneous creditors are taken over at 80% of the book value.

Show the opening Balance Sheet of Charlie Ltd. Workings should be part of the answer.

Solution

Balance sheet of Charlie Ltd. as at 31st Dec, 2009

Particulars	Note No	Amount ` 000's)
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	7000
2. Reserves and Surplus	-	-
II Non Current Liabilities		
Long Term Borrowing		10,630
III Current Liabilities (7,200 + 1,000 + 4,000 + 1,440)		13,640
Total		**31,270**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets (3,400 + 6,800)		10,200
Non Tangible Assets		9,470
II. Current Assets (2,880 + 6,720)		9,600
Cash and Cash Equivalent		2,000
Total		**31,270**

Working and Notes

1. Value of miscellaneous creditors taken over by Charlie Ltd. (in ` 000's)

	Andrew Ltd	Barry Ltd.
Given in the Balance sheet	13,000	4,600
Less Statutory Liabilities	5,000	1,000
Liabilities to employees	3,000	1,800
Miscellaneous Creditors	5,000	1,800
80% thereof	4,000	1,440

2. Value of Total Liabilities taken over by Charlie Ltd.

	Andrew Ltd.	Barry Ltd.
Statutory Liabilities	7,200	1,000
Liability to employees	3,000	1,800
Misc Creditors (W.N . 1)	4,000	1,440
Secured Loans	16,000	8,000
Interest on Loans waived	-	(800)
Value of Stock	(14,720)	-
Unsecured Loans	2,150	-
	17,630	11,440

3. Assets taken over to Charlie Ltd.

	Andrew Ltd.	Barry Ltd.
Fixed Assets (Assumed at Book Value)	3,400	6,800
Current Assets 80% and 70% of Book Value	2,880	6,720
	6,280	13,520

4. Goodwill / Capital Reserve

	Andrew Ltd.	Barry Ltd.
Liabilities taken over (W.N.2)	17,630	11,400
Equity shares issued to Preference shareholders	200	-
A	17,830	11,400
Less : Total Assets taken over (W.N.3)	6,280	13,520
	11,550 Goodwill	(2,080) Capital Reserve
Net Goodwill	9,470	

5. Equity shares issued by Charlie Ltd.

For cash		2,00,000
For consideration other than cash		
1. Discharge of Liabilities to employees	4,80,000	
2. To preference shareholders	20,000	5,00,000
Total		7,00,000

Value = 7,00,000 x 10 = Rs. 70,00,000

Question 10 **May RTP – 2010**

The Balance Sheet of Neptune Ltd. as on 31.3.2009 is given below:

Liabilities		`	Assets	`
Equity shares of Rs.10 each		8,00,000	Freehold property	5,00,000
6% Pref. shares of 100 each		5,00,000	Plant & machinery	1,80,000
6% Debentures (secured by freehold property)	3,75,000		Trade investments (at cost)	1,70,000
			Sundry debtors	4,50,000
Arrear interest	22,500	3,97,500	Stock in trade	2,00,000
Sundry creditors		17,500	Deferred advertisement expenditure	1,50,000
Director's loan		3,00,000	Profit and Loss A/c	3,65,000
		20,15,000		20,15,000

The Court approved a scheme of re-organization to take effect on 1.4.2009 and the terms are given below:

(i) Preference shares are to be written down to ` 75 each and equity shares to ` 2 each.

(ii) Preference dividend in arrear for 4 years to be waived by 75% and for the balance equity shares of ` 2 each to be allotted.

(iii) Arrear of debenture interest to be paid in cash.

(iv) Debenture holders agreed to take one freehold property (Book value ` 3,00,000) at a valuation of ` 3,00,000 in part payment of their holding. Balance debentures to remain as liability of the company.

(v) Deferred Advertisement Expenditure to be written off.

(vi) Stock value to be written off fully in the books.

(vii) 50% of the Sundry Debtors to be written off as bad debt.

(viii) Remaining freehold property (after take over by Debenture holders) to be valued at ` 3,50,000.

(ix) Investments sold out for ` 2,00,000.

(x) 80% of the Director's loan to be waived and for the balance equity shares of ` 2 each to be issued.

(xi) Company's contractual commitments amounting to ` 5,00,000 to be cancelled by paying penalty at 3% of contract value.

(xii) Cost of Re-construction Scheme is ` 20,000.

Show the Journal entries (with narration) to be passed for giving effect to the above transactions and draw Balance Sheet of the company after effecting the Scheme.

Solution

I. **In the Books of Neptune Ltd.**

Date	Particulars	L.F	Dr. `	Cr. `
i)	Preference Shares Capital A/c Dr		5,00,000	
	To Preference Shares Capital A/c			3,75,000
	To Capital Reduction A/c			1,25,000
	(Being Preference share Capital Reduced)			
ii)	Equity Shares Capital A/c Dr		8,00,000	
	To Equity Shares Capital A/c			1,60,000
	To Capital Reduction A/c			6,40,000
	(Being shares Capital reduced to ` 2 each)			
iii)	Capital reduction A/c Dr		30,000	
	To Equity Share Capital			30,000
	(Being arrears of dividend is satisfied)			
iv)	Accrued Debenture Interest Dr		22,500	
	To Cash/Bank A/c			22,500
	(Being arrears of Interest Paid in cash)			

v)	6% Debenture A/c Dr To Freehold Property A/c (Being part Claim settled)		3,00,000	 3,00,000
vi)	Capital Reduction A/c Dr To Profit/loss A/c To Differed Expenditure A/c To Stock A/c To Debtors A/c (Being Assets written off as per Scheme)		9,40,000	 3,65,000 1,50,000 2,00,000 2,25,000
vii)	Freehold Property A/c Dr To Capital Reduction A/c (Being Appreciation of Property)		1,50,000	 1,50,000
viii)	Cash/Bank A/c Dr To Trade Investment A/c To Capital Reduction A/c (Being Investment Sold)		2,00,000	 1,70,000 30,000
ix)	Directors Loan A/c Dr To Capital Reduction A/c To Equity Share Capital A/c (Being Loan waved off)		3,00,000	 2,40,000 60,000
x)	Capital Reduction A/c Dr To Bank A/c (Being Penalty paid)		15,000	 15,000
xi)	Capital Reduction A/c Dr To Bank A/c (Being reconstruction Expenses paid)		20,000	 20,000
xii)	Capital Reduction A/c Dr To Capital Reserve (Being Balance Transferred)		1,80,000	 1,80,000

II. Balance Sheet of Neptune Ltd. (As Reduced)

Particulars	Note No	Amount
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		
1. Share Capital	1	6,25,000

2. Reserves and Surplus	2	1,80,000
II Non Current Liabilities		
Long Term Borrowing	3	75,000
III Current Liabilities		
Trade Payables		17,500
Total		**8,97,500**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets	4	5,30,000
II. Current Assets		
Trade Receivables		2,25,000
Cash and Cash Equivalent		1,42,500
Total		**8,97,500**

Notes to Accounts

1. Share Capital	
Authorized Share Capital	?
Issued, Subscribed and Paid Up	
Equity Shares Capital [1,25,000 Shares of ` 2/- each]	2,50,000
6% Cumulative preference shares of ` 75	3,75,000
	6,25,000
2.Reserves and Surplus	
Capital Reserve	1,80,000
3.Long Term Borrowings	
6% Debentures	75,000
4.Fixed Assets	
Freehold Property	3,50,000
Plant	1,80,000
	5,30,000

Question 11 – **May RTP – 2010**

Dee Limited furnishes the following Balance Sheet as at 31st March, 2009:

Liabilities	**` '000**	**` '000**
Share Capital:		
Authorised Capital		30,00
Issued and subscribed capital:		
2,50,000 equity shares of `.10 each fully paid up	25,00	
2,000, 10% Preference shares of `.100 each (Issued two months back for the purpose of buy back)	2,00	2,700
Reserves and Surplus:		
Capital Reserve	10,00	
Revenue Reserve	30,00	

Securities Premium	22,00	
Profit and Loss A/c	35,00	97,00
Current liabilities and provisions:		14,00
		1,38,00
Assets		
Fixed assets		93,00
Investments		30,00
Current assets, loans and advances (Including cash and bank balance)		15,00
		1,38,00

The company passed a resolution to buy back 20% of its equity capital @ ` 50 per share. For this purpose, it sold all of its investments for ` 22,00,000.

You are required to pass necessary journal entries and prepare the Balance Sheet.

Solution

ii. **In the Books of Dee Ltd**

Date	Particulars	L.F	Dr. ` (in ,000)	Cr. ` (in 000)
i)	Bank A/c Dr		2,200	
	Profit/loss A/c Dr		800	
	To Investment A/c			3,000
	(Being Sale of Investment)			
ii)	Equity Shares Capital A/c Dr		500	
	Premium on Buyback A/c Dr		2,000	
	To Equity Shares holders A/c			2,500
	(Being Amount due)			
iii)	Security Premium A/c Dr		2,000	
	To Premium Payable on Buyback A/c			2,000
	(Being Premium Payable)			
iv)	Security Premium A/c Dr		200	
	Revenue Reserve A/c Dr		100	
	To Capital Redemption reserve A/c			300
	(Being Amount equal to Nominal Value of Shares Transferred to CRR A/c)			
v)	Equity Share Buyback A/c Dr		2,500	
	To Bank A/c			2,500
	(Being Payment made)			

II. Balance Sheet of Dee Ltd

Particulars	Note No	Amount in ,000
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		
1. Share Capital	1	2,200
2. Reserves and Surplus	2	6,900

II Non Current Liabilities III Current Liabilities		 1,400
Total		10,500
Assets I. Non Current Assets 1. Fixed Assets Tangible Assets II. Current Assets (Including Cash) (1,500 + 2,200 – 2,500)		 9,300 1,200
Total		**10,500**

Notes to Accounts

Particulars	**In ,000**	
1. Share Capital Authorized Capital Issued and Paid up of ` 10 each fully Paid Up 2,000 10% Preference shares of ` 100 each	 2,000 200	 3,000 2,200
2.Reserves and Surplus Capital Reserve Capital Redemption Reserve Revenue Reserve Profit/Loss A/c (3,500 - 800)	1,000 300 2,900 2,700	 6,900

Question 12 – **May Paper – 2010**

The following are the summarized Balance sheet of Cat Ltd. and Bat Ltd. as on 31.3.2012

(` in thousands)

	Cat Ltd.	**Bat Ltd.**
Liabilities		
Shares Capital		
Equity shares of ` 100 each fully paid up	2,000	1,000
Reserves	800	---
10% Debentures	500	---
Loans from Banks	250	450
Bank Overdrafts	---	50
Sundry Creditors	300	300
Proposed Dividend	200	---
Total	**4,050**	**1,800**
Assets		
Tangible Assets / Fixed Assets	2,700	850
Investments (Including Investments of Bat Ltd.)	700	---
Sundry Debtors	400	150
Cash at Bank	250	---
Accumulated Loss	---	800

Total	**4,050**	**1,800**

Bat Ltd has acquired the business of Cat Ltd. The following scheme of merger was approved

(i) Banks agreed to waive off the loan of ` 60 thousands of Bat Ltd.

(ii) Bat Ltd will reduce its shares to ` 10 per share and then consolidate 10 such shares into one share of ` 100 each (New Share)

(iii) Shareholders of Cat Ltd. will be given one share (New) of Bat Ltd. in exchange of every share held in Cat Ltd.

(iv) Proposed Dividend of Cat Ltd. will be paid after marriage to shareholders of Cat Ltd.

(v) Sundry creditors of Bat Ltd. includes ` 100 thousands payable of Cat Ltd.

(vi) Cat Ltd. will cancel 20% holding in Bat Ltd. as investment, which was held at a cost of ` 250 thousands

Pass necessary entries in the Books of Bat Ltd. and Prepare Balance Sheet after Merger.

Solution

I. Calculation of Purchase Consideration

One Share of Bat Ltd will be issued in Exchange of every Share of Cat Ltd	20,000
Less: Shares already Held (20% of 10,000)	
No of Shares to be issued by Bat Ltd to Cat Ltd	<u>200</u>
	19,800

II. In the Books of Bat Ltd

Date	Particulars	L.F	Dr. ` (in ,000)	Cr. ` (in 000)
i)	Loan from Bank A/c Dr		60	
	To Reconstruction A/c			60
	(Being Bank Loan Waived off)			
ii)	Equity Shares Capital A/c (FV/PU = 100)		1,000	
	Dr			100
	To Equity Shares Capital A/c (FV / PU = 10)			900
	To Reconstruction			
iii)	(Being Equity Shares Capital Reduced)		100	
				100
	Equity Shares Capital A/c (FV / PU = 10) Dr			
	To Equity Shares Capital A/c			
iv)	(Being share capital consolidated)		960	
				800
	Reconstruction A/c Dr			160
	To Profit/Loss A/c			

	~~To Capital Reserve A/c~~			
v)	(Being Losses set off and balance Transferred)		2,700 450 400	
	Fixed Assets A/c Dr		250	
	Investment A/c (700 - 250) Dr			300
	Debtors A/c Dr			200
	Cash/Bank A/c Dr			500
	To Sundry Creditors			250
	To Proposed Dividend			1980
	To 10% Debenture			570
	To Loan from Bank			
vii)	To Business Purchase A/c		1980	
	To Reserves (800 - 230)			1980
	(Being Assets, Liabilities and Reserves Taken Over)			
viii)	Liquidator of Cat Dr		100	
	To Equity Share Capital A/c			100
	(Being Payment to Liquidation)			
ix)	Sundry Creditors A/c Dr		200	
	To Sundry Debtors			200
	(Being Mutual Owing Cancelled)			
	Proposed Dividend A/c Dr			
	To Bank A/c			
	(Being Dividend Paid)			

III. Balance Sheet of Bat Ltd

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	2,080
2. Reserves and Surplus	2	730
II Non Current Liabilities		
Long Term Borrowing	3	1,140
III Current Liabilities		
Short Term Borrowing	4	50
Trade Payables		500
Total		**4,500**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets		3,550
Long Term Loans and Advances		450
II. Current Assets		
Trade Receivables		450

Cash and Cash Equivalent		50
Total		**4,500**

Notes to Accounts

Particulars	**Amount**
1. Share Capital Authorized Share Capital Issued, Subscribed and Paid up 20,800 Shares @ ` 100 each	2,080
2.Reserves and Surplus Capital Reserve General Reserve	160 570 730
3.Long-Term Borrowings 10% Debenture Loan from Bank	500 640 1,140
4.Short-Term Borrowings Bank Overdraft	50

Question 13 **Nov RTP – 2010**

The following are the Balance sheets (as at 31.3.2010) of A Ltd. and B Ltd.:

Liabilities	**A Ltd.**	**B Ltd.**	**Assets**	**A Ltd.**	**B Ltd.**
	`	`		`	`
Share Capital			Fixed Assets	50,00,000	30,00,000
Equity Shares of `10 each	36,00,000	18,00,000	Investments	5,00,000	5,00,000
10% Preference shares of ` 100 each	12,00,000	-	Current Assets		
12% Preference shares of `100 each	-	6,00,000	Stock	18,00,000	12,00,000
Reserve and Surplus			Debtors	15,00,000	12,00,000
Statutory Reserve	1,00,000	1,00,000	Bills receivable	50,000	10,000
General Reserve	25,00,000	17,00,000	Cash at Bank	1,50,000	90,000
Secured Loan					
15% Debentures	5,00,000	-			
12% Debentures	-	5,00,000			
Current Liabilities					
Sundry creditors	10,80,000	12,80,000			
Bills payable	20,000	20,000			
	90,00,000	**60,00,000**		**90,00,000**	**60,00,000**

Contingent liabilities for bills receivable discounted ` 20,000.

(A) The following additional information is provided to you:

	A Ltd.	B Ltd.
	`	`
Profit before Interest and Tax	14,75,000	7,80,000
Rate of Income-tax	40%	40%
Preference dividend	1,20,000	72,000
Equity dividend	3,60,000	2,70,000

(B) The equity shares of both the companies are quoted on the Mumbai Stock Exchange. Both the companies are carrying on similar manufacturing operations.

(C) A Ltd proposes to absorb business of B Ltd. as on 31.3.2010. The agreed terms for absorption are:

(i) 12% Preference shareholders of B Ltd. will receive 10% Preference shares of A Ltd. sufficient to increase their present income by 20%.

(ii) The Equity shareholders of B Ltd. will receive equity shares of A Ltd. on the following terms:

(a) The Equity shares of B Ltd. will be valued by applying to the earnings per share of B Ltd. ` 60 per cent of price earnings ratio of A Ltd. based on the results of 2009-10 of both the Companies.

(b) The market price of Equity shares of A Ltd. is ` 40 per share.

(c) The number of shares to be issued to Equity shareholders of B Ltd. will be based on the 80% of market price.

(d) In addition to Equity shares, 10% Preference shares of A Ltd. will be issued to the equity shareholders of B Ltd. to make up for the loss in income arising from the above exchange of shares based on the dividends for the year 2009-2010.

(iii) 12% Debentureholders of B Ltd. are to be paid at 8% premium by 15% debentures in A Ltd. issued at a discount of 10%.

(iv) ` 16,000 is to be paid by A Ltd. to B Ltd. for liquidation expenses. Sundry Creditors of B Ltd. include ` 20,000 due to A Ltd. Bills receivable discounted by A Ltd. were all accepted by B Ltd.

(v) Fixed assets of both the companies are to be revalued at 20% above book value. Stock in trade is taken over at 10%; less than their book value.

(vi) Statutory reserve has to be maintained for two more years.

(vii) For the next two years no increase in the rate of equity dividend is anticipated.

(viii) Liquidation expense is to be considered as part of purchase consideration.

You are required to find out the purchase consideration and prepare the Balance Sheet of A Ltd. as at 31.3.2010 after absorption.

Solution

I. Calculation of Purchase consideration (Net Payment)

A. Preference shareholders will receive preference shares

12% Preference Share Capital	6,00,000
Dividend (12%)	72,000
Add : 20%	14,400
New Dividend	86,400
10% Preference shares	8,64,000 (86,400 /10%)

B. Equity share holders will Receive Equity shares and Preference shares

i. Equity shares

Value per share of B Ltd = EPS of B x 60% of PE Ratio of A

= 2 x (60% of 20) = ` 24/share

Amount to be discharged = 1,80,000 x 24 = ` 43,20,000

Shares to be issued = 43,20,000 = 1,35,000 shares @ 32 (FV 10 and SP 22)

32 (80% of 40)

ii. Preference shares

Existing Dividend to ESH of B ltd.	2,70,000
Dividend to ESH of B under A Ltd.	1,35,000 (1,35,000 x 10 x 10%)
Loss of Income	1,35,000

New Preference shares to be issued for loss of income = 1,35,000 / 10% = ` 13,50,000

Summary for PC

1. Equity share = ` 43,20,000 (1,35,000 x 32)

2. 10% Preference shares = ` 22,14,000 (8,64,000 + 13,50,000)

Liquidation Expenses = ` 16,000

Total Purchase Consideration = ` 65,50,000

Working Note for Calculation of EPS and PE Ratio

	A Ltd	**B Ltd**
Earning Before Interest and Tax Less Interest	14,75,000 75,000	7,80,000 60,000
Earnings Before Tax Less Tax	14,00,000 5,60,000	7,20,000 2,88,000
Earnings After Tax Less Preference Dividend	8,40,000 1,20,000	4,32,000 72,000
Earnings for Equity	7,20,000	3,60,000
No of Shares	3,60,000	1,80,000
EPS	` 2 / share	` 2 / share
MPS	` 40 / share	
P. E. Ratio (MPS/EPS)	20 times	

II. Journal of A Limited

Date	**Particulars**		**L.F**	**Dr (`)**	**Cr (`)**
	Business Purchase A/c	Dr		65,50,000	

	To Liquidators of B Ltd. A/c				65,50,000
	Fixed Assets A/c Investments A/c Stock A/c Debtors A/c Bills Receivable A/c Cash at Bank A/c To 12% Debentures A/c To Sundry creditors A/c To Bills Payable A/c To Business Purchase A/c	Dr Dr Dr Dr Dr Dr		36,00,000 5,00,000 10,80,000 12,00,000 10,000 90,000	 5,40,000 12,80,000 20,000 65,50,000
	Liquidators of B Ltd. A/c To Equity share Capital A/c To 10% Preference Share Capital To Security Premium A/c To Cash A/c	Dr		65,50,000	 13,50,000 22,14,000 29,70,000 16,000
	12% Debentures A/c Discount on Issue A/c To 15% Debentures A/c	Dr Dr		5,40,000 60,000	 6,00,000
	Creditors A/c To Debtors A/c	Dr		20,000	 20,000
	Amalgamation Adjustment A/c To Statutory Reserve A/c	Dr		1,00,000	 1,00,000
	Before Absorption Fixed Assets A/c To Revaluation Reserve A/c	 Dr		 10,00,000	 10,00,000

III. Balance Sheet of A Ltd

Particulars	Note No	Amount
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>	1	83,64,000
1. Share Capital	2	66,70,000
2. Reserves and Surplus		
<u>II Non Current Liabilities</u>		
Long Term Borrowing	3	11,00,000
<u>III Current Liabilities</u>		
Trade Payables		23,80,000
Total		**1,85,14,000**
<u>Assets</u>		
<u>I. Non Current Assets</u>		
1. Fixed Assets		
Tangible Assets		96,00,000
Non Tangible Assets	4	19,10,000
2. Long Term Loans and Advances		10,00,000
3. Other Non Current Assets	5	1,60,000
<u>II. Current Assets</u>		
Inventories		28,80,000

Trade Receivables		27,40,000
Cash and Cash Equivalent		2,24,000
Total		**1,85,14,000**

Notes to Accounts

Particulars	Amount
1.Share Capital	
4,95,000 Equity Shares @ ` 10 each fully paid up	49,50,000
(of these, 1,35,000 Shares have been issued for Consideration other than Cash)	
10% Preference Shares @ ` 100	34,14,000
	83,64,000
2.Reserves and Surplus	
Statutory Reserve	2,00,000
Revaluation Reserve	10,00,000
General Reserve	25,00,000
Security Premium	29,70,000
	66,70,000
3.15% Debenture	11,00,000
4.Intangible Assets	
Goodwill	19,10,000
5.Other Non-Current Assets	
Amalgamation Adjustment	1,00,000
Discount on issue of Shares	60,000
	1,60,000

Question 14 **Nov RTP – 2010**

Paradise Limited which had experienced trading difficulties, decided to reorganize its finances. On March 31, 2010, a final Trial Balance extracted from the books of the company showed the following position:

	`	`
Share Capital, Authorized and issued:		
1,500 6% Cumulative Preference Shares of ` 100 each		1,50,000
2,000 Equity Shares of `. 100 each		2,00,000
Capital Reserve		36,000
Profit and Loss Account	1,10,375	
Preliminary Expenses	7,250	
Goodwill at Cost	50,000	
Trade Creditors		42,500
Debtors	30,200	
Bank Overdraft		51,000
Leasehold Property at Cost	80,000	
Provision for Depreciation on Leasehold Property		30,000

Plant and Machinery at Cost	2,10,000	
Provision for Depreciation on Plant and Machinery		57,500
Stock-in-Trade	79,175	
	5,67,000	5,67,000

(a) The approval of the Court was obtained for the following scheme for reduction of Capital.

(b) The Preference Shares to be reduced to ` 75 per share.

(c) The Equity Shares to be reduced to ` 12.50 per share

(d) One ` 12.50 Equity Share to be issued for each ` 100 of Gross Preference Dividend Arrears, the Preference Dividend had not been paid for three years.

(e) The balance in Capital Reserve Account to be utilized.

(f) Plant and Machinery to be written down to ` 75,000.

(g) The Profit and Loss Account balance and all intangible assets to be written off.

At the same time as the resolution to reduce capital was passed, another resolution was approved restoring the total Authorised Capital to ` 3,50,000 consisting of 1,500 6% Cumulative Preference Shares of ` 75 each and the balance in Equity Shares of ` 12.50. As soon as the above resolutions had been passed 5,000 Equity Shares were issued at par, for cash, payable in full as application money. The same were fully subscribed and paid.

You are required:

(i) To show the Journal entries necessary to record the above transactions in the Company's books, and

(ii) To prepare the Balance Sheet of the Company, after completion of the reconstruction scheme.

Solution

I. **Journal of Paradise Ltd**

Date	Particulars	L.F	Dr. `	Cr. `
i)	6% Preference Shares Capital A/c Dr		1,50,000	
	To 6% Preference Shares Capital A/c			1,12,500
	To Capital Reduction A/c			37,500
	(Being Preference share Capital Reduced)			
ii)	Equity Shares Capital A/c Dr		2,00,000	
	To Equity Shares Capital A/c			25,000
	To Capital Reduction A/c			1,75,000
	(Being shares Capital reduced to ` 12.5 each)			
iii)	Capital reduction A/c Dr		3,375	
	To Equity Share Capital			3,375
	(Being Allotment of Equity Shares for Arrears			

	of Dividend i.e. [$\frac{1,50,000}{100}$ x 6% x3 x 12.5])			
iv)	Capital Reserve A/c Dr To Capital Reduction A/c (Being Capital Reserve utilized)		36,000	36,000
v)	Capital Reduction A/c Dr To Plant and Machinery A/c (Being plant Written down)		77,500	77,500
vi)	Capital Reduction A/c Dr To Profit/loss A/c To Preliminary Expenditure A/c To Goodwill A/c (Being Losses and Intangible Assets written off)		1,67,625	1,10,375 7,250 50,000
vii)	Bank A/c Dr To Equity Share Capital A/c (Being 5,000 Shares @ 12.5 each fully subscribed)		62,500	62,500

II. Balance Sheet of Paradise Ltd (And Reduced)

Particulars	**Note No**	**Amount**
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	2,03,375
2. Reserves and Surplus		
II Current Liabilities		
Trade Payables		42,500
Total		**2,45,875**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets	2	1,25,000
II. Current Assets		
Inventories		79,175
Trade Receivables	3	30,200
Cash and Cash Equivalent		11,500
Total		**2,45,875**

Notes to Accounts

Particulars	**Amount**
1.Share Capital	
Authorized Capital	
19,000 Equity Shares @ ` 12.5 each fully paid up	2,37,500

1,500 6% Preference Shares @ ` 75 each		1,12,500
		3,50,000
Issued, and fully Paid up		
7,270 Equity Shares @ ` 12.5 each		90,875
(270 Shares are issued for consideration other than cash)		
1,500 6% Preference shares of ` 75 each		1,12,500
		2,03,375
2.Fixed Assets		
Plant And Machinery	2,10,000	
LESS: Written off	77,500	75,000
LESS: Provision	57,500	
Leasehold Property	80,000	50,000
LESS: Provision	(30,000)	
		1,25,000
3.Inventories		79,175
Stock in Trade		

Question 15 – Nov RTP – 2010

The following was the balance sheet of Kanika Ltd. as at 31st March, 2010.

Liabilities	(` in lakhs)
10% Redeemable preference shares of ` 10 each, fully paid up	2,500
Equity shares of ` 10 each fully paid up	8,000
Capital redemption reserve	1,000
Securities premium	800
General reserve	7,100
Profit and loss account	300
9% Debentures	5,000
Sundry creditors	3,300
Sundry provisions	2,000
	30,000
Assets	(` in lakhs)
Fixed assets	16,000
Investments	4,100
Cash at bank	1,650
Other current assets	8,250
	30,000

On 1st April, 2010 the company redeemed all its preference shares at a premium of 10% and bought back 25% of its equity shares @ ` 20 per share. In order to make cash available, the company sold all the investments for ` 4,500 lakhs and raised a bank loan amounting to ` 1,000 lakhs on the security of the company's plant.

Pass journal entries for all the above mentioned transactions including cash transactions and prepare the company's balance sheet immediately thereafter. The amount of securities premium has been utilized to the maximum extent allowed by law.

Solution

I. Journal Entries in Kanika Ltd

Date	Particulars	L.F	Dr. ` (in Lacs)	Cr. `(in Lacs)
i)	Cash/Bank A/c Dr		4,500	
	To Investment A/c			4,100
	To Profit on sale of Investment A/c			400
	(Being Sale of Investment)			
ii)	Bank A/c Dr		1,000	
	To Bank/Loan A/c			1,000
	(Being Loan Taken from Bank)			
III)	10% Preference Share Capital A/c Dr		2,500	
	Premium on Preference Share Capital A/c Dr		250	
	To Preference Share Holders A/c			2,750
	(Being Redemption Of Shares)			
iv)	Preference Share Holder A/c Dr		2,750	
	To Bank A/c			2,750
	(Being Payment made)			
v)	Security Premium A/c Dr		250	
	To Premium on Redemption A/c			250
	(Being Use of Security Premium)			
vi)	Equity Share Capital A/c Dr		2,000	
	Premium on Buy Back A/c Dr		2,000	
	To Equity Shares holders A/c			4,000
	(Being Buyback of Shares)			
VII)	Equity share holders A/c Dr		4,000	
	To Bank A/c			4,000
	(Being Equity shareholders Paid)			
viii)	Security Premium A/c Dr		550	
	General Reserve A/c Dr		1450	
	To Premium on buy Back A/c			2000
	(Being Amount equal to Face Value Transferred)			
iX)	General Reserve A/c Dr		4500	
	To Capital Redemption Reserve A/c			4500
	(Being Amount t/s to CRR)			

II. Balance Sheet of Kanika Ltd.

Particulars	Note No	Amount In

		lakhs
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	6,000
2. Reserves and Surplus	2	7,350
II Non Current Liabilities		
Long Term Borrowing	3	6,000
III Current Liabilities		
Short Term Borrowing		3,300
Trade Payables		2,000
Total		**24,650**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets		16,000
II. Current Assets		
Cash and Cash Equivalent		400
Other Current Assets		8,250
Total		**24,650**

Notes to Accounts

Particulars	Amount In Lakhs
1.Share Capital	
Equity Shares @ ` 10	6,000
2.Reserves and Surplus	
Capital Redemption Reserve	5,500
Profit/Loss A/c (300 + 400)	700
General Reserve	1,150
	7,350
3. Long Term Borrowing	
9% Debentures	5,000
Bank Loans	1,000
	6,000

Question 16 – **Nov Paper – 2010**

The following are the balance sheets of A Ltd. and B Ltd. as on 31st December 2001.

Liabilities	A Ltd.	B Ltd.	Assets	A Ltd.	B Ltd.
	`	`		`	`
Share capital			Fixed assets	7,00,000	2,50,000
Equity shares of `.10	6,00,000	3,00,000	Investment:		
10% Pref. shares			6,000 shares of B Ltd.	80,000	–
of `.100 each	2,00,000	1,00,000	5,000 shares of A	–	80,000

			Ltd.		
Reserves and surplus	3,00,000	2,00,000	Current assets:		
Secured loans:			Stock	2,40,000	3,20,000
12% Debentures	2,00,000	1,50,000	Debtors	3,60,000	1,90,000
Current liabilities			Bills receivable	60,000	20,000
Sundry creditors	2,20,000	1,25,000	Cash at bank	1,10,000	40,000
Bills payable	30,000	25,000			
	15,50,000	**9,00,000**		**15,50,000**	**9,00,000**

Fixed assets of both the companies are to be revalued at 15% above book value. Stock in trade and Debtors are taken over at 5% lesser than their book value. Both the companies are to pay 10% equity dividend, preference dividend having been already paid.

After the above transactions are given effect to, A Ltd. will absorb B Ltd. on the following terms.

i. 8 Equity shares of ` 10 each will be issued by A Ltd. at par against 6 shares of B Ltd.

ii. 10% Preference shareholders of B Ltd. will be paid at 10% discount by issue of 10% Preference Shares of ` 100 each at-par in A Ltd.

iii. 12% Debentureholders of B Ltd. are to be paid at 8% premium by 12% debentures in A Ltd. issued at a discount of 10%.

iv. ` 30,000 is to be paid by A Ltd. to B Ltd. for liquidation expenses. Sundry creditors of B Ltd. include ` 10,000 due to A Ltd.

Prepare:

(a) Absorption entries in the books of A Ltd.

(b) Statement of consideration payable by A Ltd.

Solution

I. Calculation of Purchase Consideration (Net Payment)

i) Equity **Old** **New**

6 8

[30 - 6] 24,000 32,000

Less: 5,000

27,000

X 10

2,70,000

ii. Preference

10% Preference Share Capital 1,00,000

Less: 10% Discount (10,000)

90,000

No of Shares = 90,000 / 100 = 900 shares

Total PC. = 2,70,000 + 90,000 = ` 3,60,000

II. Journal Entries In A Ltd

Date	Particulars	L.F	Dr (Amt)	Cr (Amt)
	<u>Before Absorption</u> Fixed Assets A/c Dr. To Revaluation Reserve A/c (Being Fixed Assets Revalued)		 1,05,000	 1,05,000
	Dividend A/c (P & L Approx) Dr. To Bank A/c (Being Dividend Paid)		60,000	 60,000
	Bank A/c Dr. To Dividend A/c (P & L) (Being Dividend Received)		6,000	 6,000
	<u>Absorption</u> Business Purchase A/c Dr. To Liquidators of B Ltd. (Being Business Purchased)		 3,60,000	 3,60,000
	Fixed Assets A/c Dr. Stock A/c Dr. Debtors A/c Dr. Bills Receivable A/c Dr. Cash A/c Dr. (40,000 – 30,000 + 5000) To Capital Reserve A/c (Bal. Fig) To Bills Payable A/c To 12% Debentures A/c To Creditors A/c To Business Purchased A/c To Investment A/c (Being Assets and Liabilities taken-over)		2,87,500 3,04,000 1,80,500 20,000 15,000	 55,000 25,000 1,62,000 1,25,000 3,60,000 80,000
	Liquidators of B Ltd. Dr. To Equity Share Capital A/c To 10% Preference Share Capital A/c (Being Liquidators Settled)		3,60,000	 2,70,000 90,000
	12% Debentures A/c Dr. Discount on Issue A/c Dr. To 12% Debentures A/c (Being old debentures exchanged with new debentures)		1,62,000 18,000	 1,80,000
	Capital Reserve A/c Dr. To Bank A/c (Expenses) (Being Liquidation Expenses Paid)		30,000	 30,000
	Creditors A/c Dr. To Debtors A/c (Being Mutual Owing cancelled)		10,000	 10,000

III. Balance Sheet of A Ltd.

Particulars	Note No	(`) In lakhs
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		
1. Share Capital		11,60,000
2. Reserves and Surplus		3,76,000
<u>II Non Current Liabilities</u>		
Long Term Borrowing		3,80,000
<u>III Current Liabilities</u>		
Trade Payables		3,90,000
Total		23,06,000
<u>Assets</u>		
<u>I. Non Current Assets</u>		
1. Fixed Assets		
Tangible Assets		10,92,500
<u>II. Current Assets</u>		
Inventories		5,44,000
Trade Receivables		6,10,500
Cash and Cash Equivalent		41,000
Other Current Assets		18,000
Total		23,06,000

2011

Question 17 **May RTP – 2011**

Roshni and Jyoti have been carrying on same business independently. Due to competition in the market, they decided to amalgamate and form a new company called Ujala Ltd.

Following is the Balance Sheet of Roshni and Jyoti as at 31.3.2010:

Liabilities	Roshini `	Jyoti `	Assets	Roshini `	Jyoti `
Capital	7,75,000	8,55,000	Plant & machinery	4,85,000	6,14,000
Current liabilities	6,23,500	5,57,600	Building	7,50,000	6,40,000
			Current assets	1,63,500	1,58,600
	13,98,500	14,12,600		13,98,500	14,12,600

Following are the additional information:

(i) The authorised capital of the new company will be ` 25,00,000 divided into 1,00,000 equity shares of ` 25 each.

(ii) Liabilities of Roshni includes ` 50,000 due to Jyoti for the purchases made. Jyoti made a profit of 20% on sale to Roshni.

(iii) Roshni has goods purchased from Jyoti, cost to him ` 10,000. This is included in the Current asset of Roshni as at 31st March, 2010.

(iv) The assets of Roshni and Jyoti are to be revalued as under:

	Roshni	Jyoti
	`	`
Plant and machinery	5,25,000	6,75,000
Building	7,75,000	6,48,000

(v) The purchase consideration is to be discharged as under:

(a) Issue 24,000 equity shares of ` 25 each fully paid up in the proportion of their profitability in the preceding 2 years.

(b) Profits for the preceding 2 years are given below:

	Roshni	Jyoti
	`	`
1st year	2,62,800	2,75,125
2nd year	2,12,200	2,49,875
Total	**4,75,000**	**5,25,000**

(c) Issue 12% preference shares of Rs.10 each fully paid up at par to provide income equivalent to 8% return on capital employed in the business as on 31.3.2010 after revaluation of assets of Roshni and Jyoti respectively.

You are required to:

(i) Compute the amount of equity and preference shares issued to Roshni and Jyoti.

(ii) Prepare the Balance Sheet of Ujala Ltd. immediately after amalgamation.

Solution

I. Calculation of amount of equity shares issued to Roshni and Jyoti

Profits of	Roshni (`)	Jyoti (`)
I year	2,62,800	2,75,125
II year	2,12,200	2,49,875
Total	4,75,000	5,25,000

No of shares to be issued = 24,000 in the ratio of the proceeding 2 years profitability (i.e 475 : 525)

No of shares to Roshni $= 24{,}000 \times \frac{475}{1000} = 11{,}400$

No of shares to Jyoti $= 24{,}000 \times \frac{525}{1000} = 12{,}600$

II. Calculation of amount of 12% preference shares issued to Roshni and Jyoti Ltd.

Particulars	Roshni	Jyoti
Capital Employed (Working Note 3)		
8% return of Capital Employed	8,40,000	9,24,000
12% Preference Shares to be issued	67,200	73,920
$[67{,}200 \times \frac{100}{12}]$	5,60,000	
$[73{,}920 \times \frac{100}{12}]$		6,16,000

III. Total Purchase Consideration

Equity shares @ ` 25 each	2,85,000	3,15,000
	5,60,000	6,16,000

12% Preference shares		
	8,45,000	9,31,000

IV Balance Sheet of Ujala of (After amalgamation)

Particulars	**Note No**	**Amount In lakhs**
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	17,76,000
II Non Current Liabilities		
III Current Liabilities (Working Note)		11,31,100
Total		29,07,100
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets	2	26,23,000
Intangible Assets (Balancing Figure)	3	14,000
II. Current Assets (Working Note)		2,70,100
Total		29,07,100

Notes to Account

1. Share Capital	
Issued and Subscribed Capital	
24,000 Equity Share Capital of Rs. 25 each	6,00,000
1,17,600 12% Preference shares of Rs. 10 each	11,76,000
	17,76,000
(All the above equity and preference shares have been issued for consideration other than cash)	
2. Tangible Assets	
Plant and Machinery	12,00,000
Building	14,23,000
	26,23,000
3. Intangible Assets	
Goodwill	14,000

Calculation of Current Assets		Calculation of Current Liabilities	
Roshni Ltd.	1,63,500	Roshni Ltd.	6,23,500
Jyoti	1,58,600	Jyoti Ltd.	5,57,600
	3,22,100		11,81,100
Less Common	(50,000)	Less : Common	(50,000)
Less Unrealized Profit	(2,000)		11,31,100
	2,70,100		

Question 18 **May RTP – 2011**

Somya Ltd. has the following Capital Structure as on 31.03.2010:

Particulars	(` in crores)	
Equity Share Capital (Shares of `. 10 each fully paid)	-	330
Reserves and Surplus:		
General Reserve	240	-
Securities Premium Account	90	-
Profit & Loss Account	90	-
Infrastructure Development Reserve	180	600
Loan Funds		1,200

The shareholders of Somya Ltd., on the recommendation of their Board of Directors, have approved on 12.09.2010 a proposal to buy back the maximum permissible number of Equity shares considering the large surplus funds available at the disposal of the company.

The prevailing market value of the company's shares is ` 25 per share and in order to induce the existing shareholders to offer their shares for buy back, it was decided to offer a price of 20% over market.

You are also informed that the Infrastructure Reserve is created to satisfy Income-tax Act requirements.

You are required to compute the maximum number of shares that can be bought back in the light of the above information.

Show the accounting entries in the company's books assuming that the entire buy back is completed by 09.12.2010. Narrations should form part of your answer.

Solution

I. Checking of Legal Provisions

Number of Shares Outstanding	33
25% of Shares	8.25
Resources Test	330
Paid up Capital (₹ in Crores)	420
Free Reserves (11)	750
25% of Funds	187.5
Buyback Price (25 + 20%)	30
No of Shares	6.25
Debt Equity Ratio	
a) Loan funds	1,200
b) Maximum Equity Shares Bought back	600
c) Present Equity Funds	750
d) Permitted dilution	150

e) Maximum no of Shares Bought back (150/30)	5

Least of the Above = 5 Crores

II. Journal Entries

Date	Particulars		L.F	Dr. ` in Crores)	Cr. ` (in Crores)
i)	Equity Share Capital A/c	Dr		50	
	Premium On Buy Back A/c	Dr		100	
	To Equity shareholders A/c				150
	(Being 5 crores Shares @ 30 each Bought Back)				
ii)				150	
	Equity shareholders A/c	Dr			150
	To Bank A/c				
iii)				90	
	Security Premium A/c	Dr		10	
	General Reserve A/c	Dr			100
	To Premium on Buy Back A/c				
	(Being Cancellation on Shares)				
IV				50	
	General Reserve A/c	Dr			50
	To Capital Redemption Reserve A/c				
	(Being Transfer to extent of Face Value Redeemed)				

Question 19 **May Paper – 2011**

A Ltd. agreed to absorb B Ltd. on 31st March, 2010, whose balance sheet stood as follows:

Liabilities	`	Assets	`
Share capital		Fixed assets	7,00,000
80,000 shares of `.10/- each		Investments	
fully paid	8,00,000	Current assets, loans and advances	
Reserves and surplus			
General reserve	1,00,000	Stock in trade	1,00,000
Secured loan	–	Sundry debtors	2,00,000
Unsecured loan	–		
Current liabilities and provisions			
Sundry creditors	1,00,000		
	10,00,000		10,00,000

The consideration was agreed to be paid as follows:

a. A payment in cash of ` 5 per share in B Ltd. and

b. The issue of shares of ` 10 each in A Ltd., on the basis of 2 equity shares (valued at ` 15) and one 10% cumulative preference share (valued at ` 10) for every five shares held in B Ltd.

c. It was agreed that A Ltd. will pay in cash for fractional shares equivalent at agreed value of shares in B Ltd. i.e. ` 65 for five shares of ` 50 paid.

The whole of the share capital consists of shareholdings in exact multiple of five except the following holding.

A	116	
B	76	
C	72	
D	28	
Other individuals	8	(eight members holding one share each)
	300	

Prepare a statement showing the purchase consideration receivable by above shareholders in shares and cash and a statement of total purchase consideration.

Solution

For Every 5 Shares = 2 Equity shares of ` 15 each = 2 x 15 = 30

= 1 Preference shares of ` 10 each = 1 x 10 = 10

= ` 5 cash for each share = 5 x 5 = 25

So for the block of 5 shares (FV 50) = Total payment will be ` 65

So for every share = $\frac{65}{5}$ = ` 13 per Share

Note : Any person holding fractional shares he will paid `. 13 in cash

Details	A	B	C	D	Others	Total
No of Shares	116	76	72	28	8	80,000
Classification						
Divisible	115	75	70	25	-	79985
Non-Divisible	1	1	2	3	8	15
Purchase Consideration						
Divisible Numbers	46	30	28	10	-	31,994
Equity Shares	23	15	14	5	-	15,997
Preference Shares						
Divisible Amount						
Equity (no x 15)	690	450	420	150	-	4,79,910
Preference (no x 10)	230	150	140	50	-	1,59,970
Cash (Div x 5)	575	375	350	125	-	3,99,925
Non Divisible Amount						
Cash	13	13	26	39	104	195

(Non – Div x 13)						
	1508	988	936	254	104	10,40,000

Question 20 **Nov RTP – 2011**

Given Below are the balance sheets of Hight ltd. and Length Ltd. as on 31.12.2010 Length Ltd. was merged with Hight Ltd. with effect from 1.1.2011.

Balance sheets as on 31.12.1010

Liabilities	Hight Ltd	Length Ltd	Assets	Hight Ltd	Length Ltd
Share Capital Equity Share of ` 10 each	7,00,000	2,50,000	Sundry Fixed Assets	9,50,000	4,00,000
General Reserve	3,50,000	1,20,000	Investments (Non Trade)	2,00,000	50,000
Profit and Loss A/c	2,10,000	65,000	Stock	1,20,000	50,000
Export Profit Reserve	70,000	40,000	Debtors	75,000	80,000
12 % Debentures	1,00,000	1,00,000	Advance Tax	80,000	20,000
Sundry Creditors	40,000	45,000	Cash and Bank	2,75,000	1,30,000
Provision of Taxation	1,00,000	60,000	Preliminary Expenses	10,000	-
Proposed Dividend	1,40,000	50,000			
	17,10,000	**7,30,000**		**17,10,000**	**7,30,000**

Hight Ltd. would issue 12% Debentures to discharge the claims of the debentures holders of length Ltd. at par. Non – trade investments of Hight Ltd. Fetched interest @25% while those of length Ltd. fetched @18%. Profits of hight ltd. and Length Ltd. during 2008, 2009 and 2010 were as follows

Year	Hight Ltd	Length Ltd
2008	5,00,000	1,50,000
2009	6,50,000	2,10,000
2010	5,75,000	1,80,000

Goodwill may be calculated on the basis of capitalization method taking 20% as the normal rate of return. Purchase consideration is discharged by Hight Ltd on the basis of intrinsic value per share. Both companies decided to cancel the proposed dividend.

Pass journal entries and prepare the balance sheet of hight ltd. after the merger.

Solution

I. Calculation of Purchase Consideration

Valuation of Goodwill

A. Capital Employed

Particular	Highlight	Length
Assets		
Fixed Assets	9,50,000	4,00,000
Stock	1,20,000	50,000
Debtors	75,000	80,000
Advance Tax	80,000	20,000
Cash/Bank	2,75,000	1,30,000

	15,00,000	6,80,000
Liabilities		
12% Debenture	1,00,000	1,00,000
Sundry Creditors	40,000	45,000
Provision of Tax	1,00,000	60,000
	2,40,000	2,05,000
Capital Employed	12,60,000	4,75,000

B. Calculation of Average Capital Employed

Particular	Highlight	Length
Average Profit of Hight Ltd		
$\frac{5,00,000 + 6,50,000 + 5,75,000}{3}$	5,75,000	1,80,000
Length Ltd		
$\frac{1,50,000 + 2,10,000 + 1,80,000}{3}$		
LESS: Non Trading Income	(50,000)	(9,000)
Average Profit	5,25,000	1,71,000

C. Valuation of Goodwill

Capitalized Value	5,25,000 20% = 26,25,000	1,71,000 20% = 8,55,000
Capital Employed	12,60,000	4,75,000
Goodwill	13,65,000	3,80,000
D. Calculation of IV		
	Height	**Length**
Capital Employed	12,60,000	4,75,000
Goodwill	13,65,000	3,80,000
Investment	2,00,000	50,000
	28,25,000	9,05,000
No of Shares	70,000	25,000
Iv	40.4	36.2

E. Calculation of Purchase consideration

Equity shares of Length Ltd = 25,000

Iv = 36.2

Total Value = 9,05,000

No of Shares = $\frac{9,05,000}{40.4}$ = 22,400.99 Shares

Purchase Consideration

Shares (22,400 x 40.4)	9,04,960
Cash	40

Total Purchase Consideration	9,05,000

II. Journal of Hight Ltd

Date	Particulars		L.F	Dr. ` (in Lacs)	Cr. ` (in Lacs)
i)	Business Purchase A/c	Dr		9,05,000	
	To Liquidation of length Ltd				9,05,000
	(Being Length purchased)				
ii)	Fixed Assets A/c	Dr		4,00,000	
	Stock A/c	Dr		50,000	
	Debtors A/c	Dr		80,000	
	Advance Tax A/c	Dr		20,000	
	Cash/Bank	Dr		1,30,000	
	Investment A/c	Dr		50,000	
	Goodwill A/c (Bal Fig)	Dr		3,80,000	
	To 12% Debenture A/c				1,00,000
	To Sundry Creditors A/c				45,000
	To Provision of Taxation A/c				60,000
	To Business Purchase A/c				9,05,000
	(Being Assets And Liabilities Taken)				
iii)	Liquidators of Length Ltd	Dr		9,05,000	
	To Cash				40
	To Equity Share Capital A/c				2,24,000
	To Security Premium A/c				6,80,960
	(Being PC. Discharged)				

III. Balance Sheet Of Hight Ltd

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		9,24,000
2. Reserves and Surplus		14,90,960
II Non Current Liabilities		
Long Term Borrowing		2,00,000
III Current Liabilities		
Trade Payables		85,000
Short Term Borrowing		1,60,000
Total		28,59,960
Assets		
I. Non Current Assets		
1. Fixed Assets		

Tangible Assets		17,30,000
Long Term Investment		2,50,000
II. Current Assets		
Inventories		1,70,000
Trade Receivables		1,55,000
Cash and Cash Equivalent		4,04,960
Short Term Loans and Advances		1,00,000
Other Current Assets		50,000
Total		28,59,960

Question 21 – **Nov RTP – 2011**

Given below is the balance sheet of Restructure Ltd. as on 31.3.2011

Liabilities	Amount	Assets	Amount
Share Capital		Building	4,00,000
12,000, 7% Preference shares of `. 50	6,00,000	Plant	2,68,000
each		Trademark and	3,18,000
(preference dividend in arrears for 5	7,50,000	Goodwill	4,00,000
years)	5,73,000	Stock	3,28,000
15,000 Equity shares of `. 50 each	2,07,000	Debtors	11,000
Loan	35,000	Preliminary Expenses	4,40,000
Sundry Creditors		Profit and Loss A/c	
Other Liabilities			
	21,65,000		21,65,000

The company is now earning profits short of working capital and a scheme of reconstruction has been approved by both the class of shareholders. A Summary of the scheme is as follows

a) The equity shareholders have agreed that their ` 50 share should be reduced to ` 2.50 cancelling ` 47.50 per share. They have agreed to subscribe for three new equity shares of ` 2.50 each for each equity share held.

b) The preference shareholders have agreed to cancel the arrears of dividend and to accept for each ` 50 share, 4 new 5% preference shares of ` 10 each, plus 6 new equity shares of ` 2.50 each, all credited as fully paid.

c) Lenders to the company for ` 1,50,000 have agreed to convert their loan into share and for this purpose they will be allotted 12,000 new preference shares of ` 10 each and 12,000 new equity shares of ` 2.50 each.

d) The directors have agreed to subscribe in cash for 40,000 new equity shares of ` 2.50 each in addition to any shares to be subscribed by them under (a) above.

e) Of the cash received by the issue of new shares, ` 2,00,000 is to be used to reduce the loan due by the company.

f) The equity share capital cancelled is to be applied.

   i) To write off the preliminary expenses

ii) To write off the debit balance in the profit and loss A/c

iii) To write off ` 35,000 from the value of the plant.

Any balance remaining is to be used to write the value of trademarks and goodwill.

Show journal entries how will the financial books are affected by the scheme and prepare the balance sheet of the company after reconstruction. The nominal capital as reduced is to be increased to ` 6,50,000 for preference share capital and ` 7,50,000 for equity share capital.

Solution

I. Journal of Restructure Ltd.

Date	Particulars	L.F	Dr. ` (in ,000)	Cr. ` (in ,000)
i)	Equity Shares Capital A/c Dr To Equity Shares Buyback A/c To Capital Reduction A/c (Being Equity Share Capital Reduced)		7,50,000	 37,500 7,12,500
ii)	Bank A/c Dr To Equity Share Capital A/c (Being 3 shares @ ` 2.5 each subscribed)		1,12,500	 1,12,500
iii)	7% Preference Capital A/c Dr Capital Reduction A/c Dr To 5% Preference Share Capital A/c (` 10) To Equity Share Capital (Being 7% preference Capital, Converted)		6,00,000 60,000	 4,80,000 1,80,000
iv)	Loan A/c Dr To 5% Preference Share Capital A/c To Equity Share Capital A/c (Being loan converted into Equity Share Capital)		1,50,000	 1,20,000 30,000
v)	Bank A/c Dr To Equity Share Capital (Being Directors Subscribed)		1,00,000	 1,00,000
vi)	~~Loan A/c Dr~~ To Bank A/c (Being Loan Repaid)		2,00,000	 2,00,000
vii)	Reconstruction A/c Dr To Preliminary Expenses To Profit/Loss A/c		6,52,500	11,000 4,40,000 35,000 1,66,500

	To Plant A/c To Trade Marks and Goodwill (Being Losses and Assets written off)			

II. Balance Sheet of Restructure Ltd (And Reduced)

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	10,60,000
2. Reserves and Surplus		
II Non Current Liabilities		
Long Term Borrowing		2,23,000
III Current Liabilities		
Trade Payables		2,07,000
Other Current Liability		35,000
Total		**15,25,000**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets	2	6,33,000
Intangible Assets	3	1,51,500
II. Current Assets		
Inventories	3	4,00,000
Trade Receivables	4	3,28,000
Cash and Cash Equivalent		12,500
Total		**15,25,000**

Notes to Accounts

Particulars	Amount In Lakhs
1.Share Capital	
Authorized Capital	
65,000 Preference Shares of ` 10 each	6,50,000
3,00,000 Equity Shares @ 2.5	7,50,000
	14,00,000
Issued Subscribed and Paid up	4,60,000
1,80,000 Equity Shares @ ` 2.5 each	6,00,000
60,000 5% preference Shares @ ` 10 each	10,60,000
	4,00,000
2.Tangible Assets	2,33,000
Building	6,33,000
Plant	
3. Intangible Assets	1,51,500

Trademark and Goodwill	4,00,000
3.Inventories Stock	3,28,000
4.Trade receivable Debtors	

Question 22 **Nov RTP – 2011**

Part Ltd. has two divisions A and B and their respective shares of various assets and liabilities in the company's balance sheet as on 31st March, 2011 are given below.

	(`. in Lakhs)		
	A Div	**B Div**	**Total**
Fixed Assets			
Cost	650	340	
Less Depreciation	225	160	
Written Down Value	425	180	605
Investments			115
Current Assets	350	430	
Less Current Liabilities	185	210	
Net Current Assets	165	220	385
			1,105
Financed By			
Loan Funds			400
Own Funds			
Equity share capital of ` 10 each			300
Reserves and Surplus			405
			1,105

Division b has been invariably suffering losses. The company sold this division B along with its assets and liabilities to a newly formed company Apart Ltd. which was incorporated with an authorized capital of ` 800 lakhs divided into shares of ` 10 each. Apart Ltd. allotted to Part Ltd shareholders its two fully paid shares of ` 10 each held in Part Ltd. as discharge of Consideration for the division taken over.

Apart Ltd. recorded in its books the fixed assets at ` 280 lakhs, current assets at ` 320 lakhs and liabilities at the same value at which they appeared in the books of Part Ltd.

On 1st April, 2011 Part Ltd. sold all its investments for ` 135 lakhs and redeemed debentures liabilities of ` 150 lakhs at par, which was included in loan funds. The cash transaction being recorded in the bank account pertaining to A Division.

You are required to.

1. Show journal Entries in the books of Part Ltd.
2. Prepare Part Ltd. Balance sheet immediately after the Demergers and
3. Initial Balance sheet of Apart Ltd.

Solution

I. Calculation of Purchase Consideration

2 Fully Paid up Shares @ ` 10 each

PC. = 300 (in Lakhs) x 2 = ` 600 Lakhs

II. Journal Entries of Part Ltd

Date	Particulars		L.F	Dr. ` (in Lacs)	Cr. ` (in Lacs)
i)	Bank A/c	Dr		135	
	To Profit/loss A/c				20
	To Investment A/c				115
	(Being Sale of Investment)				
ii)	Debenture A/c	Dr		150	
	To Debenture Holders A/c				150
	(Being Debenture redeemed)				
iii)	Debenture Holders A/	Dr		150	
	To Bank A/c				150
	(Being Holders Paid)				
iv)	Current Liability A/c	Dr		210	
	Provision for Depreciation A/c	Dr		160	
	Reserves and Surplus A/c	Dr		400	
	To Fixed Assets A/c				340
	To Current Assets A/c				430
	(Being Assets and Liabilities Transferred				

III. Balance Sheet of Part Ltd (After Demerger)

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	300
2. Reserves and Surplus		25
(405 + 20 - 400)		
II Non Current Liabilities	2	250
Long Term Borrowing		
III Current Liabilities		185
Total		**760**
Assets		
I. Non Current Assets		
1. Fixed Assets		425
Tangible Assets		
II. Current Assets (350 + 135 - 150)		335
Total		**760**

IV. Initial Balance Sheet of Apart

Particulars	Note No	Amount

Equity and Liabilities I. Share holders Fund 1. Share Capital 2. Reserves and Surplus II Non Current Liabilities Long Term Borrowing III Current Liabilities	1	600 - 210
Total		**810**
Assets I. Non Current Assets 1. Fixed Assets Tangible Assets Intangible Assets II. Current Assets		280 210 320
Total		**810**

Check Goodwill

PC.	600
Less: Fixed Assets	(280)
Current Assets	(320)
Add: Current Liabilities	210
Goodwill	210

Questiion 23 **Nov Paper – 2011**

As part of its expansion Strategy White Ltd has decided to amalgamate its business with that of Black Ltd and a new company Black & White Ltd being incorporated on the 1st of September 2010 having an authorized equity capital of 2 crore shares of f 10/- each. M/s Black & White Ltd. shall in turn acquire the entire ownership of White Ltd and Black Ltd in consideration for issuing its equity at 25%premium on 1st Oct.2010. It is also agreed that the consideration shall be based on the product of the profits available to equity shareholders of each entity, times its PE multiple. The Preference Shareholders & Debenture holders are to be satisfied by the issue of similar instruments in Black & White Ltd on 1-10-2010 in lieu of their existing holdings. Accordingly the relevant information is supplied to you as under:

	White Ltd.	**Black Ltd.**
Paid up Equity off 10 class (Nos)	3 Lakh	1.2 Lakhs
8% Preference Shares f 10/- paid (Nos	___	1 Lakh
5% Redeemable Debentures 2015 of ` 10/- each (Nos)	__	0.8 Lakh
Profits before Interest & Taxation (Rupees)	6,00,000	4,40,000
Price to Earnings Multiple	15	10

To augment the Cash retention level of Black & White Ltd it is decided that on Ist Oct 2010 Black& White Ltd. shall collect full share application money for the issue 20,00,000 equity shares @ 40% premium under Private Placement. The allotment of the shares will be made on 31-12-2010 and such shares shall qualify for dividend from 2011 only.

Black & White Ltd also shall avail a 12.50% TOD of ` 15 lakhs to meet its preliminary expenses and cost of working which amount to ` 12 lakhs and Rs.2 lakhs respectively. The TOD will be availed on 1st Nov 2010 and closed on 31st Dec. 2010. Preliminary expenditure is tax deductible @ 20% each year.

Due to an accounting omission the opening inventory of Black Ltd of Rs.5 Lakh & the closing stock of White Ltd. of ` 2.20 lakh was understated & overstated by 5% and 10% respectively.

The dividend schedule proposed is that all companies would pay interim dividend for equity, for the period from 1st Oct 2010 to 31st Dec. 2010. The rates of dividend being White Ltd. @ 5%, Black Ltd @ 2% and Black & White Ltd @ 3.5%. The preference Shareholders & debenture holders dues for the post take over period are discharged on 31.12.2010.

It is proposed that in the period Oct-Dec 2010 Black & White Ltd would carry out trade in futures that would generate an absolute post' tax return of 18% by using the funds generated from the Private Placement. The trades would be squared off on 31-12-2010. Proceeds from such transactions are not liable to withholding taxes.

You are required to prepare a projected Profit & Loss A/c for the period ended 31st Dec.2010 and a Balance Sheet on that date for Black & White Ltd.

The corporation tax rate for the company is 40%.

Solution

Projected Profit and Loss and Account of Black and White for the period ended 31-12-2010

Particulars	Amount (`)	Particulars	Amount (`)
To Working Capital expenses	2,00,000	To Profits from futures trading	84,00,000
To Interest on TOD	31,250	To Dividends received	1,74,000
To Debenture interest	10,000		
To Provision for Tax (40% on pre-tax profit – ` 81,58,750)	32,63,500		
To Profit after Tax	50,69,250		
	85,74,000		85,74,000
To Dividends (Equity and Preference)	2,06,760	By Profit for the year after tax	50,69,250
To Profit transferred to Balance sheet	48,62,490		
	50,69,250		50,69,250

Projected Balance sheet of Black & White Ltd. as at 31-12-2010

Liabilities	Amount (`)	Assets	Amount (`)
Authorized Share Capital		Investments in subsidiaries	
2 crores Equity shares of `.		In equity shares at cost	66,70,000
10 each	20,00,00,000	In Preference shares at cost	10,00,000
Issued, subscribed & Paid		5% Debentures	8,00,000
up	2,53,36,000		
25,33,600 shares of ` 10		Bank Balance	3,49,25,990
each			
(of the above 5,33,600			
shares issued for	10,00,000		
consideration their than			
cash)			
Preference shares	81,34,000		
1 Lakh, 8% Preference			
shares	48,62,490		
` 10 paid			
Reserves and Surplus	8,00,000		
Security Premium			
(93,34,000 – 12,00,000)	32,63,500		
Profit and Loss Account			
Secured Loan			
5% Debentures of ` 10 each			
Current Liabilities & Provisions			
Provisions for tax			
	4,33,95,990		**4,33,95,990**

Working Notes

1. Calculation of Rectified Profits

	White Ltd. (`)	Black Ltd (`)
Value of inventory as given	2,20,000(over stated)	5,00,000 (Actual)
Adjustment therein due to incorrect valuation will be reduced will be reduced from profits	2,20,000 x 10/110 = 20,000	5,00,000 x 10/110 = 25,000

2. Computation of shares to be issued as purchase consideration

	White Ltd.	Black Ltd.
Profit before interest and Tax	6,00,000	4,40,000
Less : Reduction in profit due to incorrect inventory valuation	(20,000)	(25,000)
	-	(40,000)
Less : Debentures Interest	5,80,000	3,75,000

Profit before tax	(2,32,000)	1,50,000
Less : Tax @ 40%	3,48,000	2,25,000
Profit after tax (PAT)	-	(80,000)
Less : Preference dividend	3,48,000	1,45,000
Profit available to equity shareholders (A)	15	10
Profit Earnings Multiple (B)	52,20,000	14,50,000
Total Purchase consideration to be given (A x B)	41,76,000	11,60,000
Equity Share Capital (Purchase consideration x 100/125)	10,44,000	2,90,000
Securities Premium (25% of the premium)		

3. Bank Account

Date	Particulars	`	Date	Particulars	`
1.10.10	To share	2,80,00,000	1.10.10	By Future Trading	2,80,00,000
1.11.10	Application	15,00,000	1.11.10	A/c	12,00,000
31.12.10	To 12.5% TOD	3,64,00,000	31.12.10	By Preliminary	2,00,000
31.12.10	To Future Trading		31.12.10	Exp	1,86,760
	To Dividend		31.12.10	By Working	31,250
	Received	1,74,000	31.12.10	Capital	10,000
	White Ltd		31.12.10	By Dividend Paid	20,000
	1,50,000		31.12.10	By TOD Interest	15,00,000
	Black Ltd.		31.12.10	By Debenture	3,49,25,990
	24,000			interest	
				By Preference Div.	
				By 12.5% TOD	
				By Balance c/d	
		6,60,74,000			6,60,74,000

2012

Question 24 **May RTP – 2012**

The Balance Sheet as at 31st March 2011 of Sick Ltd. was as under:

Liabilities	`	Asset	`	`
Share Capital		Fixed Assets		
4,000 Equity shares of Rs. 100 each, ` 50 per share paid –up	2,00,000	Goodwill at cost		20,000
		Others	4,25,000	
2,000, 11% Cumulative preference	2,00,000	Less: Depreciation	1,35,000	2,90,000
Shares of Rs. 100 each		Investment		12,500
Security Premium	20,000	Stock in trade		1,05,000
General reserve	30,000	Sundry Debtors		1,27,500
Current Liabilities	1,55,000	Cash and Bank balances		50,000
	6,05,000			6,05,000

Contingent liability not provided:

Preference dividend is in arrears for three years including the year ended 31st March, 2011

The funds of the Company are sufficient to discharge its liabilities including Preference Dividends in arrears. However, the Company does not want to deplete its resources. It would also like to reflect the values of some of its assets in a realistic manner. The Board of Directors of the Company decided and proposed the following scheme of reconstruction to be effective from 1st April, 2011.

(i) The cumulative preference shareholders are to be issued, in exchange of their holdings, 13% Debentures of the face value of ` 100 each at a premium of 10%. Fractional holdings are to be paid off in cash.

(ii) Arrears in preference dividends to be converted into equity shares of ` 100, ` 50 per share paid-up

(iii) After the issue of the shares mentioned in (ii) above, the paid-up value of all the equity shares is to be reduced to ` 25 each.

(iv) The face value of all the equity shares to be reduced to ` 50 each and the balance of the unpaid portion is to be called up fully.

(v) Goodwill has lost its value and has to be written off. Market value of other fixed assets is determined, as at 31st March, 2011 at ` 2,50,000.

(vi) Investments have no market value and have to be written off.

(vii) Stock-in-trade is to be valued at 110% of its book value and Sundry Debtors are to be discounted by 5%.

The scheme, as approved by the Directors, is duly accepted by all the authorities and put into effect. During the working for the half-year ended 30th September, 2011 it is noticed that the trading for the period has resulted in an increase of bank balances by ` 27,550, Sundry Debtors by ` 20,000, Trade creditors by ` 13,000 and a decrease in stock by ` 4,000. Depreciation for the half year on fixed assets at 10% per annum is to be provided. The increase in the bank balances was prior to the company paying the half yearly interest on the debentures and redeeming one half of the debentures on 30th September, 2011.

From the above information you required to prepare the Balance Sheet of Sick Ltd. as on 30th September, 2011.

Solution

Balance Sheet of Sick Ltd at 30th September, 2011

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund	1	2,66,000
1. Share Capital	2	73,038
2. Reserves and Surplus		
II Non Current Liabilities		
Long Term Borrowing	3	90,900

III Current Liabilities	4	1,68,000
Total		**5,97,938**
Assets I. Non Current Assets 1. Fixed Assets Tangible Assets (2,50,000 – 12,500) II. Current Assets Inventories Trade Receivables Cash and Cash Equivalent	 5 6 	 2,37,500 1,11,500 1,41,125 1,07,813
Total		**5,97,938**

Notes to Accounts

Particulars	**(`) in Lakhs**
1.Share Capital	
5,320 Equity Shares @ ` 50 each Fully Paid Up	2,66,000
2.Reserves and Surplus	
Security Premium	20,000
General Reserve (30,000 - 1375)	28,625
Premium on Debentures	18,180
Profit/Loss A/c	6,233
	73,038
3. Long Term Borrowings	
13% Debentures	90,900
4.Current Liabilities (1,55,000 + 13,000)	1,68,000
5. Inventories	
Stock (1,15,400 – 4,000)	1,11,500
6. Trade Receivables	
Debtors (1,21,125 + 20,000)	1,41,125

Cash/Bank A/c

Date	Particular	Amount	Date	Particular	Amount
	To Balance B/d (1,33,000+50,000-20)	1,82,980		By Interest	11,817
	To Increase	27,550		By Debentures	90,900
				By Balance C/d	1,07,813
		2,10,530			**2,10,530**

Working Notes

i) $\frac{2,00,000}{110}$ = 1818 Debenture @ ` 110 each

ii) Fractional Holdings = 0.1818 x 10 = ` 20 Cash

iii) ` 66,000 (22,000x 3) = 1320 Shares @ ` 50 Paid up

iv) Total Equity Shares = 4,000 + 1,320 = 5,320 Shares

v) Paid up Value reduced to ` 25 each so ` 1,33,000 transferred to Capital Reduction

Cash/Bank A/c	Dr	1,33,000	
To Equity Shares Capital A/c			1,33,000
(Fully Paid up Equity @ 25each)			

vi) ` 78,875 written off & 10,500 Stock gone up

vii) Debit Balance of ` 1,375 transferred to General Reserve

viii) Increase in Profit

Date	Liability	Amount	Date	Assets	Amount
	Increase in Creditors	13,000		Cash/Bank	27,550
	Decrease in Stock	4,000		Increase in Debtors	20,000
	Depreciation	12,500			
	Profit	18,050			

Profit = $18{,}050 - \frac{1{,}81{,}000 \text{ x } 13\%}{2} = 6{,}233$

Question 25 **May RTP – 2012**

Major Ltd. has a subsidiary X Ltd. holding 76% of the later's paid-up-capital. The balance of shares in X Ltd. is held by a foreign collaborating company. A memorandum of understanding has been entered into with the foreign company providing for the following:

(a) The shares held by the foreign company will be sold to Major Ltd. The price per share will be calculated by capitalising the yield at 15%. Yield, for this purpose, would mean 40% of the average of pre-tax profits for the last 3 years which were ` 15 lakhs, ` 20 lakhs and ` 32.5 lakhs.

(b) The actual cost of the shares to the foreign company was ` 1,20,000 only. The profit that would accrue to them would be taxable at an average rate of 30%. The tax payable will be deducted from the proceeds and Major Ltd. will pay it to the Government.

(c) Out of the net consideration, 50% would be remitted to the foreign company immediately and the balance will be an unsecured loan repayable after one year.

Major Ltd. decided to absorb X Ltd. simultaneously. It decided to write down fixed assets of X Ltd. by 5%. The Balance Sheet figures included a sum of ` 75,000 due by X Ltd. to Major Ltd.

The entire arrangement was approved by all concerned for being given effect to on 1.4.2011.

The summarised Balance Sheets as at 31.3.2011 immediately before the implementation of the scheme were as follows:

	Major Ltd. (`)	**X Ltd. (`)**
Shares of ` 10 each	40,00,000	10,00,000
Reserves and Surplus	80,00,000	30,00,000
Secured Loans	20,00,000	-

Current Liabilities	30,00,000	10,00,000
	1,70,00,000	**50,00,000**
Fixed Assets	60,00,000	17,50,000
Investments in X Ltd.	3,70,000	-
Sundry Debtors	35,00,000	5,00,000
Inventories	30,00,000	25,00,000
Cash and Bank	41,30,000	2,50,000
	1,70,00,000	**50,00,000**

You are required to show the Balance Sheet of Major Ltd. as it would appear after the arrangement is put through on 1.4.2011.

Solution

Calculation of Purchase Consideration

I. Yield of X Ltd = $\frac{15,00,000 + 20,00,000 + 32,50,000}{3}$ x 40% = ` 9,00,000

II. Capitalized Value of Yield = $\frac{9,00,000}{15\%}$ = ` 60,00,000

III. Value per Share = $\frac{60,00,000}{10,00,000}$ x 10 = ` 60

Purchase Consideration 24% (100 - 76) held by Outside Share Holders 14,40,000
(60,00,000 x 24%)

[14,40,000 – 1,20,000]
X 30%
= 3,96,000
To the Government

10,44,000
50% in Cash = 5,22,000
50% Loan = 5,22,000

IV. Working of Cash for Balance Sheet

Date	Particular	`	Date	Particular	`
	To Balance B/d	41,30,000		By Foreign Company	5,22,000
	To X Ltd	2,50,000		By Tax	3,96,000
				By Balance C/d	34,62,000
		43,80,000			**43,80,000**

V. In the Books of Major Ltd

Balance Sheet

Particulars	**Note No**	**(`)**
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	40,00,000
2. Reserves and Surplus	2	1,01,02,500
II Non Current Liabilities		
Long Term Borrowing	3	25,22,000
III Current Liabilities [30,00,000+10,00,000-75,000]		39,25,000
Total		**2,05,49,500**

Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets [60,00,000+(17,50,000 –5%)]		76,62,500
II. Current Assets		
Inventories [30+25]		55,00,000
Trade Receivables		39,25,000
Cash and Cash Equivalent		34,62,000
Total		**2,05,49,500**

Notes to Accounts

Particulars	(`) In Lakhs
1.Share Capital	
4,00,000 Shares @ ` 10 each	40,00,000
2.Reserves and Surplus	80,00,000
Capital Reserve	21,02,500
	1,01,02,500
3. Long Term Borrowings	
Secured Loans	20,00,000
Unsecured Loan	5,22,000
4. Trade Receivables	
Debtors (35,00,000+5,00,000-75,000)	39,25,000

Question 26 – **May RTP – 2012**

The following is the Balance Sheet of Complete Ltd. having an authorised capital of ` 1,000 crores as on 31st March, 2011:

(` in crores)

Particulars	(` in crores)	
Sources of funds:		
Shareholders' funds:		
Share capital		
Equity shares of ` 10 each fully paid in cash	250	
Reserves and surplus (Revenue)	750	1,000
Loan funds:		
Secured against: (a) Fixed assets ` 300 Cr.		
(b) Working capital ` 100 Cr.	400	

Unsecured:	600	1,000
		2,000
Employment of funds:		
Fixed assets:		
Gross block	800	
Less: Depreciation	(200)	600
Investments at cost (Market value ` 1,000 Cr.)		400
Net current assets:		
Current assets	3,000	
Less: Current liabilities	(2,000)	1,000
		2,000

Capital commitments : ` 700 crores.

The company consists of 2 divisions:

(i) Settled division whose gross block was ` 200 crores and net block was ` 30 crores; current assets were ` 1,500 crores and working capital was ` 1,200 crores; the entire amount being financed by shareholders' funds.

(ii) New project division to which the remaining fixed assets, current assets and current liabilities related.

The following scheme of reconstruction was agreed upon:

(a) Two new companies Much Ltd. and More Ltd. are to be formed. The authorized capital of Much Ltd. is to be ` 1,000 crores. The authorised capital of More Ltd. is to be ` 500 crores.

(b) More Ltd. is to take over investments at ` 800 crores and unsecured loans at balance sheet value. It is to allot equity shares of ` 10 each at par to the members of Complete Ltd. in satisfaction of the amount due under the arrangement.

(c) Much Ltd. is to take over the fixed assets and net working capital of the new project division along with the secured loans and obligation for capital commitments for which Complete Ltd. is to continue to stand guarantee at book values. It is to allot one crore equity shares of ` 10 each as consideration to Complete Ltd. Much Ltd. made an issue of unsecured convertible debentures of ` 500 crores carrying interest at 15% per annum and having a right to convert into equity shares of ` 10 each at par on 31.3.2016. This issue was made to the members of Much Ltd. as a right who grabbed the opportunity and subscribed in full.

(d) Complete Ltd. is to guarantee all liabilities transferred to the 2 companies.

(e) Complete Ltd. is to make a bonus issue of equity shares in the ratio of one equity share for every equity share held by making use of the revenue reserves.

Assume that the above scheme was duly approved by the Honourable High Court and that there are no other transactions. Ignore taxation.

You are asked to:

(i) Pass journal entries in the books of Complete Ltd., and

(ii) Prepare the balance sheets of the three companies giving all the information required by the Companies Act, 1956 in the manner so required to the extent of available information.

Solution

Complete Ltd.

Established Division		New Project	Balance
Gross Block	200	600	Secured Loan 400
Dep	170	30	
Net Block	30	570	Unsecured Loan 600
		Much Ltd	Investment 400
Current Assets	1500	1500	
CL	300	1700	
Work. Cap	1200	(200)	More Ltd.

Calculation of Purchase Consideration

More Ltd.		Much Ltd.	
Investment	800	PC = 1 x 10 = 10 crores	
Unsecured Loan	600		
Purchase consideration	200	FA	570
		CA	1500
Discharge = 20 x 10 = 200			2070
		CL	1700
		Loan	400
			2100
		Net Assets	(30)
			40 Loss
		PC	10

I. Journal of Complete Ltd.

Date	Particulars		L.F	Dr. (`)	Cr (`)
	<u>Sale to More Ltd</u>				
?	More Ltd.	Dr		200	
	Unsecured Loan Ltd	Dr		600	
	To Capital Reserve A/c				400
	To Investment A/c				400
?	Capital Reserve A/c	Dr		200	
	To More Ltd.				200
?	<u>Sale to Much Ltd.</u>				

	Much Ltd. A/c Dr	Dr		10	
	Secured Loan Ltd. A/c Dr	Dr		400	
	Current Liabilities A/c Dr	Dr		1700	
	PFD A/c Dr	Dr		30	
	To Capital Reserve A/c				40
	To Fixed Assets A/c				600
	To Current Assets A/c				1500
	Share in Much Ltd.	Dr		10	
	To Much Ltd. A/c				10
	Bonus Issue				
	Declaration of Bonus	Dr			
	Revenue Reserve A/c	Dr		250	
	To Bonus to Shareholders A/c				250
	Issue of Bonus				
	Bonus to shareholders A/c	Dr.		250	
	To share Capital A/c				250

II. Balance Sheet of Complete Ltd

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		500
2. Reserves and Surplus		740
II Non Current Liabilities		
III Current Liabilities		300
Total		1540
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets		30
Non Current Invest		10
II. Current Assets		1500
Total		1540

II. Balance Sheet of More Ltd

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		200
2. Reserves and Surplus		
II Non Current Liabilities		
Long Term Borrowing		600
III Current Liabilities		

Total		**800**
Assets I. Non Current Assets Non Current Invest II. Current Assets		 800
Total		**800**

II. Balance Sheet of Much Ltd

Particulars	Note No	Amount
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		10
2. Reserves and Surplus		-
II Non Current Liabilities		
Long Term Borrowing		900
III Current Liabilities		1700
Total		**2610**
Assets		
I. Non Current Assets		
Tangible Assets		570
Intangible Assets		40
II. Current Assets		2000
Total		**2610**

Question 27 **May paper – 2012**

The shareholders of Sunrise Ltd. Decided on a corporate restructuring exercise necessitated due to economic recession and a slump in business. From the audited statements as on 31.3.2010 and the information supplied, you are requested to prepare :

(i) Balance Sheet after the completion of restructuring exercise,

(ii) The Capital Reduction Account

(ii) The cash Account of the Entity

Balance Sheet of Sunrise Ltd. as on 31.3.2010

Liabilities	`	Assets	`
30,000 Equity Shares of ` 10	3,00,000	Trade Marks and Patents	1,10,000
each	4,00,000	Goodwill at cost	36,100
40,000 8% cumulative		Freehold Land	1,20,000
Preference Shares of ` 10 each	10,000	Freehold Premises	2,44,000
Securities Premium A/c		Plant and Equipment	3,20,000
Profit and Loss A/c	(1,38,400)	Investment (Marked to Market)	64,000
9% Debentures		Inventory	60,000
1,20,000	1,25,400	Raw Material	16,000
Accrued Interest	1,20,000	Finished Goods	1,20,000
5,400	50,000	Trade Receivable	
Creditors	2,23,100		

Deferred Vat Payable Bank Overdraft			
	10,90,100		**10,90,100**

Note : Preference Dividend are in arrears for 4 years.

The Scheme of reconstruction that received the permission of the court was on the following lines.

1. The authorized capital of the company to be re-fixed at ` 10 lakhs (Preference capital ` 3 lakhs and equity capital 7 lakhs both ` 10 shares each)
2. The preference shares are to be reduced to ` 5 each and equity shares reduced by ` 3 per share. Post reduction, both classes of shares to be re-consolidated into ` 10 shares.
3. Trade Investments are to be liquated in open market.
4. One fresh equity shares of ` 10 to be issued for every ` 40 of preference dividends in arrears
5. The securities Premium is to be fully utilized to meet the reconstruction programme.
6. The debenture-holder took over freehold land at ` 2,10,000 and settled the balance after adjusting their dues.
7. Unprovided contingent liabilities were settled at ` 54,000 and a pending insurance claim receivable settled at `12,500 on condition that claim will be immediately settled.
8. The intangible Assets were all to be written off along with ` 10,000 worth absolute packing material and 10% of the receivables
9. Expenses of the scheme were ` 10,000
10. Remaining cash available as a result of the above transactions is to be utilized to pay off the bank overdraft to that extent.
11. The Equity shareholders agree that they will bring in cash to liquidate the balance outstanding on the overdraft account and also agree that sufficient funds will be brought in to bring up the net working capital, after completing the re-structuring exercise, to ` 2 lakhs. The equity shares will be issued at par for this purpose.

Solution

Books of Sunrise Ltd. Capital Reduction A/c

Particulars	Dr (`)	Particulars	Cr (`)
To Preference Dividend	32,000	By Preference share capital	2,00,000
To Contingent liability	54,000	A/c	90,000
Provided	1,10,000	By Equity share Capital A/c	10,000
To Trademarks and Patents	36,100	By Security Premium	90,000
To Goodwill	10,000	By Freehold land A/c	12,500
To Raw material	12,000	By Insurance Claim	
To Trade receivables	10,000	receivable	
To Cash A/c (Expenses)	1,38,400		

To Profit and Loss account			
	4,02,500		**4,02,500**

Cash Account

Particulars	`	**Particulars**	`
To Investment A/c	64,000	By Contingent Liability A/c	54,000
To 9% Debenture holders	84,600	By Capital reduction A/c	10,000
(2,10,000 – 1,25,400)		(Exp)	97,100
To Insurance Claim	12,500	By Bank O/D A/c	
To Equity share Capital A/c	1,26,000	(64,000 + 84,600 + 12,500	
(2,23,100 – 97,100)		– 54,000 – 10,000)	1,26,000
To Equity Shares capital	1,96,000	By Bank O/D A/c	
[(2,00,000 – (50,000 +		(2,23,100 – 97,100)	
16,000 + 108,000 – 50,000			1,96,000
– 120,000)]		By Balance C/D	
	4,83,100		**4,83,100**

Balance sheet as on 31.3.2010

II. Balance Sheet of Much Ltd (And Reduced)

Particulars	**Note No**	**(`)**
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		7,64,000
2. Reserves and Surplus		
II Non Current Liabilities		
III Current Liabilities		
Trade Payables		1,20,000
Deferred vat payable		50,000
Total		**9,34,000**
Assets		
I. Non Current Assets		
Tangible Assets		5,64,000
Intangible Assets		
II. Current Assets		
Inventories		66,000
Trade Receivables		1,08,000
Cash		1,96,000
Total		**9,34,000**

Notes to Account

1. Share Capital	
Authorized Share Capital	
70,000 Equity shares of `. 10 each	7,00,000
	3,00,000

30,000 Preference shares of `. 10 each	10,00,000
	5,64,000
Issued, Subscribed, and Paid up	
	2,00,000
56,400 Equity shares of `. 10 each	
	7,64,000
20,000 preference shares of `. 10 each	
	1,20,000
2. Trade Payable	
Creditors	
	2,44,000
3. Tangible Assets	3,20,000
Freehold Premises	5,64,000
Plant and Equipment	
	50,000
4. Inventories	16,000
Raw material	66,000
Finished Goods	
	1,08,000
5. Trade Receivable	
Debtors	

Question 28 – Nov RTP – 2012 – Similar to Nov 2008 Paper

Question 29 **Nov RTP – 2012**

The following are the summarized Balance Sheets of Sonu Ltd. and Monu Ltd. for the year ending on 31st March, 2012:

	Sonu Ltd.	**Monu Ltd.**
Equity Share capital- in equity shares of ` 10 each	50	40
Preference share capital- in 10% preference shares of ` 100 each	-	60
Reserves and Surplus	200	150
	250	250
Loans – Secured	100	100
Total Funds	350	350
Applied for: Fixed asset at cost less depreciation	150	150
Current Assets	200	200
Total	350	350

The present worth of fixed assets of Sonu Ltd. is ` 200 crores and that of Monu Ltd. is ` 429 crores. Goodwill of Sonu Ltd. is ` 40 crores and of Monu Ltd. is ` 75 crores.

Monu Ltd. absorbs Sonu Ltd. by issuing equity shares at par in such a way that intrinsic net worth is maintained.

Goodwill account is not to appear in the books. Fixed assets are to appear at old figures.

1. Show the Balance Sheet after absorption
2. Draft a statement of valuation of shares on intrinsic value basis and prove the accuracy of your workings.

Solution

I. Purchase Consideration

Calculation of Purchase Consideration

	Sonu (` in Crores)	**Monu (` in Crores)**
Equity Share Capital	50	40
Reserve and Surplus	200	150
Add: Increase in Fixed Assets	50	279
Goodwill	40	75
	340	544
No of Shares	5 Crores	4 Crores
iv	` 68	` 136

Intrinsic Net Worth = $\frac{\text{5 Crores}}{2}$ = 2.5 Crores

II. Balance Sheet of Monu Ltd

Particulars	**Note No**	**Amount**
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		
1. Share Capital	1	125
2. Reserves and Surplus	2	375
<u>II Non Current Liabilities</u>		
Long Term Borrowing	3	200
Total		**700**
<u>Assets</u>		
<u>I. Non Current Assets</u>		
1. Fixed Assets		
Tangible Assets [150+150]		300
Intangible Assets		-
<u>II. Current Assets [200+200]</u>		400
Total		**700**

Notes to Accounts

Particulars	**` In Lakhs**
<u>1.Share Capital</u>	
4 Crores Equity Share Capital @ ` 10 each	40
10% Preference Shares @ ` 100 each	60
2.5 Crore Equity Shares @ ` 10 each	25
	125

[Out of these, 2.5 Crore, Shares are issued for Consideration other than Cash]	
	150
2.Reserves and Surplus	225
Capital Reserve	375
3. Long Term Borrowings	200
Secured Loans (100+100)	200

Accuracy of the Workings After Absorption

Particular	Amount in Crores
Equity Share Capital	65
Reserve and Surplus	375
	440
(+) Goodwill(40+75)	115
(+) Increase in Value of Assets [50+279]	329
No of Shares	884
	6.5 Cr.

IV = ` 136 per Share

Question 30 – Nov RTP – 2012 – Similar to Nov 2008 – RTP

Question 31 **Nov Paper – 2012**

The Abridged Balance Sheet (Draft) of V Ltd as on 31stMarch, 2012 is as under:

Liabilities	`	Assets	`
24,000, Equity shares of `10 each	2,40,000	Goodwill	5,000
		Fixed Assets	2,57,000
5000, 8% cumulative preference shares of 10 each	50,000	Stock	50,000
		Debtors	60,000
8% Debentures	1,00,000	Bank	1,000
Interest accrued on debentures	8,000	Preliminary Expenses	15,000
Creditors	1,00,000	Profit & Loss Account	1,10,000
	4,98,000		**4,98,000**

The following scheme is passed and sanctioned by the court :

(i) A new company P Ltd is formed with ` 3,00,000, divided into 30,000 Equity shares of ` 10 each.

(ii) The new company will acquire the assets and liabilities of V Ltd on the following terms:

(a) Old company's debentures are paid by similar debentures in new company and for outstanding accrued interest, shares of equal amount are issued at par.

(b) The Creditors are paid for every ` 100, ` 16 in cash and 10 shares issued at par.

(c) Preference shareholders are to get equal number of equity shares at par. For arrears of dividend amounting to ` 12,000, 5 shares are issued at par for each ` 100 in full satisfaction.

(d) Equity shareholders are issued one share at par for every three shares held.

(e) Expenses of ` 8,000 are to be borne by the new company.

(iii) Current Assets are to be taken at book value (except stock, which is to be reduced by ` 3,000). Goodwill is to be eliminated, balance of purchase consideration being attributed to fixed assets.

(iv) Remaining shares of the new company are issued to public at par and are fully paid.

You are required to show:

(a) In the old company's books:

(i) Realisation and Reconstruction (combined) Account

(ii) Equity Shareholder's Account

(b) In the new company's books:

(i) Bank Account

(ii) Summarised Balance Sheet as per requirement of Revised Schedule-VI.

Solution

Calculation of Purchase Consideration

Particulars	**Amount**
<u>Preference Share Holders</u>	
5,000 Equity Shares @ ` 10 each	50,000
Arrears od Dividend	
[$\frac{12,000}{100}$ x 10 x 5]	6,000
Equity Share Holders	
[$\frac{24,000}{3}$ x 10]	80,000
Total Purchase Consideration	1,36,000

Calculation of Fair Value of Assets Acquired

Particulars	**Amount**
Purchase Consideration	1,36,000
Add: Liabilities	
8% Debenture	1,08,000
Creditors	
[$\frac{1,00,000}{100}$ x 16 + $\frac{1,00,000}{100}$ x 10 x 10]	1,16,000
	3,60,000
Less: Stock (50-3)	
Bank	47,000
Debtors	1,000
Fair Value of Fixed Assets	60,000
	2,52,000

Equity Share to Public

Particulars	**Amount**
Authorized Equity Shares	30,000
Less:	
Interest Accrued on Debenture	(800)

Creditors of X	(10,000)
Preference Shareholders	(5,000)
Equity Share holders	(8,000)
O/s Dividend	(600)
Issued to Public for Cash	5,600

I. In the Books of Old Company

Realization and Reconstruction A/c

(Combined) Account

Date	Particular	Amount	Particular	Amount
	To Goodwill	5,000	By 8% Debenture	1,00,000
	To Fixed Assets	2,57,000	By Interest Accrued on	8,000
	To Stock	50,000	Debenture	1,00,000
	To Debtors	60,000	By Creditors	1,36,000
	To Bank	1,000	By P Ltd (Purchase	35,000
			Consideration)	
	To Pref. Shareholders	6,000	By Equity Share holders	
	A/c	**3,79,000**	(Loss)	**3,79,000**

Equity Share Capital A/c

Date	Particular	Amount	Particular	Amount
	To Preliminary	15,000	By Equity Share Capital	2,40,000
	Expenses	1,10,000		
	To Profit and loss A/c	80,000		
	To Equity Shares in P	35,000		
	Ltd	**2,40,000**		**2,40,000**
	To Realization A/c			

II. In the Books of New Company

Bank A/c

Date	Particular	Amount	Particular	Amount
	To Balance B/d	1,000	By Goodwill A/c	8,000
	To Equity Shares to	56,000	(Liquidation)	16,000
	Public		By Creditors	33,000
		57,000	By Balance C/d	**57,000**

III. In the Books of P Ltd

Balance Sheet as on 31/3/12

Particulars	Note No	Amount
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>	1	3,00,000
1. Share Capital	2	
2. Reserves and Surplus		
<u>II Non Current Liabilities</u>		
Long Term Borrowing	3	1,00,000
Total		**4,00,000**
<u>Assets</u>		

<u>I. Non Current Assets</u>		
1. Fixed Assets		
Tangible Assets (W.N.)		2,52,000
Intangible		8,000
<u>II. Current Assets</u>		
Inventories		47,000
Trade Receivables		60,000
Cash and Cash Equivalent		33,000
Total		**4,00,000**

Notes to Accounts

Particulars	(`) In Lakhs
<u>1.Share Capital</u>	
<u>Authorized Capital</u>	3,00,000
<u>Issued and Subscribed</u>	
30,000 Shares @ ` 10 each	
(of these 24,400 are issued for Consideration other than Cash)	3,00,000
<u>2. Long Term Borrowings</u>	1,00,000
8% Debentures	
<u>3.Intangible</u>	8,000
Goodwill	
<u>4.Inventories</u>	47,000
Stock (50,000 -3,000)	
	60,000
<u>5.Trade Receivable</u>	
Debtors	

2013

Question 32 – **May RTP – 2013**

Honey Ltd. agreed to acquire the business of Bunny Ltd. as on 31st March, 2012. On that date, balance sheet of Bunny Ltd. was summarised as follows:

Liabilities	`	Assets	`
Share Capital (fully paid shares of Rs.10 each)	3,00,000	Goodwill	50,000
General Reserve	1,35,000	Land, Buildings and Plant	3,20,000
Profit and Loss Account	55,000	Inventories	84,000
Trade Payables	10,000	Trade Receivables	18,000
		Cash and Bank balances	28,000
	5,00,000		5,00,000

The shareholders in Bunny Ltd. were to receive ` 2.50 in cash per share and 3 shares in Honey Ltd. for every two shares held - the shares in Honey Ltd. being considered as worth ` 12.50 each.

There were fractions equalling 50 shares of Honey Ltd. for which cash was paid. The directors of Honey Ltd. considered the various assets as on 31.3.12 to be valued as follows:

	`
Land	1,00,000
Buildings	2,50,000
Plant	3,50,000
Inventories	80,000
Trade receivables	18,000

The cost of liquidation of Bunny Ltd. ultimately was ` 5,000. Due to a technical hitch, the transaction could be completed only on 1st October, 2012. Till that date, Bunny Ltd. carried on trading which resulted in a profit of ` 20,000 (subject to interest) after providing ` 15,000 as depreciation. On October 1, 2012 inventory was ` 90,000; Trade receivables were ` 25,000 and trade payables were ` 15,000. There was no addition to or sale of fixed assets. However, for the purpose of amalgamation, stock on October 1, 2012 was taken at ` 86,000 only. It was agreed that the profit will belong to Honey Ltd.

You are required to

(i) Prepare Realisation Account and the Shareholders Account in the books of Bunny Ltd., and

(ii) Give journal entries in the books of Honey Ltd. as on October, 1, 2012.

Solution

I. Calculation of Purchase Consideration

Particulars	`
Cash (2.5 x 30,000)	75,000
Equity Shares	5,61,875
[(30,000 x $\frac{3}{2}$ – 50) x 12.5]	625
Cash(50 x 12.5)	6,37,500

II. In the Books of Bunny Ltd

Dr **Realization A/c** **Cr**

Date	**Particular**	**Amount**	**Date**	**Particular**	**Amount**

	To Goodwill To Land Building To Inventories To Trade Receivable To Cash/Bank (W.N.) To Equity shareholders	50,000 3,20,000 90,000 25,000 55,000 1,47,500 **6,87,500**		By Trade Payables By Depreciation By Purchase Consideration By Profit	15,000 15,000 6,37,500 20,000 **6,87,500**

Dr **Share-Holders A/c** **Cr**

Date	Particular	Amount	Date	Particular	Amount
	To Cash/Bank To Equity Shares in Honey Ltd	75,625 5,61,875		By Equity Share Capital By General reserve By Profit/Loss By Realization Profit	3,00,000 1,35,000 55,000 1,47,500
		6,37,500			**6,37,500**

Calculation of Cash

Particulars	Amount	Amount
Opening Cash		28,000
Add: Profit	20,000	
Depreciation	15,000	
Increase in Trade Payables	5,000	40,000
Less: Increase in Inventories		
Increase in Trade Receivables	6,000	
Cash Profit	7,000	(13,000)
		55,000

III. Journal Entries in the Books of Honey Ltd

Date	Particulars		L.F	Dr. `	Cr. `
1/10/12	Business Purchase A/c	Dr		6,37,500	
	To Liquidation of Bunny A/c				6,37,500
	(Being Business Purchased)				
	Land A/c	Dr		1,00,000	
	Building A/c	Dr		2,50,000	
	Plant A/c	Dr		3,50,000	
	Inventories A/c	Dr		86,000	
	Trade Receivables A/c	Dr		25,000	
	Bank A/c	Dr		55,000	
	To Provision for Depreciation				15,000
	To Trade Payables				15,000
	To Profit/Loss				20,000
	To Business Purchase				6,37,500
	To Capital Reserve A/c				1,78,500

	(Being Assets and Liabilities taken Over)			
	Liquidation of Bunny Ltd Dr		6,37,500	
	To Share Capital [44,950 x 10]			4,49,500
	To Security Premium A/c			1,12,375
	To Cash/Bank A/c			75,625
	(Being Purchase Consideration Discharged)			
	Capital Reserve A/c Dr		5,000	
	To Cash/Bank A/c			5,000
	(Being Expenses on Liquidation)			

Question 33 **May Paper – 2013**

Sun Limited.agreed to absorb Moon Limited on 31st March 2012 whose Summarized

Balance Sheet stood as follows:

Equity and Liabilities	`	**Assets**	`
Share Capital		Fixed Assets	10,50,000
1,20,000shares of `.10 each full paid	12,00,000	Investments	-
Reserve & Surplus		Current Assets.	
General reserve	1,50,000	Loans & Advances	
Secured Loan		Stock in Trade	1,50,000
Unsecured Loan		Sundry Debtors	3,00,000
Current Liabilities & Provisions			
Sundry Creditors	1,50,000		
	15,00,000		**15,00,000**

The consideration was agreed to be paid as follows:

(a) A payment in cash of ` 5 per share in Moon Ltd. and

(b) The issue of shares of ` 10 each in Sun Ltd. on the basis of two equity shares (valued at ` 15) and one 10% cum. preference share (valued at ` 10) for every five shares held in Moon Ltd.

The whole of the share capital consists of shareholdings in exact multiple of five except the following holding:

P	174
Q	114
R	108
S	42
Other Individuals	12 (Twelve members holding one share each)

It was agreed that Sun Ltd. will pay in cash for fractional shares equivalent at agreed value of shares in Moon Ltd. i.e. ` 65 for five shares of ` 50 paid.

Prepare a statement showing the purchase consideration receivables in shares and cash.

Solution

For Every 5 Shares = 2 Equity shares of ` 15 each = 2 x 15 = 30

= 1 Preference shares of ` 10 each = 1 x 10 = 10

= ` 5 cash for each share = 5 x 5 = 25

So for the block of 5 shares (FV 50) = Total payment will be ` 65

So for every share $= \frac{65}{5}$ = ` 13 per Share

Note : Any person holding fractional shares he will paid ` 13 in cash

Details	**P**	**Q**	**R**	**S**	**Others**	**Total**
No of Shares	174	114	108	42	12	1,20,000
Classification						
Divisible	170	110	105	40	-	1,19,975
Non-Divisible	4	4	3	2	12	25
Purchase Consideration						
Divisible Numbers						
Equity Shares	68	44	42	16	-	47,990
Preference Shares	34	22	21	8	-	23,995
Divisible Amount						
Equity (no x 15)	1020	660	630	240	-	7,19,850
Preference (no x 10)	340	220	215	80	-	2,39,950
Cash (Div x 5)	850	550	525	200	-	5,99,875
Non Divisible						
Cash						
(Non – Div x 13)	52	52	39	26	156	325
	2262	1482	1404	546	156	15,60,000

Question 34 **NOV RTP – 2013**

Ram Limited and Shyam Limited carry on business of a similar nature and it is agreed that they should amalgamate. A new company, Ram and Shyam Limited, is to be formed to which the assets and liabilities of the existing companies, with certain exception, are to be transferred. On 31st March, 2013, the Balance Sheets of the two companies were as under:

Ram Limited

Balance Sheet as at 31st March, 2013

Liabilities	`	**Assets**	`
Issued and Subscribed Share capital:		Freehold Property, at cost	2,10,000
		Plant and Machinery, at cost less depreciation	50,000
30,000 Equity shares of ` 10 each, fully paid	3,00,000	Motor Vehicles, at cost less depreciation	20,000
General Reserve	1,60,000	Stock	1,20,000

Profit and Loss Account	40,000	Debtors	1,64,000
Sundry Creditors	1,50,000	Cash at Bank	86,000
	6,50,000		**6,50,000**

Shyam Limited

Balance Sheet as at 31st March, 2013

Liabilities	`	**Assets**	`
Issued and Subscribed Share capital:		Freehold Property, at cost	1,20,000
		Plant and Machinery, at cost less depreciation	30,000
16,000 Equity shares of ` 10 each, fully paid	1,60,000	Stock	1,56,000
Profit and Loss A/c.	40,000	Debtors	42,000
6% Debentures	1,20,000	Cash at Bank	36,000
Sundry Creditors	64,000		
	3,84,000		3,84,000

Assets and Liabilities are to be taken at book-value, with the following exceptions:

(a) Goodwill of Ram Limited and of Shyam Limited is to be valued at ` 1,60,000 and ` 60,000 respectively.

(b) Motor Vehicles of Ram Limited are to be valued at ` 60,000.

(c) The debentures of Shyam Limited are to be discharged by the issue of 6% Debentures of Ram and Shyam Limited at a premium of 5%.

(d) The debtors of Shyam Ltd. realized fully and bank balance of Shyam Ltd, are to be retained by the liquidator and the sundry creditors of Shyam Ltd. are to be paid out of the proceeds thereof.

You are required to:

(i) Compute the basis on which shares in Ram and Shyam Limited will be issued to the shareholders of the existing companies assuming that the nominal value of each share in Ram and Shyam Limited is ` 10.

(ii) Draw up a Balance Sheet of Ram and Shyam Limited as of 1st April, 2013, the date of completion of amalgamation.

(iii) Write up journal entries, including bank entries, for closing the books of Shyam Limited.

Solution

I. Calculation of Purchase Consideration

Particular	**Ram**	**Shyam**
Assets taken over at Revised Value		
Goodwill	1,60,000	60,000
Freehold Property	2,10,000	1,20,000
Plant and Machinery	50,000	30,000
Motor Vehicle	60,000	-

Stock	1,20,000	1,56,000
Debtors	1,64,000	-
Cash	86,000	-
<u>LESS: Liabilities</u>		
6% Debentures		
(1,20,000 x 5%)		(1,26,000)
Sundry Creditors	(1,50,000)	-
Net Assets	7,00,000	2,40,000
To be Satisfied by shares @ ` 10 each	70,000 Sh.	24,000 Sh.

II. Balance Sheet of Ram and Shyam Ltd as on 1st April 2011

Particulars	Note No	Amount
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		
1. Share Capital	1	9,40,000
2. Reserves and Surplus	2	6,000
<u>II Non Current Liabilities</u>		
Long Term Borrowing	3	1,20,000
<u>III Current Liabilities</u>		
Trade Payables		1,50,000
Total		**12,16,000**
<u>Assets</u>		
<u>I. Non Current Assets</u>		
1. Fixed Assets	4	4,70,000
Tangible Assets	5	2,20,000
Intangible		
<u>II. Current Assets</u>		
Inventories	6	2,76,000
Trade Receivables	7	1,64,000
Cash and Cash Equivalent		86,000
Total		**12,16,000**

Notes to Accounts

Particulars	` in Lakhs
<u>1.Share Capital</u>	
94,000 Equity Shares @ ` 10 each	9,40,000
<u>2.Reserves and Surplus</u>	
Security Premium	6,000
<u>3. Long Term Borrowings</u>	
6% Debentures	1,20,000
<u>4.Tangible</u>	
Freehold property (2,10,00 + 1,20,000)	3,30,000
Plant and Machinery (50,000 + 30,000)	80,000
Motor vehicle	<u>60,000</u>
	4,70,000
<u>5.Intangible Assets</u>	

Goodwill (1,60,000 + 60,000)	2,20,000
<u>6. Inventories</u>	
Stock (1,20,000 – 1,56,000)	2,76,000
<u>6. Trade Receivables</u>	
Debtors	1,64,000

III. Journal Entries for Closing Books of Shyam Ltd

Date	Particulars	L.F	Dr. ₹	Cr. ₹
1	Realization A/c Dr		3,48,000	
	To Freehold Property			1,20,000
	To Plant and Machinery			30,000
	To Stock A/c			1,56,000
	To Debtors A/c			42,000
	(Being Assets transferred to Realization A/c)			
2			1,20,000	
	6% Debenture A/c Dr		64,000	
	Sundry Creditors A/c Dr			1,84,000
	To Realization A/c			
	(Being all Liabilities Transferred)			
3			1,60,000	
	Equity Share Capital A/c Dr		40,000	
	Profit and Loss A/c Dr			2,00,000
	To equity Shareholders A/c			
	(Being Equity Transferred to Shareholders			
4	A/c)		2,40,000	
				2,40,000
	Ram and Shyam A/c Dr			
	To Realization A/c			
5	(Being P.C. Recorded)		42,000	
				42,000
	Bank A/c Dr			
	To Realization A/c			
6	(Being Paid to Creditors)		64,000	
				64,000
	Realization A/c Dr			
	To Bank A/c			
7	(Being Creditors settled in cash)		2,40,000	
				2,40,000
	Shares in Ram in Shyam Dr			
	To Ram and Shyam Ltd			
	(Being Purchase Consideration Received)			
8			54,000	
				54,000
	Realization A/c Dr			

9	To Equity Shareholders A/c (Being Profit on Realization transferred to Shareholders A/c)		2,54,000	
	Equity Share holders A/c Dr To Shares in Ram and Shyam Ltd To Bank A/c (Being Payment made to Share holders)			2,40,000 14,000

Question 35 – **Nov Paper – 2013**

Following is the Extract of Balance sheet of M/s Sunny Ltd. and Money as on 31.03.2013 :

Balance Sheet Extract as on 31.03.2013

	Sunny Ltd.	**Money Ltd**
Authorised Share Capital	15,00.000	5,00,000
Equity Share Capital of ` 10 each fully paid	8,00,000.00	2,00,000.00
General Reserve	1,10,000.00	45,000.00
Profit & Loss Account	42,000.00	18,000.00
Statutory fund	16,000.00	8,000.00
Trade Payables	45,000.00	24,000.00
Provisions	95,000.00	12,000.00
	11,08,000.00	3,07,000.00
Goodwill	20,000.00	0.00
Machines & Plant	5,10,000.00	1,95,000.00
Other fixed Assets	90,000.00	15,000.00
Current Assets		
Inventories	1,85,000.00	35,000.00
Debtors	1,00,500.00	35,000.00
Prepaid expenses	24,500.00	2,000.00
Cash in Hand & Bank	1,78,000.00	25,000.00
	11,08,000.00	**3,07,000.00**

The two companies have entered into a scheme of Amalgamation and a new company Z Ltd. is formed. The Amalgamation is to take place in the following manner:

(1) For the purpose of Amalgamation a new Company Z is to be formed with a authorized Share Capital of 2,50,000 equity shares of `10 each.

(2) Z Ltd.. to issue fully paid shares to the shareholders of Sunny Ltd. and Money Ltd., at a price of ` 5 and ` 3 above the intrinsic value of the shares respectively.

(3) The scheme of amalgamation was not supported by 100 shareholders of Sunny Ltd., and had to be paid ` 10 per share above intrinsic value as consideration. The amount of the dissenting shareholders was borne by Z Ltd.,

(4) Fixed Assets of Sunny Ltd., were last revalued in the year 2009 after which there has been an increase of 15% in the values, while assets of Money Ltd. have not shown any

change in prices. The current assets of Money Ltd., include Debtors of ` 20,000/- which are considered bad.

(5) Money Ltd.'s Stock-in-trade as on 31.03.2013 includes stock of ` 25,000 purchased from Sunny Ltd., at a profit of 25% on cost price.

(6) The Statutory Fund of the companies is to be maintained by Z Ltd. for a period of 3 years.

(7) Sunny Ltd. had declared dividend of 10% on 31.03.2013 which has still not been paid.

(8) Goodwill shown in books of Sunny Ltd., was considered to be worthless.

(9) All the assets of the companies are taken over by Z Ltd. at the revalued amounts. Liabilities have to be paid in full.

Calculate the purchase consideration paid by Z to the shareholders of both the companies and prepare the Balance Sheet of Z Ltd., as per revised Schedule VI after the Amalgamation. (Notes to Balance Sheet need not form part of the answer.)

Solution

I. Calculation of Net Assets

Particular	**Sunny `**	**Money `**
Machinery and Plant	5,10,000	1,95,000
Other Fixed Assets	90,000	15,000
	6,00,000	2,10,000
Add: Increase in Price of Sunny	90,000	
(15%)	6,90,000	2,10,000
Add: Current Assets	1,85,000	30,000 [35,000 –
Inventories	1,00,500	5,000]
Debtors	24,500	15,000 [35,000 –
Prepaid Expenses	1,78,000	20,000]
Cash/Bank	(80,000)	2,000
Less: Dividend [8,00,000 x 10%]	10,98,000	25,000
Total Assets		
		2,82,000
Less: Liabilities	45,000	
Trade Payables	15,000	
Provision [95,000 –	10,38,000	24,000
80,000]		12,000
Net Assets		2,46,000

Notes :-

1. Loading on Stock = 25,000 x $\frac{25}{125}$ = 5,000
2. It is assumed that Proposed Dividend was included in Provisions

II. Calculation of Purchase Consideration

Particulars	**Sunny**	**Money**

Net Assets	10,38,000	2,46,000
No of Shares	80,000	20,000
Iv Value of Shares	12.975	12.3
Premium to be paid by Z	5	3
Amount per Shares	17.975	15.3
No of Shares Holders to Amalgamation	79,900	20,000
Amt to be Paid by Z Ltd (v x vi)	14,36,202	3,06,000
Total No of shares	1,43,620	30,600
	1,74,220	
Payment to Share Holders in Cash (12.975 + 10)	2,298 [22.975 x 100]	
Total PC	14,38,500	3,06,000

III. In the Books of Z Ltd

Balance Sheet as on 31/3/2013

Particulars	**Note No**	`
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		
1. Share Capital		17,42,200
2. Reserves and Surplus		
Statutory Funds		24,000
<u>II Non Current Liabilities</u>		
<u>III Current Liabilities</u>		
Trade Payables[45,000 + 24,000]		69,000
Short Term Provisions		27,000
Total		18,62,200
<u>Assets</u>		
<u>I. Non Current Assets</u>		
1. Fixed Assets		
Tangible Assets [6,90,000 + 2,10,000]		9,00,000
Non Tangible Assets (Goodwill)		4,60,500
2. Non Current Investments		24,000
<u>II. Current Assets</u>		
Inventories		2,15,000
Trade Receivables		1,15,500
Cash and Cash Equivalent [12,30,000 – 2,300]		1,20,700
Short Term Loans and Advances		26,500
Total		18,62,200

2014

Question 36 – May RTP – Similar to Nov 2013 RTP (RAM and Shayam)

Question 37 – **May Paper – 2014**

Dawn Ltd. was incorporated to take over Arun Ltd., Brown Ltd. and Crown Ltd. Balance Sheets of all the three companies as on 31.03.2008 are as follows:

(` in '000)

Particulars	Arun Ltd.	Brown Ltd.	Crown Ltd
Liabilities			
Equity Share Capital (Share of 110 each)	1,800	2,100	900
Reserve	300	150	300
10% Debentures	600	–	300
Other liabilities	600	450	300
Total	**3,300**	**1,800**	**1,500**
Assets:			
Net Tangible Block	2,400	1,800	1,500
Goodwill	–	150	–
Other Assets	900	750	300
Total	**3,300**	**2,700**	**1,800**

From the following information you are to:

(a) Work out the number of equity shares and debentures to be issued to the shareholders of each company.

(b) Prepare the Balance Sheet of Dawn Ltd. as on 31.3.2008.

Information:

(i) Assets are to be revalued and the revalued amount of Tangible Block and other Assets are as follows

	Tangible Block	Other Assets
Arun Ltd.	` 30,00,000	` 10,50,000
Brown Ltd.	` 15,00,000	` 4,20,000
Crown Ltd.	` 18,00,000	` 2,40,000

(ii) Normal profit on capital employed is to be taken at 10%

(iii) Average amount of profit for three years before charging interest on Debentures are:

Arun Ltd.	` 5,40,000
Brown Ltd.	` 4,32,000
Crown Ltd.	` 3,12,000

(iv) Goodwill is to be calculated at three years' purchase of average super profits for three years, such average is to be calculated after adjustment of 10% depreciation on Increase/Decrease on revaluation of Fixed Assets (Tangible Block).

(v) Capital employed being considered on the basis of net revaluation of Tangible Assets.

(vi) Equity Shares of ` 10 each fully paid up in Dawn Ltd are to be distributed in the ratio of average profit after adjustment of depreciation on revaluation of Tangible Block.

(vii) 10% Debentures of ` 100 each fully paid up are to be issued y Dawn Ltd. for the balance due.

(viii) The ratio of issue of Equity shares and debentures of Dawn ltd are to be maintained at 3:1, towards the take over companies.

(ix) The amount required for preliminary expenses of ` 1,50,000 and for payment to existing Debenture holders, were provided by issuing Equity shares of ` 10 each in Dawn Ltd.

Solution

Calculation of Goodwill (Super Profit Method)

Details	**Arun**	**Brown**	**Crown**
1. Future Maintainable Profits	4,20,000	4,62,000	2,52,000
2. Average Capital Employed	28,50,000	14,70,000	14,40,000
3. Normal Rate of Return	10%	10%	10%
4. Normal Profits (Step 2 x Step 3)	2,85,000	1,47,000	1,44,000
5. Super Profits (Step 1 – Step 4)	1,35,000	3,15,000	1,08,000
6. Goodwill (Step 5 x 3 yrs purchase)	4,05,000	9,45,000	3,24,000

Working Notes

1. Future Maintainable Profits

Particulars	**Arun**	**Brown**	**Crown**
Average Profits	5,40,000	4,32,000	3,12,000
Less : Interest on Debentures	(60,000)	-	(30,000)
Add / Less : Depreciation	(60,000)	30,000	(30,000)
Adjusted Profits	4,20,000	4,62,000	2,52,000

2. Capital Employed

Particulars	**Arun**	**Brown**	**Crown**
Tangible Trading Assets			
Tangibles	30,00,000	15,00,000	18,00,000
Other Assets	10,50,000	4,20,000	2,40,000
Total	40,50,000	19,20,000	20,40,000
Less External Liabilities			
10% Debentures	6,00,000	-	3,00,000
Other Liabilities	6,00,000	4,50,000	3,00,000
Total	12,00,000	4,50,000	6,00,000
Adjusted Profits	28,50,000	14,70,000	14,40,000

Calculation of Purchase Consideration (Net Asset Method)

Details	**Arun**	**Brown**	**Crown**
Capital Employed	28,50,000	14,70,000	14,40,000
Add Goodwill	4,05,000	9,45,000	3,24,000
PC	32,55,000	24,15,000	17,64,000

Total PC	74,34,000		
	Equity(3) 55,75,500	Debenture(1) 18,58,500	
	Arun	Brown	Crown
Equity (In Ratio of Profits)	20,65,000	22,71,500	12,39,000
Balance (Debtures)	11,90,000	1,43,500	5,25,000
Total	32,55,000	24,15,000	17,64,000

Additional Transactions

1.	Preliminary Expenses	1,50,000	
	To Equity share Capital		1,50,000
2.	10% Debentures	9,00,000	
	To Equity share Capital		9,00,000

Balance Sheet of X Ltd. After Amalgamation

	Particulars	Note	`
	<u>Equity & Liabilities</u>		
I	Share holders funds		
a	Share Capital	1	66,25,500
II	Non current liabilities		
a	Long term borrowings	2	18,58,500
III	<u>Current liability</u>		13,50,000
			98,34,000
	<u>Assets</u>		
I	Non current assets		
a	Fixed Assets		
	Tangible Assets		63,00,000
	Intangibles	3	16,74,000
II	<u>Current Assets</u>		17,10,000
a	Other Current Assets	4	1,50,000
			98,34,000

Note to Balance Sheet

Note 1 : Share capital	
6,62,550 Equity Shares of Rs. 10/- each	66,25,500
(Out of the Above, all the shares are issued for consideration other than cash)	
	66,25,500
Note 2 : Long term borrowings	

10% Debentures	18,58,500
Note 3 : Tangible assets	
Goodwill	16,74,000
	16,74,000
Note 4 : Other Current Assets	
Preliminary Expenses	1,50,000
	1,50,000

Question 38 – Nov RTP – 2014 - Similar to Nov 2011 Paper

Question 39 – **Nov Paper – 2014**

The Summarised Balance Sheets of 'S' Limited and .H' Limited as on 30th June 2014 were as follows:

`.in Crores

	S Limited		H Limited	
Equity and Liabilities				
Equity Share Capital		80		25
Reserve and Surplus		400		75
10%, 25,00,000 Debentures of Rs.100 each		-		25
Non-Current Liabilities				
Other Liabilities		120		-
Current Liabilities		356		200
Total Liabilities		956		325
Assets				
Fixed Assets (At Cost)	200		75	
Less : Depreciation	100	100	50	25
Investment in 'H' Limited				
2 Crores Equity shares of Rs.10 each at cost	32			
10%, 25,00,000 Debentures of Rs.100 each at Cost	24	56	-	-
Current Assets		800		300
Total Assets		956		325

In a duly approved scheme of absorption, 'S' Limited took over the assets of 'H' Limited at an agreed value of Rs.330 Crores and the liabilities were .taken over at book value. Other Shareholders of 'H' Limited were allotted equity shares in 'S' Limited at a premium of ` 90 per share in satisfaction of their claim. ‘S' Limited valued the Fixed assets taken over at ` 40 Crores and all other assets and liabilities were recorded at book value. The scheme/of absorption was completed on 1st July 2014.

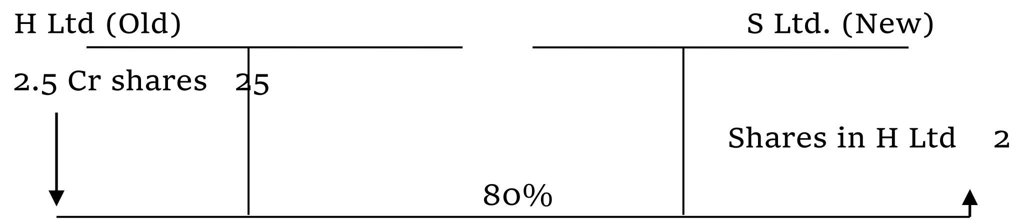
You are required to :

(a) Pass necessary Journal entries in the books of 'S' Limited to record the transactions.

(b) Prepare the Balance Sheet of 'S' Limited after absorption in the Revised Schedule VI format along with Notes to accounts.

Solution

I. Inter-company Analysis



II. Calculation of PC (Net Assets Method)

Particulars	**` in Crores**
Agreed Value	330
Less: Current Liabilities	(200)
10% Debentures	(25)
	105
Less: Share Held by S Ltd (80%)	84
PC	21

III. Discharge of PC = 21/100 = 0.21 shares (FV = 10 / Security Premium 90)

IV. Journal Entries of S Ltd

Date	**Particulars**		**L.F**	**Dr. ` in Crores**	**Cr. ` in Crores**
1)	Business Purchase A/c	Dr		21	
	To Liquidators of H Ltd				21
	(Being Business Purchase)				
	Fixed Assets A/c	Dr		40	
2)	Current Assets A/c	Dr		300	
	To Capital Reserve A/c				25
	To 10% Debenture A/c				200
	To Current Liabilities A/c				21
	To Business Purchase A/c				32
	To Investments A/c				
	(Being Assets and Liabilities Taken Over)				
3)				21	
	Liquidators of H Ltd A/c	Dr			2.1
	To Equity Share Capital A/c				18.9
	To Security Premium A/c				
	(Being PC Discharged)				
4)				25	
	10% debenture A/c				1
	To Capital Reserve A/c				24
	To 10% Debentures A/c				
	(Being 10% Debenture Discharged)				

V. Balance Sheet of S Ltd

Particulars	Note No	Amount
<u>Equity and Liabilities</u>		
<u>I. Share holders Fund</u>		82.1
1. Share Capital		481.9
2. Reserves and Surplus		
<u>II Non Current Liabilities</u>		120
Other Liabilities		
<u>III Current Liabilities [356 + 200]</u>		556
Total		1,240
<u>Assets</u>		
<u>I. Non Current Assets</u>		
1. Fixed Assets		140
Tangible Assets [40 + 100]		
<u>II. Current Assets [800 + 300]</u>		1,100
Total		1,240

Notes to Accounts

Particulars	**` in Lakhs**
<u>1.Share Capital</u>	
8 Crores Shares @ ` 10 Each	80
21,00,000 Shares @ ` 10 Each	2.1
(out of these 0.21 Crore Shares are issued for Consideration other than Cash)	
<u>2.Reserves and Surplus</u>	
Security Premium	18.9
Reserves and Surplus	400
Capital Reserve	63

2015

Question 40 **May RTP – 2015**

AB Ltd. and CD Ltd. two private companies, decide to amalgamate their business into a new holding company EF Ltd., which was incorporated on 1st August, 2014 with an authorised capital of ` 40,00,000 in equity shares of ` 10 each. The new company plans to commence operations on 1st October, 2014.

From the information given below, and assuming that all transactions are completed by 31st March, 2015, you are required to:

(a) Prepare Projected Statement of Profit & Loss of EF Ltd. for the six months ending 31st March, 2015.

(b) Prepare Projected Balance Sheet of EF Ltd. as on 31st March, 2015.

(c) Show the computation of number of shares to be issued to the former shareholders of AB Ltd. and CD Ltd.

Information

(1) EF Ltd. will acquire the whole of the Equity share capital of AB Ltd. and CD Ltd. by issuing its fully paid own shares.

(2) The number of shares to be issued is to be calculated by multiplying the future annual maintainable profits available to the Equity shareholders in each of the two companies by agreed price earnings ratios.

The following information is relevant:

	AB Ltd. (`)	CD Ltd. (`)
Equity Shares of ` 10 each fully paid	10,00,000	4,00,000
8% Cumulative Preference shares		1,00,000
10% Debentures	2,00,000	
Future annual maintainable pre tax profits (before interest/dividend)	2,30,000	1,12,000
Price Earnings Ratio	10 times	8 times

(3) Shares in the holding company are to be issued to the shareholders in subsidiary companies at a premium of 20% and thereafter these shares will be marketed on the stock exchange.

(4) It is expected that the Group profits of the new company in 2014-15 will be at least ` 4,50,000 but that will be required as additional working capital to facilitate expansion. Accordingly it is planned to make a further issue of 37,500 Equity shares to the public for cash at a premium of 30% on 1st February, 2015. The new shares will not rank for interest/dividend to be paid on 31st March, 2015.

(5) Out of the proceeds of the right issue EF Ltd. will advance ` 2,50,000 to AB Ltd. and ` 2,00,000 to CD Ltd. on 1st February, 2015 for working capital. These advances will carry interest @ 15% p.a. to be paid monthly.

(6) Preliminary Expenses are estimated at ` 8,000 and Administrative Expenses for the half-year ended 31st March, 2015 at ` 16,000 but this expenditure will be covered by temporary overdraft facility. It is estimated that Interest on Bank Overdraft cost will be ` 1,600 in the first six months.

(7) A provision for ` 7,500 should be made for Directors Fee for the half-year.

(8) On 31st March, 2015, Interim Dividends on Equity Shares, will be paid by AB Ltd. @ 5%, by CD Ltd. @ 4.4% and by EF Ltd. @ 4%.

(9) Income tax is to be taken @50% for calculation of number of shares. However, ignore tax effect while preparing Projected Statement of Profit and Loss.

Solution

No of Shares to be Issued

Particulars	AB Ltd (`)	CD Ltd (`)
Future EBIT	2,30,000	1,12,000
Less: Interest (2,00,000 x 10%)	(20,000)	
	2,10,000	1,12,000

Less: Income Tax	(1,05,000)	(56000)
	1,05,000	56,000
Less: Preference Dividend		(8,000)
Profit to Equity	1,05,000	48,000
Share Holders	10	8
Capitalized Earnings	10,50,000	3,84,000
No of Shares	87,500	32,000
	10,50,000 / 12	3,84,000 / 12

II. Profit/Loss A/c (Projected) for Year Ending 31/03/15

Date	Particular	Amount	Date	Particular	Amount
	To Interest on Bank O/d To Preliminary Expenses To Administrative Expenses To Director's Fees To Profit before Tax	1,600 8,000 16,000 7,500 45,750		By Interest (4,50,000 x 15% x 2/12) By Dividend [(10,00,000 x 5%)+(4,00,000 x 4.4%)]	11,250 67,600
		78,850			78,850

III. Projected Balance Sheet of EF Ltd

Particulars	Note No	`
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		15,70,000
2. Reserves and Surplus		3,49,450
II Non Current Liabilities		
III Current Liabilities		
Other Current Liabilities		23,500
Total		19,42,950
Assets		
I. Non Current Assets		
1. Non Current Investments		14,34,000
II. Current Assets		
Cash and Cash Equivalent		58,950
Short Term Loans and Advances		4,50,000
Total		19,42,950

Notes of Accounts

Particulars	` In Lakhs
1.Share Capital	
Authorized Share Capital	
4,00,000 Shares @ ₹ 10 Each	40,00,000
Issued Share Capital	
1,57,000 Equity Shares @ 10 each	15,70,000
(of these, 1,19,500 Share are Issued for consideration other than cash)	

<u>2.Reserves and Surplus</u>		3,51,500
Security Premium [2,39,000+1,15,500]		
Profit And Loss	45,750	(2,050)
Less: Interim Dividend	<u>(47,800)</u>	
[1,19,500 x 10 x 4%]		3,49,450
		7,500
<u>3.Other Current Liabilities</u>		16,000
Directors Fees		23,500
Bank Overdraft		
		10,50,000
<u>4.Non-Current Investment</u>		3,84,000
Shares of AB @ 12 Ltd		14,34,000
Shares of CD @ 12 Ltd		

Bank A/c

Date	Particular	Amount	Date	Particular	Amount
	To Interest Income	11,250		By Preliminary Expenses	8,000
	To Dividend (CD)	17,600		By Interest on Bank	1,600
	To Dividend (AB	50,000		Overdraft	2,50,000
	To Equity Share Capital	3,75,000		By Advance to AB	2,00,000
	A/c	1,12,500		By Advance to CD	47,800
	To Security Premium			By Interim Dividend	58,950
	(37,500 x 3)			By Balance C/d	
		5,66,350			**5,66,350**

Question 41 **May Paper – 2015**

XY Limited has been incorporated with an Authorized Capital of 70 Lakhs Equity Shares of ` 10 each and 4 Lakhs Preference Shares of ` 100 each. The Subscribers to the Memorandum of Association have subscribed and paid for 1 Lakh Equity Shares. The expenses of incorporation incurred amounted to ` 8.09 Lakhs.

XY Limited desires to amalgamate X Limited and Y Limited as at 1st April, 2015. Following information is available.

Balance Sheet as on 31st March 2015 (Amounts in ` Lakhs)

	Liabilities	X Ltd.	Y Ltd.
Share Capital	Equity Shares (FV 100)	750	725
	10% Preference shares (FV 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	12.5 % Debentures (FV 100)	50	28
	Unsecured Loans	25	0
Current Liabilities	Trade Payables	165	75

	Total	**1900**	**1325**
	Assets		
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
	Total	**1900**	**1325**

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 ` 330 Lakhs.

(iii) Y Limited will revalue its Plant and Machinery at ` 220 Lakhs.

(iv) Investments will be disposed off. X Limited sold its Investments for ` 67 Lakhs and Y Limited disposed the same for ` 52 Lakhs.

(v) Debentureholders of X Limited and Y Limited will be discharged by XY Limited by issued of 15% Debentures of ` 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 ` 25.

(vii) Equity Shares in XY Limited will be issued as under:

(a) Shareholders of X Limited in the ratio of 4:1 at ` 35 per Share, and

(b) Shareholders of Y Limited in the ratio of 3:1 at ` 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.

Solution

I. Calculation of Purchase Consideration

	X Ltd.	**Y Ltd.**
<u>Equity Shares</u>		
Ratio	4 : 1	3 : 1
Old No	7.5	7.25
New No	7.5 x 4 = 30	7.25 x 3 = 21.75
Issued at	` 35 / share	` 32 / share

Total Value	30 x 35 = ` 1050	21.75 x 32 = ` 696
Preference Shares Ratio Old No New No Issued At Total Value	 2 : 3 4.2 4.2 x 2 / 3 = 2.8 ` 125 / share 2.8 x 125 = ` 350	 2 : 3 1.8 1.8 x 2 / 3 = 1.2 ` 125 / share 1.2 x 125 = ` 150
Total	1400	846
Total PC	2246	

II. Calculation of Debentures to be issued

Total Debentures of X Ltd. & Y Ltd. (50 + 28) = ` 78 lakhs

Interest on Debentures @12.5 % = ` 9.75 lakhs

15% debentures issued to give same interest = 9.75 / 15% = ` 65 lakhs

III. Balance sheet of X Ltd and Y Ltd as 31/3/2015

Particulars	X Ltd	Y Ltd
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		
Equity share Capital	750	725
Preference share Capital	420	180
2. Reserves and Surplus	529	369
II Non Current Liabilities		
Long Term Borrowing	50	28
III Current Liabilities (Trade Payable)	165	75
Total	**1914**	**1377**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Land and Building	517	330
Plant and Machinery	310	220
II. Current Assets		
Inventories	345	254
Trade Receivables	345	270
Cash and Cash equivalent	397	303
Total	**1914**	**1377**

IV. Calculation of Goodwill / Capital Reserve for combined company

Particulars	X Ltd	Y Ltd	Total
Assets Taken Over			
Land and Building	517	330	847
Plant and Machinery	310	220	530
Trade Receivable	345	270	615
Inventories	345	254	599

Cash and Cash Equivalent	397	303	700
Total	1914	1,377	3,291
Less Liabilities Taken Over			
Trade Payables	165	75	240
Debentures	41.67	23.30	65
Total	206.67	98.30	305
Net Worth			2986
Purchase Consideration			(2246)
Capital Reserve			740

V. Balance sheet of Combined Firm

Particulars	Note No	Amt (`)
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital		927.5
2. Reserves and Surplus		2068.5
II Non Current Liabilities		
Long Term Borrowing		65
III Current Liabilities		
Trade Payable		240
Total		**3,301**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets		1377
II. Current Assets		
Inventories		599
Trade Receivables		615
Cash and Cash equivalent		701.91
Other Current Assets		8.09
Total		**3301**

Question 42 **Nov 2015 – RTP**

The following are the balance sheet of A Ltd and B Ltd. as on 31st March, 2015

Liabilities	A Ltd.	B Ltd.
Share Capital		
Equity Shares of ` 10 each Fully Paid	45,00,000	10,00,000
8% Preference shares of ` 10 each fully paid	-	5,00,000
General Reserve	3,50,000	3,10,000
Profit and Loss Account	6,34,000	60,000
10% Debentures	-	8,00,000
Current Liabilities	6,00,000	3,80,000
Total	**60,84,000**	**30,50,000**
Assets		
Fixed Assets	30,50,000	730,000
30,000 Equity shares of B Ltd.	3,00,000	-

90,000 Equity shares of A Ltd.	-	10,00,000
Debtors	12,70,000	4,50,000
Stock	8,40,000	5,50,000
Bank Balance	6,24,000	3,20,000
Total	**60,84,000**	**30,50,000**

A Ltd absorbs B Ltd on the basis of intrinsic value of both the companies as on 31st March, 2015. It is informed that the preference shares of B Ltd. do not have priority over payment of capital and dividend. Before absorption, A Ltd declared dividend of 8% Dividend tax is 10%.

Prepare Balance sheet of A Ltd., after the absorption of B Ltd. with necessary notes to accounts.

Solution

I. Balance Sheet of A Ltd (After absorption of B Ltd) as on 31st March, 2015

Particulars	**Notes**	**(`)**
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	1	49,73,950
2. Reserves and Surplus	2	7,56,040
II Non Current Liabilities		
Long Term Borrowing		8,00,000
III Current Liabilities		9,80,000
Total		**75,09,990**
Assets		
I. Non Current Assets		
1. Fixed Assets		
Tangible Assets (30,50,000 + 7,30,000)		37,80,000
II. Current Assets		
Inventories		13,90,000
Trade Receivables		17,20,000
Cash and Cash equivalent		6,19,990
Total		**75,09,990**

Notes to Account

1. Share Capital 4,97,395 shares of ` 10 each fully paid (out of the services 47,395 shares are allotted for consideration other than cash)	49,73,950
2. Reserves and Surplus General Reserve Profit and Loss A/c (6,34,000 – 3,60,000 – 36,000)	4,46,000 2,38,000 72,040 7,56,074

Securities Premium A/c (47,395 x 1.52)	

II. Calculation of IV

	A Ltd	**B Ltd.**
Assets at Revised Value		
Fixed Assets	30,50,000	7,30,000
Debtors	12,70,000	4,50,000
Stock	8,40,000	5,50,000
Bank	6,24,000	3,20,000
Dividend Receivable	-	72,000
Total Assets	57,84,000	21,22,200
Less Liabilities at Revised Value		
10% Debentures	-	8,00,000
Current Liabilities	6,00,000	3,80,000
Proposed Dividend (Including Div Tax)	3,96,000	-
Total Liabilities	9,96,000	11,80,000
Net Assets Excluding Investment	47,88,000	9,42,000
Add Investment	0.2 y	0.2x
Net Assets Including Investment	X	Y

Equation 1 ---- x = 47,88,000 + 0.2Y

Equation 2 ---- Y = 9,42,000 + 0.2 x

Replacing 2 in 1

X = 47,88,000 + 0.2 (9,42,000 + 0.2x)

X = ` 51,83,750

IV (A) = 51,83,750 / 4,50,000 = ` 11.52 / share

Replacing X = 51,83,750 in equation 2

Y = 9,42,000 + 0.2 x

Y = ` 19,78,750

IV (B) = 19,78,750 / 1,50,000 = ` 13.19 / share

Calculation of Purchase Consideration (A Absorbs B)

No of shares held by outsiders = 1,00,000 – 30,000 + 50,000 = 1,20,000

Intrinsic value of shares = 1,20,000 x 13.19 = ` 15,82,800

Total no of shares to be held by A Ltd = $\frac{15,82,800}{11.52}$ = 1,37,395.83

Less Shares already held = 90,000

Shares to be issued = 47,395.83

Purchase consideration

Shares = 47,395.83 x 11.52 = 5,45,990

Cash = 0.83 x 11.52 10

Total = 5,46,000

Question 43 **Nov 2015 Paper**

The balance sheet of White Ltd. as at 31st March, 2015 is given below. In it, the respective shares of the company's two divisions namely E Division and N Division in the various assets and liabilities have also been shown.

(All amounts in Lakhs of Rupees)

	E Division	N Division	Total
Fixed assets :			
Cost	975	510	
Less: Depreciation	340	240	
Written-down value	635	270	905
Investments			175
Net Current assets:			
Current assets	525	645	
Less: Current liabilities	(275)	(305)	
	250	340	590
			1,670
Financed by :			
Loan funds		20	530
Own funds			
Equity share capital: Shares of Rs.10 each			420
Reserves and surplus			720
			1,670

Loan funds included, inter alia, bank loans of ` 20 crore specifically taken for N Division and debentures of the paid up value of Rs.200 crore redeemable at any time between 1st Dec, 2014 and 30th September,2015.

Div N has been invariably suffering losses. The company sold this div N along with its assets and liabilities to a newly formed company Bright Ltd. Which was incorporated with an authorized capital of ` 1,200 Lakhs, divided into shares of ` 10 each.

Bright Ltd. allotted to white Ltd’s shareholders its two fully paid equity shares of ` 10 each held in white Ltd. as discharge of consideration for the division taken – over.

Bright Ltd. recorded in its books the fixed assets at ` 400 Lakhs, current assets at ` 450 Lakhs and liabilities at the same value at which they appeared in the books of white Ltd.

On 1st April, 2015, white Ltd. sold all investments for ` 200 Lakhs and redeemed debentures liability at 10% discount, which was included in loan funds. The cash transaction being recorded in the bank account pertaining to E Division.

(i) Show the journal entries in the books of White Ltd.

(ii) Prepare White Ltd's balance sheet immediately after the demerger and the initial balance sheet of Bright Ltd.

(iii) Calculate the intrinsic value of the share of white Ltd. immediately before the demerger and after the demerger and

(iv) Comment on the impact of demerger on "Shareholders wealth".

Solution

Calculation of Purchase Consideration			Calculation of Capital Reserve for White		Calculation of Goodwill For Bright Ltd.	
			Fixed Assets	270	Fixed Assets	400
New	Old		Current Assets	645	Current Assets	450
2	1			915		850
			Current Liabilities	305	Current Liabilities	305
84	42		Loan	20	Loan	20
X 10				325		325
840	Purchase Consideration		Net Assets	590	Net Assets	525
			PC	840	PC	840
			Capital Reserve	250	Goodwill	315

I. Journal Entries in the Books of Z Ltd

Date	Particulars		L.F	Dr (Rs. in Crores)	Dr (Rs. in Crores)
	Before Demerger				
	Cash/Bank A/c	Dr		200	
	To Investments				175
	To Profit/Loss				25
	(Being Investment Sold)				
	Debenture A/c	Dr		200	
	To Cash/Bank				180
	To Discount A/c (P & L)				20
	(Being Debentures Redeemed)				
	After Demerger				
	Y Ltd A/c	Dr		840	
	PFD A/c	Dr		240	
	Current Liabilities A/c	Dr		305	
	Loan A/c	Dr		20	
	To Capital Reserve A/c				250
	To Fixed Assets A/c				510
	To Current Assets A/c				645
	(Being Assets and liabilities transferred)				
	Capital Reserve A/c	Dr		250	
	Profit and loss A/c	Dr		590	
	To Y Ltd				840
	(Being Amount Due from Y Ltd. written off)				

II. Balance Sheet of White Ltd ` in Crores

Particulars	After De-Merger	Before De-Mergerccc
Equity and Liabilities		
I. Share holders Fund		
1. Share Capital	420	420
2. Reserves and Surplus	175	765
II Non Current Liabilities		
Long Term Borrowing	310	330
III Current Liabilities	275	580
Total	**1180**	**2095**
Assets		
I. Non Current Assets		
1. Fixed Assets	635	905
Tangible Assets		
II. Current Assets	545	1190
Total	**1180**	**2095**

II. Balance Sheet of Bright Ltd

Particulars	` in Crores
Equity and Liabilities	
I. Share holders Fund	
1. Share Capital	840
II Non Current Liabilities	
Long Term Borrowing	20
III Current Liabilities	305
Total	**1165**
Assets	
I. Non Current Assets	
1. Fixed Assets	
Tangible Assets	400
Intangible Assets	315
II. Current Assets	450
Total	**1165**

III. Calculation of Intrinsic Value

	Before (White)	After (White)	After (Bright)
Assets	2095	1180	850 (1165 – 315)
Less: Liabilities	910	585	325
	1185	595	525
No of Shares	42	42	84
IV	28.21428	14.166	6.25

Iv. Loss per share to share holders of White Ltd

Before De – Merger	`	`
IV of White Ltd		28.214
After De – Merger IV of White Ltd.	14.166	

IV of Bright Ltd. (x 2)	12.5	328.666
Gain Per Share		1.548

Note : The Gain per share can be proved by = [1.548 x 42] = 65 (315 – 250)

❑ ❑ ❑

2 Chapter

Consolidation of Financial Statements

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	Yes	Yes	Yes	Yes
2009	Yes	Yes	Yes	Yes
2010	Yes	Yes	Yes	Yes
2011	Yes	Yes	Yes	Yes
2012	Yes	Yes	Yes	Yes
2013	Yes	Yes	Yes	Yes
2014	Yes	Yes	Yes	Yes
2015	Yes	Yes	Yes	Yes

2008

Question 1 – **May RTP – 2008**

The following information has been extracted from the Books of 'X' Limited group (as at 31st December, 2009):

	X Ltd.	Y Ltd.	Z Ltd.		X Ltd.	Y Ltd.	Z Ltd.
Share capital				Fixed Assets Less Depreciation	4,20,000	3,76,000	5,22,000
(Full paid equity shares of `.10 each)	8,00,000	6,00,000	4,00,000	Investment at Cost	6,30,000	4,00,000	-
Profit & Loss A/c.	2,10,000	1,90,000	1,28,000	Current Assets	1,20,000	60,000	40,000
Dividend Received :							
From Y Ltd. in 2005	60,000						
From Y Ltd. in 2006	60,000						
From Z Ltd. in 2006		36,000					
Current Liabilities	40,000	10,000	34,000				
	11,70,000	**8,36,000**	**5,62,000**		**11,70,000**	**8,36,000**	**5,62,000**

All the companies pay dividends of 12 percent of paid-up share capital in March following the end of the accounting year. The receiving companies account for the dividends in their books when they are received.

'X' Limited acquired 50,000 equity shares of Y Ltd. on 31st December, 2007.

'Y' Limited acquired 30,000 equity shares of Z Ltd. on 31st December, 2008.

(93)

The detailed information of Profit and Loss Accounts is as follows:

	X Ltd.	**Y Ltd.**	**Z Ltd.**
Balance of Profit and Loss Account on 31st December, 2007 after dividends of 12% in respect of calendar year 2007, but excluding dividends received	86,000	78,000	60,000
Net profit earned in 2008	1,20,000	84,000	56,000
	2,06,000	1,62,000	1,16,000
Less – Dividends of 12% (paid in 2009)	96,000	72,000	48,000
	1,10,000	90,000	68,000
Net profit earned in 2009 (Before taking into account proposed dividends of 12% in respect of calendar year 2009)	1,00,000	1,00,000	60,000
	2,10,000	**1,90,000**	**1,28,000**

Taking into account the transactions from 2007 to 2009 and ignoring taxation, you are required to prepare:

(i) The Consolidated Balance Sheet of X Limited group as at 31st December, 2009.

(ii) The Consolidated Profit and Loss Account for the year ending 31st December, 2009.

(iii) Cost of control.

(iv) Minority shareholders interest.

Solution

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		8,00,000
	Reserves and Surplus		3,04,833
	Minority Interest		2,71,167
II	Non Current Liabilities		
III	Current Liabilities		84,000
	Short Term Provisions		96,000
	Total		**15,56,000**

Assets			
I	Non Current Assets Fixed Assets Tangible Assets Intangible Assets		 13,18,000 18,000
II	Current Assets		2,20,000
	Total		**15,56,000**

Working Notes

		X in Y	Y in Z
1.	Book Value of Investments	6,30,000	4,00,000
	- Paid up Value of Investment	5,00,000	3,00,000
	Goodwill / (Capital Reserve)	1,30,000	1,00,000
2.	Capital Reserve		
	Pre Acquisition Dividend	60,000	36,000
	Reserves	65,000	51,000
		1,25,000	87,000
	Cost of Control	5,000	13,000
		Goodwill	Goodwill
	Net	18,000 goodwill	
3.	Reserves of Holding Company		
	Profit and Loss A/c	2,10,000	
	Dividend Received	60,000	
	Proposed Dividend	(96,000)	
	Reserves (Y)	1,30,833	
	Total	3,04,833	
4.	Minority Interest	X	Y
	Share Capital	1,00,000	1,00,000
	Reserves	39,167	32,000
		1,39,167	1,32,000

5. Share Capital of Subsidiary Company

X in Y (on 31/12/07) 60,000 → 50,000 (5/6 X) ; 10,000 (Minority)

Y in Z (on 31/12/08) 40,000 → 30,000 (3/4 Y) ; 10,000 (Minority)

6. Reserves of Subsidiary Company

Z Ltd 1,28,000

1,16,000

- 48,000

68,000 60,000

51,000 17,000 45,000 15,000

Y – CP Minority Y – RP Minority

<u>Y Ltd</u> 1,90,000

84,000

<u>- 72,000</u>

12,000

<u>+ 1,00,000</u>

78,000 1,12,000

<u>+ 45,000</u>

1,57,000

65,000 13,000 1,30,833 26,167

X – CP Minority X – RP Minority

Question 2 – **May Paper – 2008**

Astha Ltd. acquired 80% of both classes of shares in Birat Ltd. on 1.4.2007. The draft Balance Sheets of two companies on 31st March, 2008 were as follows :

` in 000's

Liabilities	Astha Ltd.	Birat Ltd.	Assets	Astha Ltd.	Birat Ltd.
Share Capital:			Plant & Machinery	2,060	600
Equity shares of ` 10			Furniture & Fixture	600	540
each, fully paid up	3,000	600	Investments		
14% Preference shares of			Equity Shares of Birat Ltd	1,920	--
` 100 each, fully paid up	–	400	Preference shares		
General reserve	1,900	40	of Birat Ltd.	320	–
Profit and Loss A/c	1,600	720	Stock	680	404
Creditors	300	320	Debtors	560	316
			Cash at Bank	660	220
Total	**6,800**	**2,080**		**6,800**	**2,080**

Note : Contingent liability - Astha Ltd : Claim for damages lodged by a contractor against the company pending in a law-suit – ` 1,55,000.

Additional Information:

(i) General reserve balance of Birat Ltd. was the same as on 1.4.2007.

(ii) The balance in Profit and Loss A/c of Birat on 1.4.2007 was ` 3,20,000 out of which dividend of 16% p.a. on the then Equity capital of ` 6,00,000 was paid for the year 2006-07.

(iii) The dividend in respect of preference shares of Birat Ltd. for the year 2007-08 was still payable as on 31.3.2008.

(iv) Astha Ltd. credited its Profit and Loss A/c for the dividend received by it from Birat Ltd. for the year 2006-07.

(v) Sundry creditors of Astha Ltd. included an amount of ` 1,20,000 for purchases from Birat Ltd. on which the later company made a loss of ` 10,000.

(vi) Half of the above goods were still with the closing stock of Astha Ltd. as at 31.3.2008.

(vii) At the time of acquisition by Astha Ltd. while determining the price to be paid for the shares in Birat Ltd. it was considered that the value of Plant and Machinery was to be increased by 25% and that of Furniture and Fixtures reduced to 80%. There was no transaction of purchase or sale of these Assets during the year. The Directors wish to give effect to these revaluations in the Consolidated Balance Sheet.

(viii) The Directors of Astha Ltd. Are of opinion that disclosure of its Contingent liability will seriously prejudice the company's position in dispute with the contractor.

Prepare consolidated Balance Sheet as at 31st March, 2008, assuming the rate of depreciation charged as 25% p.a. and 10% p.a. on Plant and Machinery and Furniture and Fixtures respectively. Working should be part of the answer.

Solution

Consolidated Balance Sheet of Astha Ltd. and its subsidiary Birat Ltd. as at 31/03/08 as per revised schedule III.

Particulars			`
I)	Equity and liabilities		
	A)	Shareholders fund	
		Share Capital	3000
		Reserves and surplus	3793.6
		Minority Interest	361.4
	B)	Current Liabilities	
		Trade Payable (620 – 120)	500
			7655
II)	Assets		
	A)	Non-Current Assets	
		Fixed Assets	
		Tangible	3842
		Intangible	1088
	B)	Current Assets	
		Inventory (680 + 404 + 5)	1089
		Trade Receivables (560 + 316 – 120)	756
		Cash and Cash equivalents	880
			7655

Working Notes :

WN 1 Book value of investments 2240

	(–) Paid up of Investments	<u>800</u>
	Goodwill	<u>1440</u>
WN 2	<u>Capital Reserve</u>	
	Pre-acquisition dividend	76.8
	Reserves	<u>275.2</u>
		<u>352</u>
	Cost of control (Net of 1 and 2)	<u>1088 – Goodwill</u>
WN 3	<u>Revenue Reserve</u>	
	General Reserve	1900
	Profit and Loss A/c	1600
	(–) Pre-acquisition dividend (96 × 80%)	(76.8)
	Loss on Stock Reserve (80%)	4
	Reserve	<u>366.4</u>
		<u>3793.6</u>
WN 4	<u>Minority Interest</u>	
	Equity share capital	120
	Preference Share Capital	80
	Loss on stock capital (20%)	1
	Reserve	<u>160.4</u>
		<u>361.4</u>

WN 5 Share Capital

Equity 60

48 — 80% — Holding

12 — 20% — Minority (` 10)

Preference 4

3.2 — H – 80%

0.8 — M – 20% (`.100)

WN 6 Reserve

General reserve 40 Pre.

Profit & Loss		720	31/3/08
1/4/07	320		
(–) Div.	96 (600000 × 16%)		
Pre.	224		496 Post

Total of General Reserve and Profit and Loss A/c

Pre.	264	Post	496	
+ Plant	200	– Dep.	50	Plant
– Fur.	120	+ Dep.	12	Fur.
	344		458	

275.2	68.8	366.4	91.6
Holding	M.	Holding	M.
CR		R.R.	

WN 7 Tangibles

Plant

Ashta	2060
Birat	750
(600 + 200 – 50)	

Furniture

Astha	600
Birat	432
(540 – 120 + 12)	
	3842

Plant	Current Position	Revised Position
Opening	800	1000
(–) Dep.	(200)	250
Closing	600	750

Furniture		
Opening	600	480
(–) Dep.	60	48
Closing	540	432

WN 8 Stock Reserve

Loss on sales (For Birat)

10000

50%

i.e. 5000

4000 1000

80% H. 20% M.

Question 3 – NOV RTP – 2008

From the following summarized Balance Sheets of a group of companies and the other information provided, draw up the consolidated Balance Sheet as on 31.3.2008.

Balance Sheets as on 31.3.2008 (Rs. in lakhs)

	X	Y	Z		X	Y	Z
Shares capital (in shares of Rs.100 each)	300	200	100	Fixed Assets less Depreciation	130	150	100
Reserves	50	40	30	Cost of investment in Y Ltd.	180	-	-
Profit and loss balance	60	50	40	Cost of investment in Z Ltd.	40	-	-
Bills payables	10	-	5	Cost of investment in Z Ltd.	-	80	-
Creditors	30	10	10	Stock	50	20	20
Y Ltd. balance	-	-	15	Debtors	70	10	20
Z Ltd. balance	50	-	-	Bills receivables	-	10	20
				Z Ltd. balance	-	10	-
				X Ltd. balance	-	-	30
				Cash and bank balance	30	20	10
	500	**300**	**200**		**500**	**300**	**200**

Additional information :

(a) X Ltd. holds 1,60,000 shares and 30,000 shares respectively in Y Ltd. and Z Ltd.; Y Ltd. holds 60,000 shares in Z Ltd. These investments were made on 1.7.2007 on which date the provision was as follows:

	Y Ltd	**Z Ltd.**
Reserves	` 20 lakhs	` 10 lakhs
Profit and loss account	` 30 lakhs	` 16 lakhs

(b) In December, 2007 Y Ltd. invoiced goods to X Ltd. for ` 40 lakhs at cost plus 25%. The closing stock of X Ltd. includes such goods valued at ` 5 lakhs.

(c) Z Ltd. sold to Y Ltd. an equipment costing ` 24 lakhs at a profit of 25% on selling price on 1.1.2008. Depreciation at 10% per annum was provided by Y Ltd. on this equipment.

(d) Bills payables of Z Ltd. represent acceptances given to Y Ltd. out of which Y Ltd. had discounted bills worth ` 3 lakhs.

(e) Debtors of X Ltd. include ` 5 lakhs being the amount due from Y Ltd. X Ltd. proposes dividend at 10%.

Solution

Consolidated Balance sheet of X along with its Subsidiaries Y and Z as on 31/3/08

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		300
	Reserves and Surplus		152.836
	Minority Interest		78.364
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		83
	Short Term Provisions		30
Total			**644.2**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		372.2
	Intangible Assets		
II	Current Assets		
	Inventory		89
	Trade Receivables		123
	Cash & Cash Equivalents		60
Total			**644.2**

Working Notes

		X in Y	X in Z	Y in Z
1.	Book Value of Investments	180	40	80
	- Paid up Value of Investment	160	30	60
	Goodwill / (Capital Reserve)	20	10	20

2. Capital Reserve

	X in Y	X in Z	Y in Z
Reserves	40	7.8	15.6
Cost of Control	20	2.2	4.4
	Goodwill	Goodwill	Goodwill
Net	13.4 goodwill		

3. <u>Reserves of Holding Company</u>

Reserves	50
Profit and Loss A/c	60
Proposed Dividend	(30)
Reserve in Machinery	(6.084)
Stock Reserve	(0.8)
Reserves (Z)	13.2
Reserves (Y)	<u>53.12</u>
Total	139.436

4. <u>Minority Interest</u>

	y	Z
Share Capital	40	10
Reserve in Machinery	(0.936)	(0.78)
Stock Reserve	(0.2)	
Reserves	<u>23.28</u>	<u>7</u>
	62.144	16.22

5. <u>Share Capital of Subsidiary Company</u>

Y 2,00,000

1,60,000 — 80% X

40,000 — Minority

Z 1,00,000

30,000 — 30% X

60,000 — 60% Y

10,000 — `Minority

6. Reserves of Subsidiary Company

Z Ltd Reserves 30

40

10 Pre

20 Post

Profit and Loss A/c

16 Pre

24 Post

Total Pre 26

7.8 — 30%

15.6 — 60%

2.6 — 10%

Post 44

13.2 — 30%

26.4 — 60%

4.4 — 10%

X – CP Y – CP Min X – RP Y – RP Min

Y Ltd Reserves 40 Profit and Loss A/c 50

20 20 30 20

Pre Post Pre Post

Total Pre 50 Post 40

<u>26.4</u>

66.4

40 10 53.12 13.28

80% 20% 80% 20%

X – CP Min X – RP Min

7. <u>Trade Payables</u>

Bills Payable = 10 + 5 = 15 – 2 = 13

Creditors = 30 + 10 + 10 = 50 – 5 = 45

Current A/c = 15 + 50 = 65 – 40 = 25

8. <u>Reserves of Subsidiary Company</u>

Debtor = 70 + 10 + 20 = 100 – 5 = 95

Bills Receivable = 10 + 20 = 30 – 2 = 28

Current A/c = 10 + 30 = 40 – 40 = Nil

9. <u>Inventory</u> = Y to X = Unrealized profit 1 = X's share 0.8 and Minority share 0.2

10. <u>Fixed Assets</u> = 130 + 150 + 100 = 380 – 7.8 = 372.2

Z $\longrightarrow$ y

24 + 8 32

Less Depreciation <u>0.2</u> --- 8 x 10% x 3/12 = 0.2

WDV 7.8

30% 60% 10%

2.34 = X 4.68 = Y 0.78 Minority of Z

3.744 0.936

80 % = X Minority Y

Question 4 – **Nov RTP – 2008**

Consolidated balance sheet of Hydra Ltd. group and its associate Amoeba Ltd., as on 31.03.08 before adjustment for equity method are given below:

(` in '000s)

Liabilities	Hydra Ltd	Amoeba Ltd.	Assets	Hydra Ltd	Amoeba Ltd.
Share Capital (` 10)	600	100	Goodwill	10	-
P & L A/c.	300	-	Sundry Assets	1,75	130
Minority Interest	75	-	Investment in Amoeba Ltd.	15	-
Sundry Liabilities	225	150	P & L A/c	-	120
	1,200	**250**		**1,200**	**250**

Hydra Ltd. acquired 30% of ordinary shares of Amoeba Ltd., on 01.04.06 for ` 15,000. The balance of Amoeba Ltd., profit and loss account on that date was Rs.40,000 (Debit).

Show adjustment for equity method and redraft the consolidated balance sheet of the group as on 31.3.08.

Solution

Consolidated Balance sheet of Hydra along with its Subsidiaries Amoeba as on 31/3/08

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		600
	Reserves and Surplus		285
	Minority Interest		75
II	Non Current Liabilities		
III	Current Liabilities		225
Total			**1185**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		
	Intangible Assets		10
II	Current Assets		1175
Total			**1185**

Loss = 120

Investment A/c Dr 24

40	80 x 30% = 24	To Reserve A/c	24

Note : Loss not recognized = 9 i.e 15-24 = 9

Question 5 – NOV Paper – 2008

The Balance Sheets of three companies Angle Ltd., Bolt Ltd., and Canopy Ltd., as at 31st December, 2009 are given below:

Liabilities	**Angle Ltd.** `	**Bolt Ltd.** `	**Canopy Ltd.** `
Share capital			
(Equity shares of Rs.100 each)	15,00,000	10,00,000	6,00,000
Reserves	2,00,000	1,25,000	75,000
Profit and Loss A/c	5,00,000	2,75,000	2,50,000
Sundry creditors	2,00,000	2,50,000	1,00,000
Bills payable	-	-	50,000
Angle Ltd.	-	1,00,000	80,000
Total	24,00,000	17,50,000	11,55,000
Assets	**Angle Ltd.** `	**Bolt Ltd.** `	**Canopy Ltd.** `
Goodwill	2,50,000	5,80,000	4,50,000
Plant and Machinery	4,00,000	2,50,000	3,25,000
Furniture and Fittings	2,00,000	1,50,000	1,40,000
Shares in-			
Bolt Ltd. (7,500 shares)	9,00,000	-	-
Canopy Ltd. (1,000 shares)	1,50,000	-	-
Canopy Ltd. (3,500 shares)	-	5,20,000	-
Stock in trade	1,00,000	1,50,000	1,60,000
Sundry debtors	1,40,000	70,000	70,000
Bills receivable	50,000	20,000	-
Due from-			
Bolt Ltd.	1,20,000	-	-
Canopy Ltd.	80,000	-	-
Cash in hand	10,000	10,000	10,000
Total	24,00,000	17,50,000	11,55,000

(a) All shares were acquired on 1st July, 2008.

(b) On 1st January, 2008, the balances were:

	Angle Ltd. `	**Bolt Ltd.** `	**Canopy Ltd.** `
Reserves	1,00,000	1,00,000	50,000
Profit and Loss account	50,000	(50,000)	30,000

Profit during 2008 were earned evenly over the year	3,00,000	Dr. 2,50,000	1,00,000

(c) Each company declared a dividend of 10% in the year 2009 on its shares out of Profits for the year 2008; Angle Ltd. and Bolt Ltd. have credited their Profit and Loss account with the dividends received.

(d) The increase in reserves in case of Angle Ltd., Bolt Ltd., and Canopy Ltd., was affected in the year 2008.

(e) All the bills payable appearing in Canopy Ltd.'s Balance Sheet were accepted in favour of Bolt Ltd., out of which bills amounting ` 30,000 were endorsed by Bolt Ltd., in favour of Angle Ltd.

(f) Stock with Bolt Ltd. includes goods purchased from Angle Ltd., for ` 18,000. Angle Ltd., invoiced the goods at cost plus 20%.

Prepare consolidated Balance Sheet of the group as at 31st December, 2009. Working should be part of the answer. Ignore taxation including dividend distribution tax, disclose minority interest as per AS 21.

Solution

Consolidated Balance sheet of Angel along with its Subsidiaries Bolt and Canopy as on 31/3/09

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		15,00,000
	Reserves and Surplus		9,83,562.5
	Minority Interest		6,09,687.5
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		5,50,000
Total			**36,43,250**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		14,65,000
	Intangible Assets		14,21,250
II	(2,50,000 + 5,80,000 + 4,50,000) + 1,41,250		
	Current Assets		4,07,000
	Inventory		3,00,000
	Trade Receivables		50,000
	Cash & Cash Equivalents		
Total			**36,43,250**

Working Notes

		A in B	A in C	B in C
1.	Book Value of Investments	9,00,000	1,50,000	5,20,000
	- Paid up Value of Investment	7,50,000	1,00,000	3,50,000
	Goodwill / (Capital Reserve)	1,50,000	50,000	1,70,000

2.	Capital Reserve			
	Reserves	93,750	16,667	58,333
	Pre Acquisition Dividend	37,500	5,000	17,500
		1,31,250	21,667	75,833
	Cost of Control	18,750	28,333	94,167
		Goodwill	Goodwill	Goodwill
	Net		1,41,250 goodwill	

3.	Reserves of Holding Company	
	Reserves	2,00,000
	Profit and Loss A/c	5,00,000
	Stock Reserve	(3,000)
	Reserves from Canopy	37,500
	Pre Acquisition Dividend Canopy	(5,000)
	Pre Acquisition Dividend Bolt	(37,500)
	Reserves of Bolt	2,91,562.5
	Total	9,83,562.5

4.	Minority Interest	Bolt	Canopy
	Share Capital	2,50,000	1,50,000
	Reserve in Machinery	1,28,437.5	81,250
		3,78,437.5	2,31,250

5. Share Capital of Subsidiary Company

Bolt 10,000

7,500	2,500
75% A	Minority

Z 6,000

1,000	3,500	1,500
1/6 A	3.5/6 Y	Minority

6. Reserves of Subsidiary Company

Canopy Ltd Reserves 75,000

Pre 50,000 25,000

Pre 12,500 Post 12,500

Profit & Loss 2,50,000

30,000

\+ 1,00,000

1,30,000

\- Div 60,000 → 60,000

70,000

\- t/s Res 25,000 10,000 35,000 15,000

45,000 2,05,000 1/2 1/2 Minority

5,000 17,500

Pre 30,000 15,000 A B

Pre 7,500 Post 7,500

Total Pre 1,00,000 Post 2,25,000

1/6	3.5/6	1.5/6	1/6	3.5/6	1.5/6
16,667	58,333	25,000	37,500	1,31,250	56,250
A – CP	B – CP	Minority	A – RP	B – RP	Minority

Bolt Ltd Reserves 1,25,000

Pre 1,00,000 25,000

Pre 12,500 Post 12,500

Profit & Loss 2,75,000

(50,000)

\+ 2,50,000

2,00,000

\- Div 1,00,000 → 1,00,000

1,00,000

\- t/s Res 25,000 Post 75,000 25,000

75,000 2,00,000 1/2 Minority

37,500 A

Pre (50,000) 1,25,000

Pre 62,500 Post 62,500

Total Pre 1,25,000 Post 2,25,000

+ Share from Canopy 1,31,250

75% 25 % - Pre Acquisition Div (17,500)

93,750 31,250 3,88,750

A – CP Minority

2,91,562.5 97,187.5

A – CP Minority

2009

Question 6 – **June 2009 – RTP**

The Balance sheets of War and Peace Ltd. as on 31.3.2002, the date of purchase were as under:

Liabilities	War Ltd.	Peace Ltd.	Assets	War Ltd.	Peace Ltd.
tore capital (Rs.10)	10,50,000	6,00,000	Fixed assets	6,50,000	2,00,000
General reserve	1,00,000	40,000	Stock in trade	3,00,000	1,80,000
Profit and loss A/c	80,000	–	Sundry debtors	3,20,000	2,00,000
Wry creditors	1,00,000	60,000	Cash in hand	60,000	30,000
			Preliminary		10,000
			Expense	–	
			Profit and loss A/c	–	80,000
	13,30,000	**7,00,000**		**13,30,000**	**7,00,000**

War Ltd Purchase on 31st March, 2002, 48,000 shares in Peace Ltd. at 50% premium over face value by issue of 8% debentures at 20% premium.

Particulars of War Ltd:

i) Profit made:

2002 - 2003 Rs.1,60,000 2003 - 2004 – ` 2,00,000

ii) The above profit was made after charging depreciation of ` 60,000 and ` 40,000 respectively.

iii) Out of profit shown above every year, Rs.20,000 has been transferred to General reserve.

iv) 10% dividend had been paid in both the years.

v) It has been decided to write down investment to face value of shares in 10 years and to provide for share of loss to subsidiary.

Particulars of Peace Ltd

i) The company incurred losses of ` 40,000 and ` 60,000 in 2002 – 2003 and 2003 – 2004 after charging depreciation of 10% of the book value as on 1.4.2002.

Prepare consolidated Balance sheet as at 31.3.2004 of War Ltd and its subsidiary.

Solution

Working Notes

Balance sheet of WAR Ltd along with its subsidiary as on 31/03/2004 (Before consolidation)

Liabilities	WAR	PEACE	Assets	WAR	PEACE
Share Capital	10,50,000	6,00,000	Fixed Assets	5,50,000	1,60,000
General Reserve	1,40,000	40,000	Stock	3,00,000	1,80,000
(war = 1,00,000 +			Debtors	3,20,000	2,00,000
20,000 + 20,000)			Cash	3,10,000	-
Profit and Loss	1,42,000	-	Profit and loss A/c	-	1,80,000
A/c	1,20,000	-	Prepaid Expenses	-	10,000
Security Premium	6,00,000	-	Investments	6,72,000	-
Debentures	1,00,000	60,000	(7,20,000 –		
Creditors	-	30,000	48,000)		
Bank O/D					
	21,52,000	**7,30,000**		**21,52,000**	**7,30,000**

Purchase of shares by WAR in Peace

48,000 shares x 10 = 4,80,000 Journal Entry

+ 50% Premium 2,40,000

Purchase price 7,20,000 Investment A/c Dr 7,20,000

Discharge by Debenture @ 120 To 8% Debentures A/c 6,00,000

No of Debentures 60,000 To Security Premium A/c 1,20,000

Investments to be brought to Book value in 10 years i.e 7,20,000 – 4,80,000 = ` 2,40,000 should be written off in 10 years i.e ` 24,000 should be written off every year.

Calculation of Profit and Loss A/c as on 31/03/2004

	WAR	PEACE
Profit and loss A/c	80,000	(80,000)
+ / - Profit / Loss for 2002-03	1,60,000	(40,000)
+ / - Profit / Loss for 2003 – 04	2,00,000	(60,000)
- transfer to General Reserve (2 years)	(40,000)	-
- Dividend Paid (2 years)	(2,10,000)	-
- Investment written off (2 years)	(48,000)	-
Balance	1,42,000	(1,80,000)

Consolidated Balance Sheet ~~of WAR. and its sub~~sidiary PEACE Ltd. as at 31/03/08 as per revised schedule III.

	Particulars	**Note No**	**Amount**
Equity and Liability			
I	Shareholders Funds		
	Share Capital		10,50,000
	Reserves and Surplus		3,22,000
	Minority Interest		90,000
II	Non Current Liability		
	Long Term Borrowing		6,00,000
III	Current Liability		
	Short Term Borrowing		30,000
	Trade Payable		1,60,000
Total			**22,52,000**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		7,10,000
	Intangible Assets		2,32,000
II	Current Assets		
	Inventory		4,80,000
	Trade Receivable		5,20,000
	Cash and Cash Equivalent		3,10,000
Total			**22,52,000**

Working Notes :

WN 1	Book value of investments	6,72,000
	(–) Paid up of Investments	<u>4,80,000</u>
	Goodwill	<u>1,92,000</u>

WN 2 <u>Capital Reserve</u>

Preliminary Expenses	(8,000)
Reserves	<u>(32,000)</u>
Goodwill	<u>(40,000)</u>

Cost of control (Net of 1 and 2) <u>2,32,000 - Goodwill</u>

WN 3 <u>Revenue Reserve</u>

General Reserve	140,000
Profit and Loss A/c	142,000
(–) Pre-acquisition dividend	<u>(80,000)</u>
	<u>2,02,000</u>

WN 4 <u>Minority Interest</u>

Share capital	120000

Preliminary Expenses	(2,000)
Profit and loss A/c	(28,000)
	90,000

WN 5 Share Capital

600,000

480,000	120,000
80%	20%
Holding	Minority

WN 6 Reserve of subsidiary Company

General reserve 40,000 Pre.

Profit & Loss (180,000)

(80,000)	(100,000)
Pre	Post

Total of General Reserve and Profit and Loss A/c

Pre. (40,000) Post (1,00,000)

80%	20%	80 %	20 %
(32,000)	(8,000)	(80,000)	(20,000)
Holding	Minority.	Holding	Minority.
CR		R.R.	

Question 7 – **June 2009 – paper**

From the following Details, prepare a consolidated balance sheet of sun limited and its subsidiaries as on 31st March, 2009

` in lakhs

Assets	Sun Ltd	Moon Ltd	Star LTd
Fixed Assets	816	312	126
Investment at Cost			
7,50,000 shares of moon ltd	75	-	-
2,40,000 shares of star ltd	24	-	-
4,80,000 shares of star ltd.	-	60	-
30,000 preference shares of sun ltd	-	-	30
4,500 debentures of sun ltd.	-	-	42
Current Assets	1059	369	336
Profit and Loss A/c	288	108	63
Total	**2,262**	**849**	**597**
Liabilities			
Equity share Capital (` 10 each)	180	144	120
7.5% Preference share Capital	45	36	30
Capital Reserve (Revaluation of Fixed Assets)	360	-	-
	75	45	30

General Reserve	75	-	-
8% Debenture of ` 1000 each			
Secured Loans and Advances	513	249	165
From Banks			
Unsecured Loans	-	-	36
From Moon Ltd.	45	-	-
From Star Ltd.			
Current Liabilities and Provisions	27	-	-
Inter-company Balances	942	375	216
Other Liabilities			
Total	**2,262**	**849**	**597**

Other information are as follows

a) Moon Ltd. subscribed for 2,40,000 shares of star Ltd. at par at the time of first issue and further acquired 2,40,000 shares from the market ar ` 15 each, when the Reserves and Surplus account of Star Ltd. stood at ` 15 lakhs

b) Sun Ltd subscribed for shares of Moon Ltd and Star Ltd as par at the time of first issue of shares by both the companies

c) Current Assets of Moon Ltd and Star Ltd includes 12 lahks and ` 18 lakhs respectively being current account balance against Sun Ltd.

Solution

Consolidated Balance sheet of Star along with its Subsidiaries Moon and Star as on 31/3/09

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		195
	Reserves and Surplus (360 – 264.1875)		95.8125
	Minority Interest		132.1875
II	Non Current Liabilities		
	Long Term Borrowings		957
III	Current Liabilities		1533
Total			**2,913**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		1254
	Intangible Assets		3
II	Current Assets		1656
Total			**2,913**

Working Notes

	S in M	S in Star	M in Star

1.	Book Value of Investments	75	24	60
	- Paid up Value of Investment	75	24	48
	Goodwill / (Capital Reserve)	Nil	Nil	12
2.	Capital Reserve			
	Reserves	3	6	Nil
	Cost of Control	3	6	12
		CR	CR	Goodwill
	Net		3 goodwill	

3.	Reserves of Holding Company	
	General Reserves	75
	Profit and Loss A/c	(288)
	Reserves (Star)	(9)
	Reserves (Moon)	(42.1875)
	Total	(264.1875)

4.	Minority Interest	**Moon**	**Star**
	Share Capital	69	48
	Preference shares	-	66
	Reserves	38.8125	(12)
		30.1875	102

5. Share Capital of Subsidiary Company

Moon 14,40,000 → 7,50,000 (25/48 Sun); 6,90,000 (Minority)

Star 12,00,000 → 2,40,000 (2/10 Sun); 4,80,000 (4/10 M); 4,80,000 (4/10 Minority)

6. Reserves of Subsidiary Company

Star Ltd Reserves 30 → 15 Pre; 15 Post

Profit and Loss A/c (63)
\+ 3 – Profit on Dep
(60) - post

Total Pre 15 → 3 Sun CP; 6 Moon CP; 6 Min

Post (45) → (9) Sun RP; (18) Moon RP; (18) Min

Moon Ltd (- 108 + 45 – 18) (81) → (42.1875) Sun CP; (38.8125) Min

Question 8 – **Nov RTP 2009 – Same AS May – 2008 RTP**

Question 9 – **Nov RTP – 2009**

Vertical Ltd owns 80% of voting power of Horizon Ltd., its only investment, acquired on 01.04.2008 for ` 1,00,000. The Net Assets of Horizon Ltd on 01.04.2008 was `1,00,000. On 01.10.2009, the investment in Horizon Ltd was sold for ` 2,00,000. The Net Assets of Horizon Ltd on 31.03.2009 and 30.09.2009 were ` 1,50,000 and ` 1,80,000, respectively the difference representing the profit for the period. Compute the Gain/Loss on disposal of the subsidiary.

Solution

1.	Cost of Investment	1,00,000
	Less : Share in Net assets as in the date of acquisition (1,00,000 x 80%)	(80,000)
	Goodwill	20,000
2.	Gain/Loss on disposal of subsidiary on 1/10/2009	
	Sale consideration	2,00,000
	Less : Share of Net asset on the date of sale (1,80,000 x 80%)	(1,44,000)
	Less : Goodwill on consolidation	(20,000)
	Gain on Disposal	36,000

Question 10 – **Nov Paper – 2009**

P Ltd. owns 80% of S and 40% of J and 40% of A. J is jointly controlled entity and A is an associate. Balance sheet of four companies as on 31.03.09 are:

Particulars	**P Ltd.** `	**S** `	**J** `	**A** `
Assets				
Investment in S	800	–	–	–
Investment in J	600	–	–	–
Investment in A	600	–	–	–
Fixed assets	1000	800	1400	1000
Current assets	2200	3300	3250	3650
Total	**5200**	**4100**	**4650**	**4650**
Share capital Re.1				
Equity share	1000	400	800	800
Retained earnings	4000	3400	3600	3600
Creditors	200	300	250	250
Total	**5200**	**4100**	**4650**	**4650**

P Ltd. acquired shares in S many years ago when S retained earnings were ` 520, P Ltd. acquired its shares in J at the beginning of the year when J retained earnings were ` 400. P Ltd. acquired its shares in 'A' on 01.04.08 when 'A' retained earnings were ` 400.

The balance of goodwill relating to S had been written off three years ago. The value of goodwill in J remains unchanged.

Prepare the consolidated Balance Sheet of P Ltd. as on 31.03.09. As per AS-21, 23 and 27.

Solution

Consolidated Balance Sheet of P. with its subsidiary S Ltd. jointly controlled entity J and Associate A Ltd. as at 31/03/09 as per revised schedule III.

	Particulars	**Note No**	**Amount**
Equity and Liability			
I	Shareholders Funds		
	Share Capital		1000
	Reserves and Surplus		8800
	Minority Interest		760
II	Non Current Liability		
III	Current Liability		
	Trade Payable		600
Total			**11,160**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		2360
	Intangible Assets		120
	Non Current Investments (1,280 + 600)		1,880
II	Current Assets		6,800
Total			**11,160**

Working Notes :

		S Ltd.	J Ltd.		
WN 1	Book value of investments	800	600		
	(–) Paid up of Investments	320	320		
	Goodwill	480	280		
WN 2	Capital Reserve				
	Reserves	416	160		
	Cost of control (Net of 1 and 2)	649	120	–	Goodwill
WN 3	Revenue Reserve				
	Retained Earning	4000			
	Reserves (S Ltd)	2304			
	Reserves (J Ltd)	1280			

Reserves (A Ltd)	1280
Goodwill Written off	(64)
Total	8800

WN 4 Minority Interest

	S Ltd
Share capital	80
Reserves	680
	760

WN 5 Share Capital

S Ltd. (Subsidiary Company) 400

320	80
80%	20%
Holding	Minority

J Ltd (Jointly Controlled Entity) 800

40% (In jointly controlled entity we will disclose holding company's share)

320

A Ltd – Associate company – No disclosure on share capital. The only thing we have to consider only holding company's share in the reserves for the post acquisition period)

WN 6 Reserve of subsidiary Company / Jointly controlled entity and Associate

S Ltd (Subsidiary Company) 3400

Pre 520 | Post 2880

80%	20%	80%	20%
416	104	2304	576
Holding	Minority	Holding	Minority

J Ltd (Jointly) 3600

Pre 400 | Post 3200

40% | 40%

1600 | 1280

A Ltd (Associate) 3600

Pre 400 | Post 3200
NA | ↓ 40%
 | 1280

As discussed we shall not have any share in pre profits of associate company. For post we shall pass the following journal entry

Investments A/c	Dr	1280	
To Reserves A/c			1280

2010

Question 11 – **May RTP – 2010 – Same as Nov 2008 - Paper**

Question 12 – **May RTP – 2010 – Similar to Question 4 – Nov 2008 RTP**

Question 13 – **May Paper – 2010**

The draft Balance Sheet of three companies W, H, O, as at 31.3.2010 is as under : ` in thousands

Assets	**W**	**H**	**O**
Fixed assets	697	648	349
Investments 1,60,000 shares in H	562	–	–
80,000 shares in O	184	–	–
Cash at Bank	101	95	80
Trade receivable	386	321	251
Inventory	495	389	287
Total	2,425	1,453	967
Liabilities	W	H	O
Share capital	600	200	200
(Nominal value per share)			
Reserves	1050	850	478
Trade payables	375	253	189
Debentures	400	150	100
Total	2,425	1,453	967

You are given the following information :

(a) W purchased the shares in H on 13.10.2005 when the balance in reserves was ` 500 thousands.

(b) The shares in O were purchased on 11.5.2005 when the balance in reserves was ` 242 thousands.

(c) The following dividend have been declared but not accounted for before the accounting year end

W - ` 65 thousands

H - ` 30 thousands

O - ` 15 thousands

(d) Included in inventory figure of O is inventory valued at ` 20 thousands which had been purchased from W at cost plus 2.5%.

(e) Goodwill in respect of the acquisition of H has been fully written off.

(f) On 31.3.2010 H made bonus issue of one share for every share held. This had not been accounted in the Balance Sheet as on 31.3.2010.

(g) Included in trade payables of W is `18 thousands to O, which is included in trade receivables of O.

Prepare Consolidated Balance Sheet of W as at 31.3.2010.

Solution

Consolidated Balance sheet of W along with its Subsidiary H and Associate O as on 31/3/10

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		6,00,000
	Reserves and Surplus		13,55,800
	Minority Interest		2,10,000
II	Non Current Liabilities		
	Long Term Borrowings		5,50,000
III	Current Liabilities		
	Trade Payables		6,28,000
	Short Term Provisions		65,000
	Total		**34,08,800**
	Assets		
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		13,45,000
	Intangible Assets		-
	Non Current Investment		2,70,800
II	Current Assets		
	Inventory		8,84,000
	Trade Receivables		7,07,000
	Cash & Cash Equivalents		1,96,000
	Loans and Advances (Dividend Receivable)		6,000
Total			**34,08,800**

Working Notes

1. Book Value of Investments 5,62,000

- Paid up Value of Investment 3,20,000

Goodwill / (Capital Reserve)	2,42,000	

2. <u>Capital Reserve</u>

Reserves	4,00,000	
Goodwill written off	2,000	
	4,02,000	
Cost of Control	1,60,000	– Capital Reserve

3. <u>Reserves of Holding Company</u>

Reserve	10,50,000
Dividend Payable	(65,000)
Reserves from H	96,000
Share in Dividend from H	24,000
Share in Profits from O	88,400
Share in Dividend from O	6,000
Stock Reserve	(1,600)
Goodwill Written off	(2,000)
Total	11,95,800

4. <u>Minority Interest</u>

Share Capital	40,000
Bonus Issue	40,000
Share in Pre Acquisition Profits	1,00,000
Share in Post Acquisition Profits	24,000
Share in Dividend	6,000
	2,10,000

5. <u>Share Capital of Subsidiary Company</u>

H 2,00,000 → 1,60,000 80% Holding; 40,000 Minority

O 1,00,000 → 40,000 40% Holding

Question 14 – Nov RTP – 2010 – Similar to Question 3 – Nov 2008 RTP

Question 15 – Nov RTP – 2010

Consolidated balance sheet of Mohan Ltd. group and its associate Sohan Ltd. as on 31/03/10 before adjustment for equity method are given below:

	Group `000	Sohan Ltd. `000		Group `000	Sohan Ltd. `000
Equity Share Capital	900	300	Sundry Assets	2,200	630

(Rs.10)					
Capital Reserve	25	-	Investment in Sohan Ltd.	150	
P & L A/c	500	200			
Minority Interest	150	-			
Sundry Liabilities	675	100			
Proposed Dividend	100	30			
	2,350	**630**		**2,350**	**630**

Mohan Ltd. acquired 30% ordinary equity shares of Sohan Ltd. on 01/04/08 for ` 1,50,000. The balance of A Ltd. profit and loss account on that date was ` 1,80,000.

Mohan Ltd. is preparing consolidated financial statements of the group as on 31.3.2010 as per equity method. You are required to:

(i) Compute goodwill, if any, arising on acquisition of Sohan Ltd. shares;

(ii) Show how Mohan Ltd. will reflect the value of investment in Sohan Ltd. in the consolidated financial statements?

Solution

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		900
	Reserves and Surplus		-
	Minority Interest		150
II	Non Current Liabilities		
III	Current Liabilities		675
	Short Term Provisions		100
Total			**2,446**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		2.200
	Intangible Assets		
	Non Current Investment (150 + 96)		246
Total			**2,446**

Working Note : Profit and Loss A/c 500

Pre 180 Post 320 x 30% = 96

Investment A/c Dr 96

Reserves A/c 96

Question 16 – **Nov Paper – 2010**

Air Ltd., a listed company, entered into an expansion programme on 1st October 2009. On that date the company purchased from Bag Ltd. its investments in two Private Limited Companies. The purchase was of

(a) the entire share capital of Cold Ltd. and

(b) 50% of the share capital of Dry Ltd.

Both the investments were previously owned by Bag Ltd. After acquisition by Air Limited, Dry Ltd. was to be run by Air Ltd and Bag Ltd as a jointly controlled entity.

Air Ltd makes its financial statements upto 30th September each year. The terms of acquisition were:

Cold Ltd

The total consideration was based on price earnings ratio (P/E) of 12 applied to the reported profit of ` 20 lakhs of Cold Ltd for the year 30 September, 2009. The consideration was settled by Air Ltd issuing 8% debentures for ` 140 lakhs (at par) and the balance by a new issue of ` 1 equity shares, based on its market value of ` 2.50 each.

Dry Ltd

The market value of Dry Ltd on first October, 2009 was mutually agreed as ` 375 Lakhs. Air Ltd satisfied its share of 50% of this amount by issuing 75 lakhs ` 1 equity shares (market value ` 2.50 Each) to Bag Ltd.

Air Ltd has not recorded in its books the acquisition of the above investments or the discharge of the consideration.

The summarized statements of financial position of the three entities at 30th September 2010 are:

(Rs. in Thousands)

Assets	Air Ltd	Cold Ltd	Dry Ltd
Tangible assets	34,260	27,000	21,060
Inventories	9,640	7,200	18,640
Debtors	11,200	5,060	4,620
Cash	–	3,410	40
Total	55,100	42,670	44,360
Liabilities	Air Ltd	Cold Ltd	Dry Ltd
Equity capital of Re. 1 each	10,000	20,000	25,000
Retained earnings	20,800	15,000	4,500

Trade and other payables	17,120	5,270	14,100
Overdraft	1,540	–	–
Provision for taxes	5,640	2,400	700
Total	**55,100**	**42,670**	**44,360**

The following information is relevant.

(a) The book value of the net assets of Cold Ltd and Dry Ltd on the date of acquisition were considered to be a reasonable approximation to their fair values.

(b) The current profits of Cold Ltd and Dry Ltd for the year ended 30th September, 2010 were ` 80 lakhs and ` 20 lakhs respectively. No dividends were paid by any of the companies during the year.

(c) Dry Ltd., the jointly controlled entity, is to be accounted for using proportional consolidation, in accordance with AS-27 "Interests in joint venture".

(d) Goodwill in respect of the acquisition of Dry Ltd has been impaired by Rs.10 lakhs at 30th September, 2010. Gain on acquisition, if any, will be separately accounted.

Prepare the consolidated Balance Sheet of Air Ltd., and its subsidiaries as at 30th September, 2010.

Solution

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		21,500
	Reserves and Surplus		49,050
	Minority Interest		-
II	Non Current Liabilities		
	Long Term Borrowing		14,000
III	Current Liabilities		
	Short Term Borrowings		1,540
	Trade Payables		29,440
	Provisions for Tax		8,420
Total			**1,23,950**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		71,790
	Intangible Assets		4,000
II	Current Assets		
	Inventory		26,160
	Trade Receivables		18,570
	Cash and Cash Equivalent		3,430
Total			**1,23,950**

Working Notes :

		Cold Ltd	Dry Ltd	
WN 1	Book value of investments	24,000	18,750	
	(–) Paid up of Investments	20,000	12,500	
	Goodwill	4,000	6,250	
WN 2	Capital Reserve			
	Reserves	7,000	1,250	
	Cost of control (Net of 1 and 2)	3,000 CR	5,000	Goodwill
	Less Written off		1,000	
	Balance		4,000	Goodwill
WN 3	Revenue Reserve			
	Retained Earning	20800		
	Reserve from Cold Ltd	8,000		
	Reserve from Dry Ltd	1,000		
	Goodwill Written off	(1,000)		
		28,800		
	Security Premium	17,250		

WN 4 Share Capital

Cold 20,000 --- 100% holding (Air)

Dry 25,000 x 50% = 12,500 (50% Holding) Air

WN 5 Reserve

Cold 15,000

7,000 Pre — 8,000 Post

Air – CP — Air – RP

Dry 4,500

2,500 — 2,000

50% — 50%

1,250 — 1,000

Air – CP — Air – RP

WN 6 Calculation of PC and Analysis

Cold Ltd

PC = 12 x 20 = 240

Dry Ltd

PC = 375 x 50% = 187.5

140 8% Debn 100 Equity shares Discharge = 75 equity shares x 2.5 = 187.5

2.5

= 40 lakh shares

Investments in Cold A/c Dr 240 Investments in Dry A/c Dr 187.5

To Debentures A/c 140 To Equity Share Capital

75

To Equity share Capital A/c 40 To Security Premium

112.5

To Security Premium A/c 60

Cold (Reserves) 15,000 Dry (Reserves) 4,500

7,000 8,000 2500 2000

Share Capital	20,000	Share Capital	25,000
Reserves	7,000	Reserves	2,500
Total	27,000	Total	27,500 x 50% 13,750
PC	24,000	PC	18,750
Capital Reserves	3,000	Goodwill	5,000

2011

Question 17 – May RTP – 2011

Tarun Ltd. had acquired 25% of the equity share capital of Varun Ltd. at ` 2,40,000 by 1-7-2009. It had received ` 8,000 as dividend for the year 2008-09. Equity share capital of Varun Ltd. is ` 5,00,000. Varun Ltd. had not provided for the dividend when the accounts for the year 2008-09 were prepared. Find out goodwill/capital reserve against investment in Varun Ltd. as well as the value at which investment shall be reported in consolidated financial statements to be prepared by Tarun Ltd. as on 31-3-2010, if the balances in profit and loss account were ` 84,000 and ` 1,92,000 respectively at the end of 2008-09 and 2009-10.

Solution

Date of Acquisition	- 1/7/2009
Date of Consolidation	- 31/3/2010
Pre – Acquisition Period	- 3 months
Post – Acquisition Period	- 9 months
% of Holding	- 25%
Profit and Loss A/c	1,92,000 (31-3-2010)

Opening 52,000 Current Year 1,40,000

35,000 Pre 1,05,000 Post

	Total	Tarun Ltd (25%)
Capital Profit	87,000	21,750
Revenue Profit	1,05,000	26,250
Equity share Capital	5,00,000	1,25,000

Calculation of Goodwill

Investments		2,40,000
Less Pre Acquisition Dividend	(8,000)	
Paid up share capital	(1,25,000)	
Capital Profits	(21,750)	(1,54,750)
Goodwill		85,250

Investment in Associate Under Equity Method

Nominal Value of Investment (1,25,000 + 21,750)	1,46,750
+ Goodwill	85,250
+ Revenue Profits	26,250
	2,58,250

Question 18 – **May RTP – 2011**

The summarized Balance Sheets of Kush Ltd. and Shuk Ltd. as at 31st March, 2010 are as follows:

(Rs. in lakhs)

Liabilities	Kush Ltd. `	Shuk Ltd. `	Assets	Kush Ltd. `	Shuk Ltd. `
Share capital :			Plant at cost less depreciation	86.4	72.9
Equity shares of Rs.10 each	216.0	108.0	Furniture, Fixtures & Fittings	23.4	7.2
Securities premium	32.4	-	Stock at cost	18.0	13.5
Caital reserve on 1.04.09	-	7.2	Sundry debtors	73.8	47.6
General reserve on 1.04.09	13.5	9.0	Trade investment	-	2.7
Profit & Loss A/c.	70.2	21.6	Goodwill at cost	45.0	13.6
Sundry creditors	29.7	19.7	Investment :		
			8.64 lakhs shares of Shuk Ltd. at cost	97.2	-
			Balance at bank	18.0	8.0
	361.8	**165.5**		**361.8**	**165.5**

Additional information:

(1) On 1st April, 2009 Kush Ltd. acquired from the shareholders of Shuk Ltd. 8.64 lakhs shares of ` 10 each in Shuk Ltd. and allotted in consideration thereof 6.48 lakhs of its own shares of ` 10 each at a premium of ` 5 per share.

(2) The consideration for the shares of Shuk Ltd. was arrived at inter-alia by valuing certain assets of Shuk Ltd. on 1st April, 2009 as under:

(i) Plant at ` 90 lakhs

(ii) Furniture, Fixtures & Fittings at ` 8 lakhs

(iii) No value on Trade Investment and Goodwill.

No adjustments were made in the books of accounts of Shuk Ltd. in respect of the above valuation.

During 2009-10 there was no purchase or sale of these assets. It is desired that such adjustments should however be made in the consolidated accounts.

(3) The figures for Plant and Furniture, Fixtures and Fittings at 31.3.2010 shown in the Balance Sheet are after providing depreciation for 2009-10 at the rates of 10 per cent per annum and 20 per cent per annum respectively, on the book values as at 01.04.09.

(4) The Profit and Loss Account of Shuk Ltd. showed a credit balance of ` 27 lakhs on 01.04.09. A dividend of 10% was paid in January, 2010 for the year 2008-09. This dividend was credited to Profit and Loss A/c of Kush Ltd.

(5) The following point was not considered in making out the accounts In the year expenses at ` 4,500 per month were incurred by Kush Ltd. on behalf of Shuk Ltd. It was by mistake debited to Profit and Loss Account of Kush Ltd. and nothing has been done in the accounts of Shuk Ltd.

(6) The stock of Shuk Ltd. included ` 4.5 lakhs of goods received from Kush Ltd. invoiced at cost plus 25 per cent.

(7) Debtor of Shuk Ltd. include ` 3.5 lakhs due from Kush Ltd. Whereas Creditors of Kush Ltd. include ` 3.1 lakhs due to Shuk Ltd., the difference being represented by a cheque in transit.

You are required to consolidate the accounts of the two companies and prepare a Consolidated Balance Sheet of Kush Ltd. and its subsidiary as at 31st March, 2010.

Solution

Consolidated Balance Sheet of Kush Ltd. and its subsidiary Ltd. Shuk Ltd. as at 31st March, 2010 as per revised schedule III.

Particulars			`
I)	Equity and liabilities		
	A)	Shareholders fund	
		Share Capital	216
		Reserves and surplus	127.548
		Minority Interest	27.252

	B)	Current Liabilities	
		Trade Payable	46.3
			417.1
II)	Assets		
	A)	Non-Current Assets	
		Fixed Assets	
		Tangible	197.2
		Intangible (Goodwill)	45
		Other Non-Current Assets	10
	B)	Current Assets	
		Inventory	30.6
		Trade Receivable	117.9
		Cash and Cash Equivalent	26.4
			417.1

Working Notes :

WN 1	Book value Investments		97.2	
	(–) Paid up value of Investments		86.4	
	Goodwill		10.8	
WN 2	Capital Reserve			
	Pre-acquisition Dividend		8.64	
	Reserve		19.28	
			27.92	
	Cost of control	Capital Reserve	17.12	
WN 3	Reserve of Holding Co.			
	Securities Premium			32.4
	General Reserve		13.5	
	Profit and Loss A/c		70.2	
	Pre-acquisition Div.			(8.64)
	Unrealized profit in stock		(0.9)	
	Exp. For Sukh Ltd.		0.54	
	Reserve of Sukh Ltd.			3.328
			110.428	
WN 4	Minority Interest			
	Share capitals		21.6	
	Reserves		5.652	
			27.252	
WN 5	Share capital of Sukh Ltd.			

10.8

8.64	2.16
Holding	Minority
80%	20%

WN 6 Reserve of Sukh ltd.

Capital Reserve	7.2	Pre
General Reserve	9.0	Pre
Profit & Loss	21.6	31/3/10

1/4/09	27		
(–) Dividend	10.8		
Pre	16.2	5.4	Post

Pre	32.4	Post	5.4
(+) Rev. of Plant	9	(–) Dep. on plant	(0.9)
(+) Rev. of furniture	(1)	(+) Dep. on fur.	0.2
(–) Investment	(2.7)	–Expenses	(0.54)
(–) Goodwill	(13.6)		
	24.1		4.16

19.28	4.82	3.328	0.832
H-CP	M.	H-RP	M.

WN 7 Trade Payable

Kush Ltd.	29.7
Sukh Ltd.	19.7
	49.4
(–) Common	3.1
	46.3

WN 8 Tangible

Plant	
Kush ltd.	86.4
Sukh Ltd. (72.9 + 9 – 0.9)	81
Furniture	
Kush Ltd.	23.4
Sukh Ltd. (7.2 – 1 + 0.2)	6.4
	197.2

Plant	Current Position	Revised Position
Opening	81	90

	(–) Dep.	8.1	9
	Closing	72.9	81

WN 9	Stock / Inventory	
	Kush Ltd.	18
	Sukh ltd.	13.5
		31.5
	(–) Unrealised profit	0.9
		30.6
WN 10	Trade Receivables	
	Kush Ltd.	73.8
	Sukh Ltd.	47.6
		121.4
	(–)	3.5
		117.9
WN 11	Trade Investments	
	Kush Ltd.	Nil
	Sukh Ltd.	Nil
	(2.7 – 2.7)	Nil
WN 12	Goodwill	
	Kush Ltd.	45
	Sukh Ltd.	Nil
	(13.6 – 13.6)	—
		45
WN 13	Cash and cash equivalents	
	Kush Ltd.	18
	Such Ltd.	8
		26
	(+) Cash in transit	0.4
		26.4

Question 19 – **May Paper – 2011**

The summarized Balance Sheets of three companies Sun Ltd., Moon Ltd. and Light Ltd. as at 31st March, 2012 are given below:

Liabilities	Sun Ltd. `	Moon Ltd. `	Light Ltd. `	Assets	Sun Ltd. `	Moon Ltd. `	Light Ltd. `
Share Capital				Fixed Assets	70,000	1,20,000	1,03,000
(Shares of `10 each)	1,50,000	1,00,000	60,000	Investments			
Reserves	50,000	40,000	30,000	(at cost)			
P & L A/c	60,000	50,000	40,000	Share in :			

Sundry Creditors	30,000	35,000	25,000	Moon Ltd.	90,000	-	-
Sun Ltd.	-	10,000	8,000	Light Ltd.	40,000	-	-
				Light Ltd.	-	50,000	-
				Stock-in-rate	40,000	30,000	20,000
				Debtors	20,000	25,000	30,000
				Due from			
				Moon Ltd.	12,000		
				Light Ltd.	8,000		
				Cash in hand	10,000	10,000	10,000
	2,90,000	**2,35,000**	**1,63,000**		**2,90,000**	**2,35,000**	**1,63,000**

(a) Sun Ltd. held 8,000 shares of Moon Ltd. and 1,800 shares of Light Ltd.

(b) Moon Ltd. held 3,600 shares of Light Ltd.

(c) All investments were made on 1st July, 2011.

(d) The following balances were there on 1st July, 2011:

	Moon Ltd.	**Light Ltd.**
	`	`
Reserves	25,000	15,000
Profits and Loss A/c	20,000	25,000

(e) Moon Ltd. invoiced goods to Sun Ltd. for ` 4,000 at a cost plus 25% in December, 2011.

The closing stock of Sun Ltd. includes such goods valued at ` 5,000.

(f) Light Ltd. sold to Moon Ltd. an equipment costing ` 24,000 at a profit of 25% on selling price on 1st January, 2011. Depreciation at 10% per annum was provided by Moon Ltd. on the equipment.

(g) Sun Ltd. proposes dividend at 10%.

Prepare the Consolidated Balance Sheet of the group as at 31st March, 2012. Working should form part of the answer.

Solution

Consolidated Balance sheet of Sun along with its Subsidiaries Moon and Light as on 31/3/08

Equity and Liabilities		**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		1,50,000
	Reserves and Surplus		173,516
	Minority Interest		52,684
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		90,000
	Short Term Provisions		15,000
Total			**4,81,200**
Assets			

I	Non Current Assets Fixed Assets Tangible Assets Intangible Assets		 2,85,200
II	Current Assets Inventory Trade Receivables Cash & Cash Equivalents		 89,000 75,000 32,000
Total			**4,81,200**

Working Notes

		S in M	S in L	M in L
1.	Book Value of Investments	90,000	40,000	50,000
	- Paid up Value of Investment	80,000	18,000	36,000
	Goodwill / (Capital Reserve)	10,000	22,000	14,000
2.	Capital Reserve			
	Reserves	36,000	12,000	24,000
	Cost of Control	26,000	10,000	10,000
		Capital Res	Goodwill	Capital Res
	Net		26,000 goodwill	

3.	Reserves of Holding Company	
	Reserves	50,000
	Profit and Loss A/c	60,000
	Reserves in Machinery	(6,084)
	Stock Reserve	(800)
	Proposed Dividend	(15,000)
	Reserves (Light)	9,000
	Reserves (Moon)	50,400
	Total	147,516

		Moon	Light
4.	Minority Interest	Moon	Light
	Share Capital	20,000	6,000
	Reserve in Machinery	(936)	(780)
	Stock Reserve	(200)	
	Reserves	21,600	7,000
		40,464	12,220

5. Share Capital of Subsidiary Company

Moon 10,000

8,000	2,000
80% Sun	Minority

Light 6,000

1,800	3,600	600
30% X	60% Y	Minority

6. Reserves of Subsidiary Company

Light Ltd Reserves30,000

15,000	15,000
Pre	Post

Profit and Loss A/c 40,000

25,000	15,000
Pre	Post

Total Pre 40,000

12,000	24,000	4,000
30%	60%	10%
S – CP	M – CP	Min

Post 30,000

9,000	18,000	3,000
30%	60%	10%
S – RP	M – RP	Min

Moon Ltd Reserves 40,000

25,000	15,000
Pre	Post

Profit and Loss A/c 50,000

20,000	30,000
Pre	Post

Total Pre 45,000

36,000		9,000	
80%	20%	80%	20%
S – CP	Min	S – RP	Min

Post 45,000
18,000
63,000

50,400	12,600

7. Fixed Assets

L $\longrightarrow$ M

24 + 8 32

Less Depreciation 0.2 --- 8 x 10% x 3/12 = 0.2

WDV 7.8

30%	60%	10%
2,340 = S	4,680 = M	780 Minority of Light

3744 936

80 % = S Minority Moon

Question 20 – **Nov RTP – 2011**

Harsh Ltd. acquired control in Sukh Ltd. a few years back when Sukh Ltd. had ` 25,000 in Reserve and ` 14,000 profit in Profit and Loss Account. Plant Account (book value ` 66,000) of Sukh Ltd. was revalued at ` 62,000 on the date of acquisition. Equity dividend of ` 7,500 was received by Harsh Ltd. out of pre-acquisition profit and the amount was correctly treated by Harsh Ltd. Debenture interest has been paid up to date. Following are Balance Sheets of Harsh Ltd. and Sukh Ltd.

Balance Sheet as on 30-09-2011

	Harsh Ltd.	**Sukh Ltd.**
Liabilities	`	`
Equity Capital (` 10)	5,00,000	1,00,000
6% Preference Share Capital (` 100)	1,00,000	50,000
General Reserve	30,000	30,000
Profit and Loss account	40,000	12,000
6% Debentures	Nil	1,00,000
Sundry Creditors	90,000	60,000
Due to Sukh Ltd.	10,000	Nil
Bills Payable	20,000	25,000
Total	7,90,000	3,77,000
Assets		
Goodwill	50,000	30,000
Building	2,00,000	50,000
Plant & Machinery	1,05,000	1,00,000
Stock in trade	1,30,000	1,00,000
Sundry Debtors	90,000	50,000
Bills Receivable	30,000	10,000
Due from Harsh Ltd.	Nil	12,000
Bank	27,000	25,000
Investments in Sukh Ltd.		
300 Preference Share Capital	28,000	Nil
7,500 Equity Shares	85,000	Nil
Debentures (Face Value ` 50,000)	45,000	Nil
Total	**7,90,000**	**3,77,000**

1. Cheque of ` 2,000 sent by Harsh Ltd. to Sukh Ltd. was in transit.
2. Balance Sheet of Sukh Ltd. was prepared before providing for 6 months dividend on Preference Shares. Dividend for the first half has already been paid.
3. Both the Companies have proposed preference dividend only, but no effect has been given in accounts.

4. Stock of Harsh Ltd. includes ` 6,000 stock purchased from Sukh Ltd. on which Sukh Ltd. made 20% profit on cost. Stock of Sukh Ltd. includes stock of ` 10,000 purchased from Harsh Ltd. on which Harsh Ltd. made 10% profit on selling price.
5. Since acquisition, Sukh Ltd. has written off 30% of the book value of Plant as on date of acquisition by way of depreciation.
6. Bills Receivable of Sukh Ltd. is due from Harsh Ltd.

Prepare Consolidated Balance Sheet as on 30.09.2011.

Solution

Consolidated Balance sheet of Sun along with its Subsidiaries Moon and Light as on 31/3/08

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		6,00,000
	Reserves and Surplus		88,425
	Minority Interest		54,175
II	Non Current Liabilities		
	Long Term Borrowings		50,000
III	Current Liabilities		
	Trade Payables		1,85,000
	Other Current Liabilities (6,000 + 600)		6,600
Total			**9,84,200**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		4,52,200
	Intangible Assets		
II	Current Assets		
	Inventory		2,28,000
	Trade Receivables		1,70,000
	Cash & Cash Equivalents		54,000
Total			**9,84,200**

Working Notes

1.

	Equity	Preference
Book Value of Investments	85,000	28,000
- Paid up Value of Investment	75,000	30,000
Goodwill / (Capital Reserve)	10,000	(2,000)

2. Capital Reserve

Reserves	18,750
Cost of Control	10,750
Capital Res	

3. Reserves of Holding Company

General Reserves	30,000
Profit and Loss A/c	40,000
Stock Reserve	(1,750)
Proposed Dividend	(6,000)
Dividend of Sukh	900
Gain on write off of Investment	5,000
Revenue Profits	9,525
Total	77,675

4. Minority Interest

Share Capital	25,000
Preference share Capital	20,000
Profits	9,425
Stock Reserve	(250)
Reserves	21,600
	54,175

5. Share Capital of Subsidiary Company

Equity 10,000

7,500 — 80% Holding; 2,500 — Minority

Preference 500

300 — 60% Holding; 200 — Minority

6. Reserves of Subsidiary Company

General Reserves 30,000

25,000 — Pre; 5,000 — Post

Profit and Loss 12,000

	14,000			
Less Dividend		10,000		
	4,000	Pre	8,000	Post
Less Rev	4,000		(1,500)	Less Dividend
	Nil		1,200	Add Depreciation
			7,700	

Total	Pre 25,000		Post	12,700	
	18,750	6,250		9,525	3,175
	H – CP	Minority		H – RP	Minority

Question 21 – **Nov Paper – 2011**

Kim and Kin floated a new company KimKin Ltd. on 1st April 2010 with a capital of ` 5 lakhs represented by 50,000 ordinary shares of ` 10 each, subscribed equally by both groups.

Kimkin Ltd. made the following acquisitions on the same date:

(1) 3,000 shares of ` 10 each in Klean Ltd. at ` 35,000

(2) 10,000 shares of ` 10 each in Klinic Ltd. for ` 72,000

(3) 8,000 equity shares of ` 10 each in Klear Ltd. for ` 92,000 and 200 8% Cumulative Preference shares @ ` 140 per share.

The following are the summarized Balance sheets of the three companies as on 31.03.2011 Liabilities

	Klean Ltd.	Klinic Ltd.	Klear Ltd.
	`	`	`
Equity Share Capital	40,000	1,20,000	1,00,000
8% Cumulative Preference share Capital (Rs.100 shares)			25,000
Reserves (31.03.2010)	3,000		7,500
Profit & Loss Account	6,000		15,000
Sundry Creditors	2,900	8,000	7,500
Total	51,900	1,28,000	1,55,000
Assets			
	`	`	`
Goodwill (self generated)	4,000 -		15,000
Freehold Land	8,000	52,000	50,000
Plant & machinery	16,000	19,000	37,000
Inventories	8,900	25,000	26,000
Sundry Debtors	4,000	12,000	15,500
Bank	11,000	2,000	11,500
Profit & Loss A/c	....	18,000	....
Total	51,900	1,28,000	1,55,000

You are supplied with the following information and requested to compile the Consolidated Balance Sheet as on 31st March 2011 of the entire Group.

1. The freehold land of Klear Ltd. carries a fair value of ` 65,000 as on 1-04-2010.

2. The plant & machinery of Klinic Ltd. to be depreciated by ` .3,000.
3. Inventories of Klean Ltd. are undervalued by ` 2,000.
4. On Balance Sheet date, Kimkin Ltd. owed Klean Ltd. ` 10,500 and is owed ` 8,200 by Klinic Ltd. Klear Ltd. is owed ` 1,300 by Klean Ltd. and ` 2,000 by Klinic Ltd.
5. The balances in Profit and Loss account on date of acquisition were : Klean Ltd. ` 2,000 (Cr) ; Klinic Ltd. ` 12,000 (Dr.) and Klear Ltd. ` 4,000(Cr.)

The credit balances of Klean Ltd. & Klear. Ltd. were wholly distributed as dividends in June 2010.

6. During 2010-11 Klean Ltd. & Klear Ltd. declared and paid interim dividends of 8% and 10% respectively.
7. Klear Ltd. has discharged dividend obligations towards its preference shareholders up-to March 2009.

Solution

Consolidated Balance sheet of KimKin Ltd along with its Subsidiaries as on 31/3/15

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	7. Share Capital		5,00,000
	8. Reserves and Surplus		38,210
	9. Minority Interest		62,390
II	Non Current Liabilities		
III	Current Liabilities		
	1. Trade Payables		19,600
Total			**6,20,200**
Assets			
I	Non Current Assets		
	Fixed Assets		
	1. Tangible Assets		1,94,000
	2. Intangible Assets		19,000
II	Current Assets		
	1. Inventories (W.N.5)		61,900
	2. Trade Receivables		28,200
	3. Cash and Cash Equivalents		3,17,100
Total			**6,20,200**

Notes to Accounts

1.	Share Capital		
	Authorized		?
	Issued, Subscribed and Paid up		
	50,000 shares of Rs. 10 each		5,00,000
2	Reserves and Surplus		

	Capital Reserve	17,630	
	Profit and Loss A/c (W.N 6)	20,580	38,210
3.	Tangible Assets		
	Freehold Land	1,25,000	
	Plant and Machinery	69,000	1,94,000
4.	Intangible Assets		
	Goodwill (4,000 + 15,000)		19,000
5.	Cash and Cash Equivalents		
	Bank Balance (W.N.5)	3,14,000	
	Cash in Transit (W,N.7)	2,200	3,17,100

Working Notes

1.	**Analysis of Profit**	**Rs.**	**Rs.**
	Klean Ltd.	**Capital**	**Revenue**
	Reserves as on 1st April, 2014	3,000	
	Profit and Loss Account as on 1st April, 2014 net of dividend	0	
	Current year profits after interim dividend of ` 3,200		6,000
	Appreciation in inventory value.		2,000
		3,000	8,000
	Less : Minority Interest (1/4)	(750	(2,000)
	Share of Kimkin Ltd. (3/4)	2,250	6,000
	Klinic Ltd.	Capital	Revenue
	Loss on date of acquisition	(12,000)	-
	Current year loss after additional depreciation of ` 3,000		-
	(18,000 + 3,000 – 12,000)	-	(9,000)
		(12,000)	(9,000)
	Less : Minority interest (1/6)	(2,000)	(1,500)
	Share of Kimkin Ltd. (5/6)	(10,000)	(7,500)
	Klear Ltd.	Capital	Revenue
	Reserves as on 1st April, 2014	7,500	
	Profit & Loss as on 1st April, 2014 net of dividend	0	
	Current year profits after interim dividend of ` 10,000		15,000
	Appreciation in freehold property value as on 01.04.2014	15,000	
	Arrears of Preference Dividend of Minority's Preference shares	(400)	(400)
		22,100	14,600
	Less : Minority Interest (1/5)	(4,420)	(2,920)
	Share of Kimkin Ltd. (4/5)	17,680	11,680
2.	Cost of Control / Capital Reserve		

	Cost of Investment in Klean Ltd.	35,000	
	Less : Pre – acquisition Dividend (2,000 x ¾)	(1,500)	33,500
	Cost of Investment in Klinic Ltd.		
	Cost of Equity Investment in Klear CLtd.	92,000	
	Less : Pre – acquisition Dividend (4,000 x 4/5)	(3,200)	88,800
	Cost of Investments cum – preference in Klear Ltd.		28,000
			2,22,300
	Less : Paid up Value of Equity shares in Klean Ltd.	30,000	
	Less : Paid up Value of Equity shares in Klinic Ltd.	1,00,000	
	Less : Paid up Value of Equity shares in Klear Ltd.	80,000	
	Less : Paid up Value of Preference shares in Klear Ltd.	20,000	(2,30,000)
			(7,700)
	Less : Capital Profits in Klean Ltd.	2,250	
	Less : Capital Profits in Klinic Ltd.	(10,000)	
	Less : Capital Profits in Klear Ltd.	17,680	(9,930)
	Capital Reserve		17,630

3. Minority Interest

	Klean Ltd.	Klinic Ltd.	Klear Ltd.
Equity share Capital	10,000	20,000	20,000
Preference Share Capital			5,000
Arrears of Preference Dividend			800
Capital Profits	750	(2,000)	4,420
Revenue Profits	2,000	(1,500)	2,920
	12,750	16,500	33,140

4. Bank Account of KimKin Ltd.

	`		`
To Share Capital	5,00,000	By Investments in Klean Ltd.	35,000
To investment in Klean Ltd	1,500	By Investments in Klinic Ltd.	72,000
(Pre-acquisition Dividend)		By Investments in Klear Ltd.	1,20,000
To investment in Klear Ltd.	3,200	(92,000 + 28,000)	
(Pre – acquisition Dividend)		By Klinic Ltd. (owings)	8,200
To Dividend Received			
Klean Ltd.	2,400		
Klear Ltd.	8,000		
To Klean Ltd. (Owings)	10,500	By Balance c/d	2,90,400
	5,25,600		**5,25,600**

5. Statement showing consolidated balances

	Land	Plant	Inventory	Trade Rec	Bank	Trade Pay
Kimkin Ltd.	-	-	-	8,200	2,90,400	10,500
Klean Ltd.	8,000	16,000	10,900	4,000	11,000	2,900
Klinic Ltd.	52,000	16,000	25,000	12,000	2,000	8,000
Klear Ltd.	65,000	37,000	26,000	15,500	11,500	7,500
	1,25,000	69,000	61,900	39,700	3,14,900	28,900
Less : Mutual	-	-	-	(11,500)		(9,300)

Owings	1,25,000	69,000	61,900	28,200	3,14,900	19,600

6. Consolidated Revenue Profits

Klean Ltd.	6,000
Klinic Ltd.	(7,500)
Klear Ltd.	11,680
	10,180
Add : Interim Dividend Received (2,400 + 8,000)	10,400
Consolidated Profit and Loss A/c	20,580

7. Cash in transit

Amount due from Klinic Ltd. (8,200 + 2,000)	10,200
Less : Balance of trade Payables of Klinic Ltd.	(8,000)
Cash in transit	2,200

2012

Question 22 – May **RTP – 2012 – Similar to May RTP – 2008**

Question 23 – **May RTP – 2012**

Morning Ltd. acquired 60,000 equity shares of ` 10 each in Evening Ltd. on 1-1-2011 at ` 15 per share. The total issued equity share capital of Evening Ltd. was ` 15,00,000 divided into 1,50,000 equity shares of ` 10 each. During the year 2011, the fixed assets of Evening Ltd., have been revalued up by ` 2,50,000. On the date of acquisition of shares, reserves and surplus of Evening Ltd. was ` 5,00,000. Evening Ltd. earned a profit after tax of ` 3,37,500 for the year 2011. During 2011, Evening Ltd. paid an Interim dividend of 5%.

Show in the books of Morning Ltd. the value of investments in shares of Evening Ltd. that would appear at 31-12-2011:

I. In separate Balance Sheet of Morning Ltd., and

II In the Consolidated Balance Sheet of Morning Ltd. and its subsidiaries.

Solution

I. In the separate Balance sheet of Morning Ltd (Extracts)

Assets

Non Current Assets

Non Current Investments

Investments in Evening Ltd	9,00,000
(60,000 shares of ` 10 each)	

II. In Consolidated Balance sheet of Morning Ltd. (Extracts)

Cost [Including Goodwill]	9,00,000
Share of Revaluation Reserve (2,50,000 x 40%)	1,00,000
Add : Share of Revenue Profit	

	(3,37,500 x 40%) – (75,000 x 40%)	1,05,000
	Cost of Investments	11,05,000
III.	Calculation of Goodwill	
	Investment in Evening Ltd	9,00,000
	Less : Nominal Value	(6,00,000)
	Less : Capital Profits (5,00,000 x 40%)	(2,00,000)
	Goodwill	1,00,000

Question 24 – **May Paper – 2012**

The Balance Sheets of A Limited and its subsidiaries B Limited and C Limited as on 31-3-2011 were as follows

	Rs.in lakhs		
	A	**B**	**C**
Investments :			
1,00,000 shares in B Ltd.	100	–	–
80,000 shares in C Ltd,	200	–	–
Other Assets	700	600	500
	1,000	600	500
Share Capital:			
Shares of Rs.100 each	400	100	100
Reserves and Surplus	400	300	200
Liabilities	200	200	200
	1,000	600	500

A Limited acquired shares in B Limited in April 2008 when B Limited was formed with Share Capital of ` 100 lakhs.

A Limited acquired shares in C Limited in April 2008 when C Ltd. had share Capital of ` 100 lakhs and Reserves and surplus of ` 100 lakhs.

The group amortizes goodwill on consolidation on a SLM basis over a period of 5 years. A full year's amortization is provided if the goodwill exists for more than 6 months,

On 1st April, 2011 A Limited sold 40000 shares of C Limited for cash consideration of ` 150 lakhs. The Balance sheets of the companies for the year 2011-12 were as follows :

(1) Balance Sheet as on 31-3-2012

	Rs.in lakhs		
	A	**B**	**C**
	`	`	`
Investments, at. cost:			

1,00,000 shares in B Ltd.	100	–	–
40,000 shares in C Ltd.	100	–	–
Other Assets	1,000	800	700
	1,200	800	700
Share Capital	400	100	100
Reserves and Surplus	550	420	280
Liabilities	250	280	320
	1200	800	700

(2) Profit and Loss A/c for the year ended 31 -3-2012

	Rs.in lakhs		
	A	**B**	**C**
	`	`	`
Profit before tax	150	180	120
Tax	50	60	40
Profit after tax	100	120	80
Extraordinary items	50	–	–
Profit after tax	150	120	80
Reserves & Surplus-Beginning	400	300	200
Reserves & Surplus - End	550	420	280

Prepare for A Limited, group Balance Sheets as on 31-3-2011 and as on 31-3-2012.

Solution

Consolidated Balance sheet of A along with its Subsidiaries B and C as on 31/3/11

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		400
	Reserves and Surplus		756
	Minority Interest		60
II	Non Current Liabilities		
III	Current Liabilities		600
Total			**1816**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		
	Intangible Assets		16
II	Current Assets		1800
Total			**1,816**

Working Notes

		A in B	B in C	
1.	Book Value of Investments	100	200	
	- Paid up Value of Investment	100	(80)	
	Goodwill / (Capital Reserve)	Nil	120	
2.	Capital Reserve			
	Reserves	Nil	80	
	Cost of Control	Nil	40	
	Less : Amortization		(24)	
	Balance		16	Goodwill
3.	Reserves of Holding Company			
	Reserves	400		
	Reserves (C)	80		
	Reserves (B)	300		
	Goodwill Written/off	(24)		
	Total	756		
4.	Minority Interest	C		
	Share Capital	20		
	Reserves	40		
		60		

5. Share Capital of Subsidiary Company

B 100 → 100 % A Ltd

C 100 → 80, 80% A ; 20, Minority

6. Reserves of Subsidiary Company

B Ltd	Reserves	300	--- Holding (100%) CP
C Ltd	Reserves	200	

100 Pre → 80, 80%, A – CP ; 20, 20%, Min

100 Post → 80, 80%, A – RP ; 20, 20%, Min

Consolidated Balance sheet of A along with its Subsidiaries B and C as on 31/3/12

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund Share Capital		400

	Reserves and Surplus Minority Interest		1026 -
II	Non Current Liabilities		
III	Current Liabilities		530
Total			**1956**
Assets			
I	Non Current Assets Fixed Assets Non Current Investments		 156
II	Current Assets		1800
Total			**1,956**

Working Notes

		A in B
1.	Book Value of Investments	100
	- Paid up Value of Investment	<u>100</u>
	Goodwill / (Capital Reserve)	Nil
2.	<u>Capital Reserve</u>	
	Reserves	300
3.	<u>Reserves of Holding Company</u>	
	Reserves	550
	Reserves (C)	32
	Reserves (B)	120
	Profit on Investments	28
	Goodwill Written/off	<u>(4)</u>
	Total	726

4. <u>Reserves of Subsidiary Company</u>

<u>B Ltd</u> Reserves 420

300 – CP 120 – RP

<u>C Ltd</u> Reserves 280

200 Pre 80 Post

40%

32 – RP

Question 25 – **Nov RTP – 2012**

Following are the summarized Balance Sheets of A Ltd., B. Ltd. & C Ltd., as on 31.3.2014:

	A Ltd.	**B Ltd.**	**C Ltd.**		**A Ltd.**	**B Ltd.**	**C Ltd.**

	`	`	`		`	`	`
Share capital of `10 each	5,00,000	3,00,000	2,00,000	Fixed Asset	2,00,000	1,50,000	1,20,000
General Reserves	80,000	60,000	50,000	Investment			
Profit & Loss A/c	1,00,000	80,000	60,000	24,000 Shares in B Ltd.	2,50,000		
Sundry Creditors	70,000	20,000	30,000	6,000 Shares in C Ltd.	80,000		
B Ltd. Balance			40,000	12,000 Shares in C Ltd.		1,60,000	
C Ltd. Balance	1,20,000			Stock in trade	1,00,000	60,000	60,000
				Debtors	1,50,000	40,000	80,000
				C Ltd. Balance		30,000	
				A Ltd. Balance			90,000
				Cash and Bank Balance	90,000	20,000	30,000
	8,70,000	**4,60,000**	**3,80,000**		**8,70,000**	**4,60,000**	**3,80,000**

Other Information:

(a) All the investments were made on 1.8.2013 on which date the provisions were as follows:

	B Ltd. (`)	**C Ltd. (`)**
General Reserves	30,000	15,000
Profit & Loss Account	50,000	25,000

(b) In December 2013, B Ltd. invoiced goods to A Ltd. for ` 80,000 at cost plus 25%. The closing stock of A Ltd. includes such goods valued at ` 10,000.

(c) C Ltd. sold to B Ltd. a machinery costing ` 27,000 at a profit of 25% on selling price on 31.12.2013. Depreciation at 10% per annum was provided by B Ltd. on this equipment.

(d) Debtors of A Ltd. include ` 12,000 being the amount due from B Ltd.

(e) A Ltd. proposed dividend at 10%.

You are required to prepare the Consolidated Balance Sheet of the Group as on 31.3.2014 as per Schedule III to the Companies Act, 2013.

Solution

Consolidated Balance sheet of X along with its Subsidiaries Y and Z as on 31/3/08

Equity and Liabilities		**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		5,00,000
	Reserves and Surplus		2,54,682
	Minority Interest		1,25,218
II	Non Current Liabilities		

III	Current Liabilities Trade Payables Short Term Provisions		 1,48,000 50,000
Total			**10,77,900**
Assets			
I	Non Current Assets Fixed Assets Tangible Assets Intangible Assets		 4,61,900
II	Current Assets Inventory Trade Receivables Cash & Cash Equivalents		 2,18,000 2,58,000 1,40,000
Total			**10,77,900**

Working Notes

		A in B	A in C	B in C
1.	Book Value of Investments	2,50,000	80,000	1,60,000
	- Paid up Value of Investment	2,40,000	60,000	1,20,000
	Goodwill / (Capital Reserve)	10,000	20,000	40,000
2.	Capital Reserve			
	Reserves	64,000	12,000	24,000
	Cost of Control	54,000	8,000	16,000
		Capital Reserve	Goodwill	Goodwill
	Net		30,000 Capital Reserve	

3.	Reserves of Holding Company	
	Reserves	80,000
	Profit and Loss A/c	1,00,000
	Proposed Dividend	(50,000)
	Reserve in Machinery	(6,318)
	Stock Reserve	(1,600)
	Reserves (C)	21,000

Reserves (B)	81,600
	Total
	139.436

4. Minority Interest

	B	C
Share Capital	60,000	20,000
Reserve in Machinery	(972)	(810)
Stock Reserve	(400)	
Reserves	36,400	11,000
	95,028	30,190

5. Share Capital of Subsidiary Company

B 30,000

24,000	6,000
80% A	Minority

C 20,000

6,000	12,000	2,000
30% A	60%B	Minority

6. Reserves of Subsidiary Company

C Ltd Reserves 50,000

5,000	35,000
Pre	Post

Profit and Loss A/c 60,000

25,000	35,000
Pre	Post

Total Pre 40,000

12,000	24,000	4,000
30%	60%	10%
A – CP	B – CP	Min

Post 70,000

21,000	42,000	7,000
30%	60%	10%
A – RP	B – RP	Min

Y Ltd Reserves 60,000

30,000	30,000
Pre	Post

Profit and Loss A/c 80,000

50,000	30,000
Pre	Post

Total Pre 80,000

Post 60,000

42,000

1,02,000

64,000	16,000	81,600	20,400
80%	20%	80%	20%
A – CP	Min	A – RP	Min

7. <u>Fixed Assets</u>

C → B

27,000 + 9,000 36,000

Less Depreciation <u>900</u> --- 9000 x 10% = 900

WDV 8,100

30% 60% 10%

2430 = A 4860 = B 810 Minority of C

3888 972

80 % = A Minority B

Question 26 – **Nov RTP – 2012**

The summarized balance sheets of Rich Ltd. and its subsidiary Poor Ltd. are as follows

Liabilities	**Rich Limited (`in Lakhs)**	**Poor Limited (` in Lakhs)**
Share Capital		
Authorized	<u>15,000</u>	<u>6,000</u>
Issued and Subscribed		
Equity shares of Rs. 10 each, fully paid up	12,000	4,800
General Reserve	2,784	1,380
Profit and Loss Account	2,715	1,620
Bills Payable	372	160
Sundry Creditors	1,461	854
Provisions for Taxation	855	394
Proposed Dividend	1,200	-
Total	**21,387**	**9,208**
Assets	2,718	-
Land And Building	4,905	4,900
Furniture and Fixture	1,845	586
Investments in shares in Poor Ltd.	3,000	-
Stock	3,949	1,956
Debtors	2,600	1,363

Cash and Bank Balance Bills Receivable Sundry Advances	1,490 360 520	204 199 -
	21,387	**9,208**

The Following information is also provided to you :

a) Rich Ltd. Purchased 180 lakh shares in Poor Ltd. on 1st April, 2011 when the balance to general Reserves and profit and Loss Account of Poor Ltd. stood at ` 3,000 lakh and ` 1,200 respectively.

b) On 4th July, 2011 Poor Ltd. declared a dividend @ 20% for the year ended 31st March, 2011.

Rich Ltd. credited the dividend received by its to its profit and Loss Account

c) On 1st Jan, 2012 Poor Ltd. issued 3 fully paid – up shares for every 5 shares held as bonus out of balance to its general reserve as on 31st March, 2011

d) On 31st March, 2012 all the bills payable in Poor Ltd's Balance sheet were acceptance in favour of Rich Ltd.. But on that date, Rich ltd held only ` 45 lakh of These acceptance in hand, the rest having been endorsed favor of its creditors.

e) On 31st March, 2012, Poor Ltd. stock included goods which it had purchased for ` 100 lakh from rich Ltd. which made a profit @ 25% on Cost.

Prepare a consolidated Balance sheet of Rich Ltd. and its subsidiary Poor Ltd. as at 31st March, 2012 bearing in mind the requirements of AS 21.

Solution

Consolidated Balance sheet of X along with its Subsidiaries Y and Z as on 31/3/08

Equity and Liabilities		Note No	Amount
I	Shareholders Fund		
	Share Capital		12,000
	Reserves and Surplus		7,159
	Minority Interest		3,120
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		2,802
	Other Current Liabilities		1,200
	Short Term Provisions		1,249
Total			**27,530**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		14,954
	Intangible Assets		

II	Current Assets		
	Inventory		5,885
	Trade Receivables		4,477
	Cash & Cash Equivalents		1,694
	Short term loans and advances		520
Total			**27,530**

Working Notes

1.	Book Value of Investments	3,000	
	- Paid up Value of Investment	2,880	
	Goodwill / (Capital Reserve)	120	
2.	Capital Reserve		
	Reserves	1,080	
	Pre Acquisition Dividend	360	
		1,440	
	Cost of Control	1,320	Capital Reserve
3.	Reserves of Holding Company		
	General Reserve	2,784	
	Profit and Loss A/c	2,715	
	Pre Acquisition dividend	(360)	
	Reserve from Poor	720	
	Stock Reserve	(20)	
		5,839	
4.	Minority Interest		
	Share Capital	1,920	
	Reserves	1,200	
		3,120	

5. Share Capital of Subsidiary Company

480

180 192

Add : Bonus 108

288 – 60%

6. Reserves of Subsidiary Company

General Reserve 1380

Pre 1,200 180 Post

(3,000 – 1,800)

Profit and Loss A/c 1,620

Pre 600 1020 Post

(1200 – 600)

Total Pre 1800

1080 720

H – CP Min

Post 1200

720 480

H – RP Min

Question 27 – **Nov Paper – 2012 – Similar to June 2009 – RTP**

2013

Question 28 – **May RTP – 2013**

A Limited is a holding company and B Limited and C Limited are subsidiaries of < Limited. Their Balance sheets as on 31.12.2000 are given below.

(`)

	A Ltd.	**B Ltd.**	**C Ltd.**		**A Ltd.**	**B Ltd.**	**C Ltd.**
Share capital	1,00,000	1,00,000	60,000	Fixed assets	20,000	60,000	43,000
Reserves	48,000	10,000	9,000	Investments :			
Profit and loss A/c.	16,000	12,000	9,000	Shares in B Ltd.	95,000	–	–
Sundry Creditors	7,000	5,000	–	Shares in C Ltd.	13,000	53,000	–
C Ltd. balance	3,000	–	–	Stock in trade	12,000	–	–
A Ltd. balance	–	7,000	–	Sundry debtors	26,000	21,000	32,000
				B Ltd. Balance	8,000	–	–
				A Ltd. Balance	–	–	3,000
	1,74,000	**1,34,000**	**78,000**		**1,74,000**	**1,34,000**	**78,000**

The following particulars are given :

i. The Share capital of all companies is divided into shares of ` 10 each.

ii. A Ltd. held 8,000 shares of B Ltd. and 1,000 shares of C Ltd.

iii. B Ltd. held 4,000 shares of C Ltd.

iv. All these investments were made on 30.06.2000.

v. On 31.12.1999, the position was as shown below:

Particulars	**B Ltd. `**	**C Ltd. `**
Reserve	8,000	7,500
Profit and loss account	4,000	3,000
Sundry creditors	5,000	1,000
Fixed assets	60,000	43,000
Stock in trade	4,000	35,500

Sundry debtors	48,000	33,000

vi. 10% dividend is proposed by each company.

vii. The whole of stock in trade of B Ltd. as on 30.06.2000 (` 4,000) was later sold to A Ltd. For ` 4,400 and remained unsold by A Ltd. as on 31.12.2000.

viii. Cash-in-transit from B Ltd. to A Ltd. was ` 1,000 as at the close of business.

You are required to prepare the Consolidated Balance sheet of the group as on 31.12.2000.

Solution

Consolidated Balance sheet of A along with its Subsidiaries B and C as on 31/3/08

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		1,00,000
	Reserves and Surplus		60,305
	Minority Interest		37,820
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		12,000
	Short Term Provisions		10,000
Total			**2,20,125**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		1,23,000
	Intangible Assets		5,525
II	Current Assets		
	Inventory		11,600
	Trade Receivables		79,000
	Cash & Cash Equivalents		1,000
Total			**2,20,125**

Working Notes

		A in B	A in C	B in C
1.	Book Value of Investments	95,000	13,000	53,000
	- Paid up Value of Investment	80,000	10,000	40,000
	Goodwill / (Capital Reserve)	15,000	3,000	13,000
2.	Capital Reserve			
	Reserves	13,600	2,375	9,500
	Cost of Control	1,400	625	3500

Goodwill Goodwill Goodwill

Net 5,525 Goodwill

3. Reserves of Holding Company

Reserves	48,000
Profit and Loss A/c	16,000
Proposed Dividend	(10,000)
Stock Reserve	(320)
Reserves (C)	625
Reserves (B)	6,000
Total	60,305

4. Minority Interest

	B	C
Share Capital	20,000	20,000
Stock Reserve	(80)	
Reserves	4,900	3,000
	24,820	13,000

5. Share Capital of Subsidiary Company

B 10,000

8,000 80% A | 2,000 Minority

C 6,000

1,000 1/6 - A | 4,000 4/6 - B | 1,000 1/6 - Minority

6. Reserves of Subsidiary Company

C Ltd Reserves 9,000

8,250 Pre | 750 Post

Profit and Loss A/c 9,000

6,000 Pre | 3,000 Post

Total Pre 14,250

2,375 1/6 A – CP | 9,500 4/6 B – CP | 2,375 10% Min

Post 3,750

625 1/6 A – RP | 2,500 4/6 B – RP | 625 1/6 Min

B Ltd Reserves 10,000

9,000 Pre | 1,000 Post

Profit and Loss A/c 12,000

8,000 Pre | 4,000 Post

Total Pre 17,000		Post 5,000	
		2,500	
		7,500	
13,600	3,400	6000	1,500
80%	20%	80%	20%
A – CP	Min	A – RP	Min

Question 29 – **May Paper – 2013**

The summarized balance sheets of two companies, Major Ltd. and Minor Ltd. as at 31st December,

2012 are given below :

Particulars	**Major Ltd.**	**Minor Ltd.**
Assets:		
Plant and Machinery	4,14,000	1,00,800
Furniture	14,000	9,200
18,000, ordinary shares in Minor Ltd.	2,40,000	–
4,000 ordinary shares in Major Ltd.	–	48,000
Stock in Trade	96,000	2,28,000
Sundry Debtors	1,40,000	1,70,000
Cash at Bank	34,000	26,000
	938,000	5,82,000
Liabilities :		
Ordinary shares of ` 10 each	3,60,000	2,00,000
7.5% preference shares of ` 10 each	3,00,000	1,60,000
Reserves	52,000	60,000
Sundry Creditors	1,06,000	1,22,000
Profit and Loss account	1,20,000	40,000
	9,38,000	5,82,000

Major Ltd. acquired the shares of Minor Ltd. on 1st July, 2012. As on 31st December, 2011, the plant & machinery stood in the books at ` 1,12,000, the reserve at ` 60,000 and the profit and loss account at ` 16,000. The plant and machinery was revalued by Major Ltd. on the date of acquisition of shares of Minor Ltd. at ` 1,20,000 but no adjustments were made in the books of Minor Ltd.

On 31st December, 2011, the debit balance of profit and loss account was Rs.45,500 in the books of Major Ltd.

Both the companies have provided depreciation on all their fixed assets at 10% p.a.

You are required to prepare a Consolidated Balance Sheet as on 31st December 2012 as per Revised Schedule-VI and Supporting Schedule for Computation.

Solution

Consolidated Balance sheet of Major along with its Subsidiaries Minor as on 31/3/12

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		6,20,000
	Reserves and Surplus		1,69,361
	Minority Interest		2,05,059
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		2,28,000
	Short Term Provisions		22,500
Total			**12,44,920**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		5,50,920
	Intangible Assets		
II	Current Assets		
	Inventory		3,24,000
	Trade Receivables		3,10,000
	Cash & Cash Equivalents		60,000
Total			**12,44,920**

Working Notes

		Major in Minor	**Minor in Major**	
1.	Book Value of Investments	2,40,000	48,000	
	- Paid up Value of Investment	1,80,000	40,000	
	Goodwill / (Capital Reserve)	60,000	8,000	- Goodwill
2.	Capital Reserve			
	Reserves	1,01,378		
	Cost of Control	41,378	8000	
		Capital Reserve	Goodwill	

Net			33,378 Capital Reserve

3. Reserves of Holding Company

Reserves		52,000	
	Less	17,042	34,958
Profit and Loss A/c		97,500	
	Less	12,628	84,872
Reserve (Minor)			16,153
Total			1,35,983

4. Minority Interest

Equity Share Capital	20,000
Pref. Share Capital	1,60,000
Preference Dividend	12,000
Reserves (Minor)	13,059
	2,05,059

5. Share Capital of Minor

20,000

18,000	2,000
Major – 90%	Minority

6. Fixed Assets

Plant and Machinery		
Major Limited	4,14,000	
Minor Limited		
(1,00,800 + 13,600 – 680)	1,13,720	
Furniture		
Major Limited	14,000	
Minor Limited	9,200	
Total	5,50,920	
Plant and Machinery	CP	RP
Opening	1,12,000	
Less : Depreciation	5,600	
	1,06,400	1,20,000
Less : Depreciation	5,600	6,280
Closing	1,00,800	1,13,720

7. Reserves of Minor (Before Inter co)

Reserves 60,000 Pre

Profit and Loss 40,000

Pre 16,000 24,000

(12,000) Preference Dividend

12,000

Pre 6,000 Post 6,000

Pre	82,000		Post	6000
+ Upward	13,600		- Dep	680
	95,600			5,320

8. Reserves of Major

Reserves 52,000

Pre 26,000 26,000 Post

Profit and Loss 1,20,000

Pre (45,500) 1,65,500

(22,500) Preference Dividend

1,43,000

Pre 71,500 Post 71,500

Pre 52,000 Post 97500

9. Inter Company Holding

Major in Minor = 90% i.e 9/10th

Minor in Major = 11.11% i.e 1/9th

<u>Capital Profits</u>

Major = x Minor = y

X = 52,000 + 0.9 Y

Y = 95,600 + 0.1111X

$X = 52{,}000 + 0.9\ (95{,}600 + 0.1111x)$

$X = 52{,}000 + 86{,}040 + 0.09999x$

$0.9\ x = 138040$

$X = 1{,}53{,}378$

$Y = 95{,}600 + 0.1111 \times 153378 = 1{,}12{,}642$

<u>Capital Profits</u>

Major = a Minor = b

$a = 97{,}500 + 0.9\ b$

$b = 5{,}320 + 0.1111a$

$a = 97{,}500 + 0.9\ (5{,}320 + 0.1111a)$

$a = 97{,}500 + 4{,}788 + 0.09999x$

$0.9\ a = 1{,}02{,}288$

$a = 1{,}13{,}653$

$b = 5{,}320 + 0.1111 \times 113653 = 17{,}948$

10. Distribution of Reserves

Major	Pre	52,000	Post	97,500
	Minor	17,042	Minor	12,628
	(1,53,378 x 1/9)			(1,13,653 x 1/9)

Minor	Pre	95,600	Post	5,320
	Add	17,042	Add	12,628
		1,12,642		17,948

1,01,378	11,264	16,153	1795
Major	Minority	Major	Minority

Question 30 – **Nov RTP – 2013**

As on 31-3-2013, the summarized balance sheets of companies in a group showed the following position:

Assets	A `	B `	C `
Fixed assets	1,35,000	60,000	70,000

Investments at cost	1,60,000	1,50,000	10,000
Stock	55,240	36,840	61,760
Debtors	1,10,070	69,120	93,880
Bank Balance	1,31,290	16,540	52,610
Total	**5,91,600**	**3,32,500**	**2,88,250**
	`	`	`
Liabilities			
Equity shares of ` 10 each	2,00,000	1,50,000	80,000
Capital Reserve	50,000	-	23,000
Revenue Reserve	99,540	49,370	45,060
Creditors	1,12,060	73,130	78,190
Provision for Taxation	30,000	-	22,000
Proposed Dividends	1,00,000	60,000	40,000
Total	**5,91,600**	**3,32,500**	**2,88,250**

Additional Information

i. B Ltd. acquired 6,800 shares in C Ltd. at ` 22 per share in 2009 when the balance on capital reserve was ` 15,000 and revenue reserve was ` 30,500.

ii. A Ltd. purchased 8,000 shares in B Ltd. in 2009 when the balance in revenue reserve was ` 40,000. A Ltd. purchased further 4,000 shares in B Ltd. in 2010 when revenue reserve stood at ` 45,000. There was no other investment held by A Ltd. as on 31.3.2013.

iii. Parent companies included there share of proposed dividend in debtors accounts.

Prepare consolidated balance sheet of the group.

Solution

Consolidated Balance sheet of A along with its Subsidiaries B and C as on 31/3/08

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		2,00,000
	Reserves and Surplus		1,66,937
	Minority Interest		64,558
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		2,63,380
	Other Current Liabilities		1,18,000
	Short Term Provisions		52,000
Total			**8,64,875**
Assets			
I	Non Current Assets		

	Fixed Assets		
	Tangible Assets		2,65,000
	Intangible Assets		44,125
	Non Current Investments		10,400
II	Current Assets		
	Inventory		1,53,840
	Trade Receivables		1,91,070
	Cash & Cash Equivalents		2,00,440
Total			**8,64,875**

Working Notes

		A in B	B in C
1.	Book Value of Investments	1,60,000	1,49,600
	- Paid up Value of Investment	1,20,000	68,000
	Goodwill / (Capital Reserve)	40,000	81,600
2.	Capital Reserve		
	Reserves	32,000	45,475
	Cost of Control	8,000	36,125
		Goodwill	Goodwill
	Net	44,125 Goodwill	

3.	Reserves of Holding Company		
	Capital Reserves	50,000	
	Revenue Reserves	99,540	
	Revenue Reserves (B Ltd)	17,937	
	Total	1,66,937	
4.	Minority Interest	**B**	**C**
	Share Capital	30,000	12,000
	Reserves	12,349	10,209
		42,349	22,209

5. Share Capital of Subsidiary Company

B 15,000
- 12,000 — 80% A
- 3,000 — Minority

C 8,000
- 6,800 — 85% - B
- 1,200 — 15% - Minority

6. Reserves of Subsidiary Company

C Ltd Capital Reserve 23,000

Revenue Reserve 45,060

Pre 30,500 14,560 Post

Total Pre 53,500 Post 14,560

45,475 8025 12,376 2,184

B – CP Minority B – RP Minority

B Ltd. Capital Reserve Nil

Reserve Reserves 49,370

Pre 40,000 Post 9,370

Add C Ltd 12,376

21,746

32,000 8,000 17,397 4349

A – CP Minority A – RP Minority

Question 31 **Nov RTP – 2013**

H Ltd., which has an authorised and issued share capital of Rs 10 crore equity shares of ` 10 each fully paid, has a balance of revenue reserve of ` 1,62,000 thousand on 31st March, 2011, after paying a dividend for the year ended on that date.

You are also given the following information:

1. On 1st April, 2011, H Ltd. purchased 90 lakh of the 4 crore issued equity shares of ` 10 each fully paid in A Ltd. for ` 1,42,500 thousand. The balance in revenue reserve of A Ltd. as on 31st March, 2011 was ` 3,45,000 thousand after paying dividend for the year.

2. For the year ended 31st March 2012, H Ltd. made a trading profit of ` 1,84,000 thousand and paid a dividend of 15% while Anoop Ltd. made a trading profit of ` 1,40,000 thousand and paid a dividend of 20%.

3. For the year ended 31st March, 2013, H Ltd. made a trading profit of ` 2,65,400 thousand and paid a dividend of 20% while A Ltd. incurred a trading loss of ` 1,41,000 thousand and no dividend was paid.

4. During the year ended 31st March, 2013, A Ltd. had manufactured and sold to H Ltd. an item of plant for ` 80,000 thousand which included 25% profit on selling price to A Ltd. The plant had been included in the fixed assets of H Ltd. and a full year's depreciation had been provided thereon at 20% on cost.

You are required to show the relevant Notes to Accounts for the Consolidated Balance Sheet of H Ltd. as on 31st March, 2013, together with the corresponding figures for the preceding year, assuming that H Ltd. has a subsidiary and it prepared consolidated financial statements on 31.3.2012 as well as 31.3.2013.

Solution

Notes to Accounts for Consolidated Balance sheet of H LTd. as on 31st March, 2013 (Extract)

			March, 2013	**March 2012**
1.	Share Capital			
	10 Crore shares of Rs. 10 each fully paid			10,00,000
		10,00,000		
2.	Reserves and Surplus			
	Profit and Loss A/c	2,43,175		
	Less Unrealised Profit	(4,500)	2,38,675	2,09,500
	Investment Reserve		77,625	77,625
3.	Non – Current Investments			
	In A Ltd		1,42,500	1,42,500
	Share of Profits Post		(18,225)	13,500
	Pre – Acquisition Profits		77,625	77,625
			2,01,900	2,33,625

Question 32 **Nov Paper – 2013**

From the Balance Sheets of CAT Ltd. and RAT Ltd. as on 31.03.2013 furnished below, read with supplementary information hereunder, you are required to prepare Consolidated Balance Sheet of CAT Ltd. as at 31st March, 2013.

	CAT `	RAT `	ASSETS	CAT `	RAT `
Equity Shares (`.10)	24,00,000	25,00,000	Fixed Assets (Tangible)	38,61,650	17,50,000
9% Cumulative Preference Shares (`.100)	-	20,25,000	Investments in RAT Ltd.	23,51,250	-
Profit & Loss Account	29,10,000	2,60,000	Current Assets	1,87,500	18,60,000
12% Secured Debentures	-	6,50,000			
Creditors (Trade)	10,90,000	4,50,000			
	64,00,400	**36,10,000**		**64,00,400**	**36,10,000**

Supplementary Information:

(1) CAT Ltd. was formed on the First of April, 2012 with an Authorized Capital of 3,00,000 Equity Shares of ` 10 each. On 1st April, 2012 it acquired from the open market 9,000 equity shares in RAT Ltd. at ` 13 per share. On 1st of August 2012 CAT Ltd. made a further acquisition of 4,950 Equity shares in RAT Ltd. @ ` 15 per share and 20,000, 9% Cumulative Preference shares for ` 21,60,000, from the existing shareholders of RAT Ltd. The shares acquired on 1st of August, 2012 were Ex- Bonus and Ex-Dividend.

(2) On 1st August, 2012, CAT Ltd. received Bonus entitlements from RAT Ltd. @ 1 : 4 held, together with 12% equity Dividend from RAT Ltd. The equity dividend received was credited to Profit & Loss A/c by CAT Ltd. Both the bonus issue and the dividend payment have been considered in the Profit & Loss account of RAT Ltd. on 1st August, 2012 itself.

(3) The Profit & Loss account of CAT Ltd. included Current Year Profits amounting to ` 3,75,000 earned after debiting a monthly sum of ` 8,000 in its P & L Account being expenditure incurred on behalf of RAT Ltd. The entry to record the amount due from RAT Ltd. was not passed neither in the books of CAT Ltd. nor in the books of RAT Ltd.

(4) RAT Ltd. earned a profit of ` 1,92,000 for the year ended March 2013 which included ` 61,000 towards insurance claim received for loss of stock by a fire accident on 30th June, 2012. The cost of such stock, which is part of the opening stock of the company as on 1st April, 2012, was ` 1,09,000.

(5) RAT Ltd. has discharged its obligations towards Preference Dividend only up to 31st March, 2011.

(6) A 10% equity dividend has been proposed by CAT Ltd. which is not provided for as yet.

Solution

Consolidated Balance sheet of Evil along with its Subsidiaries Devil as on 31/3/13

Equity and Liabilities	Note	Amount

		No	
I	Shareholders Fund Share Capital Reserves and Surplus Minority Interest		 24,00,000 28,22,865 1,37,160
II	Non Current Liabilities Long Term Borrowings		 6,50,000
III	Current Liabilities Trade Payables Short term Provisions		 15,40,400 2,40,000
Total			**17,80,400**
Assets			
I	Non Current Assets Fixed Assets Tangible Assets Intangible Assets		 56,11,650 1,31,275
II	Current Assets		20,47,500
Total			**17,80,400**

Working Notes

1. Book Value of Investments 23,51,250 - (9,000 x 13 + 4950 x 15 + 21,60,000)

   - Paid up Value of Investment 21,62,000 – 20,00,000 + 1,62,000

   Goodwill / (Capital Reserve) 1,89,250

2. Capital Reserve

   Pre Acquisition Dividend 10,800

   Reserves 47,175

   57,975

   Cost of Control 1,31,275 - Goodwill

3. Reserves of Holding Company

   Profit and Loss A/c 29,10,000

   Expenses for RAT 96,000

   Pre Acquisition Dividend (10,800)

   Proposed Dividend (2,40,000)

   Share in Post Acquisition 67,665

   Total 28,22,865

4. Minority Interest

Equity share capital	63,000
Preference Share Capital	25,000
Preference Dividend	4,500
Reserves	44,660
Total	1,37,160

2014

Question 33 – **May RTP – 2014**

Evil Ltd. purchased control of Devil Ltd. on 01.10.2012. Following are the summarized Balance Sheets of Evil Ltd. and Devil Ltd. as at 31st March, 2013:

Liabilities	**Evil Ltd,** `	**Devil Ltd.** `	**Assets**	**Evil Ltd,** `	**Devil Ltd.** `
Equity Capital (`10)	6,00,000	3,00,000	Goodwill	10,000	40,000
General Reserves	60,000	50,000	Land & Buildings	1,00,000	1,00,000
Profit & Loss Account	1,00,000	1,00,000	Plant & Machinery	2,00,000	1,80,000
Trade Payables	1,00,000	80,000	Investment:		
			22,500 Shares of Devil Ltd.	3,37,500	-
			Inventory	1,17,500	1,00,000
			Trade	50,000	90,000
			Receivables Cash at Bank	45,000	20,000
	8,60,000	**5,30,000**		**8,60,000**	**5,30,000**

On 01.04.2012, Devil Ltd. had ` 50,000 in General Reserve and ` 60,000 in Profit and Loss A/c. On 30th September 2012, 10% dividend was declared by Devil Ltd. in respect of financial year 2011-12 from its profit and loss account. Evil Ltd. credited its share of dividend, on receipt, to the Profit and Loss Account.

Trade receivables of Devil Ltd. include ` 10,000 due from Evil Ltd. Machinery of Devil Ltd. standing in books at ` 2,00,000 as on 1.4.2012, was revalued at ` 2,40,000. Inventory of Evil Ltd. includes goods valued at ` 16,000 purchased from Devil Ltd., on which the latter made a profit of 1/3rd on cost price.

Prepare the Consolidated Balance Sheet of Evil Ltd. and its subsidiary Devil Ltd. as on 31.03.2013.

Solution

Consolidated Balance sheet of Evil along with its Subsidiaries Devil as on 31/3/13

Equity and Liabilities		**Note No**	**Amount**
I	Shareholders Fund		

	Share Capital Reserves and Surplus Minority Interest		6,00,000 1,84,000 1,20,500
II	Non Current Liabilities		
III	Current Liabilities Trade Payables		 1,70,000
Total			**10,74,500**
Assets			
I	Non Current Assets Fixed Assets Tangible Assets Intangible Assets		 6,16,000 50,000
II	Current Assets Inventory Trade Receivables Cash & Cash Equivalents		 2,13,500 1,30,000 65,000
Total			**10,74,500**

Working Notes

1.	Book Value of Investments	3,37,500
	- Paid up Value of Investment	2,25,000
	Goodwill / (Capital Reserve)	1,12,500
2.	Capital Reserve	
	Pre Acquisition Dividend	22,500
	Reserves	90,000
		1,12,500
	Cost of Control	Nil
3.	Reserves of Holding Company	
	General Reserves	60,000
Profit and Loss A/c		1,000,000
Pre Acquisition Dividend		(22,500)
Stock Reserve		(3,000)
	Reserves (Devil)	49,500
	Total	184,000
4.	Minority Interest	
	Share Capital	75,000

Reserve in Machinery	(1000)
Reserves	46,500
	1,20,500

5. Share Capital of Subsidiary Company

30,000

22,500	7,500
75% Holding	Minority

6. Reserves of Subsidiary Company

General Reserve		50,000 --- Pre
Profit and Loss A/c		1,00,000
	60,000	
Less : Dividend	30,000	
Pre	30,000	70,000 Post

Total	Pre	80,000	Post	70,000
	Add Mach	40,000	Less Depreciation	(4,000)
		1,20,000		66,000

90,000	30,000	49,500	16,500
H – CP	Minority	H – RP	Minority

7. Fixed Assets

Land and Building		
Evil	1,00,000	
Devil	1,00,000	2,00,000
Plant and Machinery		
Evil	2,00,000	
Devil (1,80,000 + 40,000 – 4000)	2,16,000	4,16,000
		6,16,000

Plant and Machinery	CP	RP
Opening	2,00,000	2,40,000
Less : Depreciation	20,000	24,000
Closing	1,80,000	2,16,000

Question 34 – May Paper – 2014

The Balance Sheets of the Greatness Group of Companies as at 31" March. 16 2014 is given below:

	Greatest Ltd.	BIG Ltd.	SMALL Ltd.
	`	`	`
Capital & Liabilities			
Share Capital:			
Ordinary Shares of Rs.10	5,00,000	2,00,000	1,00,000
General reserve	1,00,000	50,000	30,000
Profit & Loss Account	2,00,000	1.00,000	50,000
Creditors	3,00,000	2,00,000	1,00,000
Total:	11,00,000	5,50,000	2,80,000
Assets :			
Fixed Assets	7,75,000	4,10,000	2,35,000
Investments :			
16,000 shares in BIG Ltd.	2,00.000	–	–
6,000 shares in SMALL Ltd. -	–	90,000	–
Others (Non-Current)	25,000	–	15,000
Current Assets	1,00,000	50,000	30,000
Total:	11,00,000	5,50,000	2,80,000

Notes:

(1) The investment in BIG Ltd. was made on 1st April. 2007 and that in SMALL Ltd. was made on 1st April, 2009.

(2) The Balances in Reserves and P & L Account on relevant dates are as under:

	1st April 2007	1st April 2009
	`	`
Big Ltd.		
Reserve	20,000	22,000
P & L Account	60,000	68,000
	1st April 2007	**1st April 2009**
	`	`
Small Ltd.		
Reserve	8,000	10,000
P & L Account	17,000	20,000

Solution

Consolidated Balance sheet of Greatest along with its Subsidiaries Big and Small as on 31/3/10

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		5,00,000
	Reserves and Surplus		3,92,000
	Minority Interest		1,48,000

II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		6,00,000
Total			**16,40,000**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		14,20,000
	Intangible Assets		-
	Other Non Current Assets		40,000
II	Current Assets		1,80,000
Total			**16,40,000**

Working Notes

		G in B	B in S
1.	Book Value of Investments	2,00,000	90,000
	- Paid up Value of Investment	<u>1,60,000</u>	<u>60,000</u>
	Goodwill / (Capital Reserve)	40,000	30,000
2.	<u>Capital Reserve</u>		
	Reserves	<u>64,000</u>	<u>18,000</u>
	Cost of Control	24,000	12,000
		Capital Res	Goodwill
	Net	12,000 Capital Reserve	

3. <u>Reserves of Holding Company</u>

General Reserves	1,00,000
Profit and Loss A/c	2,00,000
Reserves from Big	<u>80,000</u>
Total	380,000

4. <u>Minority Interest</u>

	Big	Small
Share Capital	40,000	40,000
Reserves	<u>36,000</u>	<u>32,000</u>
	76,000	72,000

5. <u>Share Capital of Subsidiary Company</u>

Moon 20,000

16,000 (80% H) 4,000 (Minority)

Light 10,000

6,000 (60% H) 4,000

6. <u>Reserves of Subsidiary Company</u>

Small Limited (Big in Small on 1/4/09)

General Reserve 30,000 Profit and Loss A/c 50,000

Pre 10,000 Post 20,000 Pre 20,000 Post 30,000

Total Pre 30,000 Post 50,000

18,000 12,000 30,000 20,000

Big – CP Minority Big – RP Minority

Big Limited (Greatest in Big on 1/4/07)

General Reserve 50,000 Profit and Loss A/c 1,00,000

Pre 20,000 Post 30,000 Pre 60,000 Post 40,000

Total Pre 80,000 Post 70,000

30,000 from small

1,00,000

64,000 16,000 80,000 20,000

G – CP Minority G – RP Minority

Question 35 – **Nov RTP – 2014 – Similar Nov RTP – 2012 (Question 25)**

Question 36 – **Nov Paper – 2014**

'HIM' Limited is a company carrying on the business of beauty products and is having a subsidiary 'SIM' Limited. Their Balance-sheets as on 31st March 2014 were as under:

Equity and Liabilities	HIM Limited	SIM Limited
	`	`
Shareholders' Funds		
Share Capital	25,00,000	5,80,000
Reserves and Surplus		
General Reserves	2,00,000	1,20,000
Profit and Loss Account	3,12,500	2,05,000

Current Liabilities		
Trade Payable	4,55,000	2,35,500
Bills Payable	28,000	83,000
Total Liabilities	34,95,500	12,23,500
Assets		
Fixed Assets	21,70,000	6,25,000
Non-Current Assets		
Investments		
4060 Shares in SIM Limited	5,10,000	–
Current Assets		
Inventories	4,80,000	3,19,200
Trade Payable	1,80,000	1,64,000
Bills Receivable	68,000	1,00,000
Cash and Bank Balances	87,500	15,300
Total Assets	34,95,500	12,23,500

HIM Limited has also given the following information :

(i) HIM Limited has acquired the shares in SIM Limited in two lots on two different dates. The relevant information at the time of acquisition of shares was as under:

No. of shares acquired	Balance in General Reserves	Balance in Profit Loss account
Is' acquisition 3480	80,000	25,000
IInd acquisition 580	85,000	1,02,000

(ii) Bill Receivable of HIM Limited includes `15,000/- being acceptance from SIM Limited.

(iii) Both the companies have declared dividends of 10% for the year ended on 31st March 2014, but it has not been provided in the books of accounts.

(iv) SIM Limited's inventory includes stock of? 1,45,000/- purchased from HIM Limited. HIM Limited sells goods at mark up of 25% on its Cost

Prepare the consolidated Balance Sheet of HIM Limited along with 'Notes' to accounts.

Solution

Consolidated Balance sheet of HIM along with its Subsidiaries SIM as on ___________

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund Share Capital		25,00,000

	Reserves and Surplus		3,79,250
	Minority Interest		2,71,500
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		7,86,500
	Short Term Provisions		2,50,000
Total			**41,87,250**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		27,95,000
	Intangible Assets		22,250
	Other Non Current Assets		
II	Current Assets		
	Inventory		7,70,200
	Trade Receivables		4,97,000
	Cash and Cash Equivalent		1,02,800
Total			**41,87,250**

Working Notes

1. Book Value of Investments 5,10,000

   - Paid up Value of Investment 4,06,000

   Goodwill / (Capital Reserve) 1,04,000

2. Capital Reserve

   Reserves 81,750

   Cost of Control 22,250 – Goodwill

3. Reserves of Holding Company

General Reserves	2,00,000
Profit and Loss A/c	3,12,500
Short Term Provisions	(2,50,000)
Stock Reserve	(29,000)
Reserves from Sim	1,45,750
Total	3,79,250

4. Minority Interest

Share Capital	1,74,000
Reserves	97,500
	2,71,500

5. Share Capital of Subsidiary Company

Moon 5,800

3,480 – 60%
580 – 10%
4060 – 70%

1,740
Minority – 30%

6. Reserves of Subsidiary Company

General Reserve 1,20,000

80,000 5,000 35,000

Profit and Loss 2,05,000

25,000 77,500 1,02,500

Total Prior to 1st Acquisition From 1st to 2nd Acquisition After 2nd Acquisition

1,05,000

73,500 31,500
H – CP Minority

82,500

57,750 24,750
Minority

49,500 8,250
H – RP H – CP

1,37,500

96,250 41,250
H – RP Minority

2015

Question 37 – **May RTP – 2015**

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:

(a) The parent company purchased its investment in the associate two years ago when the balance on the profit and loss account was ` 17,000. The useful life of the goodwill is estimated at ten years and there are no signs of impairment of the goodwill.

(b) 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.

Solution

Consolidated Balance sheet of as on 31/3/15

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		1,00,000
	Reserves and Surplus		1,20,000
	Minority Interest		20,000
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		23,000
	Other Current Liabilities		12,500
	Short Term Provisions		10,000
Total			**2,86,200**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		2,15,500
	Intangible Assets		-
	Non Current Investments		17,200
II	Current Assets		53,500
Total			**2,86,200**

Notes to Accounts

1.	Share Capital		
	Shares of Rs. 1 each fully paid		1,00,000
2.	Reserves and Surplus		
	General Reserve	40,000	
	Profit and Loss A/c	80,700	1,20,700
3.	Trade Receivables		
	Holding and Subsidiary	20,000	
	Joint Venture (50%)	3,000	23,000
4.	Short term Provisions		
	Provisions for Tax		
	Holding and Subsidiary	9,000	
	Joint Venture (50%)	3,500	12,500
	Proposed Dividend		
	Holding and Subsidiary	10,000	
	Joint Venture (50%)	2,000	
		12,000	

	Less Mutual Owings	(2,000)	10,000
			22,500
5.	Fixed Assets		
	Holding and Subsidiary	1,95,000	
	Joint Venture (50%)	20,500	2,15,500
6.	Non – Current Investments		
	Investment in Associate		17,200
7.	Current Assets		
	Holding and Subsidiary	21,000	
	Joint Venture	34,500	
		55,500	
	Less : Mutual Owings (Dividend Receivable)	(2,000)	53,500

Working Notes :

1. Profit and Loss of Associate / Joint Venture

	Pre-Acquisition	Post – Acquisition	
Profit as on 31/3/15	16,000	11,000	
Share of Associate company (20%)		3,200	2,200
Profit and Loss of joint venture	Nil	83,000	
Share of Joint Venture (50%)		41,500	

2. Calculation of Goodwill / Capital Reserve

			Associate	Joint Venture
Investments			15,000	5,000
Less :	Nominal Value	8,000		5,000
	Capital Profit	3,200	(11,200)	- (5,000)
	Goodwill		3,800	Nil

3. Calculation of Consolidation Profit and Loss Account

		`
Profit and Loss Account of Holding & Subsidiary		37,000
Add :	Share of Associate	2,200
	Joint Venture	41,500
		80,700

4. Calculation of Investment in Associate

	`
Goodwill (W.N.2)	3,800

Net Worth	11,200
Cost	15,000
Add : Share of Revenue Profit	2,200
	17,200

Question 38 – May Paper – 2015Draw the Consolidated Balance–Sheet as on 31st March 2015 as per Schedule–III with Notes to Accounts (following Indirect Method) based on the following information:

Balance Sheet as on 31st March 2015 (Rs in Lakhs)

	Liabilities		**P**	**Q**	**R**
Share Capital:	Equity Share Capital (FV ` 100)		600	400	100
Reserves and Surplus:	Reserves		40	10	20
	Surplus in Profit and Loss Account		60	40	30
Current Liabilities:	Trade Payables		30	10	35
	Other Payables:	Q Limited			15
	R Limited		50		
Total			**780**	**460**	**200**
	Assets		P	Q	R
Fixed Assets (Net of Depreciation)			230	150	100
Investments:	Q Limited		320		
	R Limited		40	100	
Current Assets:	Inventories		50	30	40
	Trade Receivables		60	50	20
	Other Receivables:	R Limited		40	
		P Limited			30
	Bank Balance		80	90	10
Total			**780**	**460**	**200**
Additional Information:					

a. P Limited acquired 1,50,000 (cum Bonus) Shares of Q Limited and 30,000 Shares or R Limited and Q Limited acquired 50,000 Shares of R Limited on 29th March 2014.

b. Q Limited fixed 1st April 2014 as Record Date for allotment of Bonus Shares in the ratio of 1:1 and the same were duly allotted.

c. P Limited proposed Dividend at 7.50% for the year ended on 31st March 2015.

d. In December 2014, Q Limited invoiced goods to P Limited for ` 30 Lakhs on a load of 25% on cost. 1/3rd of such goods are in Stock with P Limited as at the end of the year.

e. R Limited sold to Q Limited on 1st January 2015, as asset costing ` 20 Lakhs and made a profit of 20% on Invoice Value. Q has provided depreciation at 10% per annum on such assets.

f. As on 31st March 2014, the balances in Reserves and Profit & Loss Account of Q Limited were ` 5 Lakhs and Rs 15 Lakhs respectively.

g. R Limited made a Profit of ` 12.40 Lakhs during the current year. During the year, ` 0.55 Lakhs was received from Insurance Company against Loss of Stock due to flood which occurred on 31st January 2014 in which goods worth ` 0.75 Lakhs were damaged and were part of R's Stock as on 31st March 2014.

h. R Limited transferred, at the year–end on 31st March 2015, an amount from Profit and Loss Account to Reserves which equals to 20% of the reported aggregate figures of Reserves and Profit and Loss Account in the Balance Sheet.

Solution

Consolidated Balance sheet of P along with its Subsidiaries Q and R as on 31/3/15

	Equity and Liabilities	**Note No**	**Amount**
I	Shareholders Fund		
	Share Capital		600
	Reserves and Surplus		87.964375
	Minority Interest		143.240625
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		75
	Other Current Liabilities		20
	Short Term Provisions		45
Total			**971.205**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		475.125
	Intangible Assets		43.08
II	Current Assets		
	Inventory		118
	Trade Receivables		130
	Cash & Cash Equivalents		205

Total		**971.205**

Working Notes

		P in Q	P in R	Q in R
1.	Book Value of Investments	320	40	100
	- Paid up Value of Investment	300	30	50
	Goodwill / (Capital Reserve)	20	10	50
2.	Capital Reserve			
	Reserves	15	8.22	13.7
	Cost of Control	5	1.78	36.3
		Goodwill	Goodwill	Goodwill
	Net		43.08 goodwill	

3.	Reserves of Holding Company		
	Reserves	40	
	Profit and Loss A/c	60	
	Proposed Dividend	(45)	
	Reserve in Machinery	(3.290625)	
	Stock Reserve	(1.5)	
	Reserves (R)	6.78	
	Reserves (Q	30.975	
	Total	87.964375	
4.	Minority Interest	Q	R
	Share Capital	100	20
	Reserve in Machinery	(0.609375)	(0.975)
	Stock Reserve	(0.5)	
	Reserves	15.325	10
		114.215625	29.025

5. Share Capital of Subsidiary Company

Q 4,00,000 R 1,00,000

1,50,000	1.00,000	30,000	50,000	20,000
Add : Bonus 1,50,000	Minority	30% P	50% Q	Minority
3,00,000 – 75%				

6. Reserves of Subsidiary Company

Z Ltd

30 12.4

Reserves 20		Profit and Loss A/c	
			0.2
10	10	17.4	12.6
Pre	Post	Pre	Post

Total

Pre 27.4			Post 22.60		
8.22	13.7	5.48	6.78	11.3	4.52
30%	50%	20%	30%	50%	20%
P – CP	Q – CP	Min	P – RP	Q – RP	Min

Y Ltd

Reserves 10		Profit and Loss A/c 40	
5	5	15	25
Pre	Post	Pre	Post

Total

Pre 20		Post 30 11.3 41.3	
15	5	30.975	10.325
75%	25%	75%	25%
P – CP	Min	P – RP	Min

7. Fixed Assets

R $\longrightarrow$ Q

20 + 5 25

Less Depreciation 0.125 --- 5 x 10% x 3/12 = 0.125

WDV 4.875

30% 50% 20%

1.4625 = P 2.4375 = Q 0.975 Minority of R

1.828125 0.906375

75 % = P Minority Q

Question 39 – **Nov 2015 RTP**

Zee Ltd. is a company carrying on the business of beauty products, acquired 84,000 shares of an herbel products company Dee Ltd for Rs. 9,60,000 on 31st March, 2010.

The Balance sheet of Dee Ltd. on that date was as under :

Particulars	**Amount (`)**
Equity and Liabilities	
Shareholders Fund	
A. Share Capital	
1,20,000 equity shares of ` 10 each fully paid up	12,00,000
B. Reserves and Surplus	
Capital Reserve	24,000
Profit and Loss Account	48,000
Current Liabilities	
Trade Payable	84,000
	13,56,000
Assets	
Non – Current Assets	
Fixed Assets	8,40,000
Current Assets	5,16,000
	13,56,000

Directors of Dee Limited made bonus issue on 31st March in the ratio of one equity share of Rs. 10 each fully paid up for every two shares held on that date. It was decided that such bonus shares would be issued out of post acquisitions profits by using revenue reserve.

On 31st March, 2015 the summarized Balance sheets of the two companies were as follows.

Particulars	**Zee Limited**	**Dee Limited**
Equity and Liabilities		
Shareholders Fund		
A. Share Capital		
Equity shares of Rs. 10 each fully paid up(Before	36,00,000	12,00,000

Bonus Issue)		
B. Reserves and Surplus		
Capital Reserve	-	24,000
Securities Premium	7,20,000	-
Revenue Reserve	48,00,000	15,24,000
Profit and Loss Account	12,60,000	3,36,000
Current Liabilities		
Trade Payable	4,44,000	1,68,000
	1,08,24,000	32,52,000
Assets		
Non – Current Assets		
Fixed Assets	63,36,000	18,48,000
84,000 equity shares in Dee Ltd at cost	9,60,000	-
Current Assets	35,28,000	14,04,000
	1,08,24,000	32,52,000

You are required to calculate as on 31st March, 2015 (i) Cost of Control (ii) Minority interest (iii) Consolidated Reserves and Surplus in each of the following cases :

1. Before issue of Bonus Shares
2. Immediately after issue of Bonus Shares

Also prepare consolidated Balance sheet of the group after the bonus issue along-with necessary Notes to accounts.

Solution

I – Before the Bonus Issue

1. Book Value of Investments 9,60,000

   - Paid up Value of Investment 8,40,000

   Goodwill / (Capital Reserve) 1,20,000

2. Capital Reserve

   Pre Acquisition Dividend 50,400

   Cost of Control 69,600 – Goodwill

3. Reserves of Holding Company

   Security Premium 7,20,000

   Revenue Reserves 48,00,000

   Profit and Loss A/c 12,60,000

   Reserves from Dee 12,68,400

   Total 80,48,400

4. Minority Interest

   Share Capital 3,60,000

Reserve 5,65,200

9,25,200

5. Share Capital of Subsidiary Company

1,20,000

84,000 36,000

70% Zee Minority

6. Reserves of Subsidiary Company

Capital Reserve 24,000 --- Pre

General Reserve 15,24,000 --- Post

Profit and Loss A/c 3,36,000

Pre 48,000 Post 2,88,000

Total Pre 72,000 Post 18,12,000

50,400 21,600 12,68,400 5,43,600

H – CP Minority H – RP Minority

Consolidated Balance sheet of HIM along with its Subsidiaries SIM as on ____________

	Equity and Liabilities	Note No	Amount
I	Shareholders Fund		
	Share Capital		36,00,000
	Reserves and Surplus		79,78,800
	Minority Interest		9,25,200
II	Non Current Liabilities		
III	Current Liabilities		
	Trade Payables		6,12,000
Total			**1,31,16,000**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		81,84,000

	Intangible Assets Other Non Current Assets		-
II	Current Assets		49,32,000
Total			**1,31,16,000**

1. Book Value of Investments 9,60,000

   - Paid up Value of Investment 12,60,000

Goodwill / (Capital Reserve) (3,00,000)

2. Capital Reserve

   Pre Acquisition Dividend 50,400

   Cost of Control 3,50,400 – Capital Reserve

3. Reserves of Holding Company

Security Premium	7,20,000
Revenue Reserves	48,00,000
Profit and Loss A/c	12,60,000
Reserves from Dee	8,48,400
Total	76,28,400

4. Minority Interest

Share Capital	5,40,000
Reserve	3,85,200
	9,25,200

5. Share Capital of Subsidiary Company

	1,20,000
Add : Bonus	60,000
	1,80000

84,000 54,000

Add : Bonus 42,000 Minority – 30%

1,26,000 – 70%

6. Reserves of Subsidiary Company

Capital Reserve	24,000	--- Pre
General Reserve	15,24,000	
Less : Bonus	6,00,000	
	9,24,000	--- Post

Profit and Loss A/c 3,36,000

Pre 48,000 Post 2,88,000

Total Pre 72,000 Post 12,12,000

50,400	21,600	8,48,400	3,63,600
H – CP	Minority	H – RP	Minority

Question 40 – **Nov 2015 Paper**

X Limited acquired 100% (2,00,000) shares in Y Ltd. for ` 200 Lakhs on 1st April, 2011 when Y Ltd was formed with share capital of ` 200 Lakhs.

X Ltd. acquired 80% (1,60,000) shares in Z Ltd. for ` 400 Lakhs on 1st April, 2011 when Z Ltd. had share capital of ` 200 Lakhs and Reserves and Surplus of ` 200 Lakhs

The company amortizes goodwill on consolidation on a SLM Basis over a period of 5 years. A full years amortization is provided if the goodwill exists for more than 6 months.

On 1st April, X Ltd. sold 80,000 shares of Z Ltd. for cash consideration of ` 300 Lakhs.

The net assets of Z Ltd. on 31st March, 2014 was ` 600 Lakhs. The amount of reserves and surplus was ` 800 Lakhs, ` 600 Lakhs and ` 400 Lakhs respectively in X Ltd., and Z Ltd., on 31st March, 2014.

The Balance sheet of the companies as on 31st March, 2015 were as follows :

	Rs. in Lakhs		
	X Ltd	**Y Ltd.**	**Z Ltd.**
Share Capital (Rs. 100 per share)	800	200	200
Reserves and Surplus	1100	840	560
Current Liabilities	500	560	640
Total	2400	1600	1400
Investment at cost			
2,00,000 shares in Y Ltd.	200	-	-

80,000 shares in Z Ltd.	200	-	-
Current Assets	2000	1600	1400
Total	2400	1600	1400

Prepare for X Ltd. Group Balance sheet as on 31st March, 2015 along with notes to account. Give proper workings.

Solution

Consolidated Balance sheet of X along with its Subsidiaries Y and Associate Z as on 31/3/14

Equity and Liabilities		Note No	Amount
I	Shareholders Fund		
	Share Capital		800
	Reserves and Surplus		2,052
	Minority Interest		-
II	Non Current Liabilities		
III	Current Liabilities		1,060
Total			**3,912**
Assets			
I	Non Current Assets		
	Fixed Assets		
	Tangible Assets		
	Intangible Assets		
	Other Non Current Investments		312
II	Current Assets		3,600
Total			**3,912**

Y is the wholly owned subsidiary

Z is an associate with 40% holding

Working Notes

		Subsidiary	
1.	Book Value of Investments	200	
	- Paid up Value of Investment	200	
	Goodwill / (Capital Reserve)	Nil	
2.	Capital Reserve	Nil	
	Cost of Control	Nil	– Reserve
3.	Reserves of Holding Company		
	Reserve	1100	
	Reserves of Subsidiary	840	

Reserves of Associate	112
Total	2052

4. Reserves of Associate

1/4/2011 Cost of Control as on 1/4/2011

Investments	400	
- Paid up Capital	160	(200 x 80%)
- Share in Reserves	160	(200 x 80%)
	80 –	Goodwill

Goodwill was to be written off in 5 years = 80 / 5 = 16 every year

Written off till this year 16 x 3 = 48

Balance as on today = 80 – 48 = 32

31/3/2015 560

200

Post 360 x 40%	= 144
Less Goodwill written off	= 32
Balance	= 112

Investments in Associate	Dr	112
To Reserves A/c		112

❑ ❑ ❑

3

Chapter

VALUATION OF GOODWILL

	May		Nov	
	RTP	Paper	RTP	Paper
2008	Yes	NA	NA	NA
2009	Yes	NA	Yes	NA
2010	Yes	Yes	Yes	NA
2011	No	Yes	Yes	
2012	Yes	NA	Yes	NA
2013	Pending	Yes	Yes	Yes
2014	NA	Yes	Yes	NA
2015	NA	NA	NA	Yes

2008

Question 1 **May RTP – 2008**

Find out the average capital employed of ND Ltd. from its Balance sheet as at 31st March, 2013

Liabilities	` in lakhs	Assets	` in lakhs
Share Capital		**Fixed Assets**	
Equity shares of ` 10 each	50.00	Land and Building	25.00
9% Preference shares	10.00	Plant and Machinery	80.25
Reserves and Surplus		Furniture and Fixtures	5.50
General Reserve	12.00	Vehicles	5.00
Profit and Loss Account	20.00	Investments	10.00
Secured Loans		**Current Assets**	
16% Debentures	5.00	Stock	6.75
16% Term Loans	18.00	Sundry Debtors	4.90
Cash Credit	13.30	Cash and Bank	10.40
Current Liabilities and Provisions		**Preliminary Expenses**	0.50
Sundry Creditors	2.70		
Provision for Taxation	6.40		
Proposed Dividend on			
Equity Shares	10.00		
Preference Shares	0.90		

	148.30		**148.30**

Non – trade investments were 20% of the total investments

Balances as on 1.4.2012 to the following accounts were

Profit and loss account ` 8.70 lakhs, General reserves ` 6.50 lakhs

(181)

Solution

Capital Employed

(` in lakh)

	`	`
Tangible Trading Assets		
Land & Building	25.00	
Plant & Machinery	80.25	
Furniture & Fixture	5.50	
Vehicles	5.00	
Investments (80%)	8.00	
Stock	6.75	
Sundry Debtors	4.90	
Cash & Bank	10.40	145.80
Less Current Liabilities		
16% Debentures	5.00	
16% Term loans	18.00	
Cash Credit	13.30	
Creditors	2.70	
Provision for taxation	6.40	45.4
Net Assets		100.40
Less : ½ the current year profits		
Increase in general	5.50	
Increase in profit & loss	11.30	
Proposed divided	10.90	
	27.70	
½	13.85	13.85
Average capital employed		86.55

2009

Question 2 **May RTP – 2009**

The following Balance Sheet of X Ltd. is given below :

Balance Sheet as on 31.3.2005

Liabilities	`	**Assets**	`
5000 Shares of ` 100 each	50,00,000	Goodwill	4,00,000
Bank Overdraft	18,60,000	Land and 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

Profit & Loss Appropriation A/c	21,20,000	Debtors considered good	20,00,000
	1,16,00,000		**1,16,00,000**

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

Although income tax has so far been paid @40% and the above profits have been arrived at on the basis of such tax rate, it has been decided that with effect from the year 2004-05 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 2006 is ` 125. With effect from 1st April 2005, Managing Director's remuneration has been approved by the Government to be ` 8,00,000 in place of ` 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 ` 4,00,000 per annum for the next 5 years.

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

Solution

Super Profit Method

Details	**W.N**	**Rs**
1. Future Maintainable Profits	1	` 14,36,600
2. Average Capital Employed	2	` 67,20,000
3. Normal Rate of Return		12%
4. Normal Profits (Step 2 x Step 3)		` 8,06,400
5. Super Profits (Step 1 – Step 4)		` 6,30,200
6. Goodwill (Step 5 x 3 yrs purchase)		` 18,90,600

1. Future Maintainable profits

	01 – 02	02 – 03	03 – 04	04 – 05
Profits (After Tax)	9, 82,000	11, 70,000	14, 50,000	17,00,000
+ Tax	–	–	–	–
Profits (Before Tax)	?	?	?	?

OR

Year	**PPT**	**WT**	**Product**
01 – 02	9,82,000	1	9,82,000
02 – 03	11,70,000	2	23,40,000
03 – 04	14,50,000	3	43,50,000
04 – 05	17,00,000	4	68,00,000
		10	1,44,72,000

Wt. Avg = $\frac{1,44,72,000}{10}$ = 14,47,200

Wt. Avg. (After Tax) = 14,47,200

∴ Wt. Avg (Before Tax) = $\frac{1,44,72,00}{60\%}$ = ` 24,12,000

Wt. Avg.	24,12,000
– Director Remuneration	2,00,000
+ Adv Contract	4,00,000
FMP (Before Tax)	26,12,000
– Tax (45%)	11,75,400
FMP (After Tax)	14,36,600

2. Capital Employed

Particulars	`	`
Sundry Assets (R.V)		
Land & Building	32,00,000	
Plant & Machinery	28,00,000	
Stock	32,00,000	
Debtors	20,00,000	1,12,00,000
Less Externally Liabilities		
Creditors	21,10,000	
Bank O/D	18,60,000	
Provision for Tax	5,10,000	
		(44,80,000)
Capital Employed		67,20,000

Note : Since only one year of balance sheet is given to us we assume that closing capital employed is the average Capital Employed.

3. Normal Rate of Return: Div / MP x 100 = 15 / 125 x 100 = 12%

Question 3 **NOV RTP – 2009**

From the following information supplied to you, ascertain the value of goodwill of A.Ltd._which is carrying on business as retail trader under super profit method : Balance Sheet_as on 31st March, 2015

Liabilities	`	**Assets**	`
Paid up capital 5,000 shares of		Goodwill at cost	50,000
` 100 each fully paid	5,00,000	Land & Bldg. at cost	2,20,000
Bank Overdraft	1,16,700	Plant &Mach. at cost	2,00,000
Sundry Creditors	1,81,000	Stock at trade	3,00,000
Provision for taxation	39,000	Book debts less prov. for	
Appropriation A/c.	1,13.300	bad debts	1,80,000
	9,50,000		9,50,000

The company commenced operations in 1986 with a paid up capital of Rs.5,000. Profits for recent years after taxation have been as follows :

Year ended 31st March `

2009	40,000	(Loss)
2010	88,000	
2011	1,03,000	
2012	1,16,000	
2013	1,30,000	

The loss in 2009 occurred due to a prolonged strike.

The income tax paid so far has been at the average rate of 40% but it is likely to be 50% from now onwards. Dividends were distributed at the rate of 10% on the paid up capital in 2002 and 2003 at rate of 15% in 2004 and 2005. The market price of shares is ruling at ` 125 at the end of the year ended 31st March 2005. Profits till 2005 have been ascertained after debiting ` 40,000 as remuneration to the managing director. The government has approved a remuneration of ` 60,000 with effect from 1st April 2005. The company has been able to secure a contract for supply of materials at advantageous prices. The advantages has been valued at ` 40,000 per annum for the next five years.

Solution

Super Profit Method

Details	W.N	
1. Future Maintainable Profits	1	` 1,01,041
2. Average Capital Employed	2	` 5,63,300
3. Normal Rate of Return		12%
4. Normal Profits (Step 2 x Step 3)		` 67,596
5. Super Profits (Step 1 – Step 4)		` 33,445
6. Goodwill (Step 5 x 3 yrs purchase) (Assumed)		` 1,00,335

1. FMP

Average profit = $\frac{88,000+1,03,000+1,16,000+1,30,000}{4}$

APAT	1,09,250	60%
Avg. Profit Before tax	1,82,083	
– Additional Remuneration	20,000	
+ Advantageous contract	40,000	
FMP (Before Tax)	2,02,083	
– Tax	1,01,042	50%
FMP (After Tax)	1, 01,041	

Note : The loss is required in the 1st year as loss is considered to be abnormal in nature.

2. Average Capital Employed

Land & Building	2,20,000

Plant & Machinery	2,00,000	
Stock at trade	3,00,000	
Book debts	1,80,000	9,00,000
Less Extended liabilities		
Bank overdraft	1,16,700	
Creditors	1,81,000	
Provision for taxation	39,000	(3,36,700)
Capital Employed		5,63,300

3. Normal Rate of Return : Div / MP x 100 = 15 / 125 x 100 = 12%

2010

Question 4 **May RTP – 2010**

The following are the Balance Sheets of two companies ascertain the value of goodwill

(i) Assets are to be revalued as follows:

	Ram Ltd	Sam Ltd
Revaluation of Tangible Block	20,00,000	10,00,000
Revaluation of Current Assets	7,00,000	2,80,000
Average annual profit for three years before charging debenture interest	3,60,000	2,88,000

(ii) Goodwill is to be valued at 4 year's purchase of average super profits for 3 years. Average is to be calculated after adjustment of depreciation @10% on the amount of increase/decrease on revaluation of fixed assets.

(iii) Normal profit on capital employed is to be taken at 10%, capital employed being considered on the basis of revalued amount of tangible assets.

Ram Ltd and shyam Ltd

	Ram	Sam		Ram	Sam
Equity Shares of `10 each	12,00,000	14,00,000	Goodwill	-	1,00,000
Reserves	2,00,000	1,00,000	Net Tangible	16,00,000	12,00,000
10% Debentures	4,00,000	-	Block	6,00,000	5,00,000
Creditors	4,00,000	3,00,000	Current Assets		
	22,00,000	**18,00,000**		**22,00,000**	**18,00,000**

Solution

Super Profit Method

	Ram Ltd.	Shyam Ltd.
1. Future maintainable profit	` 2,80,000	` 3,08,000
2. Capital Employed	` 19,00,000	` 9,80,000
3. Normal Rate of Return	10%	10%
4. Normal Profit	` 1,90,000	` 98,000
5. Super Profit	` 90,000	` 2,10,000
6. Goodwill (4 years Purchase)	` 3,60,000	` 8,40,000

1. Future maintainable profit

Avg. profit before Interest	3,60,000	2,88,000
– Interest	(40,000)	
Avg Profit after Interest	3,20,000	2,88,000
–/+ Additional depreciation	(40,000)	20,000
- Omission of Claims	-	-
Avg profit	2,80,000	3,08,000

2. Capital Employed

Sundry Assets (R.V.)		
Tangible Assets	20,00,000	10,00,000
+ Current Assets	7,00,000	2,80,000
	27,00,000	12,80,000
– Outside liabilities		
Claims		-
10% Debentures	(4,00,000)	-
Creditors	(4,00,000)	(3,00,000)
Capital Employed	19,00,000	9,80,000

Question 5 **May Paper - 2010**

The balance sheet of D Ltd. on 31st March, 2009 is as under:

Liabilities	`	Assets	`
1,25,000 shares of `100 each fully paid up	1,25,00,000	Goodwill	10,00,000
Bank overdraft	46,50,000	Building	80,00,000
Creditors	52,75,000	Machinery	70,00,000
Provision for taxation	12,75,000	Stock	80,00,000
Profit and loss account	53,00,000	Debtors (all considered good)	50,00,000
Total	**2,90,00,000**	**Total**	**2,90,00,000**

In 1989, when the company started its activities the paid up capital was the same. The Profit/Loss for the last five years is as follows:

2004-05 Loss (13,75,000), 2005-06: Profit ` 24,55,000, 2006-07: Profit ` 29,25,000, 2007-08:
profit ` 36,25,000, 2008-09: Profit ` 42,50,000.

Income-tax rate so far has been 40% and the above profits have been arrived at on the basis of such tax rate. From 2009-10, the rate of income-tax should be taken at 45%. 10% dividend in 2005-06, 2006-07 and 15% dividend in 2007-08 and 2008-09 has been paid. Market price of this .share on 31st March, 2009 is ` 125. With effect from 1st April, 2009, the managing directors remuneration will be ` 20,00,000 instead of ` 15,00,000.

The company has secured a contract from which it can an additional ` 10,00,000 per annum for the next five years. Calculate the value of goodwill at 3 years purchase of super profit.

(For Calculation of future maintainable profits weighted average is to be taken).

Solution

Super Profit Method

Details	**W.N**	
1. Future Maintainable Profits	1	` 35,91,500
2. Average Capital Employed	2	` 1,68,00,000
3. Normal Rate of Return		12%
4. Normal Profits (Step 2 x Step 3)		` 20,16,000
5. Super Profits (Step 1 – Step 4)		` 15,75,000
6. Goodwill (Step 5 x 3 yrs purchase)		` 47,26,500

1. Future Maintainable profits

	05 – 06	06 – 07	07 – 08	08 – 09
Profits (After Tax)	24, 55,000	29,25,000	36,25,000	42,50,000

Year	PPT	WT	Product
05 – 06	24,55,000	1	24,55,000
06 – 07	29,25,000	2	58,50,000
07 – 08	36,25,000	3	1,08,75,000
08 – 09	42,50,000	4	1,70,00,000
		10	3,61,80,000

Wt. Avg = $\frac{3,61,80,000}{10}$ = 36,18,000

∴ Wt. Avg (Before Tax) = $\frac{36,18,000}{60\%}$ = ` 60,30,000

Wt. Avg.	60,30,000
– Director Remuneration	5,00,000
+ Adv Contract	10,00,000
FMP (Before Tax)	65,30,000
– Tax (45%)	29,38,500
FMP (After Tax)	35, 91,500

2. Capital Employed

	`	`
Sundry Assets (R.V)		
Land & Building	80,00,000	
Plant & Machinery	70,00,000	
Stock	80,00,000	
Debtors	50,00,000	2,80,00,000
Less External Liabilities		
Creditors	52,75,000	
Bank O/D	46,50,000	
Provision for Tax	12,75,000	(1,12,00,000)
Capital Employed		1,68,00,000

Note : Since only one year of balance sheet is given to us we assume that closing capital employed is Average capital Employed.

3. Normal Rate of Return : Div / NRR x 100 = 15 / 125 x 100 = 12%

Question 6 **Nov RTP – 2010**

Negotiation is going on for transfer of Value Ltd. on the basis of the balance sheet and the additional information as given below:

Balance Sheet of Value Ltd. as on 31st March, 2010

Liabilities	`	Assets	`
Share capital		Goodwill	1,00,000
10 fully paid up)	10,00,000	Land and building	3,00,000
Reserve and surplus	4,00,000	Plant and Machinery	8,00,000
Sundry creditor	3,00,000	Investments	1,00,000
		Stock	2,00,000
		Debtors	1,50,000
		Cash and Bank	50,000
	17,00,000		**17,00,000**

Profit before tax for 2009-10 amounted to ` 6,00,000 including ` 10,000 as interest on investment. However, an additional amount of ` 50,000 p.a. shall be required to be spend for smooth running business.

Market values of land and buildings and plant and machinery are estimated at ` 9,00,000 and ` 10,00,000 respectively. In order to Match the above figures, further depreciation to the extent of ` 40,000 should be taken into consideration. Income tax rate may be taken at 50%. Return on capital at the rate of 20% before tax may be considered normal for this business at the present stage.

Average trading capital employed is required to be considered for the purpose of calculation of goodwill. It has been agreed that 4 years purchase of super profit shall be taken as the value of goodwill for the purpose of the deal.

You are requested to compute the value of goodwill of the company.

Solution

Super Profit Method (No. of years purchase)

Details	W.N	
1. Future Maintainable Profits	1	` 2,50,000
2. Average Capital Employed	2	` 18,50,000
3. Normal Rate of Return		10%
4. Normal Profits (Step 2 x Step 3)		` 1,85,000
5. Super Profits (Step 1 – Step 4)		` 65,000
6. Goodwill (Step 5 x 4 yrs purchase)		` 2,60,000

1. Future Maintainable profits

Profit Before tax	6,00,000
–Income from Investments	10,000

	5,90,000
– Additional expenses	50,000
– Additional depreciation	40,000
FMP (Before tax)	5,00,000
– Tax (50%)	2,50,000
FMP (After tax)	2,50,000

2. Capital Employed

Particulars	`	`
Sundry Assets (R.V)		
Land & Building	9,00,000	
Plant & Machinery	10,00,00	
Stock	0	
Debtors	2,00,000	
Cash & Bank	1,50,000	23,00,00
Less Current Liabilities	50,000	0
Creditors		
		3,00,000
Net Assets		20,00,00
- ½ the current years profits		0
(6,00,000 x 50% x ½)		1,50,000
Average Capital Employed		18,50,000

2011

Question 7 – **May Paper – 2011**

The following are the Balance Sheets of two companies A Ltd and B Ltd as on 31.3.2010

	A Ltd	B Ltd		A Ltd	B Ltd
Equity Shares of ` 10 each	15,00,000	10,00,000	Goodwill	2,00,000	1,00,000
Reserves	3,00,000	2,00,000	Net Tangible Block	17,00,000	14,00,000
10% Debentures	6,00,000	4,00,000	Current Assets	8,00,000	6,00,000
Creditors	3,00,000	5,00,000			
	27,00,000	**21,00000**		**27,00,000**	**21,00,000**

Additional Information :

(I) Assets are to be revalued as follows:

	A Ltd	B Ltd
Revaluation of Tangible Block	21,00,000	12,00,000
Revaluation of Current Assets	10,00,000	4,00,000
Average annual profit for three years before charging debenture interest	4,50,000	3,10,000

(ii) Goodwill is to be valued at 4 year's purchase of average super profits for 3 years. Average is to be calculated after adjustment of depreciation @10% on the amount of increase/decrease on revaluation of fixed assets. In the case of B Ltd a claim of ` 10,000 which was omitted is to be adjusted against its average profit. Income tax is to be ignored.

(iii) Normal profit on capital employed is to be taken at 15%, capital employed being considered on the basis of revalued amount of tangible assets.

Solution

Super Profit Method

	A Ltd.	**B Ltd.**
1. Future maintainable profit	` 3,50,000	2,80,000
2. Capital Employed	` 22,00,000	6,90,000
3. Normal Rate of Return	15%	15%
4. Normal Profit	3,30,000	1,03,500
5. Super Profit	20,000	1,76,500
6. Goodwill (4 years Purchase)	80,000	7,06,000

1. Future maintainable profit

Avg. profit before Interest	4,50,000	3,10,000
– Interest	(60,000)	(40,000)
Avg Profit after Interest	3,90,000	2,70,000
–/+ Additional depreciation	(40,000)	20,000
- Omission of Claims	-	(10,000)
Avg profit	3,50,000	2,80,000

2. Capital Employed

Sundry Assets (R.V.)		
Tangible Assets	21,00,000	12,00,000
+ Current Assets	10,00,000	4,00,000
	31,00,000	16,00,000
– Outside liabilities Claims		(10,000)
10% Debentures	(6,00,000)	(4,00,000)
Creditors	(3,00,000)	(5,00,000)
Capital Employed	22,00,000	6,90,000

Question 8 – **Nov RTP – 2011**

Given below is the Balance Sheet of X Ltd. as on 31.3.2004 and 31.3.2005.

Balance Sheet

Liabilities	**31.3.04 '000 `**	**31.3.05 '000 `**	**Assets**	**31.3.04 '000 `**	**31.3.05 '000 `**
Share Capital	10,000	10,000	Sundry fixed		
General Reserve	8,000	8,500	Assets and Investments	16,000	18,000
Profit & Loss A/c.	1,200	1,750	Stock	5,500	6,000
18% Term loan	2,500	2,300	Debtors	3,400	2,200
Cash credit	1,200	1,000	Cash & Bank	925	1,000
Sundry Creditors	700	900			
Tax Provision					

(net of advance tax)	225	250			
Proposed dividend	2,000	2,500			
	25,825	**27,200**		**25,825**	**27,200**

Other Information :

(i) Current cost of sundry fixed assets excluding non-trade investments (in Rs. Thousand) - 31.3.2004 - 22,000 and 31.3.2005 - 23,800.

(ii) Current cost of stock :

31.3.2004 ` 6,700

31.3.2005 ` 7,500

(ii) The tax rate during 2004-2005 : 52.5%. Effective future tax rate 54.5%.

(iv) Non-trade investments in 11 % government securities ` 510 thousand.

(v) Debtors include foreign exchange debtors amounting to $700 recorded at the rate $ 1 – ` 17.5 but closing exchange rate was $1 – ` 21.50.

(vi) Creditors include $ 1200 foreign exchange creditors recorded at the rate $ 1 – ` 12.50 but exchange rate at the closing date was $ 1 - 17.50

(vii) Profit includes ` 120 thousand government subsidy on machinery purchased which is not likely to recur in future.

(viii) From the profit ` 72,000 were written off on account of R and D costs which was the last instalment. This expenditure is not likely to recur.

(ix) Normal rate of return may be taken as 10%

Find out value of goodwill of X Ltd.

Note : The depreciation on account of revaluation of fixed assets may be ignored.

Solution

Capitalization Method

Details	**W.N**	
1. Future Maintainable Profits	1	` 3488.20
2. Normal Rate of Return		10%
3. Capitalized Value of FMP (Step 1 / Step 2)		` 34,882.04
4. Capital Employed		` 29,223.4
5. Goodwill (Step 3 – Step 4)		` 5,658.65

1. FMP

Increase in profit and loss A/c	550	
Increase in general reserve	500	
Proposed dividend	2500	
NPAT	3550	47.5
+ Tax		
	7473.68	100
– Income from non-trade investments	(56.10)	
+ Undervaluation of closing stock	1500	

– Undervaluation of opening stock	(1200)
+ Exchange gain on Debtors	2.8
– Exchange loss on creditors	(6)
– Subsidiary	(120)
+ R.D. Cost	72
	7666.38
– Tax (54.5%)	4178.178
	3488.20

2. Average capital employed

	Amt	Amt
Sundry Assets		
Fixed Assets & Investments	22,000	23,800
Non – Trade Investments	-	-
Stock	6,700	7,500
Debtors	3,400	2,202.8
Cash / Bank	925	1,000
Total	33,025	34,502.8
Less Outside Liability		
18% Term Loan	2,500	2,300
Cash Credit	1,200	1,000
Creditors	700	906
Tax Provision	225	250
Total	4,625	4,456
Capital Employed	28,400	30,046.8

ACE = $\frac{28,400+30,046.8}{2}$ = `.29.223.4

2012

Question 9 - **May 2012 – RTP**

The Balance Sheet of Steel Ltd. as on 31st March, 2011 is given below:

Liabilities	Amount	Assets	Amount
Share Capital		Fixed Assets	
Equity Shares		Goodwill	70,000
6,00,000	5,80,000	Machinery	3,00,000
Less Calls in arrears		Freehold Property	4,50,000
20,000	3,00,000	Vehicles	1,00,000
(` 2 per share)		Furniture	50,000
7% Preferences shares	3,50,000	Investments	2,00,000
Reserves and Surplus	1,50,000	Current Assets	
General Reserves		Stock	2,50,000
Profit and Loss Account	3,00,000	Debtors	4,00,000
Current Liabilities	2,00,000	Cash at Bank	60,000
Sundry Creditors			
Bank Loan			
Total	**18,80,000**	**Total**	**18,80,000**

Additional Information:

1) On 1.4.2008 a new furniture costing ` 20,000 was purchased and wrongly charged to revenue. No rectification has yet been made for the same. Depreciation charged on furniture is @ 10% on reducing balance system.
2) Fixed assets are worth 15% above their book value.
3) Stock is overvalued by 50,000 and 10% Debtors are doubtful.
4) Of the investment, 10% is trade investment and the balance is non – trade investment. Trade investment is to be valued at 10% below cost. A Uniform rate of dividend of 10% is earned on all investments.
5) Profits after tax are as follows

	`
2008-09	2,50,000
2009-10	2,80,000
2010-11	3,30,000

6) In a similar business normal return on capital employed is 20%

You are required to calculate the value of goodwill on the basis of 2 years purchase of super profits based on the average profit of the last 3 years, assuming tax rate of 50%/

Solution

Super profit method

Details	**W.N**	
1. Future Maintainable Profits	1	` 2,65,097
2. Average Capital Employed	2	11,89,767
3. Normal Rate of Return		20%
4. Normal Profits (Step 2 x Step 3)		` 2,37,953
5. Super Profits (Step 1 – Step 4)		` 27,144
6. Goodwill (Step 5 x 2 yrs purchase)		` 54,288

Working Notes

1. Future Maintainable Profits

Particulars	**08-09**	**09-10**	**10-11**
Profits After Tax	2,50,000	2,80,000	3,30,000
Add : Tax (50%)			
Profit Before Tax	5,00,000	5,60,000	6,60,000
Add : Furniture	20,000	-	-
Less : Depreciation	(2,000)	(1800)	(1620)
Less : Income from Investment	(18,000)	(18,000)	(18,000)
Less : Overvaluation of Stock			(50,000)
Less : RDD			(40,000)
Net Profits as adjusted	5,00,000	5,40,200	5,50,380

$$FMP=\frac{500000+540200+550380}{3}=5,30,193-50\%\ (tax)=2,65,097$$

Capital Employed

Particulars	Amount	Amount
Tangible Trading Assets		
Furniture (W.N 3) (+15%)	74,267	
Free hold Property (15%)	5,17,500	
Vehicles (+15%)	1,15,000	
Machinery (+15%)	3,45,000	
Trade Investments	18,000	
Inventory	2,00,000	
Debtors	3,60,000	
Cash / Bank	60,000	
- External Liability		16,89,767
Secured Loan	2,00,000	
Creditors	3,00,000	5,00,000
		11,89,767
Capital Employed		

3. Value of Furniture as on 31.3.2011

Particulars	Amount	Amount
Furniture as on 31.3.2011		50,000
Add: Purchased on 1.4.2008	20,000	
Less: Depreciation @ 10% on W.D.V	(2,000)	
WDV as on 31.3.2009	18,000	
Less: Depreciation @ 10% on W.D.V	(1,800)	
WDV as on 31.3.2010	16,200	
Less: Depreciation @ 10% on W.D.V	(1,620)	
WDV as on 31.3.2011		14,580
Total		64,580

Question 10 – Nov – 2012 – RTP – Similar to May 2010 RTP – Question 4

2013

Question 11 – **May 2013 – Paper**

The Balance Sheet of Domestic Ltd. as on 31st March, 2013 is as under : (` in Lacs)

Liabilities	`	Assets	`
Equity Shares `10 each	3,000	Goodwill	744
Reserves (including provision for taxation of `	1,000	Premises and Land at cost	400

300 lacs)				
5% Debentures		2,000	Plant and Machinery	3,000
Secured Loans		200	Motor vehicles (Purchased on 1.10.12)	40
Sundry Creditors		300	Raw materials at cost	920
Profit & Loss a/c :			Work-in-progress at cost	130
Balance from previous year	32		Finished goods at cost	180
Profit for the year (after taxation)	1,100	1,132	Book Debts	400
			Investment (meant for replacement of Plant & Machinery)	1,600
			Cash at Bank & Cash in Hand	192
			Discount on Debentures	10
			Underwriting Commission	16
		7,632		**7,632**

1. The resale value of Premises and Land is ? 1,200 lacs and that of Plant and Machinery is ` 2,400 lacs.
2. Depreciation @ 20% is applicable to Motor vehicles.
3. Applicable depreciation on Premises and Land is 2% and that on Plant and Machinery is 10%.
4. Market value of the investments is ` 1,500 lacs.
5. 10% of book debts is bad.
6. The company also revealed that the depreciation was not charged to Profit and Loss account and the provision for taxation already made is sufficient.
7. In a similar company the market value of equity shares of the same denomination is ` 25 per share and in such company dividend is consistently paid during last 5 years @ 25%. Contrary to this, Domestic Ltd. is having a marked upward or downward trend in the case of dividend payment.
8. In 2007-08 and in 2008-09 the normal business was hampered. The profit earned during 2007-08 is ` 67 lacs, but during 2008-09 the company incurred a loss of 1 1,305 lacs.

Past 3 years' profits of the company were as under :

2009 - 10	` 469 lacs
2010 - 11	` 546 lacs
2011 - 12	` 405 lacs

The unusual negative profitability of the company during 2008-09 was due to the lock out in the major manufacturing unit of the company which happened in the beginning of the second quarter of the year 2007-08 and continued till the last quarter of 2008-09.

Value the goodwill of the company on the basis of 4 years' purchase of the super profit.

Solution

Super profit method

Details	W.N	
1. Future Maintainable Profits	1	` 410.785
2. Average Capital Employed	2	` 4118
3. Normal Rate of Return		11%
4. Normal Profits (Step 2 x Step 3)		` 452.98
5. Super Profits (Step 1 – Step 4)		Nil
6. Goodwill (Step 5 x 3 yrs purchase)		Nil

Working Notes

1. Future Maintainable Profits

Particulars	09-10	10-11	11-12	12-13
Profit After Tax	469	546	405	100
Add : Provision for Tax				300
Profit Before Tax	596.91	694.91	515.45	1400
Less Depreciation				
Premises and Land	(8)	(8)	(8)	(8)
Plant and Machinery	(300)	(300)	(300)	(300)
Motor Vehicles	-	-	-	(4)
Less Bad Debts	-	-	-	(40)
Net Profit Before Tax	**288.91**	**386.91**	**207.45**	**1048**

Tax Rate = $\frac{300}{1400}$ x 100 = 21.43%

Average Profit	482.8175
Less Additional Dep on Premises	(16)
Add : Reduction Dep on Plant	60
Less : Dep on Motor Vehicles	(4)
Profit Before Tax	522.8175
Less Tax (21.43%)	112.0323
Profit After Tax	410.785

1. Capital Employed

Particulars	Amount	Amount
Tangible Trading Assets		
Premises and Land	1200	
Plant and Machinery	2400	
Motor Vehicles (40 – 4)	36	

Raw Materials Work – in – Progress Finished Goods Trade Receivable (400 – 10%) Investments Cash at Bank - External Liability Provision for Tax 5% Debentures Secured Loan Trade Payables	920 130 180 360 1500 192 300 2000 200 300	 6,918 2,800
Capital Employed		4,118

3) NRR – In Other Industry = $\frac{2.5\ (10 \times 25\%)}{25} \times 100 = 10\%$

Since company is paying irregular dividends and therefore more risky, so we should ADD risk premium to NRR = 10% + 1% = 11%

Question 12 – **Nov 2013 – RTP**

ET Ltd. gives the following information-(All figures in `.000s)

PARTICULARS	2008	2009	2010	2011	2012
Net Profit after appropriation for proposed Dividend at 20% on equity share capital	19,10	18,50	22,40	20,15	25,25
Equity share capital	150,00	150,00	180,00	180,00	180,00
Advance Tax paid during the year	50,00	35,00	60,00	55,00	60,00
Provision for taxation(A/C balance at the end of the year)	3.20	2,00	3,00	2,00	1,00

The company made the following changes in its accounting policies:

1. Switched over to FIFO basis of Stock Valuation after 2010
2. Switched over to WDV method of Depreciation after 2011

Earlier the company was recognizing the gain/loss on the basis of difference between collection rate and exchange rate. However, the company now decided to generate exchange on sundry debtors at the year end.

Effects of stock Valuation for different years were quantified as belows:

Particulars for the year	2008	2009	2010
Stock adjustments –LIFO	(cr.) 1,21	(cr.) 1,31	(cr.) 1,42
Stock adjustments –FIFO	(Dr.)15	(Cr.)21	(Cr.)54

Amount of depreciation under two alternative methods were as below:

Particulars	2008	2009	2010	2011
Straight Line	7,12	8,10	8,25	8,40
WDV	8,10	8,95	9,25	9,30

Details of debtors in foreign exchange along with relevant exchange rates were as below:

Year ended	Debtor in Aus$ in '000	Entry Rate	Year end rate	Collection rate
31.12.2008	5,000	49.10	49.25	49.35
31.12.2009	6,200	49.40	49.55	50.40
31.12.2010	6,300	50.35	52.40	51.95
31.12.2011	7,200	54.10	53.90	55.10
31.12.2012	8,200	57.10	56.95	57.15

Year end Debtors were collected in the next year. Before change in accounting policy, the entire profit and loss arising out of change in exchange rate was taken to Profit and loss account of the year of collection.

The following expenses and income were not charged in the year when they occurred. Instead they were charged in the next year as prior period adjustments:

Year	2008	2009	2010	2011
Expenses(`.000s)	87	14	25	54
Income (`.000s)	12	35	8	68

Ascertain future maintainable profit for the purpose of valuation of goodwill, assuming future tax rate as 34%. Effects of changes in policies to be ignored.

Solution

Effect of foreign Exchange Rate Differences in Debtors

Particulars	2008	2009	2010	2011	2012
(a)Gain to be correctly considered					
(i)On restatement (Debtorsx(Year end Rate-Entry Rate))	750	930	12,915	(1,440)	(1,230)
(ii)On collection of proceeds(Debtorsx(Year End rate –Collection Rate))	-	500	5,270	(2,835)	8,640
Total profit to be considered	750	1,430	18,185	(4,275)	7,410
(b)Less: Gain wrongly considered(Debtors x (Collection rate –Entry rate))	Nil	(1,250)	(6,200)	(10,080)	(7,200)
Effects on profit	**750**	**180**	**11,985**	**(14,355)**	**210**

Effects of differences in treatment of expenses and income(`000s)

Particulars	2008	2009	2010	2011	2012
(a)Expenses to be considered	87	14	25	54	
Actually considered		87	14	25	54
Net effect on profit	(87)	73	(11)	(29)	54
(b)Income to be considered	12	35	8	68	
Actually considered		12	35	8	68
	12	23	(27)	60	68
Net effect on profit	(75)	96	(38)	31	(14)
Net effect on the above profits(a)-(b)					

Computation of Adjusted Past Profits

Particulars	2008	2009	2010	2011	2012
Net Profit after appropriation of dividend	19,10	18,50	22,40	20,15	25,25
Add: Proposed dividend at 20% of Capital		30,00	36,00	36,00	36,00
Tax expense for the year	30,00	37,00	63,00	57,00	61,00
Net Profit before taxes	53,20	85,50	1,21,40	1,31,15	1,22,25
Adjust: Effect of change in Stock Valuation	1,02,30				
Reversal of LIFO		(1,31)	(1,42)		
Implementation of FIFO basis	(1,21)	21	54		
Effect of change in method of depreciation i.e WDV less SLM	(15)	(85)	(100)	(90)	-
Effect of exchange Gain/Loss adjusted in Debtor	(98)	180	11,985	(14,355)	210
Effect of adjustment of expenses and income	750	96	(38)	31	(14)
Adjusted Profits Before Tax	(75) 1,06,71	86,31	2,38,99	(30,99)	1,24,21

Particulars	Amount in ` 000s
Simple Average of past 5 years adjusted profits before tax FMP before Tax=(1,06,71+86,31+2,38,99-30,99+1,24,21/5)	1,05,04.60
Less: Tax Expenses@34%	(3,571.56)
Future Maintainable Profit	6,933.04

Question 13 – **Nov 2013 – Paper**

The Summarized balance sheet of M/s Indus Ltd. as on 31.03.2013 is as follows :

Liabilities	Amount (`)	Assets	Amount (`)
Equity Share Capital ` 10 each fully paid	5,00,000	Goodwill	1,00,000
12% Preference Shares of `10 each fully paid	4,00,000	Land & Building	4,50,000
Equity Shares of ` 10 each ` 7 partly paid	2,80,000	Plant & Machinery	5,45,000
Reserves & surplus	2,20,000	Vehicles	3,50,000
Secured loans (12%)	7,50,000	Investments	5,00,000
Sundry Creditors	2,50,000	Inventory	4,25,000
Provision for expenses	1,50,000	Debtors	1,00,000
		Cash and Bank	35,000
		Prepaid Expenses	45,000
	25,50,000		**25,50,00**

			0

(1) Net Profit of the company for the past Four Years (before intt & tax) were as under:

2012-13	5,50,000
2011-12	3,85,000
2010-11	5,25,000
2009-10	4,90,000

(2) The company had purchased Furniture of ` 1,20,000 in the year 2011-12 which was wrongly charged to Revenue account. Furniture and Fixtures are depreciated at 15% of the W.D.V .

(3) In the year 2012-13 an asset having a book value of ` 80,000 was sold for ` 65,000 only.

(4) In the year 2010-11 the company paid ` 25,000 against the failure to comply with the rules as per the environment pollution control board.

(5) 60 % of the investments are Non-Trade investments and Market Value of the Trade investments is 15 % below the book value. The investments realize an interest of 8 % p.a whether trade or not. The Non- trade investments were purchased on 01.04.2012.

(6) The company has been paying managerial Remuneration of ` 1,00,000 p.a but as per the Companies Act the amount eligible to be paid is ` 80,000 p.a only for the past four years.

(7) The goodwill in books had been purchased in the year 2009-10.

(8) 60% of the Secured loan was availed from US which was recorded at a rate of 1$= Rs.50 where as the closing rate was 1$= ` 55.

(9) The company wishes to revalue Assets on the realizable value as under ;

Land & building	5,50,000	
Plant & machinery		5,00,000
Vehicles	2,50,000	
Debtors	80,000	

(Ignore the change in depreciation due to the change in the value of Assets.)

The rate of Tax on companies is 30% and the rate of return on capital Employed is 15% p.a. Calculate Goodwill based on four Years purchase of Super Profit. Make appropriate assumption wherever required.

Solution

Super profit method

Details	W.N	
1. Future Maintainable Profits	1	` 2,95,068

2. Average Capital Employed 3. Normal Rate of Return 4. Normal Profits (Step 2 x Step 3) 5. Super Profits (Step 1 – Step 4) 6. Goodwill (Step 5 x 3 yrs purchase)	2	` 10,46,700 15% ` 1,57,005 ` 1,38,063 ` 5,52,252

Working Notes

Future Maintainable Profits

Particulars	09-10	10-11	11-12	12-13
Profit Before Interest Tax	4,90,000	5,25,000	3,85,000	5,50,000
Less : Interest	(90,000)	(90,000)	(90,000)	(90,000)
Add : Furniture	-	-	1,20,000	-
Less : Depreciation	-	-	(18,000)	(15,300)
Add : Loss on Sale of FA	-	-	-	15,000
Add : Penalty Paid	-	25,000	-	-
Less : Income from Investment	-	-	-	(24,000)
Add : M. D. Remuneration	20,000	20,000	20,000	20,000
Less : Exchange Loss	-	-	-	(45,000)
Less : Bad Debts	-	-	-	(20,000)
Net Profits as adjusted	4,20,000	4,80,000	4,17,000	3,90,700

Average Profits	4,26,925
Less : Interest on Loan	<u>(5,400)</u>
Profit Before Tax	4,21,525
Less Tax (30%)	<u>1,26,457</u>
Profit After Tax	<u>2,95,068</u>

Capital Employed

Particulars	Amount	Amount
<u>Tangible Trading Assets</u>		
Furniture	86,700	
Goodwill	1,00,000	
Land and Building	5,50,000	
Plant and Machinery	5,00,000	
Vehicles	2,50,000	
Investments	1,70,000	
Inventory	4,25,000	
Debtors	80,000	
Cash / Bank	35,000	
Prepaid Exp	45,000	22,41,700
<u>- External Liability</u>		
Secured Loan	7,95,000	

Creditors Provision for Expenses	2,50,000 1,50,000	11,95,000
Capital Employed		10,46,700

Investments 5,00,000 (8%)

Non Trading — Trade

3,00,000 — 2,00,000 – Revised Value = Rs. 1,70,000

Loan 7,50,000

US $\frac{4,50,000}{50}$ — From India = 3,00,000

$ = 9,000

Current = 9,000 x 55 = ` 4,95,000

Total Loan = ` 4,95,000 + 3,00,000 = ` 7,95,000

2014

Questions 14 – **May 2014 – Paper**

A Company Q is willing to sell its business. The purchaser has sought 16 professional advice for the valuation of the goodwill of the company. He has the last audited financial statements together with some additional information. Help him to ascertain the correct price for the purpose of purchase :

The extract of the Balance Sheet as on 31-3-2014 is as under:

Liabilities	`	Assets	`
Equity Share Capital (shares of ` 100 each)	9,50,000	Goodwill	2,75,000
8% Preference Share Capital shares of `.100 each)	2,25,000	Land & Building	5,45,000
Reserve & Surplus	10,25,500	Plant & Machinery	4,55,000
9% Debentures	5,60,000	Investments in shares	4,85,000
Current Liabilities	3,25,640	Inventories	3,80,000
		Trade Receivables (net)	4,25,620
		Cash & Bank balance	5,20,520
Total	**30,86,140**	**Total**	**30,86,140**

1. The purchaser wants to acquire all the equity shares of the company.
2. The Debentures will be redeemed at a discount of 25% of the value in Balance Sheet and investments in share will be sold at their present market value which is quoted as ` 4.95.200. The above will be prior to the purchase of the equity shares.

For the Purpose of Pricing of Goodwill :

3. The normal rate of return on net assets for equity shares is 10%.
4. Profits for the past three years after debenture interest but before Preference Share Dividend have been as under:

   31-3-2014 ` 2,95,000

   31-3-2013 ` 4,99,000

   31-3-2012 ` 3,25,000
5. Goodwill is valued at three years purchase of the adjusted average super profit.
6. In the year 2013 20% of the profit mentioned above was due to non recurring transaction resulting in increase of profit.
7. The Land & Building has a current rental value of ` 62,400 and a 8% return is expected from the property.
8. On 31-3-2014. 8% of debtors existing on the date had been written as bad and charged to Profit and Loss Account as Provision for Bad debts. The same are now recoverable. Tax is applicable at 35%.
9. A claim of compensation long contingent of ` 25,000 has perspired and is to be accounted for.
10. No Debenture interest shall be payable in future due to its redemption.

Solution

Super profit method

Details	**W.N**	
1. Future Maintainable Profits	1	` 3,57,095
2. Average Capital Employed	2	` 20,97,710
3. Normal Rate of Return		10%
4. Normal Profits (Step 2 x Step 3)		` 2,09,771
5. Super Profits (Step 1 – Step 4)		` 1,47,324
6. Goodwill (Step 5 x 3 yrs purchase)		` 4,51,972

Working Notes

Future Maintainable Profits

Particulars	**2012**	**2013**	**2014**
Profit After Tax	3,25,000	4,99,000	2,95,000
Add Tax (35%)			
Profit Before Tax	5,00,000	7,67,692	4,53,846
Less : Non Recurring Income	-	(1,53,538)	-

Add : R.D.D Less : Claim Not Recorded	- -	- -	37,010 (25,000)
Net Profits as adjusted	**5,00,000**	**4,80,000**	**4,65,856**

Average Profits	5,26,670
Add : Interest on Loan	(50,400)
Profit Before Tax	5,77,070
Less Tax (35%)	2,01,975
Profit After Tax	3,75,095
Less : Preference Dividend	18,000
Profits for Equity	3,57,095

Capital Employed

Particulars	**Amount**	**Amount**
Tangible Trading Assets Land and Building Plant and Machinery Inventory Trade Receivable Cash and Bank Balance (5,20,520 + 4,95,200 + 4,20,000) - External Liability Current Liability Claims not recorded	 7,80,000 4,55,000 3,80,000 4,62,630 5,95,720 3,25,640 25,000	 26,73,350 3,50,640
Capital Employed		23,22,710
Less Preference Capital		2,25,000
Capital Employed by Equity shareholders		20,97,710

Question 15 – **Nov 2014 – RTP**

Apex Ltd. gives the following information about the past profits.

Years	**Profits (in 000's)**
2009 – 2010	21,70
2010 – 2011	22,50
2011 – 2012	23,70
2012 – 2013	24,50
2013 – 2014	21,10

On Scrutiny it is found (i) found that 2011-12, Apex Ltd Followed FIFO method of stock valuation and thereafter adopted LIFO method, (ii) that upto 2011-2012, it followed straight line depreciation and thereafter adopted written down value method.

Given below are the details of stock valuation:

(in '000s)

YEAR	**OPENING STOCK**		**CLOSING STOCK**	
	FIFO	**LIFO**	**FIFO**	**LIFO**
2009-10	40,00	39,80	46,00	41,20

2010-11	46,00	41,20	49,20	47,90
2011-12	49,20	47,90	38,90	39,10
2012-13	38,90	39,10	42,00	38,50
2013-14	42,00	38,50	45,00	43,10

Straight line and written down value depreciation were as follows:

Year	Straight Line('000)	W.D.V('000)
2009-10	12,10	17,00
2010-11	14,15	18,10
2011-12	15,00	19,25
2012-13	16,70	19,60
2013-14	18,00	19,40

Determine future maintainable profits that can be used for the valuation of goodwill.

Solution

Past profits of Apex Ltd., showed an increasing trend except in the year 2013-14.But the effects of changes in accounting policies should be eliminated to ascertain the true nature of trend. Since the company has adopted LIFO method of stock valuation and W.D.V method of depreciation, profits shall be recomputed applying these policies consistently in all the past years.

Year	Book Profits	LIFO Effect of Valuation of Stock	Effect of WDV depreciation	Profits after elimination of the effect of changes in accounting policy
2009-10	21,70	(4,60)	(4,90)	12,20
2010-11	22,50	3,50	(3,95)	22,05
2011-12	23,70	1,50	(4,25)	20,95
2012-13	24,50	(20)	(2,90)	21,40
2013-14	21,10	-	-	21,10

Future Maintainable Profit is to be calculated on simple Average Method.

FMP=22, 05+20, 95+21, 40+21, 10/4=` 21, 37.50

Effect of LIFO Valuation

Year	Particulars	Amount
2009-10	Increase in stock as per FIFO valuation	6,00
	Less: Increase in stock per LIFO valuation	(1,40)
	Reduction in profit	4,60
2010-11	Increase in stock as per FIFO Valuation	3,20
	Less: Increase in stock per LIFO valuation	(6,70)
	Increase in profit	3,50
2011-12	Decrease in stock as per FIFO valuation	10,30
	Less: Decrease in stock as per LIFO valuation	(8,80)
	Increase in profit	1,50
2012-13	Opening Stock as per LIFO valuation	38,90
	Less: Opening Stock as per LIFO valuation	(39,10)
	Reduction in Profit	20

Questions 16 – **Nov 2015 – Paper**

Find out the Leverage Effect on Goodwill from following information :

1.	Average Capital Employed (Equity Approach)	` 11,50,000
2.	Future Maintainable profits (Equity Funds)	`. 1,80,000
3.	10% Long Term Loan	` 4,50,000
4.	Tax Rate	40%
5.	Normal Rate of Return :	
	On Equity Capital Employed	15%
	On long Term Capital Employed	12%

Solution

	Owners Funds	Total Funds
1. Future maintainable profit	` 1,80,000	2,07,000
2. Capital Employed(Actual)	` 11,50,000	16,00,000
3. Normal Rate of Return	15%	12%
4. Normal Capital Employed(1/3)	12,00,000	17,25,000
5. Goodwill(4-2)	50,000	1,25,000

Leverage Effect on Goodwill=1,25,000-50,000=` 75, 000

Working Notes

Future Maintainable Profits

Particulars	**Owners Funds**	**Total Funds**
Profit before Interest	3,45,000	
Less: Interest on Long term Loans	(45,000)	3,45,000
FMP(Before Tax)	3,00,000	-
Less: Tax @ 40%	1,20,000	3,45,000
		1,38,000
FMP(After Tax)		
(1,80,000/60%=3,00,000)	1,80,000	2,07,000

❑ ❑ ❑

4 Chapter

VALUATION OF SHARES

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	Yes	Yes	Yes	No
2009	Yes	Yes	Yes	No
2010	Yes	NA	Yes	Yes
2011	Yes	Yes	Yes	Yes
2012	Yes	NA	Yes	Yes
2013	Yes	NA	Yes	NA
2014	NA	NA	Yes	Yes
2015	Yes	NA		

2008

Question 1 **May 2008 RTP**

The Balance sheet of ABC Ltd. as at 31st March, 2007 was as follows

Liabilities	Amount	Assets	Amount
Equity Shares	5,00,000	Goodwill	1,00,000
General Reserve	2,50,000	Equipment at Cost	9,00,000
Profit and Loss A/c	1,00,000	Stock	3,50,000
12% Debentures	3,00,000	Debtors	1,50,000
Provision for Depreciation on	1,50,000	Bank	75,000
Equipment	40,000	Advertisement Suspense	25,000
Staff Welfare Fund	75,000		
Proposed Dividend	75,000		
Sundry Creditors	1,85,000		
	16,00,000		**16,00,000**

You are required to calculate the value of an equity share on net asset basis. The following further information is available

1. A Fair return (after tax) on capital employed for this type of business is 10%
2. Equipment to be revalued at ` 8,00,000
3. Stocks are considered to have a net realizable value of ` 3,30,000
4. Goodwill in the type of business is normally valued at 3 years super profits.
5. Included in the debtors is a balance of ` 10,000 which may be irrecoverable

6. Profits for the last three years (before interest and taxes) are 2006-07 ` 5,40,000, 2005-06 ` 5,10,000 and 2004-05 ` 5,50,000.
7. Company profits are taxed at 40%.

(205)

Solution

Computation of average Capital Employed

Particulars	Amount `.
Sundry Assets:	
Equipment	8,00,000
Stock	3,30,000
Debtors (1,50,000-10,000)	1,40,000
Bank	75,000
Less: Outside Liabilities	
Sundry Creditors	(1,85,000)
12% Debentures	(3,00,000)
Trading tangible capital employed	8,60,000

Computation of Average annual maintainable super profit and Goodwill

Particulars	Amount `.
Average annual profit for last 3 years before interest and taxes	5,33,333
(5,40,000+5,10,000+5,50,000)/3	36,000
Less: Interest (3,00,000x12%x3 years)/3	4,97,333
Less: Income tax @ 40%	1,98,933
Average annual maintainable profit	2,98,400
Less: Normal Return on capital employed(18% of Rs.8,60,000)	1,54,800
Average annual maintainable super profit	1,43,600
No. of Purchase Year	3
Goodwill	4,30,800

Computation of net assets available to equity shareholders

Particulars	Amount `
Trading Tangible Capital Employed	8,60,000
Add: Goodwill	4,30,800
Net Asset available to equity shareholders	12,90,800
No. of equity shares	50,000 shares
Value per share	25.816 per share

Question 2 – **May 2008 Paper**

Following are the information of two companies for the year ended 31st March, 2009

Particulars	Company A	Company B
Equity Shares of ` 10 each	8,00,000	10,00,000
10% Preference shares of ` 10 each	6,00,000	4,00,000

Profit after tax	3,00,000	3,00,000

Assume that the market expectation is 18% and 80% of the profits are distributed

1. What is the rate you would pay to the equity shares of each company?

   a. if you are buying a small lot

   b. if you are buying controlling interest.

2. if you are planning to invest only in preference shares, which company's preference shares would you invest?

3. Would your rates be different for buying small lots, if the company Z retains 30% and company Y retains 10% of profits?

Solution

	X	Y
Profit After Tax	3,00,000	3,00,000
Less : Preference Dividend	60,000	40,000
Earnings for Equity	2,40,000	2,60,000
Less : Dividend (80%)	1,92,000	2,08,000
Retention	**48,000**	**52,000**

1. A. Yield Value – Dividend Yield (For Small Lots)

Steps	X	Y
1. Expected Rate of Return	24%	20.8%
2. Normal Rate of Return	18%	18%
3. Yield Value	`. 13.33/share	`. 11.56/share

1. Expected Rate of Return

$$ERR = \frac{\text{Dividend available for ESH}}{\text{Total Paid up Equity}} \times 100$$

$$= \frac{1,92,000}{8,00,000} \times 100 = 24\% \qquad = \frac{2,08,000}{10,00,000} \times 100 = 20.8\%$$

<u>Yield Value</u>

$$= \frac{ERR}{NRR} \times \text{paid up value per share}$$

$$= \frac{24}{18} \times 10 = \text{` } 13.33/\text{- share} \qquad = \frac{20.8}{18} \times 10 = \text{` } 11.56/\text{- share}$$

3. B. Yield Value – Earning Yield (For Controlling Interest)

Steps	X	Y
1. Expected Rate of Return	30%	26%
2. Normal Rate of Return	18%	18%
3. Yield Value	`. 16.67/share	`. 14.44/share

1. Expected Rate of Return

$$ERR = \frac{\text{Dividend avaialble for ESH}}{\text{Total Paid up Equity}} \times 100$$

$$= \frac{2,40,000}{8,00,000} \times 100 = 30\% = \frac{2,60,000}{10,00,000} \times 100 = 26\%$$

2. Yield Value

$$= \frac{ERR}{NRR} \times \text{paid up value per share}$$

$$= \frac{10}{18} \times 10 = ` 16.67/\text{- share} \qquad = \frac{26}{18} \times 10 = ` 14.44/\text{- share}$$

3. Yield Value – Dividend Yield (For Small Lots)

Steps	**X**	**Y**
1. Expected Rate of Return	21%	23.4%
2. Normal Rate of Return	18%	18%
3. Yield Value	`. 11.67/share	`. 13/share

	X	Y
Earnings for Equity	2,40,000	2,60,000
- Retentions	72,000	26,000
Dividend	1,68,000	2,34,000

1. Expected Rate of Return

$$ERR = \frac{\text{Dividend available for ESH}}{\text{Total Paid up Equity}} \times 100$$

$$= \frac{1,68,000}{8,00,000} \times 100 = 21\% \qquad = \frac{2,34,000}{10,00,000} \times 100 = 23.4\%$$

Yield Value

$$= \frac{ERR}{NRR} \times \text{paid up value per share}$$

$$= \frac{21}{18} \times 10 = ` 11.67/\text{- share} \quad = \frac{23.4}{18} \times 10 = ` 13/\text{- share}$$

2. Investment in equity shares

A. while deciding on the investment in the preference shares, the prime consideration should dividend.

Company X = 10% and Company Y = 10%

B. If the Preference Dividend is similar in both the companies, then the next consideration is Preference Dividend Coverage Ratio

$$\text{Preference Dividend Coverage Ratio} = \frac{\text{Profit After Tax}}{\text{Preference Dividend}}$$

$X = \frac{3,00,000}{60,000} = 5$ times $Y = \frac{3,60,000}{40,000} = 7.5$ times

We must invest in company y.

Question 3 – **Nov 2008 RTP**

Balance Sheet of Symphony Ltd. as at 31st March,2008 is given below:

Liabilities	Amount	Assets	Amount
Share capital: 6,000 equity Shares of ` 100 each fully paid up Reserves and Surplus: Profit and Loss A/c Current Liabilities and provisions: Bank Overdraft Creditiors Provision for taxation Proposed division	6,00,000 50,000 10,000 60,000 1,10,000 60,000	Fixed assets: Building Machinery Current assets, loans and advances Stock Sundry Debtors Bank	 1,50,000 2,20,000 3,00,000 1,60,000 60,000
	8,90,000		**8,90,000**

The net profit of the company, after deducting usual workings expenses but before providing for taxation, were as under:

Year	`
2005-06	2,00,000
2006-07	2,40,000
2007-08	2,20,000

On 31st March, 2008. Building was revalued at ` 2,00,000 and Machinery at ` 2,50,000. Sundry Debtors, on the same date, included ` 10,000 as irrecoverable. Having regard to the nature of the business, a 10% return, on net tangible capital invested, is considered reasonable.

You are required to value the company's ex-dividend. Valuation of goodwill may be based on three year's purchase of annual super profits. Depreciation on Building 2% and on Machinery 10%. The income-tax rate is to be assumed at 50%. All workings should be part of your answer.

Solution:

Statement showing Valuation of shares (ex dividend)

Particulars	Amount
Trading Capital Employed	7,80,000
Add: Goodwill	79,000
Less: Proposed Dividend	(60,000)
Net asset available for equity shareholders	7,99,000
No. of shares outstanding	6,000 shares
Value per share	133.17

Working Notes:

1. Calculation of FMP

Particulars	Amount	Amount
Profit for the year		
2005-06	2,00,000	
2006-07	2,40,000	
2007-08	2,20,000	6,60,000
Less: Bad debts as on 31.3.08		(10,000)
Profits for 3 years		6,50,000
Average profits for 3 Years(` 6,50,000/3)		2,16,667
Less: Additional depreciation on revaluation of assets	1,000	
Building 2% on ` 50,000(` 2,00,000-` 1,50,000)	3,000	(4,000)
		2,12,667
Machinery 10% on ` 30,000(` 2,50,000-` 2,20,000)		1,08,334
Profit before tax		1,08,334
Less: Income Tax @ 50%		
Profit After Tax		

2. Calculation of Capital Employed

Particulars	`	`
Building	2,00,000	
Machinery	2,50,000	
Stock	3,00,000	
Sundry Debtors(1,60,000-10,000)	1,50,000	
Bank	60,000	9,60,000
Less: Liabilities		
Creditors	60,000	
Provision for Tax	1,10,000	
Bank Overdraft	10,000	(1,80,000)
Capital employed		7,80,000

Valuation of goodwill (Super profit method)

Details	W.N	Amount
1. Future Maintainable Profits	1	1,04,333
2. Average Capital Employed	2	7,80,000
3. Normal Rate of Return		10%
4. Normal Profits (Step 2 x Step 3)		78,000
5. Super Profits (Step 1 – Step 4)		26,333
6. Goodwill (Step 5 x 3 yrs purchase)		79,000

2009

Question 4 **May 2009 RTP**

The following is the balance sheet of N Ltd. as on 31st March, 2002.

Liabilities	`	Assets	`

4,00,000 Equity shares of ` 10 each fully paid	40,00,000	Goodwill Building	4,00,000 24,00,000
13.5% Redeemable preference shares of Rs.100 each fully paid	20,00,000	Machinery Furniture	22,00,000 10,00,000
General reserve	16,00,000	Vehicles	18,00,000
Profit and loss account	3,20,000	Investments	16,00,000
Bank loan		Stock	11,00,000
(Secured against fixed assets)	12,00,000	Debtors	18,00,000
Bills payable	6,00,000	Bank balance	3,20,000
Creditors	31,00,000	Preliminary expenses	2,00,000
	1,28,20,000		**1,28,20,000**

Further information :

i. Return on capital employed is 20% in similar business

ii. Fixed assets are worth 30% more than book value. Stock is overvalued by ` 1,00,000. Debtors are to be reduced by ` 20,000. Trade investments, which constitute 10% of the total investments are to be valued at 10% below cost.

iii. Trade investments were purchased on 1.4.2001. 50% of non-trade investments were purchased on 1.4.2000 and the rest on 1.4.1999. Non-trade investments yield 15% return on cost.

iv. In 1999-2000, new machinery costing ` 2,00,000 was purchased, but wrongly charged to revenue. This amount should be adjusted taking depreciation at 10% on reducing value method.

v. In 2000-2001, furniture with a book value of ` 1,00,000 was sold for ` 60,000.

vi. For calculating goodwill, two years purchase of super profits based on simple average profits of last four years are to be considered. Profits of last four years are as under:

1998-1999 ` 16,00,000, 1999-2000 ` 18,00,000, 2000-2001 ` 21,00,000, 2001-2002 ` 22,00,000.

vii. Additional depreciation provision at the rate of 10% on the additional value of plant and machinery alone may be considered for arriving at average profit.

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

Solution

Super profit method

Details	**W.N**	
1. Future Maintainable Profits	1	` 17,36,076
2. Average Capital Employed	2	` 81,53,540
3. Normal Rate of Return		20%
4. Normal Profits (Step 2 x Step 3)		

5. Super Profits (Step 1 – Step 4)		16,30,708
6. Goodwill (Step 5 x 3 yrs purchase)		1,05,368
		` 2,10,736

Working Notes

Future Maintainable Profits

Particulars	98-99	99-2000	2000-01	2001-2002
Profits as given	16,00,000	18,00,000	21,00,000	22,00,000
Add : Machinery Capitalized	-	2,00,000	-	-
Less : Depreciation	-	(20,000)	(18,000)	(16,200)
Add : Loss on Sale	-	-	40,000	-
Less : Income from investments	-	(1,08,000)	(2,16,000)	(2,16,000)
Less : Stock Overvalued	-	-	-	(1,00,000)
Less : Debtors	-	-	-	(20,000)
Net Profits as adjusted	**16,00,000**	**18,72,000**	**19,06,000**	**18,47,500**

Average Profits	18,06,450
Less :Depreciation	70,374
Profit Before Tax	17,36,076

1. Capital Employed

Particulars	Amount	Amount
Tangible Trading Assets		
Building	24,00,000	
Machinery	23,45,800	
Furniture	10,00,000	
Vehicles	18,00,000	
	75,45,800	
Add – 30%	22,63,740	
	98,09540	
Trade Investments	1,44,000	
Stock	10,00,000	
Debtors	17,80,000	
Cash And Bank	3,20,000	1,30,53,540
Less External Liability		
Creditors	12,00,000	
Bank Loan	6,00,000	
Bills Payable	31,00,000	49,00,000
Capital Employed		**81,53,540**

Investments 16,00,000

Non Trading Trade – 1.4.2001

14,40,000 1,60,000 – Revised Value = ` 1,44,000

7,20,000	7,20,000
1.4.2000	1.4.1999

A. Intrinsic Value

Steps	W.N	
1. Net Assets for Equity Share holders	1	` 78,04,276
2. No of Equity shares		4,00,000
3. Intrinsic Value (step 1 / Step 2)		` 19.51/share

Working Notes

1. Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed	81,53,540
Add : Goodwill	2,10,736
Add : Non trade Investments	14,40,000
Net Assets	**98,04,276**
Less Preference Due	
Preference Share Capital	20,00,000
Net Assets for Equity shareholders	**78,04,276**

Question 5 – **May 2009 paper**

Following is the Balance sheet of Rampal Limited as on 31st March, 2009:

Liabilities	`.	Assets	`.
1,00,000 equity shares of `.10 each	10,00,000	Goodwill	5,00,000
		Buildings	15,00,000
10,000 12% preference shares of `. 100 each	10,00,000	Plant	10,00,000
		Investment in 10% Stock	4,80,000
General reserve	6,00,000	Stock-in-trade	6,00,000
Profit and loss account	4,00,000	Debtors	4,00,000
15% debentures	10,00,000	Cash	1,00,000
Creditors	8,00,000	Preliminary expenses	2,20,000
	48,00,000		**48,00,000**

Additional information are given below:

(a) Nominal value of investment is ` 5,00,000 and its market value is ` 5,20,000

(b) Following assets are revalued:

(i) Building ` 32,00,000

(ii) Plant ` 8,00,000

(iii) Stock-in-trade ` 4,50,000

A. (iv) Debtors ` 3,60,000

(c) Average profit before tax of the company is ` 12,00,000 and 12.50% of the profit is transferred to general reserve, rate of taxation being 50%.

(d) Normal dividend expected on equity shares is 8% while fair return on closing capital employed is 10%.

(e) Goodwill may be valued at three year's purchase of super profits.

Ascertain the value of each equity share under fair value method.

Solution

Super profit method

Details	**W.N**	
1. Future Maintainable Profits	1	` 5,75,000
2. Average Capital Employed	2	` 31,10,000
3. Normal Rate of Return		10%
4. Normal Profits (Step 2 x Step 3)		` 3,11,000
5. Super Profits (Step 1 – Step 4)		` 2,64,000
6. Goodwill (Step 5 x 3 yrs purchase)		` 7,92,000

Working Notes

1. Future Maintainable Profit

Average Profits before tax	12,00,000
Less :Income from Investment	50,000
Profit Before Tax	11,50,000
Less Tax (50%)	5,75,000
Profit After Tax	5,75,000

2. Capital Employed

Particulars	**Amount**	**Amount**
Tangible Trading Assets		
Building	32,00,000	
Plant	8,00,000	
Stock	4,50,000	
Debtors	3,60,000	
Cash	1,00,000	49,10,000
Less External Liability		
15% Creditors	10,00,000	
Creditors	8,00,000	18,00,000
Capital Employed		**31,10,000**

A. Intrinsic Value

Steps	**W.N**	

1. Net Assets for Equity Share holders 2. No of Equity shares 3. Intrinsic Value (step 1 / Step 2)	1	` 34,22,000 1,00,000 ` 34.22/share

Working Notes

Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed Add : Goodwill Add : Non trade Investments	31,10,000 7,92,000 5,20,000
Net Assets	**44,22,000**
Less Preference Due Preference Share Capital	 10,00,000
Net Assets for Equity share holders	**34,22,000**

B. Yield Value

Steps	W. N	
1. Expected Rate of Return 2. Normal Rate of Return 3. Yield Value	1 2	40.5% 8% `. 50.625/ share

1. Expected Rate of Return

Average Profits before tax	12,00,000
Less Tax (50%)	5,75,000
Profit After Tax	6,00,000
Less Preference Dividend	1,20,000
Less Transfer to General Reserve	75,000
Profits for Equity shareholders	4,05,000

$$\text{ERR} = \frac{\text{Profits avaialble for ESH}}{\text{Total Paid up Equity}} \times 100 = \frac{4,05,000}{10,00,000} \times 100 = 40.5\%$$

2. Yield Value

$$= \frac{\text{ERR}}{\text{NRR}} \text{ x paid up value per share} = \frac{40.5}{8} \times 10 = \text{` } 50.625/\text{- share}$$

C. Fair Value

$$= \frac{\text{IV + Yield Value}}{2} = \frac{34.22 + 50.625}{2} = \text{` } 42.42 \text{ / share}$$

Question 6 **Nov RTP 2009**

The balance sheet of Major Ltd. as on 31st December, 2009 as follows :

Liabilities		`.	Assets	`.
Share capital Equity shares of `.10	 5,00,000		Fixed assets: Goodwill	 50,000

each				
Less : Calls in arrear			Machinery	2,30,000
(`.2 for final call)	-10,000	4,90,000	Factory shed	3,00,000
8% Preference shares of			Vehicles	60,000
`.10 each fully paid		2,00,000	Furniture	25,000
Reserve and surplus:			Investments	1,00,000
General reserve		2,00,000	Current assets	
Profit and loss account		1,40,000	Stock in trade	2,10,000
Current liabilities :			Sundry debtors	3,50,000
Sundry creditors		2,70,000	Cash at bank	50,000
Bank loan		1,00,000	Preliminary expense	25,000
		14,00,000		**14,00,000**

Additional information :

1. Fixed assets are- worth 20% above their actual book value. Depreciation on appreciated portion of fixed assets to be ignored for valuation of goodwill.
2. Of the investments, 80% is non-trading and the balance is trading. All trade investments are to be valued at 20% below cost. A uniform rate of dividend of 10% is earned on all investments.
3. For the purpose of valuation of shares, goodwill is to be considered on the basis of 6 years' purchase of the super profits based on an average profit of the last 3 years.

Profits (after tax @ 50%) are as follows:

Year	`.
2011	1,90,000
2012	2,00,000
2013	2,50,000

In a similar business;, return on capital employed is 20%. In 2011, a new furniture costing `.10,000 was purchased but wrongly charged to revenue. (No effect has yet been given for rectifying the same). Depreciation charged on furniture is @ 10% (diminishing balance method).

Find out the value of each fully - paid and partly - paid equity share.

Solution

Super profit method

Details	W.N	
1. Future Maintainable Profits	1	` 2,10,549
2. Average Capital Employed	2	` 10,02,748
3. Normal Rate of Return		20%
4. Normal Profits (Step 2 x Step 3)		` 2,00,549.6
5. Super Profits (Step 1 – Step 4)		
6. Goodwill (Step 5 x 3 yrs purchase)		

		` 9999.4
		` 59,996.4

Working Notes

Future Maintainable Profits

Particulars	2011	2012	2013
Profit After Tax	1,90,000	2,00,000	2,50,000
Add : Tax			
Profit Before Tax	3,80,000	4,00,000	2,50,000
Add : Furniture	10,000	-	-
Less : Depreciation	(1,000)	(900)	(810)
Less : Interest	(8,000)	(8,000)	(8,000)
Net Profits as adjusted	**3,81,000**	**3,91,100**	**4,91,190**

Average Profits 4,21,097

Less :Depreciation 2,10,548

Profit Before Tax 2,10,547

Capital Employed

Particulars	Amount	Amount
Tangible Trading Assets		
Machinery	2,30,000	
Factory Shed	3,00,000	
Vehicles	60,000	
Furniture	32,290	
	6,22,290	
Add – 20%	1,24,458	
	7,46,748	
Trade Investments	16,000	
Stock	2,10,000	
Debtors	3,50,000	
Cash	50,000	13,72,748
Less External Liability		
Creditors	2,70,000	
Bank Loan	1,00,000	3,70,000
Capital Employed		**10,02,748**

Investments 1,00,000

Non Trading (10%) Trade

80,000 20,000 – Revised Value = ` 16,000

A. Intrinsic Value

Steps	W.N	
1. Net Assets for Equity Share holders	1	9,52,744
2. No of Equity shares		50,000
3. Intrinsic Value (step 1 / Step 2)		
A. Fully Paid up		` 19.05/share
B. Partly Paid up (-2)		` 17.05/share

Working Notes

Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed Add : Goodwill Add : Non trade Investments	10,02,748 59,996 80,000
Net Assets	**11,42,744**
Less Preference Due Preference Share Capital	 2,00,000
Net Assets for Equity Share Capital	9,42,744
Add : Notional Call	10,000
Net Assets	**9,52,744**

2010

Question no 7 – **May RTP – 2010**

The following abridged balance sheet as at 31st March, 2005 pertains to Omega Ltd.

(`. in lakhs)

Liabilities	`.	Assets	`.
Share capital		Goodwill at cost	420
180 lakh Equity shares of		Other fixed assets	11,166
10 each fully paid up	1,800	Current assets	2,910
90 lakh Equity shares of		Loans and advances	933
Rs.10 each Rs.8 paid up	720		
150 lakh Equity shares of			
Rs.5 each fully paid up	750		
Reserves and surplus	5,628		
Secured loans	4,500		
Current liabilities	1,242		
Provisions	960		
	15,429		**15,429**

You are required to calculate the following for each one of three categories of equity shares appearing in the above mentioned balance sheet:

i. intrinsic value on the basis of book values of assets and liabilities including goodwill;

ii. Value per share on the basis of dividend yield.

Normal rate of dividend in the concerned industry is 15%, whereas Glorious Ltd. has been paying 20% dividend for the last four years and is expected to maintain it in the next few years; and

iii. Value per share on the basis of EPS.

For the year ended 31st March, 2005 the company has earned ` 1,371 lakh as profit after tax, which can be considered to be normal for the company. Average EPS for a fully paid share of ? 10 of a company in the same industry is ` 2.

Solution

A. Intrinsic Value

Steps	**W.N**	**In lakhs**
1. Net Assets for Equity Share holders	1	`. 8907
2. No of Equity shares		345
3. Intrinsic Value (Step 2 / Step 1)		
A. `. 10 each fully paid		`. 25.82/share
B. `. 10 each, 8 p.u (-2)		`. 23.82/share
C. `. 5 each fully paid (x 5/10)		`. 12.91/share

Working Notes

1. Net Assets for Equity Shareholders

Particulars	**Amount**	**Amount**
All Assets		
Goodwill	420	
Other Fixed Assets	11,166	
Current Assets	2,910	
Loans and Advances	933	15,429
Less External Liabilities		
Secured Loans	4,500	
Current Liabilities	1,242	
Provisions	960	6,702
Net Assets		8,727
Add : Notional Call		180
Net Assets for Equity shareholders		8907

2. No of shares

` 10 each fully paid	180
` 10 each, 8 paid up	90
` 5 each fully paid (150 x 5/10)	75
	345

B. Yield Value (Dividend yield – Suitable for Small Lots)

Steps	**W.**	

	N	
1. Expected Rate of Return	1	20%
2. Normal Rate of Return		15%
3. Yield Value	2	
A. `. 10 each fully paid		` 13.33/share
B. `. 10 each, 8 p.u		` 10.67/share
C. `. 5 each fully paid		` 6.67/share

1. Expected Rate of Return

ERR = $\frac{\text{Dividends to ESH}}{\text{Total Paid up Equity}}$ x 100 = 20%

2. Yield Value = $\frac{\text{ERR}}{\text{NRR}}$ x paid up value per share

Fully paid share of `. 10 each = $\frac{20}{15}$ x 10 = ` 13.33 / share

`. 8 paid up = $\frac{20}{15}$ x 8 = ` 10.67 / share

`. 5 each fully up = $\frac{20}{15}$ x 5 = ` 6.67 / share

B. Yield Value (Earning yield – Suitable for Controlling Interest)

Steps	W. N	
1. Expected Rate of Return	1	41.93%
2. Normal Rate of Return		20%
3. Yield Value	2	
A. ` 10 each fully paid		` 20.96/share
B. ` 10 each, 8 p.u		` 16.77/share
C. ` 5 each fully paid		` 10.48/share

1. Expected Rate of Return

ERR = $\frac{\text{Dividends to ESH}}{\text{Total Paid up Equity}}$ x 100 = $\frac{1371}{3270}$ x 100 = 41.93%

2. Yield Value_= $\frac{\text{ERR}}{\text{NRR}}$ x paid up value per share

a. Fully paid share of Rs. 10 each = $\frac{41.93}{20}$ x 10 = ` 20.96 / share

b. `. 8 paid up = $\frac{41.93}{20}$ x 8 = ` 16.77 / share

c. `. 5 each fully up = $\frac{41.93}{20}$ x 5 = ` 10.48 / share

Question 8 – **Nov RTP – 2010**

Following information is furnished in respect of Som Dutt Ltd.

1. Share capital: 2, 00,000 equity shares of ` 10 each fully paid.
2. Profits after tax, dividends declared and retained earnings.

Year	Profit after tax	Dividend Declared	Retained Earning
	`.	`.	`.
2009	7,00,000	3,40,000	3,70,000
2008	6,00,000	3,00,000	3,00,000
2007	4,00,000	2,60,000	1,40,000

3. Normal rate of return expected by shareholders in the market is 10%
4. The normal earnings are similar companies in the chemicals industry is 15%.

You are required to calculate the value of shares under equity capitalization method.

Solution

Valuation of shares under earnings capitalization method

Future Maintainable Profit (FMP)

PARTICULARS	2009	2008	2007
Profit after tax	7,00,000	6,00,000	4,00,000
Weights	3	2	1
Weighted profits	21,00,000	12,00,000	4,00,000

FMP= Weighted average of past profits = 37,00,000/6=` 6,16,667

Ascertainment of value of business by capitalizing Future Maintainable Profit at normal rate of return

	Particulars	Amount
a)	Weighted Average profit (after Tax)	6,16,667
b)	NRR	15%
c)	Value of Business(a/b)	41,11,113
D)	No. of shares	2,00,000
e)	Value of equity share (c/d)	20.56

Question 9 – Nov Paper – 2010

The following figures, calculate the value of the share of ` 100 on (i) yield on capital employed basis, and (ii) dividends basis, the market expectation being 12%.

Year	Capital employed (`.)	Profit (`.)	Dividend %
2001	5,50,000	88,000	12
2002	8,00,000	1,60,000	15
2003	10,00,000	2,20,000	18
2004	15,00,000	3,75,000	20

The net trading assets as on valuation date was `.18.Also mention which method is more appropriate (i) when buying a small lot of shares and (ii) when acquiring controlling interest in the company.

Solution

Yield Value – Earning Yield

Steps	W. N	

1. Expected Rate of Return 2. Normal Rate of Return 3. Yield Value	1 2	22.2% 12% Rs. 185/share

1. Expected Rate of Return

$$ERR = \frac{\text{Profit}}{\text{Capital Employed}} \times 100$$

Year		Weights	Product
2001	$\frac{88,000}{5,50,000} \times 100 = 16\%$	1	16
2002	$\frac{1,60,000}{8,00,000} \times 100 = 20\%$	2	40
2003	$\frac{2,20,000}{10,00,000} \times 100 = 22\%$	3	66
2004	$\frac{3,75,000}{15,00,000} \times 100 = 25\%$	4	100

$$\text{Wt Average} = \frac{222}{10} = 22.2\%$$

2. Yield Value

$$= \frac{ERR}{NRR} \times \text{paid up value per share} = \frac{22.2}{12} \times 10 = \text{` } 185/\text{- share}$$

Note : Earning yield is suitable to the value of share for buying controlling interest.

Yield Value – Dividend Yield

Steps	W. N	
1. Expected Rate of Return 2. Normal Rate of Return 3. Yield Value	1 2	17.6% 12% ` 146.67/share

3. Expected Rate of Return

$$ERR = \frac{\text{Dividend}}{\text{Paid up Capital}} \times 100$$

Year	Dividend	Weights	Product
2001	12%	1	16
2002	15%	2	40
2003	18%	3	66
2004	20%	4	100

$$\text{Wt Average} = \frac{176}{10} = 17.6\%$$

<u>Yield Value</u>

$$= \frac{ERR}{NRR} \times \text{paid up value per share} = \frac{17.6}{12} \times 10 = \text{` } 146.67/\text{- share}$$

Note : Dividend yield is suitable to the value of share for buying small lots.

2011

Question 10 **May RTP – 2010**

The Summarized Balance Sheet of 'Shubh Ashish' Private Ltd. as on 31.03.2010 is as under

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

A holder of 10,000 of the 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

a) 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. To date ` 7,000 per annum had been written off.

b) In 2007-08, goods costing ? 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.

c) An expense Creditor ` 3,750 of the current year has been omitted from being recorded in the books.

d) 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.

e) 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.

f) 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.

Solution

1. Average Profits

Particulars	07-08	08-09	09-10
Profits	80,400	92,900	89,650

Less Depreciation on Lease	(3,000)	(3,000)	(3,000)
Less Stock Written off	-	-	(6,000)
Less Outstanding Expenses	-	-	(3,750)
Add Provision for Debtors	-	-	4,500
Less Preference Dividend	(16,000)	(16,000)	(16,000)
Net Profits as adjusted	61,400	73,900	65,400

Average Profits = $\frac{61{,}400+73{,}900+65{,}400}{3}$ = ` 66,900

Goodwill = 66,900 x 2 = ` 1,33,800

A. Intrinsic Value

Steps	W.N	
1. Net Assets for Equity Share holders	1	`. 7,43,800
2. No of Equity shares		50,000 shares
3. Intrinsic Value (step 1 / Step 2)		`. 14.876/share

Amount Due to Vending Shareholders = 10,000 shares x `. 14.876 = `. 1,48,760

Working Notes

Net Assets for Equity Shareholders

Particulars	Amount	Amount
<u>All Assets</u>		
Goodwill	1,33,800	
Leasehold Property	60,000	
Plant and Machinery	2,25,000	
Investment	4,00,000	
Stock	76,500	
Debtors	45,000	
Bank	<u>1,57,000</u>	10,97,300
<u>Less External Liabilities</u>		
Bank Loan	1,00,000	
Creditors	49,750	
Outstanding Expenses	3,750	1,53,500
Net Assets		9,43,800
Less Preference Due Preference Share Capital		2,00,000
Net Assets for Equity Share Capital		7,43,800

Question 11 – **May Paper 2011**

The Balance sheet of X Limited as on 31.12.2003 is as follows: (`. in lakhs)

Liabilities	`.	Assets	`.
1,00,000 equity shares of `.10 each fully paid	10	Goodwill	5
		Intangible assets (market value)	3
1,00,000 equity shares of `.6		Fixed assets	15

each, paid up fully	6	Other tangible assets	5
Reserves and surplus	4	Miscellaneous expenditure to the	
Liabilities	10	extent not written off	2
	30		**30**

Fixed assets are worth ` 24 lakhs. Other tangible assets are revalued at ` 3 lakhs. The company is expected to settle the disputed bonus claim of Rs.1 lakh not provided for in the accounts. Goodwill appearing in the balance sheet is purchased goodwill. It is considered reasonable to increase the value of goodwill by an amount equal to average of the book value and a valuation made at 3 year's purchase of average super-profit for the last 4 years.

After tax, profits and dividend rates were as follows:

Year	**PAT (`. In Lakhs)**	**Dividend %**
2000	3.0	11%
2001	3.5	12%
2002	4.0	13%
2003	4.1	14%

Normal expectation in the industry to which the company belongs is 10%.

Ram holds 20,000 equity shares of ` 10 each fully paid and 10,000 equity shares of each, fully paid up. He wants to sell away his holdings.

a. Determine the break-up value and market value of both kinds of shares.

b. What should be the fair value of shares, if controlling interest is being sold?

Solution

A. Goodwill

Super profit method

Details	**W.N**	**(lakhs)**
1. Future Maintainable Profits	1	3.4
2. Average Capital Employed	2	19
3. Normal Rate of Return		10%
4. Normal Profits (Step 2 x Step 3)		1.9
5. Super Profits (Step 1 – Step 4)		1.5
6. Goodwill (Step 5 x 3 yrs purchase)		` 4.5

Working Notes

1. Future Maintainable Profits

Particulars	**2000**	**2001**	**2002**	**2003**
Profit After Tax	3	3.5	4	4.1
Less Claims	-	-	-	1
Net Profits as adjusted	3	3.5	4	3.1

Average Profits `. 3.4

2. Capital Employed

Particulars	Amount	Amount
Tangible Trading Assets		
Intangible Assets	3	
Fixed Assets	24	
Other Tangible Assets	3	30
Less External Liability		
Liabilities	10	
Claim	1	11
Capital Employed		19

B. Intrinsic Value

Steps	W.N	
1. Net Assets for Equity Share holders	1	` 28.75 lakhs
2. No of Equity shares		1,60,000
3. Intrinsic Value (step 1 / Step 2)		
A. ` 10 each fully paid		` 17.96875/share
B. ` 6 each fully paid (x 6/10)		` 10.78125/share

Working Notes

1. Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed	19
Add : Goodwill [5 +($\frac{5+4.5}{2}$)]	9.75
Net Assets	28.75

2. No of shares

`. 10 each fully paid 1,00,000

`. 6 each fully paid 60,000

1,60,000

C. Yield Value – Dividend Yield

Steps	W. N	
1. Expected Rate of Return	1	13%
2. Normal Rate of Return		10%
3. Yield Value	2	
A. ` 10 each fully paid		` 13/share
B. ` 6 each fully paid		` 7.8/share

3. Expected Rate of Return

$$ERR = \frac{\text{Profits}}{\text{Capital Employed}} \times 100$$

Year	Div (%)	Weights	Product
2000	11	1	11
2001	12	2	24

2002	13	3	39
2003	14	4	56

Wt Average = $\frac{130}{10}$ = 13 %

4. <u>Yield Value</u>

$= \frac{ERR}{NRR}$ x paid up value per share

` 10 each fully paid = $\frac{13}{10}$ x 10 = ` 13/- share

` 6 each fully paid = $\frac{13}{10}$ x 6 = ` 7.8/- share

D. Yield Value – Earnings Yield

Steps	W.N	
1. Net Assets for Equity Share holders	1	` 28.75 lakhs
2. No of Equity shares		1,60,000
3. Intrinsic Value (step 1 / Step 2)		
A. `. 10 each fully paid		` 17.96875/share
B. `. 6 each fully paid (x 6/10)		` 10.78125/share

Working Notes

1. Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed	19
Add : Goodwill [5 +($\frac{5+4.5}{2}$)]	9.75
Net Assets	**28.75**

2. No of shares

`. 10 each fully paid 1,00,000

`. 6 each fully paid <u>60,000</u>

1,60,000

C. Yield Value – Dividend Yield

Steps	W. N	
1. Expected Rate of Return	1	21.25%
2. Normal Rate of Return		10%
3. Yield Value	2	
A. ` 10 each fully paid		` 21.25/share
B. ` 6 each fully paid		` 12.75/share

5. Expected Rate of Return

$$ERR = \frac{Profit}{Capital\ Employed} \times 100 = \frac{3.4}{16} \times 100 = 21.25\ \%$$

7. Yield Value

$$= \frac{ERR}{NRR} \times \text{paid up value per share}$$

` 10 each fully paid = $\frac{21.25}{10} \times 10$ = ` 21.25/- share

` 6 each fully paid = $\frac{21.25}{10} \times 6$ = ` 12.75/- share

D. Fair Value

$$\text{Fair Value} = \frac{IV + Yield}{2}$$

` 10 each fully paid = $\frac{17.96875 + 21.25}{2}$ = ` 19.609/share

` 6 each fully paid = $\frac{10.78125 + 12.75}{2}$ = ` 11.765/share

Question 12 – **Nov RTP – 2011**

Capital Structure of Happy Limited as at 31.3.2011

	` in Lakhs
Equity share Capital (` 10 each)	10
10% Preference share capital	5
15% Debenture	8
Reserves	4

Lot Limited earns a profit of ` 5 Lakhs annually on an average before depreciation and interest on debentures and income tax which works out to be 40%.

Normal return on equity shares of companies similarly placed is 12%, provided

a. Profit after tax covers fixed interest and fixed dividends at least 3 times.

b. Capital gearing ratio is 0.75

c. Yield on shares is calculated at 50% of profits distributed and at 5% on undistributed profits.

Happy Limited has been regularly paying equity dividend of 10%. Compute the value of equity shares of the company.

Solution

Yield Value

Steps	W. N	
1. Expected Rate of Return	1	5.39%
2. Normal Rate of Return	2	13%
3. Yield Value	3	`. 4.15/share

1. Expected Rate of Return

EBIT	` 5,00,000
Less Interest	`. 1,20,000
Profit before Tax	` 3,80,000
Less Tax (40%)	` 1,52,000
Profit After Tax	` 2,28,000
Less Preference Dividend	` 50,000
Earnings for Equity	` 1,78,000

Dividend Distributed	Undistributed Profits
(10,00,000 x 10%) 1,00,000	78,000
x 50%	x 5%
` 50,000	` 3,900

` 53,900

$$ERR = \frac{\text{Profits}}{\text{Total Paid up Equity}} \times 100 = \frac{53,900}{10,00,000} \times 100 = 5.39\%$$

Normal Rate of Return = 12% subject to

$$\frac{\text{PAT + Interest}}{\text{Interest + Fixed Dividend}} = \frac{2,28,000 + 1,20,000}{1,20,000 + 50,000} = 2.05 < 3$$

Condition is not satisfied and therefore NRR = 12 + 0.5 = 12.5

$$\text{Capital Gearing Ratio} = \frac{\text{Capital Bearing Fixed Rate}}{\text{Capital Not Bearing Fixed Rate}} = \frac{5,00,000 + 8,00,000}{10,00,000 + 4,00,000} = 0.93 > 0.75$$

Condition not satisfied, therefore NRR = 12.5 + 0.5 = 13%

3. Yield Value

$$= \frac{ERR}{NRR} \times \text{paid up value per share} = \frac{5.39}{13} \times 100 = \text{` } 4.15/\text{share}$$

Question 13 – **Nov Paper – 2011**

The following is the Balance sheet of Bat Ltd. as at 31st March 2010.

Liabilities	`.	Assets	`.
3,00,000 Equity shares of ₹ 10 each fully paid	30,00,000	Goodwill	3,00,000
		Building	20,00,000
12.5 % Preference capital	20,00,000	Machinery	22,00,000
General Reserve	15,00,000	Furniture	10,00,000
Profit and loss A/c	3,00,000	Investments	16,00,000
Secured Loan	10,00,000	Stock	12,00,000
Creditors	30,00,000	Sundry debtors	20,00,000
		Bank	4,00,000
	1,07,00,000		**1,07,00,000**

Additional Information

1. Fixed Assets are worth above the book Value. Stock is overvalued by ` 1,00,000. Debtors are to be reduced by 40,000. Trade Investments, which constitutes 10% of the initial investments are to be valued at 10% below Cost.
2. Trade investments were purchased on 1/4/2009. 50% of the non trade investments were purchased on 1.4.2008 and the rest on 1.4.2009. Non – trade investment yielded 15% return on cost.
3. In 2008 – 2009, Furniture with Book Value of ` 1,00,000 was sold for ` 50,000. This loss should be treated as non – recurring or extra ordinary item for the purpose of calculation of Average Adjusted Profit.
4. In 2007 – 2008, new machinery costing ` 2,00,000 was purchased, but wrongly charged to revenue. This amount should be adjusted taking depreciation at 10% on reducing value method.
5. Return on capital employed is 20% in similar business.
6. Goodwill is to be valued at two years purchase of super profits based on simple average profits of last four years.

   Profit of last four years are as under

Year	Amount (`)
2006 – 07	13,00,000
2007 – 08	14,00,000
2008 – 09	16,00,000
2009 – 10	18,00,000

   It is assumed that preference dividend has been paid till date.
7. Depreciation on overall increased value of asset need not be considered. Depreciation on the additional value of only plant and machinery is to be considered taking depreciation at 10% on reducing value method while calculating average adjusted profits.

Find out the intrinsic value of the equity shares. Ignore income tax and dividend Tax.

Solution

Super profit method

Details	W.N	
1. Future Maintainable Profits	1	14,57,950
2. Average Capital Employed	2	54,84,380
3. Normal Rate of Return		20%
4. Normal Profits (Step 2 x Step 3)		10,96,876
5. Super Profits (Step 1 – Step 4)		3,61,074
6. Goodwill (Step 5 x 3 yrs purchase)		` 7,22,148

Working Notes

1. Future Maintainable Profits

Particulars	06-07	07-08	08-09	09-10
Profits	13,00,000	14,00,000	16,00,000	18,00,000
Less Stock Overvalued	-	-	-	(1,00,000)
Less Bad Debts	-	-	-	(40,000)
Less Income from Investments	-	-	(1,08,000)	(2,16,000)
Add Loss on Furniture	-	-	50,000	-
Add Machinery Capitalized	-	2,00,000	-	-
Less Depreciation on Machinery	-	(2,00,000)	(18,000)	(16,200)
Net Profits as adjusted	**13,00,000**	**15,80,000**	**15,24,000**	**14,27,800**

Average Profits ` 14,57,950

1. Capital Employed

Particulars	Amount	Amount
<u>Tangible Trading Assets</u>		
Building	20,00,000	
Machinery	23,45,800	
Furniture	<u>10,00,000</u>	
	53,45,800	
Add – 10%		
	58,80,380	
Investments	1,44,000	
Stock	11,00,000	
Debtors	19,60,000	
Bank	<u>4,00,000</u>	94,84,380
<u>Less External Liability</u>		
Secured Loan	10,00,000	
Creditors	30,00,000	40,00,000
<u>Capital Employed</u>		**54,84,380**

Investments 16,00,000

15% Non Trading — Trade

14,40,000 — 1,60,000 – Revised Value = ` 1,44,000

1,20,000 — 7,20,000

1.4.2008 — 1.4.2009

A. Intrinsic Value (Cum Dividend)

Steps	W.N	
1. Net Assets for Equity Share holders	1	56,46,528
2. No of Equity shares		3,00,000
3. Intrinsic Value (step 1 / Step 2)		`. 18.82 /share

Working Notes

1. Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed	54,84,380
Add : Goodwill	7,22,148
Add : Non trade Investments	14,40,000
Net Assets	**76,46,528**
Less Preference Due	
Preference Share Capital	20,00,000
Net Assets for Equity Share Capital	**56,46,528**

2012

Question 14 – **RTP – May 2012**

The summarized Balance sheet of Precious Limited as on 31st December, 2011 is as follows

Liabilities	Amount	Assets	Amount
Share Capital (Shares of ` 100 each)		Fixed Assets	
		Goodwill	1,50,000
4,500 Equity shares	4,50,000	Freehold Property	3,75,000
1500, 6% Preference shares	1,50,000	Plant and Machinery	1,50,000
Profit and Loss A/c	7,50,000	Quoted Investment	3,00,000
5% Debentures	3,00,000	Current Assets	
Sundry Creditors	2,39,250	Stock	2,70,000
		Debtors	2,99,250
		Bank Balance	3,45,000
	18,89,250		**18,89,250**

Profits for three years 2009, 2010 and 2011 after charging debenture interest and tax before providing for preference dividend were ` 2,20,500, ` 3,22,500 and ` 2,40,000

1. Preference shares are payable at par on liquidation
2. The Purchaser wants to acquire all the 4,500 equity shares
3. The Price for Equity shares is to be based on the following assumptions

a) The normal return of 10% on net assets (at revised valuation) attributable to equity shares

b) Debentures will be redeemed at a discount of 25% prior to the sale of the business. In order to provide funds for this purpose, investments will be sold out

c) The value of freehold property is agreed to be ascertained on the basis of 8% return, The current annual rental is ` 50,400

d) A claim of ` 8,250 was omitted to be provided in the year 2011.

e) Market Value of quoted investments was ` 3,75,000

f) Non – recurring profits are to be eliminated. 10% of the profits for 2010 referred above arose from a transaction of a non – recurring nature.

g) A provision of 5% on sundry debtors was made on 2011 which is no longer required (the provision when made was taken into account for purposes of income – tax @ 50%)

Calculate the value of the company shares (from the point of view of purchaser) after taking into account the revised values of assets and liabilities and value the goodwill based on three years purchases of the super profit based on the average profits of the last three years.

Solution

Valuation of share of Precious Ltd.

Particulars	Amount
Capital Employed	16,08,750
Add: Goodwill	2,67,375
Less: Preference capital	(1,50,000)
Net assets available to equity shareholders	17,26,125
No. of equity shares	4500
Value per equity share	` 383.58

1. Calculation of FMP

Particulars	2009	2010	2011
Profit after interest and tax but before preference	2,20,500	3,22,500	2,40,000
dividend	-	(32,500)	-
Less : Profit from non-recurring activity	-	-	(4,125)
Less : Claims not recorded (net of tax)	-	-	7,875
Add : Provision on longer required (net of tax)	2,20,500	2,90,500	2,43,750
Adjusted Profits			2,51,500
Simple average of the profits (as profits are			
fluctuating)			7,500
Adjustments of items which will not be reflected in			
future			2,59,000
Add : Debenture interest (Debenture redeemed)			
(net of tax)			
Future Maintainable Profits			

2. Future Maintainable Profit available for equity shareholders

Particulars	Amount
Total future maintainable profits	2,59,000
Less: Dividend payable to preference shareholders	(9,000)
Future Maintainable profit	2,50,000

3. Computation of Capital Employed

Particulars	Amount	Amount
Sundry Assets:		
Freehold property (`50,400, 8%)	6,30,000	
Plant and machinery	1,50,000	
Stock	2,70,000	
Debtors	3,15,000	
Bank Balance(3,45,000+3,75,000-2,25,000)	4,95,000	18,60,000
Less: Outside Liabilities		
Creditors	2,39,250	
Omitted liability	8,250	
Tax provision	3,750	(2,51,250)
Capital Employed		16,08,750

4. Calculation of Goodwill

Details	W.N	
1. Future Maintainable Profits	1	89,125
2. Average Capital Employed	3	16,08,875
3. Normal Rate of Return		10%
4. Normal Profits (Step 2 x Step 3)		2,50,000
5. Super Profits (Step 1 – Step 4)		89,125
6. Goodwill (Step 5 x 3 yrs purchase)		2,67,375

5. Calculation of Tax Provision

Particulars	Amount `.
Provision for bad debts not required	15,750
Omitted claim(assuming Tax deductible)	(8,250)
Net incremental profit on which tax is payable	7,500
Tax provision @ 50%	3,750

Question 15 - **RTP – Nov 2012 – Similar to May 2011 Paper**

Question 16 – **Nov 2012 – paper – Similar to Nov RTP 2009**

2013

Question 17 – **May RTP – 2013**

The Balance Sheet of Wi-fi Ltd as on 31st March, 2012 is given below:

Liabilities	`	Assets	`
Share Capital: Equity Shares of `10 each 6,00,000		Fixed Assets: Goodwill	40,000

Less: Calls in arrears 20,000	5,80,000	Machinery	3,00,000
(2 for final call)		Freehold	4,50,000
7% Preference Shares of		Properties	
Rs.10 each fully paid	3,00,000	Vehicles	1,00,000
Reserves and Surplus:		Furniture	50,000
General Reserve	3,50,000	Investments	2,00,000
Profit and Loss Account	1,20,000	Current Assets:	
Current Liabilities:		Stock-in-Trade	2,50,000
Sundry Creditors	3,00,000	Sundry Debtors	4,00,000
Bank Loan	2,00,000	Cash at Bank	60,000
	18,50,000		**18,50,000**

Additional information:

(i) On 1-4-2009 a new furniture costing ` 20,000 was purchased and wrongly charged to revenue. No rectification has yet been made for above. Depreciation charged on furniture is @ 10% on reducing system

(ii) Fixed Assets are worth 15% above their actual Book Value.

(iii) Stock is overvalued by ` 50,000 and 10% Debtors are doubtful.

(iv) Of the investments, 10% is in Trade and the balance Non-Trade. Trade investments are to be valued at 10% below cost. A uniform rate of dividend of 10% is earned on all investments.

(v) For the purpose of valuation of shares, goodwill is to be considered on the basis of 2 years' purchase of super profits based on average profit of last 3 years.

Profits are as follows:

Year	`.
2009 - 10	2,50,000
2010 - 11	2,80,000
2011 - 12	3,30,000

(vi) In a similar business normal return on capital employed is 20%.

You are required to value each fully paid and partly paid equity shares, assuming tax rate of 50%.

Solution

Super profit method

Details	**W.N**	
1. Future Maintainable Profits	1	` 2,65,096
2. Average Capital Employed	2	` 11,89,767
3. Normal Rate of Return		20%
4. Normal Profits (Step 2 x Step 3)		` 2,37,953
5. Super Profits (Step 1 – Step 4)		` 27,143
6. Goodwill (Step 5 x 3 yrs purchase)		` 54,286

Working Notes

1. Future Maintainable Profits

Particulars	06-07	07-08	08-09
Profit after Tax	2,50,000	2,80,000	3,30,000
Add : Tax			
Profit Before Tax	5,00,000	5,60,000	6,60,000
Add : Furniture Capitalized	20,000	-	-
Less : Depreciation on Furniture	(2,000)	(1,800)	(1,620)
Less : Income from Non Trade	(18,000)	(18,000)	(18,000)
Investments	-	-	(50,000)
Less : Stock	-	-	(40,000)
Less Bad Debts			
Net Profits as adjusted	5,00,000	5,40,200	5,50,380

Profit Before Tax 5,30,193

Less Tax (30%) 2,65,097

Profit After Tax 2,65,096

1. Capital Employed

Particulars	Amount	Amount
Tangible Trading Assets		
Machinery	3,00,000	
Property	4,50,000	
Vehicles	1,00,000	
Furniture	64,580	
	9,14,580	
Add – 15%		
	10,51,767	
Trade Investments	18,000	
Stock	2,00,000	
Debtors	3,60,000	
Cash And Bank	60,000	22,41,700
Less External Liability		
Creditors	3,00,000	
Bank Loan	2,00,000	5,00,000
Capital Employed		**11,89,767**

2. Investments 2,00,000 (10%)

Non Trading — 1,80,000

Trade — 20,000 – Revised Value = ` 18,000

A. Intrinsic Value

Steps	W.N	
1. Net Assets for Equity Share holders	1	` 11,44,055
2. No of Equity shares		60,000 shares

3. Intrinsic Value		
A. ` 10 each fully paid (Step 2 / Step 1)		` 19.07/share
B. ` 10 each, 8 paid up (- 2)		` 17.07/share

Working Notes

1. Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed Add : Goodwill Add : Non trade Investments	11,89,767 54,288 1,80,000
Net Assets	**14,24,055**
Less Preference Due Preference Share Capital	 3,00,000
Net Assets for Equity shareholders	11,24,055
Add Calls in Arrears (Notional Call)	20,000
Net Assets for Equity Shareholders	**11,44,055**

Question – 18 – **RTP – Nov 2013**

A ltd. and its subsidiary B ltd. get their supply of some essential raw materials from C ltd. To co-ordinate their production on more profitable basis. A ltd. and C Ltd. agreed between themselves each to acquire a quarter of shares in the other's Authorized Capital by means of exchange of shares. The terms are as follows:

I. A Ltd's shares are quoted at ` 14, but for the purpose of exchange the value is to be taken at the higher of two value, e.g.(a) quote and (b) on the basis of the balance sheet Valuation.

II. C Ltd's shares which are unquoted are to be taken at the higher of the value as on (a) yield basis and (b) the balance sheet basis. The future profits are estimated as ` 1,05,000 subject to one third to be retained for development purposes. Shares of similar companies yield 8%.

III. Tangible Fixed Assets of C Ltd. are to be taken at ` 8,70,000.

IV. Balance due on settlement is to be treated as loan between two companies.

The summarized balance sheets of the companies at the relevant date stood as follows:

LIABILITIES	A Ltd.(`)	B Ltd. (`)	C Ltd. (`)
Authorised Share Capital	12,00,000	5,00,000	10,00,000
Equity Shares of `.10 each	8,00,000	5,00,000	7,50,000
Securities Premium	80,000	-	-
7% Debentures	3,00,000	-	-
Profit and Loss A/c	2,40,000	2,20,000	2,10,000
Trade Payables	2,80,000	1,80,000	2,10,000
Bank Overdraft	1,00,000	50,000	-
	18,00,000	**9,50,000**	**11,70,000**

ASSETS			
Tangible Assets	11,10,000	7,00,000	7,70,000
Investment (40000 shares in B Ltd.)	4,70,000	-	-
Current Assets	2,10,000	2,40,000	3,90,000
Underwriting Commission	10,000	10,000	10,000
	18,00,000	**9,50,000**	**11,70,000**

Compute the value of the shares according to the terms of the agreements and to present the final settlement, showing all the necessary workings.

Solution

Statement showing the valuation of shares on Balance Sheet basis

Particulars	A ltd.	B Ltd.	C Ltd.
Tangible Fixed Assets	11,10,000	7,00,000	8,70,000
Investment in B Ltd.(4/5 of net assets i.e.`.7,10,000)	5,68,000	-	
Current Assets	2,10,000	2,40,000	3,90,000
	18,88,000	**9,40,000**	**12,60,000**
Outside Liabilities			
7% Debentures	3,00,000		
Trade Payables	2,80,000	1,80,000	2,10,000
Bank overdraft	1,00,000	50,000	
Net Assets	6,80,000	2,30,000	2,10,000
No. of shares	80,000	50,000	75,000
Book Value	15.10	14.20	14.00

Yield Value

Steps	W. N	
1. Expected Rate of Return	1	9.33%
2. Normal Rate of Return		8%
3. Yield Value	2	` 11.67/share

Particulars	Amount
Annual profits	1,05,000
Less:1/3 retained for development	(35,000)
Distributable Profits	70,000

Working notes:

1. $$\text{ERR} = \frac{\text{Profits}}{\text{Total Paid up Equity}} \times 100$$

$$= \frac{70,000}{7,50,000} \times 100$$

$$= 9.33\ \%$$

2. Yield Value

$$= \frac{\text{ERR}}{\text{NRR}} \text{ x paid up value per share} = \frac{9.33}{8} \times 10 = \text{` } 11.67\text{/- share}$$

A ltd.:Value taken as per agreement of exchange of shares between A Ltd. and C Ltd. ` 15.10 per share, being the amount of Balance Sheet value, higher than the quoted value of ` 14.00 per share.

C Ltd.:` 14.00 per share being the amount of Balance Sheet value, higher than the yield value of ` 11.67 per share.

Statement of Settlement

Particulars	Amount
Shares issued by A Ltd. to C Ltd. 30,000shares @` 15.10 per share	4,53,000
Shares issued by C Ltd. to A Ltd. 25,000 shares @` 14.10 per share	3,50,000
Loan by A ltd. to C Ltd.	1,03,000

2014

Question 19 – **Nov RTP - 2014**

Following is the balance sheet of Survey Ltd. as on 31st March, 2014.

Liabilities	Amount	Assets	Amount
50,000 Equity shares of ` 10 each	5,00,000	Building	3,50,000
2,500 12% Preference shares of ` 100 each	2,50,000	Plant and Machinery	4,30,000
Profit and Loss A/c	2,20,000	Patents	80,000
15% Debentures	1,20,000	Sundry Debtors	2,00,000
General Reserve	1,80,000	Stock in trade	2,90,000
Creditors	1,50,000	Cash at Bank	70,000
	14,20,000		**14,20,000**

Building and Plant and Machinery were required many years ago and should be considered as worth ` 5,00,000 and ` 6,30,000

The profits for the last five years were as follows

Years	Profits after tax
2009-10	1,80,000
2010-11	2,50,000
2011-12	60,000
2012-13	3,00,000
2013-14	3,50,000

The company paid a remuneration of ` 50,000 p.a. to the managerial personnel, but in future it will be paying ` 75,000, the increase having been sanctioned by the Government. During 2011-12, there was a prolonged strike, resulting in low profits. There has been no substantial change in the capital employed. The company has paid a dividend of 12 percent on equity shares consistently and proposes to stick to this rate in the foreseeable future. In the class of business to which the company belongs, the dividend rates have been fluctuating and the asset backing of an equity share is about 2 times. Equity shares with an average dividend of 15% sell at par. The company is anxious to provide funds for replacement of assets when due, for which it is proposed to make 20% provision on PAT. Assume future tax rate to be 40%. Calculate the value of an equity share of Survey Ltd. on yield basis.

Solution:

Calculation of value per share on yield basis (Earnings Capitalisation Method)

Particulars	Amount
F.M.P	1,01,040
Normal Rate of Return (W.N.3)	14.25%
Value of business	7,09,053
Number of equity shares outstanding	50,000
Value per share	14.18

Working Notes:

Computation of FMP available for distribution

Weighted average profits

Year	Profit before tax	Weight	Product
2009-10	1,80,000	1	1,80,000
2010-11	2,50,000	2	5,00,000
2012-13	3,00,000	3	9,00,000
2013-14	3,50,000	4	14,00,000
		10	29,80,000

Note: Profit of the year 2011-12 has not been considered, because it is a year of strike.

Particulars	Amount
Weighted average profit=29,80,000/10	2,98,000
Less: increase in managerial remuneration	(25000)
PBT	2,73,000
Tax @ 40%	(1,09,200)
PAT	1,63,800
Less: Provision for replacement of fixed Assets(` 1,63,800x20%)	(32,760)
	1,31,040
Less:Dividend for preference shares(` 2,50,000x12%)	(30,000)
Earning available for distribution	1,01,040

2. Ascertainment of NRR criteria as applicable to Survey Ltd.

(A)Asset backing:

Particulars	Amount	Amount
Total assets as per balance sheet		14,20,000
Add: Increase in the value of building	1,50,000	
Increase in the value of plant and machinery	2,00,000	
		3,50,000
Total		17,70,000
Less: Outside Liabilities and preference share		

capital	1,50,000	
Sundry creditors	1,20,000	
15%debentures	2,50,000	(5,20,000)
12% Preference Share capital		12,50,000
Asset backing for equity share capital(a-b)		5,00,000
Equity share Capital		2.5 times
Asset backing		

(B) Dividend Rates:

Dividend rates have been fluctuating in the industry while the Survey Ltd. has constant dividend rates.

3. Computation of adjusted Normal Rate of Return as applicable to Survey Ltd.

PARTICULARS	Asset backing	Dividend rates
Industry standard	2 times	Fluctuating
Survey Ltd.	2.5 times	Constant
Degree of variance from standard	+25%	N.A
Impact on risk and consequent adjustment to NRR	↓	↓
Quantum of Adjustment to NRR(assuming 100%variance =1%change)	-0.25%	-0.50%

Adjusted NRR=15%-0.25%-0.50%=14.25%

Question 20 – **Nov 2014 paper**

The majority shareholders of MSL Limited desire to sell their holding to 1 Influx Funds. The following information has been provided by MSL Limited :

Rs.in lacs

Particulars	**2012**	**2013**	**2014**
Equity and Liabilities			
12000 Equity Shares of Rs.100 each	12.00	12.00	12.00
General Reserve	6.85	7.75	9.00
Profit and Loss Account	2.64	5.95	8.25
Current Liabilities	6.80	5.45	3.85
	28.29	**31.15**	**33.10**
Assets			
Tangible Assets	12.00	13.00	14.00
Intangible Assets			
Goodwill	6-30	5.30	4.30
Current Assets			
Inventories	6.28	7.34	8.51
Other Current Assets	3.71	5.51	6.29
	28.29	**31.15**	**33.10**

(i) The valuation of the tangible assets has been done by a professional valuer and increase of 10% in year 2011-12 and 2012-13 and 12.5% in 2014 is estimated over the given book value.

(ii) The inventories have been valued at ` 6.32 lacs as on 31st March 2012, ` 8.47 lacs as on 31st March 2013 and ` 10.68 lacs as on 31st March 2014.

(iii) The company has been, charging depreciation @ 10% p.a.

(iv) The balance of Profit and Loss account and General Reserve on 1st April 2011 was ` 2.18 lacs and 14.25 lacs respectively.

(v) Tax rate was 30% in all the years.

(vi) The goodwill shall be revalued based on 4 years purchase of average super profits of last three years.

(vii) The normal expectation in the industry is 10%.

Calculate the fair value of shares of MSL Limited.

Solution

Super profit method

Details	W.N	In lakhs
1. Future Maintainable Profits	1	4.012
2. Average Capital Employed	2	20.857
3. Normal Rate of Return		10%
4. Normal Profits (Step 2 x Step 3)		2.0857
5. Super Profits (Step 1 – Step 4)		1.9263
6. Goodwill (Step 5 x 4 yrs purchase)		7.7052

Working Notes

1. Future Maintainable Profits

Particulars	11-12	12-13	13-14
Closing Profit and Loss	2.64	5.95	8.25
Less Opening Profit and loss	2.18	2.64	5.95
	0.46	3.31	2.3
Add General Reserve	2.6	0.9	1.25
NPAT	3.06	4.21	3.55
Add : Tax (30%)			
NPBT	4.37	6.01	5.07
Less Depreciation	(0.12)	(0.13)	(0.175)
Add Under valuation of closing Stock	0.04	1.13	2.17
Less Under valuation of opening Stock	-	(0.04)	(1.13)
NPBT	4.29	6.97	5.935
Less : Tax (30%)			
Net Profits after tax	**3.003**	**4.879**	**4.1545**

Average Profits ` 4.012

2. Average Capital Employed

Particulars	11-12	12-13	13-14
Tangible Trading Assets Tangible Assets Inventory Other CA Less External Liabilities Current Liabilities	 13.08 6.32 3.71 23.11 6.8	 14.17 8.47 5.51 28.15 5.45	 15.575 10.68 6.29 32.545 3.85
Closing Capital Employed	16.31	22.70	28.695
Opening Capital Employed	12 + 2.18 + 4.25	16.31	22.7
Average Capital Employed $\frac{op+clo}{2}$	17.37	19.505	25.6975

Average Capital Employed = $\frac{17.37 + 19.505 + 25.6975}{3}$ = 20.857

A. Intrinsic Value

Steps	W.N	
1. Net Assets for Equity Share holders 2. No of Equity shares 3. Intrinsic Value (step 1 / Step 2)	1	36.4002 12,000 ` 303.335/share

Working Notes

Net Assets for Equity Shareholders

Particulars	Amount
Capital Employed Add : Goodwill	28.695 7.7052
Net Assets	36.4002

B. Yield Value

Steps	W. N	
1. Expected Rate of Return 2. Normal Rate of Return 3. Yield Value	1 2 3	20.24 10 ` 202.42

Expected Rate of Return

Average Profit After Tax 4.012

Less Transfer to General Reserve 1.583

Avg = $\frac{2.6 + 0.9 + 1.25}{3}$

Profits for Equity 2.429

ERR = $\frac{\text{Profits for ESH}}{\text{Total Paid up Equity}}$ x 100 = 20.24%

<u>Yield Value</u>

$= \frac{ERR}{NRR}$ x paid up value per share = $\frac{20.24}{10}$ x 100 = ` 202.41/share

C. Fair Value

Fair Value = $\frac{IV + Yield}{2}$ = $\frac{303.335 + 202.42}{2}$ = ` 252.8675/share

2015

Question 21 – **RTP – May 2015**

Yogesh Ltd. showed the following performance over 5 years ended 31st March, 2015:

Year Ended on 31st March	*Net profit before tax		Prior period adjustment	Remarks
	`		`	
2011	4,00,000	(–)	1,00,000	Relating to 2009-10
2012	3,50,000	(–)	2,50,000	Relating equally to 2009-10 and 2010-11
2013	6,50,000	(+)	1,50,000	Relating to 2011-12
2014	5,50,000	(–)	1,75,000	Relating to 2011-12
2015	6,00,000	(–)	1,00,000	Relating to 2011-12
		(+)	25,000	Relating to 2013-14

*Net profit before tax is after debiting or crediting the figures of loss (–) or gains (+) mentioned under the columns for prior period adjustments.

The net worth of the business as per the balance sheet of 31st March, 2010 is ` 6,00,000 backed by 10,000 fully paid equity shares of ` 10 each. Reserves and surplus constitute the balance net worth. Yogesh Ltd. has not declared any dividend till date.

You are asked to value equity shares on:

(a) Yield basis as on 31.3.2015, assuming:

(i) 40% rate of tax

(ii) anticipated after tax yield of 20%.

(iii) differential weightage of 1 to 5 being given for the five years starting on 1.4.2010 for the actual profits of the respective years.

(b) Net asset basis as per corrected balance sheets for each of the six years ended 31.3.2015.

Looking to the performance of the company over the 5 years period, would you invest in the company?

Solution

Valuation of shares on yield basis as on 31st March,2015

Year ended 31st March	**Profits**	**Adjustments**		**Revised Profits**	**Tax Provision**	**After tax Profits**	**weights**	**Weighted profits**
		Increase	**Decrease**					
2011	4,00,000	1,00,000	1,25,000	3,75,000	1,50,000	2,25,000	1	2,25,000
2012	3,50,000	2,50,000	1,00,000	4,75,000	1,90,000	2,85,000	2	5,70,000
		1,50,000	1,75,000					
2013	6,50,000	Nil	1,50,000	5,00,000	2,00,000	3,00,000	3	9,00,000
2014	5,50,000	1,75,000	Nil	7,50,000	3,00,000	4,50,000	4	18,00,000
		25,000						
2015	6,00,000	1,00,000	25,000	6,75,000	2,70,000	4,05,000	5	20,25,000
							15	55,20,000

Weighted Average profit (after Tax)=55,20,000/15=` 3,68,000

	Particulars	**Amount**
a)	Weighted Average profit (after Tax)	3,68,000
b)	NRR	20%
c)	Value of Business(a/b)	18,40,000
d)	No. of shares	10,000
e)	Value of equity share (c/d)	184

b) Valuation of Shares of Net Assets Basis

(i)	**Revised net worth as on 31st March,2010**	**Amount**	**Amount**
	Net worth		6,00,000
	Less: Adjustments relating to		
	2010-11	1,00,000	
	2011-12	1,25,000	
		2,25,000	
	Less: Relief from tax @ 40%	(90,000)	1,35,000
			4,65,000
(ii)	Net Asset Value(No. of shares=10,000)		
	As on 31st March		
	2010: Revised net worth	4,65,000	
	Value per share		46.50
	2011:Revised net worth as on 31.3.2010	4,65,000	
	Add: After tax revised profits of 2010-11	2,25,000	
	Net Worth as on 31.3.2011	6,90,000	
	Value per share		69.00
	2012:Revised net worth as on 31.3.2011	6,90,000	
	Add: After tax revised profits of 2011-12	2,85,000	
	Net Worth as on 31.3.2012	9,75,000	
	Value per share		97.50
	2013:Revised net worth as on 31.3.2012	9,75,000	
	Add: After tax revised profits of 2012-13	3,00,000	
	Net Worth as on 31.3.20113	12,75,000	
	Value per share		127.50
	2014:Revised net worth as on 31.3.2013	12,75,000	

	Add: After tax revised profits of 2013-14	4,50,000	
	Net Worth as on 31.3.2014	17,25,000	
	Value per share		172.50
	2015:Revised net worth as on 31.3.2014	17,25,000	
	Add: After tax revised profits of 2014-15	4,05,000	
	Net Worth as on 31.3.2015	21,30,000	
	Value per share		213.00

Performance Appraisal

Revised Net Worth as on 31st March		**Profit during the year ended 31st March**		**Return on net worth(%)**
2010	4,65,000	2011	2,25,000	48.39
2011	6,90,000	2012	2,85,000	41.30
2012	9,75,000	2013	3,00,000	30.77
2013	12,75,000	2014	4,50,000	35.29
2014	17,25,000	2015	4,05,000	23.48

The company's return has fallen from 48.39% to 23.48%.This is due to the fact that the company has been ploughing back the profits without having adequate reinvestment opportunities. It is not advisable to invest in this company.

Question 22 – Nov 2015 – RTP – Similar to SFM – Chapter Mergers and Acquisition

❑ ❑ ❑

5
Chapter

Valuation of Business

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	NA	NA	Yes	NA
2009	NA	Yes	NA	NA
2010	Yes	NA	NA	NA
2011	NA	NA	NA	NA
2012	NA	Yes	NA	NA
2013	NA	NA	NA	NA
2014	Yes	NA	NA	NA
2015	Yes	Yes	NA	Yes

2008 .

Question 1 **Nov. 2008 RTP**

Xeta Ltd. plans to take over Beta Ltd. Independent Cash Flows forecasts of the companies are as follows:

Year	1	2	3	4	5
Xeta Ltd.(`. in Lakhs)	200	225	250	270	285
Beta Ltd.(`. in Lakhs)	50	65	80	95	110
Year	6	7	8	9	10
Xeta Ltd.(`. in Lakhs)	310	350	600	610	650
Beta Ltd.(`. in Lakhs)	120	130	150	170	180

Following further information is available from the latest Balance Sheet of Beta Ltd.

Assets:

	` in lakhs
Fixed Assets	500
Stock	115
Debtors	50
	665

Less: Liabilities		
Sundry Creditors	165	
Long Term loan	200	(365)
Net Assets		300

Xeta Ltd. finds that fixed assets of book value ` 75 Lakhs will not be used which will fetch ` 50 Lakhs on immediate disposal. Moreover, stock will fetch `140 Lakhs and debtors ` 48 Lakhs immediately. But Xeta Ltd. has to payoff the liabilities immediately. Also it has to pay ` 110 Lakhs to workers of Beta Ltd. whose services cannot be used. It appears that after merger Xeta Ltd. has to invest ` 210 Lakhs for renovation of the plant and machinery at the end 1st year and 50 Lakhs for modernization at the end of 2nd year after merger.

(242)

Forecast of cash flows of Xeta Ltd. after merger.

Year	1	2	3	4	5
Cash flows(` in Lakhs)	240	280	350	400	410
Year	6	7	8	9	10
Cash flows(` in Lakhs)	480	550	800	880	950

Determine the maximum value of Beta Ltd. which its management should ask from Xeta Ltd. You may use 20 % discount rate.

Solution

Statement Showing Maximum Value to be quoted

Particular	` Amt	` Amt
Value of Merged Entities as per Discounted Cash flows (WN1)		502.38
Add: Cash Collected on Assets		
Fixed Assets	50.00	
Stock	140.00	
Debtors	48.00	238.00
Less: Cash Outflow		
Sundry Creditors	165.00	
Long Term Loan	200.00	
Compensation to Workers	110.00	
Renovation of Plant & Machinery (210 x 0.8333)	174.99	
Moderation of Plant & Machinery (50 x 0.6944)	34.72	(684.71)
Maximum Value to be quoted		55.67

Working Note 1

Valuation of Xeta Ltd in Case of Merger

Year	Cash flow After Merger	Cash Flow before Merger	Incremental Cash Flow	Df @ 20%	Discounted Cash Flow
1	240	200	40	0.833	33.33
2	280	25	55	0.694	38.19
3	350	250	100	0.579	57.87
4	400	270	130	0.482	62.70
5	410	285	125	0.402	50.24

6	480	310	170	0.335	56.93
7	550	350	200	0.279	55.82
8	800	600	200	0.233	46.52
9	880	610	270	0.194	52.33
10	950	650	300	0.162	48.45
					502.38

Beta Ltd can quote as high as ` 55,67,000 for the take over

2009

Question 2 – **May 2009 - Paper**

The Balance Sheets of R Ltd for the years ended on 31st March 2000, 2001 and 2002 are as follows:

LIABILITIES	31.3.2000	31.3.2001	31.3.2002
3,20,000 Equity Shares of Rs.10 each fully paid	32,00,000	32,00,000	32,00,000
General Reserve	24,00,000	28,00,000	32,00,000
Profit & Loss A/c	2,80,000	3,20,000	4,80,000
Creditors	12,00,000	16,00,000	20,00,000
	70,80,000	79,20,000	88,80,000
ASSETS			
Goodwill	20,00,000	16,00,000	12,00,000
Building & Machinery (less Depreciation)	28,00,000	32,00,000	32,00,000
Stock	20,00,000	24,00,000	28,00,000
Debtors	40,000	3,20,000	8,80,000
Bank Balance	2,40,000	4,00,000	8,00,000
	70,80,000	79,20,000	88,80,000
Actual Valuation were as under:			
Building and Machinery	36,00,000	40,00,000	44,00,000
Stock	24,00,000	28,00,000	32,00,000

Net Profit (including opening balance)

after writing off depreciation and goodwill, tax provision

and transfer to General Reserve 8,40,000 12,40,000 16,40,000

Capital employed in the business at market values at the beginning of 1999-2000 was ` 73,20,000, which included the cost of Goodwill. The normal annual returns on average capital employed in the line of business engaged by R Ltd is 12½. The balance in General Reserve on 1st April 1999 was ` 20 lakhs. The Goodwill shown on 31.3.2000 was purchased on 1.4.1999 for ` 20,00,000 on which date the balance in Profit & Loss A/c was ` 2,40,000.

Find out the average capital employed each year. Goodwill is to be valued at 5 years purchase of Super Profits (simple average).

Also find out total value of the business.

Solution

Valuation of Goodwill

Super Profit Method (No. of years purchase)

Details	W.N	
1. Future Maintainable Profits	1	` 17,60,000
2. Average Capital Employed	2	` 75,00,000
3. Normal Rate of Return		12.5%
4. Normal Profits (Step 2 x Step 3)		` 9,37,500
5. Super Profits (Step 1 – Step 4)		` 8,22,500
6. Goodwill (Step 5 x 5 yrs purchase)		` 41,12,500

Particulars	31.3.2006	31.3.2007	31.3.2008
Net Profit	8,40,000	12,40,000	16,40,000
Less : Opening Balance	(2,40,000)	(2,80,000)	(3,20,000)
Add : Undervaluation of Closing Stock	4,00,000	4,00,000	4,00,000
Less : Undervaluation of Opening	-	(4,00,000)	(4,00,000)
Stock	-	4,00,000	4,00,000
Add : Goodwill Written off	4,00,000	4,00,000	4,00,000
Add : Transfer to General Reserve	14,00,000	17,60,000	21,20,000

Average Profit $= \dfrac{(14,00,000 + 17,60,000 + 21,20,000)}{3}$

= ` **17,60,000**

Average Capital Employed at the end of each Year

Particulars	31.3.2006	31.3.2007	31.3.2008
Goodwill	20,00,000	16,00,000	12,00,000
Building &	36,00,000	40,00,000	44,00,000
Machinery	24,00,000	28,00,000	32,00,000
Stock (Revalued)	40,000	3,20,000	8,80,000
Debtors	2,40,000	4,00,000	8,00,000
Bank Balance	82,80,000	91,20,000	104,80,000
Total Assets			
Less:	12,00,000	16,00,000	20,00,000
Creditors	70,80,000	75,20,000	84,80,000
Closing Capital	73,20,000	70,80,000	75,20,000
Add: Opening	1,44,00,000	1,46,00,000	1,60,00,000
Capital	72,00,000	73,00,000	80,00,000
Total			
Average Capital			

Average Capital Employed $= \dfrac{(72,00,000 + 73,00,000 + 80,00,000)}{2}$

= ` 75,00,000

Valuation of Business = 84,80,000 + 41,12,500 – 12,00,000 = 1,13,92,500

2010

Question 3 – **May– 2010-RTP**

Shree Ltd. gives the following information:

Current profit	` 210 lakhs
Compound growth rate of profit	7.5% p.a.
Current cash flows from operations	` 270 lakhs
Compound growth rate of cash flows	6.5% p.a.
Current price earning ratio	12
Discount factor	20%

Find out the value of Shree Ltd. taking 10 years projected profit or cash flows based on Discounted earnings method, (ii) Discounted cash flows method

Solution

Method1: Discounted Earnings Method

Year	Earning	Discounting Factor @ 20%	Present Value In Lakhs
1	225.75	0.833	188.117
2	242.68	0.694	168.517
3	260.88	0.579	150.971
4	280.45	0.482	135.261
5	301.48	0.402	121.165
6	324.09	0.335	108.538
7	348.40	0.279	97.238
8	374.53	0.233	87.116
9	402.62	0.194	78.028
10	432.82	0.162	69.900
			1204.851

Method2: Discounted Cash Flow Method

Year	Earning	Discount Factor @ 20%	Present Value (in Lakhs)
1	287.55	0.833	239.615
2	306.24	0.694	212.653
3	326.15	0.579	188.743
4	347.35	0.482	167.527
5	369.92	0.402	148.671
6	393.97	0.335	131.941
7	419.58	0.279	117.105
8	446.85	0.233	103.937
9	475.89	0.194	92.227
10	506.83	0.162	81.853
			1484.272

Value of Business as per Discounted Earning Method = ` 1204.851 Lakhs

Value of Business as per Discounted Cash Flow Method = ` 1484.272

2012 . .

Question 4 **May – 2012-paper**

NRPL (Nuclear Reactors Private Limited) is engaged in the business of design and construction of nuclear reactors that are supplied exclusively to the Atomic Energy Department. The core component of such reactors is outsourced by NRPL from FIL (Fusion Industrials Ltd.) the sole manufacturer of this item. NRPL wants to gain leadership in this industry and seeks to take over FIL. NRPL estimates that its Goodwill in the industry will increase by a minimum of ` 300 crores consequent on the acquisition. NRPL has made the following calculation of the economic benefits presently available and that foreseen as a result of the acquisition.

(i) Projected Cash Flows of NRPL for the next 5 years:

Year	1	2	3	4	5
Cash flow (`. in crores)	1,000	1,500	2,000	2,500	3,000

(ii) Projected Cash Flow of FIL for the next 5 years.

Year	1	2	3	4	5
Cash flow (`. in crores)	400	400	600	800	1,000

(iii) Audited net worth of FIL

	`.
Fixed assets	2,000
Investments (non-trade)	1,000
Current assets	1,000
Total	4,000
Current liabilities	1,000
Net worth	3,000

(iv) Other information:

(a) 10% of the fixed assets of FIL will not be required in the event of the acquisition and the same has ready buyers for ` 100 crore.

(b) Current Assets include surplus stocks of ` 20 crore that can realize ` 30 crore.

(c) Investments have a ready marked for ` 1,500 crore.

(d) The current liabilities are to be paid off immediately; ` 510 crores are payable on account of a compensation claim awarded against FIL, which has been treated as a contingent liability in the accounts on which 20 percent was provided for.

(v) NRPL has estimated the combined cash flows post merger as under:

Year	1	2	3	4	5
Cash flow (` in crores)	1,500	2,000	2,500	3,000	3,500

You are required to advise NRPL the maximum value it can pay for takeover of FIL; also show the current valuation of FIL as a 'Stands Alone' entity. The Discount rate of 15% is advised appropriate, values for which are given below:

Year	P.V
1	0.870
2	0.756
3	0.658
4	0.572
5	0.497

Solution

Calculation of Operation synergy expected to arise out of merger

Year	1	2	3	4	5
Projected Cash Flow of NRPL after merger with F/L	1,500	2,000	2,500	3,000	3,500
Less: Projected Cash Flow NRPL Ltd. without Merger	(1000)	(1,500)	(2,000)	(2,500)	(3,000)
	500	**500**	**500**	**500**	**500**

Valuation of F/L in Case of Merger

Year	Cash Flow from Operations	Discount Factor	Discounted Cash Flow
1	500	0.870	435.00
2	500	0.756	378.00
3	500	0.658	329.00
4	500	0.572	286.00
5	500	0.497	284.50
			1676.50

Maximum Value to be quoted

Particulars	` in Crores	` in Crores
Value as Discounted Cash Flows from Operations		1,676.50
Add: Increase in Goodwill of NRPL		300
Add: Cash Collected on Disposal of Assets		1,976.50
Total	100	
Fixed Assets	1,500	
Investments	30	1,630.00
Stock		3,606.50
	898	
Less: Current Liabilities (1000-102)	510	(1408.00)
Compensation Claim		2,198.50
Net		

NRPL can quote as high as ` 2,198.50 Crores for taking over the Business of F/L

Valuation of FIL (without merger)

Year	Cash Flow (` in Crores)	Discount Factor	Discounting Cash Flow
1	400	0.870	348.00
2	400	0.756	302.40
3	600	0.658	394.80
4	800	0.572	457.60
5	1,000	0.497	497.00
			1,999.80

Question 5 **May – 2014 - RTP**

Jayadev Ltd. had earned a PAT of ` 48 lakhs for the year ended 2013. It wants you to ascertain the value of its business, based on the following information:

1. Tax rate for the year 2013 was 36%. Future tax rate is estimated at 34%.
2. The company's equity shares are quoted at ` 120 at the Balance Sheet date. The company had an equity capital of ` 100 lakhs, divided into shares of ` 50 each.
3. Profits for the year 2013 have been calculated after considering the following in the Profit and Loss Account:
   i. Subsidy ` 2 lakhs received from the Government towards fulfilment of certain social obligations. The Government has withdrawn this subsidy and hence, this amount will not be received in future.
   ii. Interest ` 8 lakhs is on term loan. The final instalment of this term loan was fully settled in this year.
   iii. Managerial remuneration ` 15 lakhs. The shareholders have approved an increase of ` 6 lakhs in the overall managerial remuneration, from the next year onwards.
   iv. Loss on sale of fixed assets and Investments amounting to ` 8 lakhs

Solution

Particulars	`
Profit after Tax for the Year 2013	48,00,000
Add: Tax (48,00,000 x 36/64)	<u>27,00,000</u>
Profit Before Tax	75,00,000
Add/(Less): <u>Non-Recurring items</u>	
(-) Subsidy income not Receivable in	(2,00,000)
Future	8,00,000
(+) Interest on Loan Saved	(6,00,000)
(-) Additional Managerial	<u>8,00,000</u>
Remuneration	83,00,000
(+) Loss on Sale of Fixed Assets	<u>(28,22,000)</u>
FMP Before Tax	54,78,000
(-) Tax @ 34%	
FMP (After Tax)	

Computation of Capitalization Rate & Value of Business

Particular	`
a) Profit After Tax for the Year 2013	48,00,000
b) No of Equity Shares (100/50 per Share)	2,00,000
c) EPS = PAT/No of Shares = a/b	24
d) Market Price per Share on Balance Sheet Date	120
e) Price Earnings Ratio = MPS/EPS	5
f) Capitalization Rate (1/PE Ratio) x 100	20%

g) Value of Business = FMP/Capitalization Rate = ` 54.78/20%	273.90 Lakhs

2015 .

Question 6 – **May – 2015 - RTP**

Shobhit Garments Ltd. produces and sells to retailers a certain range of fashion clothings.

(a) They have made the following estimates of potential cash flows for the next 10 years.

Year	1	2	3	4	5	6	7	8	9	10
Cash Flows (` in lakhs)	30,00	34,00	40,00	50,00	60,00	68,00	76,00	90,00	100,00	120,00

(b) Style Ltd. is a company which owns a series of boutiques in a certain locality. The boutiques buy clothes from various suppliers and retail them. Each boutique has a manager and an assistant but all purchasing and policy decisions are taken centrally. Independent cash flow estimates of Style Ltd. were as follows:

Year	1	2	3	4	5	6	7	8	9	10
Cash Flows (` in lakhs)	240	320	400	560	680	920	1040	1200	1320	1600

(c) Shobhit Garments Ltd. is interested in acquiring Style Ltd. in order to get some additional retail outlets. They make the following cost-benefit calculations:

(i) Net Value of assets of style Ltd.

	` in Lakhs
Tangible Fixed Assets	1600
Investments	400
Stock and Receivables	800
	2800
Less Current Liabilities	(800)
Net Assets	2000

(ii) Tangible Fixed Assets amounting to ` 100 lakhs cannot be used and their net realisable value is ` 90 Lakhs

(iii) Stock and Receivables can be realised immediately at ` 940 Lakhs

(iv) Investments can be disposed off for ` 424 Lakhs

(v) Some workers of style Ltd are to be retrenched for which estimated compensation is ` 260 Lakhs

(vi) Current liabilities are to be discharged immediately

(vii) ` 14.10 lakhs are payable on account of compensation claim awarded against style Limited, which has been treated as a contingent liability, 20% of which was provided for in accounts

(viii) shobhit garments Ltd. will invest ` 50 lakhs for renovating the building of style limited immediately on takeover and will invest further ` 50 lakhs at the end of 2nd year.

(ix) Expected cash flows of the combined business will be as follows

Year	1	2	3	4	5	6	7	8	9	10
Cash Flows (` in lakhs)	3600	3800	4600	5900	7000	8000	9000	10600	11600	13800

(x) Shobit Garments Ltd estimates that its goodwill in the industry will increase by a minimum of ` 300 lakhs consequent the acquisition.

Calculate the maximum per share of Style Limited which Shobit Garments Ltd can quote. Use 20% as discouting factor.

Solution

Calculation of Present Value of Incremental Cash Flows.

Year	Cash Flows Before Takeover	Cash Flows after Takeover	Incremental Cash Flows	Discounting Factor (20%)	Present value
1	3,000	3,600	600	0.8333	499.98
2	3,400	3,800	400	0.6944	277.76
3	4,000	4,600	600	0.5787	347.22
4	5,000	5,900	900	0.4823	434.07
5	6,000	7,000	1000	0.4019	401.90
6	6,800	8,000	1200	0.3349	401.88
7	7,600	9,000	1400	0.2791	390.74
8	9,000	10,600	1600	0.2326	372.16
9	10,000	11,600	1600	0.1938	310.08
10	12,000	13,800	1800	0.1615	290.70
					3,726.49

Maximum Value that can be quoted by Shobhit Garments Ltd.

Particulars	` in lakhs	` in lakhs
Present Value of Incremental Cash Flows		3,726.49
Add : Cash Inflows		
Tangible Fixed Assets	90	
Investments	424	
Stock and Receivables	940	1454.00
Less : Cash Outflows		5180.49
Current Liabilities	800	
Contingent Liability	11.28	
Retrenchment Compensation	260	

Renovation of Plant	84.72	(1156.00)
		4024.49
Add : Goodwill		300
Maximum Value that can be Quoted		4324.49
Maximum Price Per shares (20 Lakhs Shares)		` 216.22 / share

Question 7 – **May – 2015-Paper**

The Balance Sheets of R Ltd for the years ended on 31st March 2000, 2001 and 2002 are as

a. follows:

LIABILITIES	31.3.2013	31.3.2014	31.3.2015
3,20,000 Equity Shares of ` 10 each fully paid	64,00,000	64,00,000	64,00,000
General Reserve	48,00,000	56,00,000	64,00,000
Profit & Loss A/c	5,60,000	6,40,000	9,60,000
Creditors	24,00,000	32,00,000	40,00,000
	1,41,60,000	1,58,40,000	1,77,60,000
ASSETS			
Goodwill	40,00,000	32,00,000	24,00,000
Building & Machinery (less Depreciation)	56,00,000	64,00,000	64,00,000
Stock	40,00,000	48,00,000	56,00,000
Debtors	80,000	6,40,000	17,60,000
Bank Balance	4,80,000	8,00,000	16,00,000
	1,41,60,000	1,58,40,000	1,77,60,000
Actual Valuation were as under:			
Building and Machinery	72,00,000	80,00,000	88,00,000
Stock	48,00,000	56,00,000	64,00,000

b. Net Profit (including opening balance)
c. after writing off depreciation and goodwill, tax provision
d. and transfer to General Reserve 16,80,000 24,80,000 32,80,000
e. Capital employed in the business at market values at the beginning of 2012-2013 was ` 1,46,40,000, which included the cost of Goodwill. The normal annual returns on average capital employed in the line of business engaged by R Ltd is 12½. The balance in General Reserve on 1st April 2012 was ` 40 lakhs. The Goodwill shown on 31.3.2013 was purchased on 1.4.2012 for ` 40,00,000 on which date the balance in Profit & Loss A/c was ` 4,80,000.
f. Find out the average capital employed each year. Goodwill is to be valued at 5 years purchase of Super Profits (simple average).

   Also find out total value of the business.

Solution

Valuation of Goodwill

Super Profit Method (No. of years purchase)

Details	W.N	
1. Future Maintainable Profits	1	` 35,20,000
2. Average Capital Employed	2	` 1,50,00,000
3. Normal Rate of Return		12.5%
4. Normal Profits (Step 2 x Step 3)		`18,75,000
5. Super Profits (Step 1 – Step 4)		` 16,45,000
6. Goodwill (Step 5 x 5 yrs purchase)		` 82,25,000

Future Maintainable Profit

Particulars	31.3.2013	31.3.2014	31.3.2015
Net Profit	16,80,000	24,80,000	32,80,000
Less : Opening Balance	(4,80,000)	(5,60,000)	(6,40,000)
Add : Undervaluation of Closing Stock	8,00,000	8,00,000	8,00,000
Less : Undervaluation of Opening Stock	-	(8,00,000)	(8,00,000)
Add : Goodwill Written off	-	8,00,000	8,00,000
Add : Transfer to General Reserve	8,00,000	8,00,000	8,00,000
	28,00,000	35,20,000	42,40,000

Average Profit = $\frac{(28,00,000 + 35,20,000 + 42,40,000)}{3}$

= ` **35,20,000**

Average Capital Employed at the end of each Year

Particulars	31.3.2013	31.3.2014	31.3.2015
Goodwill	40,00,000	32,00,000	24,00,000
Tangible Assets	72,00,000	80,00,000	88,00,000
Stock (Revalued)	48,00,000	56,00,000	64,00,000
Debtors	80,000	6,40,000	17,40,000
Bank Balance	4,80,000	8,00,000	16,00,000
Total Assets	1,65,60,000	1,82,40,000	2,09,60,000
Less:			
Creditors	24,00,000	32,00,000	40,00,000
Closing Capital	1,41,60,000	1,50,40,000	1,69,60,000
Add: Opening Capital	1,46,40,000	1,41,60,000	1,50,40,000
Total	2,88,00,000	2,92,00,000	3,20,00,000
Average Capital	1,44,00,000	1,46,00,000	1,60,00,000

Average Capital Employed = $\frac{(1,44,00,000 + 1,46,00,000 + 1,60,000,000)}{3}$

= ` **1,50,00,000**

Valuation of Business = 1,69,60,000 + 82,25,000 – 24,00,000 = 2,27,85,000

Question 8 – **Nov– 2015 - Paper**

Railways Products Private Ltd. (RPPL) is engaged in the business of design and manufacturing of Railways products that are supplied to Railways Department. The core component of such products is outsourced by RPPL from Allied component Ltd. (ACL), the sole manufacturer of such components.

RPPL wants to gain leadership in this industry and seeks to take over ACL. RPPL estimates that its goodwill will increase on the acquisition by ` 200 lakhs.

RPPL Has made following calculation of the economic benefits presently available and that are foreseen as a result of the acquisition

i) Projected cash flows for the next 5 years

	Cash Flow Forecast (` in Lakhs)				
Year	1	2	3	4	5
RPPL	2000	2500	3000	3500	4000
ACL	600	600	800	800	1000

ii) The net worth of ACL is as follows

	` in Lakhs	
Fixed Assets		
Tangible Assets		3000
Investments		1500
Current Assets		
Inventories	1000	
Receivables	500	1500
Total		6000
Less Current Liabilities		
Trade Payables	800	
Bank Loan	700	1500
Net worth (Represented by 300 Lakhs shares of ` 10 each and serves and surplus ` 1500 Lakhs)		4500

iii) Other information

a) 20% of the fixed assets of ACL will not be required on acquisition and the same has ready buyers for ` 300 Lakhs

b) Investment has a ready market for ` 2,000 Lakhs

c) Current Assets include surplus inventory of ` 50 Lakhs that can realize ` 80 Lakhs

d) The current Liabilities are to be paid off immediately. A Sum of ` 820 Lahks are payable on account of a compensation claim awarded against ACL, which has been trated as a contingent liability in the accounts, on which 20% was provided for.

iv) RPPL has estimated the combined cash flows post mergers as follows

Year	1	2	3	4	5
Cash Flows (` in Lakhs)	2800	3200	3700	4300	5000

You are required to advice RPPL the Maximum value it can pay for take-over of ACL and also show current valuation of ACL as stand Alone equity. The discount rate of 15% is advised appropriate.

P.V of discounting factor of 15% are as follows

Year	1	2	3	4	5
Discounting factor (15%)	0.870	0.756	0.658	0.572	0.497

Solution

Calculation of Operation synergy expected to arise out of merger

Year	**1**	**2**	**3**	**4**	**5**
Projected Cash Flow of NRPL after merger	2,800	3,200	3,700	4,300	5,000
Less: Projected Cash Flow without Merger	(2000)	(2,500)	(3,000)	(3,500)	(4,000)
	800	**700**	**700**	**800**	**1000**

Present Value of Incremental Cash Flows

Year	**Cash Flow from Operations**	**Discount Factor (15%)**	**Discounted Cash Flow**
1	800	0.870	696.00
2	700	0.756	529.20
3	700	0.658	460.60
4	800	0.572	457.60
5	1000	0.497	497.00
			2640.40

Maximum Value to be quoted

Particulars	**` in Crores**	**` in Crores**
Value as Discounted Cash Flows from Operations		2,640.40
Add: Cash Collected on Disposal of Assets		
Fixed Assets	300	
Investments	2,000	
Stock	80	2,380.00
		5,020.40
Less: Trade Payable	800	
Bank Loan	700	
Compensation Claim	656	(2156.00)
		2,864.40

RRPL can quote as high as ` 2,864.40 Crores for taking over the Business of ACL

Valuation of ACL (without merger)

Year	**Cash Flow (` in Crores)**	**Discount Factor**	**Discounting Cash Flow**
1	600	0.870	522.00

2	600	0.756	453.60
3	800	0.658	526.40
4	800	0.572	457.60
5	1,000	0.497	497.00
			2,456.60

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6 Chapter

Valuation of Brands

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	NA	NA	NA	NA
2009	NA	NA	NA	NA
2010	NA	Yes	Yes	NA
2011	NA	Yes	NA	NA
2012	NA	NA	NA	NA
2013	Yes	NA	NA	Yes
2014	Yes	NA	Yes	NA
2015	NA	Yes	NA	NA

2010

Question –1 **May 2010 Paper**

From the following information, determine the possible value of brand under potential earning model:

Particulars	**` In lakhs**
Profit Before Tax(PBT)	2,500
Tangible Fixed Assets	10,000
Identifiable intangible other than brand	1,500
Expected normal return on the tangible fixed assets weighted average cost(14%)+ normal spread	18%
Weighted average cost of capital	14%
Appropriate capitalization factor for intangibles	25%

Solution

Particulars	**` in Lakhs**
Profit After Tax	2,500
Less: Profit allocated to Tangible Fixed Assets (18% of 10,000)	(1,800)
	700
Total Intangible Assets	25%
Capitalization Factor	2,800

Capitalized Value of Intangible Including Brand $\frac{A}{B}$ ($\frac{700}{25}$ x 100)	(1,500)
Less: identifiable intangible Other than Brand	1,300
Brand Value	

(254)

Question –2 **Nov 2010 RTP**

From the following information, determine the possible value of brand under potential earning model:

Particulars	` In lakhs
Profit Before Tax(PBT)	6,500
Income Taxes	1,500
Tangible Fixed Assets	10,000
Identifiable intangible other than brand	5,000
Expected normal return on the tangible fixed assets	3,000
Appropriate capitalization factor for intangibles	25%

Solution

Particulars	` in Lakhs
Profit Before Tax	6,500
Less Tax	(1,500)
Profit After Tax	5,000
Less: Profit allocated to Tangible Fixed Assets	(3,000)
Total Intangible Fixed Assets	(2,000)
Capitalization Factor	25%
Capitalized Value of Intangible Including Brand $\frac{A}{B}$ ($\frac{2000}{25}$ x 100)	8,000
	(5,000)
Less: identifiable intangible Other than Brand	3,000
Brand Value	

2011

Question – 3 **May 2011 PAPER**

From the following information, determine the possible value of brand under potential earning model:

Particulars	` In lakhs
Profit Before Tax(PBT)	13.00
Income Taxes	3.00
Tangible Fixed Assets	20.00
Identifiable intangible other than brand	10.00
Expected normal return on the tangible fixed assets	6.00

Appropriate capitalization factor for intangibles	25%

Solution

Particulars	`in Lakhs
Profit Before Tax	13,00
Less Tax	(3.00)
Profit After Tax	10.00
Less: Profit allocated to Tangible Fixed Assets	(6.00)
Total Intangible Assets	4.00
Capitalization Factor	25%
Capitalized Value of Intangible Including Brand $\frac{A}{B}$ $(\frac{4}{25}$ x 100)	16.00
Less: identifiable intangible Other than Brand	(10.00)
Brand Value	6.00

2013

Question- 4 **May 2013 RTP**

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:

The Tyre Industry in the target area i.e whole of india is to grow at 5% per annum for the next 3 years, and thereafter at 7% per annum over the subsequent seven years.

The market size in terms of unencumbered basic sales of tyres was estimated at `. 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.

Cheap Chinese imports accounted accounted for 40% of the business (bus 60% of the volume) last year. This is expected to increase by 0.25% over the next decade.

The other large players accounted roughly 34% of the business value last year, which is expected to go down by 0.5% over the next 10 years, due to expansion of Rough-use Ltd. product portfolio.

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, if the appropriate discount rate is 10%?

Solution

Market Share of Rough-Use Ltd

Last Year Market Share = 100% - Fake Brands –

Chinese Imports – Other Domestic Brands

a) Market Share of Rough-Use Ltd

= 100% - 10% - 40% - 34%

= 16%

b) Increase or Decrease in Market Share

= Chinese Imports 0.25% + Local Brands 0.5% - Other Domestic Brands 0.5%

= 0.25% + 0.5% - 0.5%

= 0.25% increase in Other 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% & so on

Year	**Market Size (` in Crores) A**	**Market Share Of Rough Ltd B**	**Market Share C**	**Expected Profit**	**Discounting factor@10%**	**Discounted Cash Flow**
1	8,000+5% = ` 8,400	15.75%	1,323.00	(C) x 8% 105.84	0.909	96.22
2	8,400+5% = ` 8,820	15.50%	1,367.00	(C) x 8% 109.37	0.826	90.34
3	8,820+5% = `9261	15.25%	1,412.30	(C) x 11% 155.32	0.751	116.65
4	9,261+7% = ` 9,909.27	15.00%	1,486.39	(C) x 11% 163.50	0.683	111.67
5	9,909.27+7% = `10,602.92	14.75%	1,563.93	(C) x 11% 172.03	0.621	106.83
6	10,602.92+7% = `11,345.12	14.50%	1,645.04	(C) x 11% 180.95	0.564	102.06
7	11,345.12+7% =`12,139.28	14.25%	1,729.85	(C) x 11% 190.28	0.513	97.62
8	12,139.28+7% =`12,989.03	14.00%	1,818.46	(C) x 11% 200.03	0.467	93.41
9	12,989.03+7% =`13,898.26	13.75%	1,911.01	(C) x 11% 210.27	0.424	89.13
10	13,898.26+7% =`14,871.14	13.50%	2,007.06	(C) x 11% 220.84	0.386	85.24
						989.17

Question – 5 **Nov 2013 Paper**

ZED Ltd. is a FMCG player in the range of Men's Cosmetics and deals in both Branded and Unbranded products. The Branded products are sold under the Brand of 'ZED' and are fully outsourced from the third party manufacturers. The company's unbranded products are manufactured at its own manufacturing units. The earnings for the last three years (lakhs Rs.) are furnished below:

Particulars	**Year 1**	**Year 2**	**Year 3**
Earning before Interest and Tax (EBIT) from sale of products	5,100	7,500	9,900
Other Income – Royalty for partial usage of ZED Brand	90	135	25

The details of Fixed Assets employed at the company's manufacturing units are given below:

Particulars	Year 1	Year 2	Year 3
Tangible Fixed Assets employed(` Lakhs)	9,000	10,800	13,500
Returns (before interest and tax) on cost of tangible assets	14%	12%	14%
Spread over return	2%	3%	3%

The average annual funds used in the company's operation is `. 5,200 lakhs of which `.2,800 lakh is in the respect of the branded business. The company's tax rate is 33.33% and has an average cost of funds of 17% after considering tax shelter on cost of borrowed funds. You are required to determine the value of the Brand ZED considering capitalization rate of 20%.

Solution

Calculation of EBIT on Unbranded Product (` in Lakh)

Particulars	Year1	Year2	Year3
Tangible Fixed Assets	9,000	10,800	13,500
Return on Cost	14	12	14
Add : Spread	2	3	3
Total Return	16	15	17
EBIT from Sale of Unbranded Products	1,440	1,620	2,295

Calculation of Average Earning After Tax on Branded Product (` in Lakh)

Particulars	Year1	Year2	Year3
EBIT	5,100	7,500	9,900
Less: EBIT in respect of Unbranded Products	(1,440)	(1,620)	(2295)
Add: Brand Royalty	90	135	225
EBIT from LED Branded Products	3,750	6,015	7,830
Average EBIT From Branded Sold [(3750+6015+7830)/3]			5,865
Less: Tax @ 33.33%			(1,955)
Average post tax earnings from Branded Goods (Including tax Shelter on Internet)			3,910

= Average Post tax earnings from Branded Goods

Less: Cost of funds used in Branded Operations

= Average Post Tax Earnings from Branded Goods = 3,910

Less: Cost of Funds Used in Branded Operations (2800 x 17%) = (476)

3,434

Brand Value = Net Earnings from Brand x Capitalization Sale

$= 3,434 \times \frac{100}{20}$ Value of Zed Brand = ` 17,170 Lakh

2014

Question - 6 May 2014 RTP - (SIMILAR TO MAY 2010 PAPER)

Question - 7 Nov 2014 RTP - (SIMILAR TO MAY 2010 PAPER)

2015

Question 8 **May 2015 PAPER**

Agile Limited is a Manufacturer-cum-Dealer of 'R' Tuff Brand of trousers. With the passage of time, its Brand has been well accepted in the market, the company has been approached ba a foreign company engaged in the same trade to enter as Partner in its business. Agile in order to negotiate the deal, wants to get its brand valued. The following information based on Market research available:

1. Garment industry of which Agile is a constituent, is expected to grow by 9% annum during the next five years. The present market size of the industry is ` 7500 crores.
2. There are some other brands both the National and International in the market. The existence of Duplicate Brands is unavoidable. The share of such players is estimated to be 63% of the total industry market. The market share of other national brands will increase @0.25% year-on-year basis in the next 5 years. The share of international brands is expected to grow 1.5 times of national brands. But the existence of duplicate brands is to fall by 2.5% over the period of next 5 years, spread equally.
3. The expected Foreign Partner needs the production line of the company to be re-engineered which will lead to an increase in the yield of the company by 3% after one year over the present yield of 10%, followed thereafter by further increase of 5% year on year.

Following the market-oriented approach, determine the Brand value to be used for negotiation with foreign company considering discounting factor for 1st five years as .909, 0.826, 0.751, 0.683 and 0.621. (Monetary value of crores to be rounded off to nearest 2 decimal places.)

Solution

Market Share of Agile Ltd

Current Market Share = 100% - (National + International + Duplicate Brands)
= 100% - 63%
= 37%

Increase or Decrease in Market Share

National Branch 0.25% + International Brands 0.375% - Fall in Duplicate Brands 0.5%
= 0.25% + 0.375 – 0.5%
= 0.125% increase Other Products Market Share

Agile Market Share in Expected to fall by 0.125% every Year from Current 37%. Next Year It will be 36.875%, the year after 36.75%

Brand Valuation (` in Crores)

Year	Market Size %	Market Share %	Market Share (Amt)	Expected Profit	Discountng factror 10%	Pv of Profit
	A	B	C			
1 2 3 4 5	7,500+9% = 8,175 8,175+9% = 8,910.75 8,910.75+9% =9,712.72 97,120.72+9%=10,586.86 10,586.86+9%=11,539.67 Value of Brand	36.875 36.75 36.625 36.50 36.375	3014.53 3274.70 3557.28 3864.20 4197.55	(C)x13%=`.391.88 (C)x18%=`.589.45 (C)x23%=`.818.17 (C)x28%=`.1,081.98 (C)x33%=`.1,385.19	0.909 0.826 0.751 0.683 0.621	356.22 486.88 614.45 738.99 860.20 3,056.74

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7

Chapter

VALUE ADDED STATEMENT

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	NA	NA	NA	Yes
2009	Yes	NA	Yes	NA
2010	Yes	NA	Yes	NA
2011	Yes	NA	Yes	Yes
2012	Yes	Yes	Yes	NA
2013	Yes	Yes	Yes	Yes
2014	Yes	NA	Yes	NA
2015	Yes	Yes	Yes	NA

2008

Question 1 – **Nov Paper - 2008**

Prepare a value added statement for the year ended on 31.3.2013 and reconciliation of total value added with profit before taxation, from the Profit and Loss Account of Addition Ltd. for the year ended on 31.3.2013:

		(in 000's)
Income :		
Sales	24,400	
Other Income	508	24,908
Expenditure		
Operating Cost	21,250	
Excise Duty	1,110	
Interest on Bank Overdraft	75	
Interest on 9% Debentures	1,200	23,635
Profit Before Depreciation		1,273
Depreciation		405
Profit Before Tax		868
Provision for Tax		320
Profit after Tax		548
Proposed Dividend		48
Retained Profit		500

(259)

The following additional information is given

1. Sales represents sales after adjusting discounts, returns and sales tax
2. Operating Cost includes ` 82,50,000 as wages, salaries and other benefits to employees
3. Bank Overdraft is temporary

Solution

M/S Futures Ltd. Value added Statement for the year ended 31.03.2013

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales	24,400	
Less: Excise Duty	(1,110)	23,290
Less: Bought out goods and services		
a) Operating cost	13,000	
b) Interest on Bank Overdraft	75	13,075
Value added from operations		10215
Add: Other Income		508
Gross Value Added		10,723
VALUE APPLIED:		
i. Towards Employees		
Wages, salaries and other benefits		8250
ii. Towards Providers of Finance		
Interest on 9 % debentures	1200	
Dividends	48	1248
iii. Towards Government		
Corporate tax		320
iv. Towards Replacement and Expansion		
Depreciation	405	
Retained profit	500	905
GROSS VALUE APPLIED		10,723

Reconciliation Of Gross Value Added And Profit Before Tax

PARTICULARS	Amount	Amount
Profit before Taxation		868
Add :		
Depreciation	405	
Wages, Salaries and other benefits to	8250	
employees	1200	9855
Debenture interest		10723

2009

Question 2 – **May RTP 2009**

From the following Profit and loss Account of Brightex Co. Ltd., prepare a gross value added statement for the year ended 31.12.2008.

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

Profit and loss Account for the year ended 31.12.2008

(`. in Lakhs)

Income	Notes		Amount
Sales			6,240
Other income			55
			6,295
Expenditure :			
Production and operational expenses	1	4,320	
Administration expenses (Factory)	2	180	
Interest and other charges	3	624	
Depreciation		16	(5,140)
Profit before taxes			1,155
Provision for taxes			55
			1,100
Balance as per last balance sheet			60
			1,160
Transferred to fixed assets replacement reserve		400	
Dividend Paid		160	560
Surplus transferred to Balance Sheet			600

Notes :

		(` in Lakhs)	
1.	Production and operational expenses:		
	Consumption of raw materials	3,210	
	Consumption of stores	40	
	Local tax	8	
	Salaries to administrative staff	620	
	Other manufacturing expenses	442	
		4,320	
2.	Administration expenses include salaries and commission to directors		5
3.	Interest and other charges include :		
a.	Interest on bank overdraft	109	
	(Overdraft is of temporary nature)		
b.	Fixed loan from I.C.I.C.I	51	
c.	Working capital loan from I.F.C.I.	20	

d. Excise duties amount to one-tenth of total value added by manufacturing and trading activities.

Solution

Value added Statement for the year ended 31.03.2008

Britghtex Co. Ltd.

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales	6240	
Less: Excise Duty	(180)	6,060
Less: Bought out goods and services		
Production and operational expenses(4320-8-620)	3,692	
Administrative Expenses(180-5)	175	
Interest on Bank overdraft	109	
Interest on Working capital Loan	20	
Other miscellaneous charges	264	4260
Value added from operations		1800
Add: Other Income		55
Gross Value Added		1,855
VALUE APPLIED:		
I. Towards Employees		
Salaries to administrative staff	620	
Director's remuneration	5	625
II. Towards Providers of Finance		
Interest on Fixed Loans	51	
Dividends	160	211
III. Towards Government		
Local tax	8	
Income Tax	55	63
IV. Towards Replacement and Expansion		
Depreciation	16	
Fixed Asset Replacement Reserve	400	
Retained profit(600-60)	540	956
GROSS VALUE APPLIED		1,855

Reconciliation of Gross Value added and Profit before Tax

PARTICULARS	AMOUNT	AMOUNT
Profit before Taxation (WN1.)		1,155
Depreciation	16	
Salaries to administration	620	
Directors remuneration	5	
Interest on Fixed Loan	51	
Local Taxes	8	700
Gross Value Added		1,855

Calculation of Excise Duty

PARTICULARS	AMOUNT '000	AMOUNT '000
Interest and other charges		624
Less: Interest on bank overdraft	109	
Interest on Loan from ICICI	51	
Working Capital loan from DFCI	20	(180)
Excise duty 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'

Then miscellaneous or other charges will be 444- x

Thus x $=\frac{1}{10}$ (6240-(3,692+175+109+20+x+(444-x)))

$= \frac{1}{10}$ (6240-4,440)=180

Therefore Excise duty ('x')=Rs. 180 thousands

Question 3 **Nov 2010 RTP – Similar May 2009 RTP**

2010

Question 4 **May RTP 2010**

From the following Profit and loss account of Ganpati Ltd., prepare a Gross value added statement. Show also the reconciliation between Gross value added and Profit before taxation.

Profit and loss Account for the year ended 31st March, 2009

Income	Notes	`. in lakhs	`. in lakhs
Sales			890
Other income			55
			945
Expenditure			
Production and operational expenses	1	641	
Administration expenses	2	33	
Interest and other charges	3	29	
Depreciation		17	(720)
Profit before taxes			225
Provision for taxes			(30)
			195
Balance as per last balance sheet			10
			205
Transferred to:			
General reserve		45	
Proposed dividend		95	140
Surplus carried to balance sheet			65

Notes :

1. Production and operational expenses	`. in lakhs
Consumption of raw materials	293
Consumption of stores	59
Salaries, wages, bonus and other benefits	82
Cess and local taxes	98
Other manufacturing expenses	109

641

2. Administration expenses include salaries and commission to directors `.9 lakhs and provision for doubtful debts `. 6.30 lakhs.

3. Interest and other charges `. in lakhs

from icici for working capital	9
from icici for fixed loans	10
on loan from IFCI on fixed loans	8
Interest on debentures	2
	29

4. The charges for taxation include the transfer of Rs. 3 lakhs to the credit of deferred tax account.
5. Cess and local tax include excise duty, which is equal to 10% of cost of bought in material

Solution

Ganpati Ltd

Value added Statement for the year ended 31.03.2009.

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales	890	
Less: Excise Duty	(55)	835
Less: Bought out goods and services		
Production and operational	461	
expenses(293+59+109)	24	
Administrative Expenses(33-9)	9	
Interest on Working capital Loan		494
Value added from operations		55
Add: Other Income		396
Gross Value Added		
VALUE APPLIED:		
I. Towards Employees		
Salaries, wages and gratuities	82	
Director's remuneration	9	
II. Towards Providers of Finance		91
Interest on Fixed Loans	18	
Interest on Debentures	2	
Dividends	95	115
III. Towards Government		
Cess and Local tax(98-55)	43	
Income Tax (30 – 3)	27	70
IV. Towards Replacement and Expansion		
Depreciation	17	
General reserve	45	

Deferred Tax	3	
Retained profit(65-10)	55	120
GROSS VALUE APPLIED		396

Reconciliation of Gross Value added and Profit before Tax

PARTICULARS	AMOUNT	AMOUNT
Profit before Taxation		225
Depreciation	17	
Salaries, wages and gratuities	82	
Directors remuneration	9	
Interest on Fixed Loan	18	
Interest on Debentures	2	
Cess and Local Taxes	43	171
Gross Value Added		396

Calculation of Excise Duty

Let Bought of Goods and Services is ‘x’

Excise Duty is 10% of x=x/10

X=461+24+9+x/10

X=494+x/10= 549

Excise Duty=549-494=` 55

Question 5 **Nov RTP 2010**

Following is an extract of Profit and loss Account of Chitresh Ltd. for the year ended 31st March, 2010

	Notes	Amount (` 000)
Income		
Sales (including Excise Duty Recoveries)		1,454
Other income		26
		1,480
Expenditure		
Material		1060
Excise Duty		124
Salaries, wages & Employee Benefits		38
Other Expenses		94
Interest and Finance Charges		14
Depreciation	3	10
Provision for Taxation		62
Preliminary Expenses Written Off		10
Transfer to Debenture written off		10
Proposed Dividend		10
Transfer to General Reserve		48
Total		1480

1. Other Expenses include Fees and Commissions to whole – Time directors amounting to ` 18,000 and Loss on Sale of Fixed Assets of ` 6,000.
2. Interest and Finance Charges include interest on Long Term Loans of ` 8,000 and the Balance being on short term borrowings.

Prepare Value Added statements for the year ended 31st March, 2010. Also show statements showing application of Value Added.

Solution

Value added Statement for the year ended 31.03.2010

Chitresh Ltd.

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales	1,454	
Less: Excise Duty	(124)	1330
Less: Bought out goods and services		
Cost of materials bought	1060	
Other Expenses(94-(18+6))	70	
Short-Term interest	6	1136
Value added from operations		194
Add: Other Income		26
Gross Value Added		220
VALUE APPLIED:		
I. Towards Employees		
Salaries, wages and benefits(38+18)		56
II. Towards Providers of Finance		
Interest on Long Term Loans	8	
Dividend on Equity	10	18
III. Towards Government		
Income Tax		62
IV. Towards Replacement and Expansion		
Depreciation	10	
Transfer to General reserve and debenture	58	
Redemption Reserve	10	
Preliminary Expenses Written off	6	84
Loss on Sale of Assets		220
GROSS VALUE APPLIED		

2011

Question 6 **May RTP – 2011**

From the following Profit and loss account of Jindals Limited, prepare Gross value added statement

Profit and loss Account for the year ended 31st March, 2010

(` in lakhs)

Particulars	Amount	Amount
Income		
Sales		400
Other income		25
		425
Expenditure		
Production and operational expenses	300	
Administrative expenses	15	
Interest and other charges	15	
Depreciation	10	340

Profit before taxes		85
Provision for taxes		15
		70
Balance as per last balance sheet		5
		75
Transferred to:		
General reserve		40
Proposed dividend		10
Surplus carried to balance sheet		25
		75
Break-up of some of the expenditure is as follows:		
Production and operational expenses		
Consumption of raw materials and store		160
Salaries, wages and bonus		30
Cess and local taxes		10
Other manufacturing expenses		100
		300
Administrative expenses		
Audit fee		3
Salaries and commission to directors		4
Other expenses		8
		15
Interest and other charges:		
On working capital loans from bank		5
On fixed loans from ICICI		7.5
On debentures		2.5
		15

Solution

Value added statement of Jindal ltd. for the year ended 31.03.2010

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales		400
Less: Excise Duty		-
Less: Bought out goods and services		
Production and operational expenses(160+100)	260	
Administrative Expenses(3+8)	11	
Interest on Working capital Loan	5	276
Value added from operations		124
Add: Other Income		25
Gross Value Added		149
VALUE APPLIED:		
I. Towards Employees		
Salaries, Wages & Bonus (30 + 4)		34
II, Towards Providers of Finance		
Interest on Debentures	2.5	
Interest on Fixed Loans	7.5	

Dividends	10	20
III. Towards Government		
Cess and Local tax	10	
Income Tax	15	25
IV. Towards Replacement and Expansion		
Depreciation	10	
General Reserve	40	
Retained profit(25-5)	20	70
GROSS VALUE APPLIED		149

Question 7 – **Nov RTP 2011 – similar to May 2010 RTP**

Question 8 – **Nov Paper 2011**

Prepare a value added statement for the year ended on 31.03.2011 and reconciliation of total value added with profit before taxation from the profit and loss account of Paradise Ltd. For the year ended on 31.03.2011

Income	**Notes**	**Amount**
Sales		254.00
Other income		6.00
		260.00
Expenditure :		
Operating cost		222.00
Excise Duty		11.20
Interest on Bank overdraft		1.00
Interest on 9% debenture		15.00
		249.20
Profit before depreciation		10.80
Depreciation		4.10
Profit before tax		6.70
Provision for tax		2.40
Profit after tax		4.30
Proposed dividend		0.30
Retained profit		**4.00**

The following additional information are given:

i. Sales represent net sales after adjusting discounts, returns and sales tax.

ii. Operating cost includes `. 82.00 lakhs as wages, salaries and other benefits to employees.

iii. Bank overdraft is temporary.

Solution

Value Added Statement for the year ended 31.03.2011 of Paradise Ltd.

PARTICULARS	**AMOUNT ‘00000**	**AMOUNT ‘00000**
VALUE ADDED:		
Revenue:		
Sales	254	
Less: Excise Duty	(11.20)	242.80

Less: Bought out goods and services		
Operating Cost(Rs.222-82)	140	
Interest on bank overdraft	1	(141)
Value added from operations		101.80
Add: Other Income		6
Gross Value Added		107.80
VALUE APPLIED:		
I. Towards Employees		
Wages, salaries and other benefits		82
II. Towards Providers of Finance		
Interest on 9 % debentures	15	
Dividends	0.30	15.30
III. Towards Government		
Corporate tax		2.40
IV. Towards Replacement and Expansion		
Depreciation	4.10	
Retained profit	4.00	8.10
GROSS VALUE APPLIED		107.80

Reconciliation of Gross Value added and Profit before Tax

PARTICULARS	AMOUNT	Amount
Profit before Taxation		6.70
Add :Depreciation	4.10	
Wages, Salaries and other benefits to employees	82	
Debenture interest	15	101.1
		107.80

2012

Question 9 **May RTP – 2012**

From the following Profit and loss account of Alpha Limited, prepare Gross value added statement and show the reconciliation between Gross value added and Profit before taxation.

Profit and loss Account for the year ended 31st March, 2011

(`. in lakhs)

Particulars	Amount	Amount
Income		
Sales		800
Other income		50
		850
Expenditure		

Production and operational expenses	600	
Administrative expenses	30	
Interest and other charges	30	
Depreciation	20	680
Profit before taxes		**170**
Provision for taxes		30
		140
Balance as per last balance sheet		10
		150
Transferred to:		
General reserve		80
Proposed dividend		20
Surplus carried to balance sheet		50
		150
Break-up of some of the expenditure is as follows:		
Production and operational expenses		
Consumption of raw materials and store		320
Salaries, wages and bonus		60
Cess and local taxes		20
Other manufacturing expenses		200
		600
Administrative expenses		
Audit fee		6
Salaries and commission to directors		8
Provision for doubtful debts		6
Other expenses		10
		30
Interest and other charges:		
On working capital loans from bank		10
On fixed loans from ICICI		15
On debentures		5
		30

Solution

Value added Statement for the year ended 31.03.2008 - Alpha. Ltd.

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales		800
Less: Excise Duty		
Less: Bought out goods and services		
Production and operational	520	
expenses(320+200)	22	
Administrative Expenses(6+6+10)	10	552

Interest on Working capital Loan		248
Value added from operations		50
Add: Other Income		298
Gross Value Added		
VALUE APPLIED:		
I. Towards Employees		
Salaries, wages and bonus	60	
Directors salary and commission	8	68
II. Towards Providers of Finance		
Interest on Debentures	5	
Interest on Fixed Loans	15	
Dividends	20	40
III. Towards Government		
Cess and Local tax	20	
Income Tax	30	50
Iv. Towards Replacement and Expansion		
Depreciation	20	
General Reserve	80	
Retained profit(50-10)	40	140
GROSS VALUE APPLIED		298

RECONCILIATION OF GROSS VALUE ADDED AND PROFIT BEFORE TAX

PARTICULARS	AMOUNT	AMOUNT
Profit before Taxation (WN1.)		170
Depreciation	20	
Salaries wages and bonus	60	
Directors remuneration	8	
Interest on Fixed Loan	15	
Local Taxes	20	
Interest on Debentures	5	128
Gross Value Added		298

Question 10 **May Paper – 2012**

Hindustan 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 annual (% 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 and the target employee cost ascertained. 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 of the employees of the HCL.

Value added statement of HCL for Last 5 years (T 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

	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 (` 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

Solution

Calculation of Target Index

Year	**2006-07**	**2007-08**	**2008-09**	**2009-10**	**2010-11**
Employee cost	520	480	450	600	750
Value added	1,100	1,170	960	1,290	1,700
Percentage of Employee cost to value added	47%	41%	47%	47%	44%

Target Index is to be taken as least of the above from the companies viewpoint on conservative basis i.e 41%

Value Added Statement for the year ended 2011-12

Particulars	**In lakhs**	**In Lakhs**
Sales		5,970
Less: Cost of bought in goods and services		
Material Consumed	1,950	
Production Expenses	500	
Administrative Expenses	200	
Selling Expenses	350	3,000
Value Added		2,970

Employee cost for 2011-2012

Particulars	**In Lakhs**

Wages	400
Production salaries	130
Administrative salaries	150
Selling Salaries	120
	800

Calculation Employee cost = Target Index Percentage X Value added

= 41 % X `.2970 lakhs = `. 1217.70

Calculation of Savings

Target employee cost = `.1217.70 lakhs

Less: Actual Cost = ` 800.00 lakhs

Savings `. 417.70 lakhs

Calculation of Variable incentive for the year 2011-12

70% of saving is variable incentive=70%X Rs.417.70 lakhs = `.292.39 lakhs

Question 11 **NOV RTP – similar to 2010 – Nov RTP**

2013

Question 12 **May RTP – 2013**

From the following data, prepare a Value Added Statement of Merit Ltd. for the year ended 31.3.2012

Particulars	Amount	Particulars	Amount
Decrease in stock	24,000	Sales	40,57,000
Purchases	20,20,000	Other Income	55,000
Wages and Salaries	10,00,000		
Manufacturing and Other Exp	2,30,000		
Finance Charges	4,69,000		
Depreciation	2,44,000		
Profit Before Taxation	1,25,000		
	41,12,000		**41,12,000**

Particulars	
Profit Before Taxation	1,25,000
Less : Tax Provisions	(40,000)
Income Tax Payments (for earlier years)	(3,000)
Profit After Taxation	82,000
Less Appropriations	
Debenture Redemption Reserve	10,000
General Reserve	10,000
Proposed Dividend	35,000
Balance carried to Balance sheet	27,000
Total	82,000

Solution

Value added statement of Merit ltd. for the year ended 31.03.2012

PARTICULARS	AMOUNT	AMOUNT
VALUE ADDED:		
Revenue:		
Sales		40,57,000
Less: Excise Duty		
Less: Bought out goods and services		
Decrease in Stock	24,000	
Purchases	20,20,000	
Manufacturing and other expenses	2,30,000	(22,74,000)
Value added from operations		17,83,000
Add: Other Income		55,000
Gross Value Added		18,38,000
VALUE APPLIED:		
I. Towards Employees		
Salaries, Wages & Bonus		10,00,000
II. Towards Providers of Finance		
Interest on borrowings	4,69,000	
Dividends	35,000	5,04,000
III. Towards Government		
Taxes		43,000
III. Towards Replacement and Expansion		
Depreciation	2,44,000	
Debenture Redemption Reserve	10,000	
General Reserve	10,000	
Retained profit	27,000	2,91,000
GROSS VALUE APPLIED		18,38,000

Question 13 **May Paper 2013 – Similar to May RTP 2009**

Question 14 **Nov RTP 2013 – Similar to Nov 2008 RTP**

Question 15 **Nov Paper 2013**

The Value Added statements of Value Ltd. for the last 5 years are furnished below:

(Lakh `.)

	2007-08	2008-09	2009-10	2010-11	2011-12
Sales	6,000	8,000	10,000	12,000	14,000
Cost of Bought in Material, Services & expenses	2,960	4,400	5,800	7,200	8,400
Value Added	**3,040**	**3,600**	**4,200**	**4,800**	**5,600**
Applied Towards :					
Employee Costs	1,368	1,584	1,680	1,968	2,240
Director Remuneration	30	44	40	48	50
Government for Taxes etc	640	760	840	1,000	1,120
Providers of Capital	250	336	440	512	630

Maintenance & Expansion	752	876	1,200	1,272	1,560
Total	**3,040**	**3,600**	**4,200**	**4,800**	**5,600**

The Employee Costs included Annual Incentive that were decided and paid after negotiations with Labour Unions as under :

100 108 118 130 150

From 2012-13 onwards it was agreed to introduce a Value Added Incentive Scheme (VAIS) that would enable employees to have the opportunity to earn better incentives in case of enhanced performances. The salient features of VAIS are as under :

(i) The highest Contribution of the last 5 years shall be the Target Index.

(ii) 50% of the excess of actual contribution in 2012-13 over target shall be paid to employees as incentive.

(iii) CONTRIBUTION shall mean the Value Added for the year reduced by Employee costs before incentive and expressed as a percentage of Turnover for the year. The result so obtained is to be rounded off to the nearest whole number.

The Profit & Loss account Summary for 2012-13 is given below from which you are required to :

(I) Calculate the amount of Incentive payable to the employees

(II) Prepare Statement of Application of Value Added for the year 2012-13 after payment of the incentive.

Summarized Profit & Loss account of Value Ltd. for the year ended 31.03.2013

(Lakh `.)

Sales	17,250	
Less:		
Material & Services Consumed	6,400	
Wages	1,200	
Production Salaries	400	
Production Expenditure	1,600	
Deprecation on Machinery	1,000	
Administrative Salaries	600	
Administrative expenses	700	
Director Remuneration	60	
Administration Deprecation	350	
Interest on Debentures	80	
Advertisement & sales Promotion	600	
Salaries to Sales team	125	
Selling Expenses	150	
Sales dept. Depreciation	120	13,385
Profit Before Taxes		3,865
Taxes	1,190	
Dividends proposed	800	
Balance C/o		1,875

Solution

Year	2007-08	2008-09	2009-10	2010-11	2011-12

Value Added	3,040	3,600	4,200	4,800	5,600
Employees cost including incentives	1,368	1,584	1,680	1,968	2,240
Less: Incentives	100	108	118	130	150
Employees cost before incentives	1,268	1,476	1,562	1,838	2,090
Contribution	1,772	2,214	2,638	2,962	3,510
Turnover	6,000	8,000	10,000	12,000	14,000
Percentage of 'Contribution' to turnover(to the nearest whole number)	30%	27%	26%	25%	25%

Calculation of Target Index

Target index is highest (%) contribution of last 5 year i.e. is 30%

Calculation of amount of incentive payable to employees for the year 2012-13

Particulars	In Lakhs
Actual contribution in 2012-13	32%
Target Index	30%
Excess of actual contribution over target index	2%
Incentive is 50%	1%
Amount of incentive is (1% of turnover 17,250)	173

Value applied after incentives

Particulars	In lakhs	In Lakhs
Towards Employees		
Salaries	2,325	
Incentives	173	
Directors Remuneration	60	2558
Towards Finance		
Interest on Debentures	80	
Dividend Proposed	800	880
Towards Government		
Depreciation	1,000	
Administration Depreciation	350	
Sales Dept. Depreciation	120	1,470
Retained Earnings	1,875	
Less: Incentive	(173)	1,702
Total Value Applied		7800

Value Added Statement for the year 2012-13

Particulars	In lakhs	In Lakhs
Sales		17,250
Less: Cost of bought in goods and services	6,400	
Material & services consumed	1,600	
Production Expenses	700	
Administrative Expenses	600	
Advertising and Selling Promotion	150	9,450

Selling Expenses Value Added		7,800

Employee Cost for 2012-13

Particulars	In Lakhs
Wages Production salaries Administrative salaries Selling Salaries	1,200 400 600 125 2,325

Calculation of actual contribution in 2012-13

Particulars	In Lakhs
Value added Employee cost Contribution Turnover Percentage of 'Contribution' to 'turnover'(to the nearest whole number)	7,800 2,325 5,475 17,250 32%

2014

Question 16 **May RTP – 2014**

Vaidant Ltd. 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 following given data, you are requested to ascertain the eligibility of 'Variable Incentive' for the year 2012-2013 for the employees of the Vaidant Ltd.

Value added statement of Vaidant Ltd. for last 5 years (`. Lakhs)

Year	2007-08	2008-09	2009-10	2010-11	2011-12
Sales	6,400	6,500	5,800	7,600	9,800
Less : Bought out goods and services	4,200	4,160	3,880	5,020	6,400
Value Added	2,200	2,340	1,920	2,580	3,400

Application of Value Added

Year	2007-08	2008-09	2009-10	2010-11	2011-12
To Pay Employees	1,040	960	900	1,200	1,500
To providers of Capital	320	340	240	380	420

To Government	420	380	440	600	500
For maintenance and Expansion	420	660	340	400	980

Summarized Profit and Loss Account of the variant Ltd. for 2012 – 2013

	`. in Lahks	
Sales		11,940
Less :		
Material Consumed	3,900	
Wages	800	
Production Salaries	260	
Production expenses	1,000	
Production depreciation	300	
Administrative Salaries	300	
Administrative Expenses	400	
Administrative depreciation	200	
Interest	300	
Selling and Distribution salaries	240	
Selling Expenses	700	
Selling Depreciation	240	8640
Profit		3,300

Solution

Calculation of Target Index

Year	2007-08	2008-09	2009-10	2009-10	2011-12
Employee cost	1,040	960	900	1200	1500
Value added	2,200	2,340	1,920	2,580	3,400
Percentage of Employee cost to value added	47%	41%	47%	47%	44%

Target Index is to be taken as least of the above from the companies viewpoint on conservative basis i.e 41%

Value Added Statement for the year ended 2012-13

Particulars	In lakhs	In Lakhs
Sales		11,940
Less: Cost of bought in goods and services		
Material Consumed	3900	
Production Expenses	1000	
Administrative Expenses	400	
Selling Expenses	700	6,000
Value Added		5,940

Employee cost for 2012-2013

Particulars	In Lakhs
Wages	800
Production salaries	260
Administrative salaries	300

Selling Salaries	240 1600

Calculation Employee cost = Target Index Percentage X Value added

= 41 % X Rs.5940 lakhs = Rs. 2,435.40lakhs

Calculation of Savings

Target employee cost = `.2,435.40 lakhs

Less: Actual Cost = ` 1,600.00 lakhs

Savings `. 835.40 lakhs

Calculation of Variable incentive for the year 2012-13

70% of saving is variable incentive = 70% x `.8353.40 lakhs = `.584.78 lakhs

Question 17 **Nov RTP - 2014**

Profit and Loss Account for the year ended 31st March, 2014

Particulars		Notes	(in 000's)
Sales Less Return			21,350
Trading Profit		1	1,920
Less :			
Depreciation	302		
Interest	140	2	(442)
Add : Other Income			80
Profit before Tax			1,558
Provision for Tax		3	688
Profit after Tax			870
Less : Extraordinary items		4	(15)
			855
Less Proposed Dividend			340
Retained Profit			515

Notes

1. Trading profit is arrived at after charging the following

Salaries, wages etc to employees		3685
Directors Remuneration		360
Audit Fees		220
Hire of Equipment		290

2. Interest figure is ascertained as below

Interest paid on bank loans and overdraft	160	
Interest received	(20)	140

3. Extraordinary items

Surplus on sale of properties	20	
Loss of Goods by fire	(35)	(15)

4. The charge for taxation include a transfer of ` 1,48,000 to the credit of deferred tax account

Solution

Value added Statement for the year ended 31.03.2009

Yash Ltd.

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales		21,350
Less: Trading Profit		
Less: Bought out goods and services		
Cost of bought goods and services(21,350-1,920-3,685-360)		(15,385)
		5,965
Value added from operations		100
Add: Other Income(20+80)		
Less: Extraordinary items	20	
Surplus on sale Transaction	(35)	(15)
Loss of goods by Fire		6,050
Gross Value Added		
VALUE APPLIED:		
Towards Employees		
Salaries, wages and other benefits	3,685	
Director's remuneration	360	4,045
Towards Providers of Finance		
Interest on Loans and overdraft	160	
Proposed Dividends	340	500
Towards Government		
Provision for Tax		688
Towards Replacement and Expansion		
Depreciation	302	
Retained profit	515	817
GROSS VALUE APPLIED		6,050

RECONCILIATION OF GROSS VALUE ADDED AND PROFIT BEFORE TAX

PARTICULARS	AMOUNT	AMOUNT
Profit before Taxation		1,558
Depreciation	302	
Salaries, wages and gratuities	3,685	
Directors remuneration	360	
Interest on Loan and overdraft	160	
Extraordinary item	(15)	4,492
Gross Value Added		6,050

2015

Question 18 **May RTP 2015 - Similar to May RTP 2009**

Question 19 **May Paper – 2015**

Famous corporation has been preparing Value Added Statements for the past five years. The human resource manager of the company has suggested introducing a value added incentive scheme to motivate the employees for their better performance. To introduce the scheme it is proposed that the best performance (favorable to employer)i.e. Employee Costs to Added Value for the last five years, will be used as the target index for future calculations for the bonus to be paid.

After the target index is determined any actual improvement in the index will be rewarded. The employer and the employee will be sharing any such improvement in the ratio of 1:2. The bonus is given in the end of the year after the profit for the year is determined.

The following information is available for the last five years

Year	**2010**	**2011**	**2012**	**2013**	**2014**
Sales	5600	7,600	9,200	10,400	12,000
Less : Bought out goods and services	2560	4,000	5,000	5,600	6,400
Value Added	3,040	3,600	4,200	4,800	5,600

Application of Value Added

Year	**2007-08**	**2008-09**	**2009-10**	**2010-11**	**2011-12**
Employee cost	1300	1520	1680	1968	2240
Dividend	200	300	400	480	600
Taxes	640	760	840	1000	1120
Depreciation	520	620	720	880	1120
Debenture Interest	80	80	80	80	80
Retained Earnings	300	320	480	392	440
Added Value	3040	3600	4200	4800	5600

Summarised Profit and loss Account for the year ended on 31St March 2015.

(` in Lakhs)

Income	Notes		Amount
Sales less returns			13600
Dividends and Interest			500
Miscellaneous Income			500
			14600
<u>Expenditure :</u>			
Production and operational expenses			
Cost of materials		5000	
Wages and salaries		1800	
Other manufacturing expenses		1400	8200
<u>Administration expenses</u>			
Administration salaries		600	
Administration Expenses		600	1200
<u>Selling and Distribution Expenses</u>			
Selling and distribution Salaries		120	

Selling Expenses		400	520
Finance Expenses			
Debenture Interest			80
Depreciation			1520
Total Expenditure			1,1520
Profit before Taxation			3080
Provision for Taxation			770
Profit after Taxation			2310

From the above information prepare value Added Statement for the year 2014-2015 and determine the amount of bonus payable to employees if any.

Solution

Calculation of Target Index

Year	2010	2011	2012	2013	2014
Employee Cost	1,300	1,520	1,680	1,968	2,240
Value Added	3,040	3,600	4,200	4,800	5,600
Ratio	42.76%	42.22%	40.00%	41.00%	40.00%

Target Index is to be taken as least of the above from the companies viewpoint on conservative basis i.e 40%

Value Added Statement for the year ended 2014-15

Particulars	In lakhs	In Lakhs
Sales		
Less: Cost of bought in goods and services		13,600
Cost of Material	5,000	
Production Expenses	1,400	
Administration Office Expenses	600	
Sales Office Expenses	400	7,400
Value added From Manufacturing & Trading Activities		6,200
Add : Other Income		1,000
Net Value Added		7,200

Employee cost for 2014 - 2015

Particulars	In Lakhs
Wages	1800
Administrative salaries	600
Selling Salaries	120
	2,520

Employee Cost / Net Value Added x 100 = 2520 / 7200 x 100 = 35%

Improvement for the year eligible for Bonus = Target Index – Employee Cost = 40 – 35 = 5%

Value Applied for the year 2014 – 15

Particulars	In lakhs	In Lakhs
I. Towards Employees (2,520 + 240)		2,760
II. Towards Government : Taxes		770
III. Towards Providers of Finance : Interest on Debenture		80

IV. Towards Retained Earnings Depreciation Retained Earnings (2,310 – 240)	1,520 2,070	3,590
		7,200

Question 20 **Nov RTP – 2015**

From the following Profit and loss Account of Orange Co. Ltd., prepare a gross value added statement for the year ended 31.12.2015.

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

Profit and loss Account for the year ended 31.12.2015

(`. in Lakhs)

Income	Notes		Amount
Sales			1,988
Other income			110
			2,098
Expenditure :			
Production and operational expenses	1	1,390	
Administration expenses (Factory)	2	166	
Interest and other charges	3	58	
Depreciation		34	(1,648)
Profit before taxes			450
Provision for taxes	4 / 5		(60)
			390
Balance as per last balance sheet			20
			410
Transferred to fixed assets replacement reserve		90	
Dividend Paid		190	(280)
Surplus transferred to Balance Sheet			130

Notes :

		(`. in Lakhs)
1.	Production and operational expenses:	
	Consumption of raw materials	694
	Consumption of stores	118
	Cess and Local tax	196
	Salaries to administrative staff	164
	Other manufacturing expenses	218
		1,390

2. Administration expenses include salaries and commission to directors ` 18 lakhs and provision for doubtful debts `. 12.60 lakhs

3. Interest includes

   a. Interest on loan from Axis bank on working capital 18 lakhs

   b. Interest on loan from Axis bank for Fixed loan 20 lakhs

   c. Interest on loan from icici Bank for Fixed Loan 16 lakhs

   d. Interest on Debentures 4 lakhs

The charges for taxation include a transfer of ` 6 lakhs to the credit of Deferred Tax Account

Cess and Local Taxes include Excise Duty, Which is equal to 1/14 of cost of bought in material and services.

Solution

Value added Statement for the year ended 31.03.2015

PARTICULARS	AMOUNT '000	AMOUNT '000
VALUE ADDED:		
Revenue:		
Sales		1988
Less: Bought out goods and services		
Production and operational expenses(694+118+218)	1030	
Administrative Expenses(166-18)	148	
Interest on Working capital Loan	18	
Excise Duty (Working Notes)	92	1288
Value added from operations		700
Add: Other Income		110
Gross Value Added		810
VALUE APPLIED:		
I. Towards Employees		
Salaries, wages and gratuities	164	
Director's remuneration	18	182
II. Towards Providers of Finance		
Interest on Fixed Loans	36	
Interest on Debentures	4	
Dividends	190	230
III. Towards Government		
Cess and Local tax(196-92)	104	
Income Tax (60 – 6)	54	158
IV. Towards Replacement and Expansion		
Depreciation	34	
General reserve	90	
Deferred Tax	6	
Retained profit(130-20)	110	240
GROSS VALUE APPLIED		810

RECONCILIATION OF GROSS VALUE ADDED AND PROFIT BEFORE TAX

PARTICULARS	AMOUNT	AMOUNT
Profit before Taxation		450
Add :		
Depreciation	34	
Salaries, wages and gratuities	164	
Directors remuneration	18	
Interest on Fixed Loan	36	
Interest on Debentures	4	
Cess and Local Taxes	104	360
Gross Value Added		810

Calculation of Excise Duty

Let Bought of Goods and Services is 'x'

Excise Duty is 1/14 of x = x/14

X = 1,030 + 148 + 18 + x/14

X = 1,288

Excise Duty = 1288 – 1,196 = ` 92

❑ ❑ ❑

8

Chapter

Economic Value Added

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	NA	NA	Yes	NA
2009	Yes	Yes	Yes	NA
2010	Yes	NA	Yes	NA
2011	Yes	Yes	Yes	Yes
2012	Yes	Yes	Yes	NA
2013	Yes	NA	Yes	NA
2014	Yes	Yes	Yes	Yes
2015	Yes	NA	Yes	Yes

2008

Question 1 – **NOV RTP - 2008**

Calculate EVA from the following data for the year ended 31st March, 2008

	(` in lakhs)
Average debt	50
Average equity	2766
Cost of debt (post tax)	7.72%
Cost of equity	16.7%
Weighted average cost of capital	16.54%
Profit after tax, before exceptional item	1541
Interest after tax	5

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	**` in lakhs**
Profit after tax	1541
ADD: Interest after tax	5
NOPAT	1546

ii. Kc (%) = 16.54%

iii. Kc (Amount)

Total Capital Employed = Equity + Debt = 2766 + 50 = 2816

Kc (Amount) = 2816 x 16.54% = 465.7664

EVA = 1546 – 465.7664 = ` 1080.2336 lakhs

(284)

2009

Question 2 – **May RTP - 2009**

The following information is available of a concern; calculate E.V.A.

Debt capital 12%	`. 2,000 crores
Equity capital	`. 500 crores
Reserve and surplus	`. 7,500 crores
Capital employed	`. 10,000 crores
Risk-free rate	9%
Beta factor	1.05
Market rate of return	19%
Equity (market) risk premium	10%
Operating profit after tax	`.2,100 crores
Tax rate	30%

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT = 2100

ii. Kc (%)

Ke = RF + B (RM - RF)

= 9 + 1.05(10)

= 19.5%

Kd = i (1 - t)

= 12(1 – 0.3) = 8.4%

Kc = WtKe + WtKd

$$= \frac{8000}{10000} \text{ x } 19.5 + \frac{2000}{10000} \text{ x } 8.4\% = 17.28\%$$

iii. Kc (Amount) = 10000 x 17.28% = 1728

Economic Value = 2100 – 1728 = ` 372 Crore

Question 3 – **May Paper**

From the following information of Vinod Ltd. compute the economic Value added.

1) Share Capital	`. 2,000 lakhs
2) Reserves and Surplus	`. 4,000 Lakhs
3) Long term Debt	`. 400 lakhs
4) Tax Rate	30%
5) Risk Free Rate	9%
6) Market Rate of Return	16%
7) Interest	`. 40 lakhs
8) Beta Factor	1.05
9) Profit Before Interest and Tax	`. 2,000 lakhs

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	`
EBIT	2000
LESS: Tax (30%)	600
NOPAT	1546

ii. Kc (%)

$$Ke = RF + B(RM - RF)$$
$$= 9 + 1.05(16 - 9)$$
$$= 16.35\%$$

$$i\ (\%) = \frac{40}{400} \times 100 = 10\%$$

$$Kd = i\ (1 - t)$$
$$= 10\ (1 - 0.3) = 7\%$$

$$Kc = WtKe + WtKd$$
$$= \frac{400}{6400} \times 7 + \frac{6000}{6400} \times 16.35 = 15.765625\%$$

iii. Kc (Amount) = 6400 x 15.765625% = 1009

EVA = 1400 – 1009 = ` 391 Lakhs

Question 4 **Nov RTP – 2009**

Pilot Ltd. supplies the following information using which you are required to calculate the economic value added.

Financial leverage		1.4 times
Capital (equity and debt)	Equity shares of ` 1,000	34,000
	Accumulated profit (Lakh `)	260
	10 percent Debentures of Rs.10 each	80 lakhs nos.
Dividend expectations of equity shareholders		17.50%

Prevailing Corporate Tax rate 30%

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

Interest = 80 x 10 x 10% = 80

$$\text{Financial leverage} = \frac{EBIT}{EBT} = \frac{EBIT}{EBT - Int}$$

$$= \frac{EBIT}{EBIT - 80} = 1.4$$

EBIT = 1.4 EBIT – 112

EBIT = 280

PARTICULARS	`
EBIT LESS: Tax (30%) NOPAT	280 84 196

ii. Kc (%)

Ke = 17.50%

Kd = i (1 - t)

= 10 (1 – 0.3) = 7%

Kc = WtKe + WtKd

$$= \frac{340 + 260}{360 + 260 + 800} \text{ x } 17.5\% + \frac{800}{1400} \text{ x } 7\% = 11.5\%$$

Kc (Amount) = 1400 x 11.5% = 161

EVA = 196 – 161 = ` 35 Lakhs

2010

Question 5 **MAY RTP – 2010**

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

Financial leverage : 1.4 times;

Equity Capital : `. 170 lakh;

Reserve and surplus : `. 130 lakh;

10% Debentures : `. 400 lakh;

Cost of Equity : 17.5%

Income Tax Rate : 30%.

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

Interest = 400 x 10% = 40

Financial leverage $= \dfrac{EBIT}{EBIT - Int} = 1.4$

$= \dfrac{\text{EBIT}}{\text{EBIT} - 40} = 1.4$ therefore EBIT = 140

PARTICULARS	`
EBIT LESS: Tax (30%) NOPAT	140 42 98

ii. Kc (%)

Ke = 17.5%

Kd = i (1 - t)

= 10 (1 – 0.3) = 7%

Kc = WtKe + WtKd

$= \dfrac{400}{700} \times 7\% + \dfrac{300}{700} \times 17.5\% = 11.5\%$

iii. Kc (Amount) = 700 x 11.5% = 80.

EVA = 98 – 80.5 = ` 17.5 Lakhs

Question 6 **NOV RTP – 2009**

Prosperous Bank has a criteria that it will give loans to companies that have an "Economic Value added" greater than zero for the past three years on an average. The bank is considering lending money to a small company that has the economic value characteristics shown below. The data relating to the company is as follows.

1. Average operating income after tax equals ` 25,00,000 per year for last 3 years
2. Average total assets over the last 3 years equals ` 75,00,000
3. Weighted average cost of capital appropriate for the company is 10% which is applicable for all three years
4. The company's average current liabilities over the last three years are ` 15,00,000.

Does the company meet the bank's criteria for a positive economic value added ?

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT = ` 25,00,000

ii. Kc (%) = 10%

iii. Kc (Amount)

Capital_Employed = Assets - Liabilities

= 75,00,000 – 15,00,000

Kc (Amount) = 60,00,000 x 10% = 6,00,000

EVA = 25,00,000 – 6,00,000 = ` 19 Lakhs

Note :- (Since the company has positive EVA, Prosperous Bank should go ahead and give loan to the company)

2011

Question 7 – **MAY RTP – 2011**

From the following data compute the Economic Value Added:

Equity	`. 1600 crores
Long-Term debt	`. 320 crores
Interest	`. 32 crores
Reserves & Surplus	`. 3200 crores
Profit before Interest & Tax	`. 1432 crores
Tax Rate	30%
Cost of equity	14.2%

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	`
EBIT LESS: Tax (30%) NOPAT	1432 429.6 1002.4

ii. Kc (%)

Ke = 17.5%

Kd = i (1 - t)

$$i\ (\%) = \frac{32}{320} \times 100 = 10\%$$

Kd = 10 (1 – 0.3) = 7%

Kc = WtKe + WtKd

$$= \frac{4800}{5120} \times 14.2 + \frac{320}{5120} \times 7\% = 13.75\%$$

iii. Kc (Amount) = 5120 x 13.75 = 704

EVA = 1002.4 – 704 = ` 298.4 Lakhs

Question 8 **May 2011 – Paper – Similar to Nov 2010 - RTP**

Question 9 **NOV 2011 - RTP – Similar to May 2009 Paper**

Question 10 **Nov Paper – 2011**

Life industries ltd [LIL] furnishes the following information from which you are required to calculate prevailing Economic Value Added of the company and also explain the reason for the difference, if any, between the EVA as calculated by you and the MVA (Market Value Added) of LIL amounting to ` 14005 crores.

Common Shares of ` 1,000 face value	1,58,200 units
12% Debentures ` 10 face value	50,00,000 units
Current Tax Rate	30%
Financial Leverage	1.1 times
Securities Premium Account	155 lakhs
Free Reserves	154 lakhs
Capital Reserves	109 lakhs

It is prevailing practice for companies in the industry to which LIL belongs to pay at least a dividend of 15% to its common shareholders.

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

Interest = 50,00,000 x 10 x 12% = ` 60,00,000

Financial leverage $= \frac{EBIT}{EBIT - Int} = 1.1$

$$= \frac{\text{EBIT}}{\text{EBIT} - 60{,}00{,}000} = 1.1 \text{ therefore EBIT} = 6{,}60{,}00{,}000$$

PARTICULARS	`
EBIT	6,60,00,000
LESS: Tax (30%)	1,98,00,000
NOPAT	4,62,00,000

ii. Kc (%)

Total Capital = Share Capital + Reserves

= 1582 + (155+154+109)

= 2,000 Lakhs

Kd = i (1 - t)

= 12 (1 – 0.3) = 8.4%

Kc = WtKe + WtKd

$$= \frac{2000}{2500} \text{ x } 15 + \frac{500}{2500} \text{ x } 8.4 = 13.68\%$$

iii. Kc (Amount) = 2500 x 13.68% = 342

EVA = 462 – 342 = ` 120 Lakhs

Market value added means total value added by company to its face value of share capital. It is calculated by following formula

Market Value Added = Total Market Value - Book Value

Whereas Economic Value added is excess of profit earned over and above the cost of capital. They are totally different concepts.

2012

Question 11 **MAY RTP – 2012**

You are given the following information about Ram Ltd.

1. Beta for the year 2010 – 2011 1.05
2. Risk Free Rate 12%
3. Long Range Market Rate 15.14%
4. Extracts of liability side of balance sheet as on 31st March 2011.

	`. In lakhs
Equity	29,160
Reserves and Surplus	43,740
Shareholders Funds	72,900
Loan Funds	8,100
Total Long Term Funds	81,000

5. Profit After Tax `. 20,394.16 lakhs
6. Interest Deducted from profit `. 487 lakhs
7. Effective tax Rate 24.45%

Calculate economic value added of Ram Ltd. as on 31st March, 2011

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	`
Profit after tax	20394.160
ADD: Tax (24.45%)	6600.095
Profit before Tax	26,994.255
ADD: Interest	487.000
EBIT	27,481.255
LESS: Tax (24.45%)	6,719.167

NOPAT	20,762.088

ii. Kc (%)

Ke = RF + β (RM - RF)

= 12 + 1.05(15.14 - 12)

= 15.297%

$i = \frac{487}{8100} \times 100 = 6.0123$

Kd = i (1 – t) = 6.0123(1 – 0.2445) = 4.54%

$Kc = WtKe + WtKd = \frac{8000}{81000} \times 4.54\% + \frac{72900}{81000} \times 15.297 = 14.224\ \%$

iii. Kc (Amount) = 81000 x 14.224% = 11521.4

Economic Value = 20762.088 – 11521.44 = ` 9240.65 Lakhs

Question 12 – **May Paper - 2012**

The following information as on 21.3.2012 is supplied to u by M/s Fox Ltd.

		In crores
1.	Profit after tax	`. 205.90
2.	Interest	`. 4.85
3.	Equity Share capital	`. 40.00
	Accumulated Surplus	`. 700.00
	Share holders fund	`. 740.00
	Loans long term	`. 37.00
	Total long term funds	`. 777.00
	Market capitalization	`. 2892.00

Additional information

a. Risk free return 12%

b. Long term market rate (BSE Sensex) 15.50%

c. Effective tax rate for the company 25%

d. β for last few years

Year	β
1	0.48
2	0.52
3	0.60
4	1.10
5	0.99

Using the above data you are requested to calculate EVA of the Fox Ltd. 31st March 2012.

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	`
NPAT	205.90
ADD: Tax	68.63
NPBT	274.53
ADD: Interest	4.85
NPBIT	279.38
LESS: Tax (25%)	69.845
NOPAT	209.535

ii. Kc (%)

Ke = RF + β (RM - RF)

= 12% + 1.1 (15.5 - 12)

= 15.85%

$i = \frac{4.85}{37} \times 100 = 13.108\%$

Kd = i (1 – t)

= 13.108 (1 – 0.25) = 9.83%

Kc = WtKe + WtKd

$= \frac{740}{777} \times 13.108\% + \frac{37}{777} \times 9.83\% = 12.95\%$

iii. Kc (Amount) = 777 x 12.95% = 100.6215

EVA = 209.535 – 100.6125 = ` 108.916 Crores

Question 13 **Nov 2012 RTP - Similar to Nov 2010 – RTP and May 2011 Paper**

2013

Question 14 **May RTP - 2013**

The Capital Structure of Define Ltd. is as under:

- 80,00,000, Equity Shares of ` 10 each = ` 800 lakhs
- 1,00,000, 12% Preference Shares of ` 250 each = ` 250 lakhs
- 1,00,000, 10% Debentures of ` 500 each = ` 500 lakhs
- Terms Loan from Bank @ 10% = ` 450 lakhs

The Company's Statement of Profit and Loss for the year showed PAT of ` 100 lakhs, after appropriating Equity Dividend @ 20%. The Company is in the 40% tax bracket. Treasury Bonds carry 6.5% interest and beta factor for the Company may be taken as 1.5. The long run market rate of return may be taken as 16.5%. Calculate Economic Value Added.

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	`
NPAT after Dividend	100.00
ADD: Equity Dividend (800 x 20%)	160.00
ADD: Interest on Dividend (250 x 12%)	30.00
NPAT	290.00
ADD: Tax	193.33
NPBT	483.33
ADD: Interest (500 x 10%)	50 + 45
EBIT	578.33
LESS: Tax (40%)	231.33
NOPAT	347.00

ii. Kc (%)

Ke $= RF + \beta\,(RM - RF)$

$= 6.5 + 1.5\,(16.5 - 6.5) = 21.5$

Kp $= Dp = 12\%$

$$i = \frac{95}{950} \times 100 = 10\%$$

Kd $= i\,(1 - t)$ Kl $= i\,(1 - t)$

$= 10\,(1 - 0.4) = 6\%$ $= 10\,(1 - 0.4) = 6\%$

Kc $= WtKe + WtKp + WtKd$

$$= \frac{800}{800 + 250 + 1500 + 450} \times 21.5 + \frac{250}{2000} \times 12 + \frac{950}{2000} \times 6 = 12.95\%$$

iiii. Kc (Amount) = 2000 x 12.95% = 259

EVA = 347– 259 = ` 88 Lakhs

Question 15 – **NOV RTP – 2013**

Booming Limited provides you the following data :

No of equity shares of ` 10 each	192 crores
No of 10% Debentures of ` 100 each	?
Free Reserves	` 1440 crores
Capital Reserves	` 960 crores
Securities Premium	` 480 crores
Tax Rate	30%
Beta Factor	1.05

Market Rate of Return	14%
Risk Free Rate	10%
Debt – Equity Ratio	1 : 2

Compute the Economic Value Added where net operating profit after tax is ` 1848 crores.

Also Explain the reason for the difference between EVA and MVA.

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT=1,848(In crores)

ii. Kc(%)

Ke = RF + β (RM - RF)

= 10 + 1.05 (14 - 10) = 14.2%

Kd = i (1 - t)

= 10 (1 – 0.3) = 7%

Kc(%) = WtKe + WtKd

Debt-Equity Ratio=Long term Debt/Equity

0.5 =Long-term debt/(1,920+1,440+960+480)

Long-term debt=2,400

$$= \frac{4{,}800}{7{,}200} \times 14.2 + \frac{2{,}400}{7{,}200} \times 7 = 11.8\%$$

iii. Kc (Amount) = 7200 x11.8% = 849.6

EVA = 1848-849.6 = 998.4 crores

2014

Question 16 **May 2014 RTP – Similar to May 2012 RTP**

Question 17 **May 2014 – Paper**

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

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

Solution

MVA = Market Value – Book Value

i. Book Value

PARTICULARS	`
Equity	505
Reserves (101 + 50.5)	151.5
9% Preference share	150
12% Secured Debenture	50
	856.5

ii. Market Value

PARTICULARS	`
Equity (505 x 600%)	3030
Reserves	-
9% Preference share (15 x 30)	450
12% Secured Debenture	50
	3530

MVA = 3530 – 856.5 = 2673.5lakhs

Question 18 – **May 2014 – Paper**

Gold. and Co. provides you with the following as at 31st March, 2004. (`. in lakhs)

Liabilities	`	Assets	`
Share capital	1,000	Fixed assets (Net)	3,000
Reserves and surplus	2,000	Investments	150
Long term debt	200	Current assets	100
Sundry creditors	50		
Total	3,250	Total	3,250

Additional Information provided is as follows :

i. Profit before interest and tax is `. 1,000 (`. in Lakhs) ii. Interest: `. 20 (`. in Lakhs)

iii. Tax: 35.875% iv. Risk Free Rate - 10%

v. Market Rate - 15% vi. Beta(β) Factor - 1.4

Compute economic value added

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	`
EBIT	1000.00
LESS: Tax (30%)	358.75
NOPAT	641.25

ii. Kc (Amount)

Ke $= RF + \beta\ (RM - RF)$

$= 10 + 1.4\ (15 - 10) = 17\%$

i (%) $= \dfrac{20}{200} \times 100 = 10\%$

Kd $= i\ (1 - t)$

$= 10\ (1 - 0.35875) = 6.4125\%$

Kc(%)

Kc $= WtKe + WtKd$

$= \dfrac{3000}{32000} \times 17 + \dfrac{200}{3200} \times 6.4125 = 16.3383\%$

iii. Kc (Amount) = 3200 x 16.3383% = 522.8256

EVA = 641.25 – 522.8256 = 118.4244 lakhs

Question 19 **NOV 2014 RTP – Similar to May 2012 Paper**

Question 20 **Nov Paper – 2014**

Disha & Co. has following information:

	`.(in lacs)
Equity share capital (`. 10 each)	400
15% Preference Share Capital	200
Reserves & Surplus	220
15% Debentures	1600
10% Non-Trade Investments(Nominal Value Rs. 100lacs)	140
Land and building held as Investment	20
Advance given for purchase of Plant	10
Capital Work in Progress	30
Underwriting Commission (not written off)	20
Earning Per share	16
Tax rate	30%
Beta factor	1.65
Market Rate of Return	16.25%
Risk free return	9.85%

Calculate Economic Value Added by the Company.

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

PARTICULARS	**`**

Profit after tax and Dividend (16 x 40)	640.00000
ADD: Interest on Dividend (200 x 15%)	30.00000
Profit After Tax	670.00000
ADD: Tax (30%)	287.14285
Profit before Tax	957.14285
ADD: Interest	240.00000
EBIT	1197.14285
LESS: Income from no trade investments	10.00000
EBIT	1187.14285
LESS: Tax (30%)	356.14285
NOPAT	831.00000

ii. Kc (%)

Ke = RF + β (RM - RF)

= 9.85 + 1.65(16.25 – 9.85) = 20.4%

Kp = 15%

Kd = i (1 – t)

= 15(1 – 0.3) = 10.5

Kc = WtKe + WtKd + Wtkp

Equity = 400 + 220 – 20 (Underwriting Commission) = 600

$$Kc = \frac{600}{2400} \times 20.41 + \frac{200}{2400} \times 15\% + \frac{1600}{2400} \times 10.5 = 5.10 + 1.25 + 7 = 13.35\%$$

iii. Kc (Amount) = 2200 x 13.35% = 293.7

EVA = 831 – 293.7 = ` 537.3 Lakhs

2015

Question 21 **May RTP - 2015**

Prosperous Limited provides you the following data to Calculate Economic Value added.

30 Crores Equity shares of `. 10 each

1 Crores, 15% Preference shares of `. 100 each

8 Crores, 15% Debentures of `. 100 each

Tax Rate	– 30%
Beta Factor	- 1.5
Market Risk Premium	- 9%
Financial Leverage	- 1.5
Immovable Property held as investment	- 100

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

Interest = 8 x 100 x 15% = 120

$$\text{Financial leverage} = \frac{EBIT}{EBT - Int} = 1.5$$

$$= \frac{EBIT}{EBIT - 120} = 1.5$$

EBIT = 1.5EBIT-180

180 = 0.5EBIT

EBIT = 360lakhs.

PARTICULARS	`
EBIT	360
LESS: Tax (30%)	108
NOPAT	252

ii. Kc (%)

Ke = Rf + β (RM – Rf)

Ke = 6.5 + 1.5 (9) += 20%

Kp = 15%

Kd = i (1 - t)

= 15 (1 – 0.3) = 10.5%

Kc = WtKe + WtKp + WtKd

$$= \frac{300}{1200} \times 20 + \frac{100}{1200} \times 15 + \frac{800}{1200} \times 10.5 = 13.25\%$$

iii. Kc (Amount) = 1100 x 13.25% = 145.75

= 1200 – 100 (immovable property)

EVA = 252 – 147.75 = 106.25

Question 22 **Nov RTP – 2015 – Similar to May Paper – Q.3**

Question 23 **Nov 2015 – Paper**

Vijay Ltd. furnishes the following information from which you are required to calculate the Economic Value Added (EVA) of the company and also explain the reason for the difference, if any, between EVA as calculated by you and the MVA (Market Value Added) of Vijay Ltd. amounting to `. 7,010 Crores

Common shares of `. 10 face value	79,10,000 shares
10% Debenture of `. 100 face Value	2,50,000 debentures
Tax Rate	30%
Financial Leverage	1.1 times
Capital Reserve	54 lakhs
Free Reserves	75 lakhs
Securities Premium	80 lakhs

It is common practice for companies in the industry to which Vijay Ltd. belongs to pay atleast a dividend of 12% P.A to its common shareholders

Solution

EVA = NOPAT – Kc (Amount)

i. NOPAT

Interest = 2, 50,000 x 100 x 10% = `. 25lakhs

$$\text{Financial leverage} = \frac{\text{EBIT}}{\text{EBT} - \text{Int}} = 1.1$$

$$= \frac{\text{EBIT}}{\text{EBIT} - 25} = 1.1$$

EBIT=1.1EBIT-27.5

27.5=0.1EBIT

EBIT=275Lakhs.

PARTICULARS	`
EBIT	275
LESS: Tax (30%)	82.5
NOPAT	192.5

ii. Kc (%)

Ke = 12%

Kd = I (1 - t)

=10(1-0.3) =7%

Kc = WtKe + WtKp + WtKd

$$= \frac{1000}{1250} \times 12 + \frac{250}{1250} \times 7 = 11\%$$

iii. Kc (Amount) = 1250 x 11% = 137.5

EVA = 192.5-137.5 = `. 55lakhs.

❑ ❑ ❑

9
Chapter

SHARE BASED PAYMENTS

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	NA	Yes – 10 Marks	Yes	NA
2009	Yes	NA	Yes	NA
2010	Yes	NA	Yes	Yes – 16 Marks
2011	Yes	NA	Yes	Yes – 5 Marks
2012	Yes	NA	Yes	Yes – 4 Marks
2013	Yes	Yes – 4 Marks	Yes	Yes – 10 Marks
2014	Yes	Yes – 8 Marks	Yes	Yes – 12 Marks
2015	Yes	NA	Yes	Yes

2008

Question 1 **May 2008 – Paper**

ABC Ltd. Grants 1,000 employees stock on 1st April 2008 at ` 40, when the market price is ` 160. The vesting period is 2.5 years and the maximum exercise period is one year. 300 unvested options lapse on 1st May 2010. 600 options are exercised on 30th June 2011. 100 options lapse at the end of the exercise period. Pass journal entries giving suitable narrations.

Solution

Journal of ACB Ltd

Date	**Particulars**	**L.F**	**Amount (Dr.)**	**Amount (Cr.)**
2008-09				
31/3/09	Employee Compensation Expenses A/c Dr To Employee Stock Option Outstanding A/c (Being Compensation Expenses recognized for 1000 options for 2.5 years)		48,000	48,000
31/3/09	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense transferred to profit and loss A/c)		48,000	48,000

<u>2009-10</u>			48,000	
31/3/10				48,000
	Employee Compensation Expenses A/c Dr ~~To Employee Stock Option Outstanding~~			
31/3/10	A/c (Being Compensation Expenses recognized for 1000 options for 2.5 years)		48,000	48,000
	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense transferred to profit and loss A/c)			
	(299)			
<u>2010-11</u> 31/03/11	Employee Stock Option Outstanding A/c Dr To General Reserve A/c (Being Excess of Employee Compensation Expenses transferred to General Reserve A/c)		12,000	12,000
<u>2011-12</u> 31/03/11			24000	
	Bank A/c Dr		72000	
	Employee Stock Option Outstanding A/c Dr To Equity Share Capital A/c To Security Premium A/c (Being 600 Employees are exercised at an expertise of ` 10 each)			6000 90000
30/09/11			12000	12000
	Employee Stock Option Outstanding A/c Dr To General Reserve A/c (Being 100 options Lapsed at the end of Exercise period)			

Working Notes

2008-09 :- Options_Amounts to be provided = $\frac{1000 \text{ x } 120\ (160 - 40) \text{ x } 1}{2.5}$ = 48,000

2009-10 :- Options_Amounts to be provided_ = $\frac{1000 \text{ x } 120\ (160 - 40) \text{ x } 2}{5}$

= 96,000 – 48,000 = `. 48,000

2010-11 :- <u>Options to be provided</u>

= Total option 1000

(-) Option Lapsed 300

Option Pending 700

Amount to be provided = $\frac{700 \text{ x } 120 \text{ x } 2.5}{2.5}$ = 84,000

Option Provided = 96,000

Reversed = 12000

2011-12 :- <u>Options Lapsed</u> = 100 x 120 = 12000 (Reversed)

Question 2 **NOV RTP – 2008**

Choice Ltd. Grants 100 stock options to each of its 1,000 employees on 1st April 2009 for ` 20, depending upon the employees at the time of vesting options. The market price of the share is ` 50. These options will vest at the end of the year 1 if the earning of Rahul Ltd is 16% or it will vest at the end of the year 2 if the average earning of two years is 13% or lastly it will vest at the end of the third year if the average earning of 3 years will be 10%, 5,000 unvested options lapsed on 31st March 2010 . 4,000 unvested options lapsed on 31st March 2011 and finally 3,500 unvested options lapsed on 31st March 2012.

Following is the earning of Choice Ltd :

Year ended on	Earning (in %)
31st March 2010	14%
31st March 2011	10%
31st March 2012	7%

850 employees exercised their vested options within a year and remaining options were unexercised at the end of the contractual life. Pass journal entries of the above.

Solution

Journal of Choice Ltd

Date	Particulars	L.F	Amount (Dr.)	Amount (Cr.)
<u>2009-10</u> 31/3/10	Employee Compensation Expenses A/c Dr To Employee Stock Option Outstanding A/c (Being Employee Compensation Expenses provided for 95000 options)		14,25000	14,25000
31/3/10	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense changed to profit and loss A/c)		14,25000	14,25000
<u>2010-11</u> 31/3/11	Employee Compensation Expenses A/c Dr To Employee Stock Option Outstanding A/c (Being Employee Compensation Expenses provided for 95000 options)		3,95,000	3,95,000
31/3/11	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense changed to profit and loss A/c)		3,95,000	3,95,000
<u>2011-12</u> 31/03/12			8,05,000	8,05,000
	Employee Compensation Expenses A/c Dr			

31/03/12	To Employee Stock Option Outstanding A/c (Being Employee Compensation Expenses provided for 95000 options)		8,05,000	8,05,000
<u>2012-13</u> 31/03/13	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense changed to profit and loss A/c)		17,00,000 25,50,000	8,50,000 34,00,000
31/03/13	Bank A/c (85,000 x 20) Dr Employee Stock Option Outstanding A/c Dr To Equity Share Capital A/c (*10) To Security Premium A/c (*40) (Being 850 Employees exercised the Options)		75,000	75,000
	Employee Stock Option Outstanding A/c Dr To General Reserve A/c (Being 100 options Lapsed at the end of Exercise period)			

Working Notes

	2009-10	2010-11	2011-12
No of Options	100000	95000	91000
(-) Lapsed	<u>5000</u>	<u>4000</u>	<u>3500</u>
Outstanding	95,000	91,000	87,500
(x) Iv of Options (50-20)	30	30	30
Total	28,50,000	27,30,000	26,25,000
Amt to be Provided	$\frac{28,50,000}{2} \times 1$ = 14,25,000	$\frac{27,30,000}{3} \times 2$ = 18,20,000	$\frac{26,25,000}{3} \times 3$ =26,25,000
Amount already Provided	Nil	14,25,000	18,20,000
Amount to be provided in current year	14,25,000	3,95,000	8,05,000

2009

Question 3 **May 2009 RTP – Similar to May 2008 Paper**

Question 4 **Nov RTP – 2009**

S Ltd. grants 1,000 options to its employees on 1.4.2005 at ` 60. The vesting period is two and a half years. The maximum exercise period is one year. Market price on that date is ` 90. All the options were exercised on 31.7.2008. Journalize, if the face value of equity share is ` 10 per share.

Solution

Journal of S Ltd

Date	Particulars	L.F	Amount (Dr.)	Amount (Cr.)
04 –				
05	Employee Compensation Expenses A/c Dr		12,000	
31.3.05	To Employee Stock Option Outstanding			12,000
	A/c			
	(Being 1000 Options provided for 2.5 Years)			
			12,000	
31.3.05	Profit and Loss A/c Dr			12,000
	To Employee Compensation Exp A/c			
	(Being Expense changed to profit and loss			
05-06	A/c)		12,000	
31.3.06				12,000
	Employee Compensation Expenses A/c Dr			
	To Employee Stock Option Outstanding			
	A/c		12,000	
31.3.06	(Being 1000 Options provided for 2.5 Years)			12,000
	Profit and Loss A/c Dr			
06-07	To Employee Compensation Exp A/c		6,000	
31.3.07	(Being Expense changed to profit and loss			
	A/c)			6,000
	Employee Compensation Expenses A/c Dr			
	To Employee Stock Option Outstanding		6,000	
31.3.07	A/c			6,000
	(Being Employee Compensation Expenses			
	provided for 95000 options)			
07-08			60000	
31.7.08	Profit and Loss A/c Dr		30000	
	To Employee Compensation Exp A/c			10000
	(Being Expense changed to profit and loss			80000
	A/c)			
	Bank A/c (1000 x 60) Dr			
	Employee Stock Option Outstanding A/c			
	(x30)Dr			

	To Equity Share Capital A/c (x10) To Security Premium A/c (x80) (Being Options exercised by the holders)			

2010

Question 5 **MAY RTP – 2010**

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

Vesting Period 3 years

Exercise Period 3 years

Expected Life 5 years

Exercise Price ` 50

Market Price ` 50

Expected forfeitures per year 3%

The fair value of options, calculated using an option pricing model, is ` 15 per option. Actual forfeitures, during the year 1, are 5 per cent and at the end of year 1, the enterprise still expects that actual forfeitures would average 3 per cent per year over the 3- year vesting period. During the year 2, however, the management decides that the rate of forfeitures is likely to continue to increase, and the expected forfeiture rate for the entire award is changed to 6 per cent per year. It is also assumed that 840 employees have actually completed 3 years vesting period.

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

Solution

Journal of _____ Ltd

Date	Particulars	L.F	Amount (Dr.)	Amount (Cr.)
Year 1				
1.	Employee Compensation Expenses A/c Dr To Employee Stock Option Outstanding A/c (Being 2,73,802 Options provided after reduce 3% expected forfeiture of 3%)		13,69,010	13,69,010
2.	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense transferred to profit and loss A/c)		13,69,010	13,69,010
Year2			11,22,740	

1.				11,22,740
	Employee Compensation Expenses A/c Dr			
	To Employee Stock Option Outstanding A/c			
	(Being 2,49,175 Options provided after reduce		11,22,740	
2.	6% expected forfeiture of 6%)			11,22,740
	Profit and Loss A/c Dr			
Year3	To Employee Compensation Exp A/c		12,88,250	
1.	(Being Expense transferred to profit and loss A/c)			12,88,250
	Employee Compensation Expenses A/c Dr		12,88,250	
2.	To Employee Stock Option Outstanding A/c			12,88,250
	(Being 2,52,00 Options provided)			
Year4				
	Profit and Loss A/c Dr			
Year5	To Employee Compensation Exp A/c		30,00,000	
1.	(Being Expense transferred to profit and loss A/c)		9,00,000	
				6,00,000
				33,00,000
	NO ENTRY			
Year6	Bank A/c (200 x 300 x 50) Dr			
1.	Employee Stock Option Outstanding A/c Dr		9,00,000	18,00,000
	To Equity Share Capital A/c (*10)		27,00,000	99,00,000
	To Security Premium A/c (*55)			
	(Being 200 Employees exercised options)			
	Bank A/c (600 x 300 x 50) Dr			
2.	Employee Stock Option Outstanding A/ Dr		1,80,000	1,80,000
	To Equity Share Capital A/c (*10)			
	To Security Premium A/c (*55)			
	(Being 600 Employees exercised options)			
	Employee Stock Option Outstanding A/c Dr			
	To General Reserve A/c			
	(Being options of 40 Employees Lapsed and Reversed)			

Working Notes

	Year 1	Year 2	Year 3
Options	300	300	300
(x) Employees	x 1,000	x 1,000	x 840
Total Options	3,00,000	3,00,000	2,52,000
(x) Expected for year			

Year1	x 0.97	x 0.94	
Year2	x 0.97	x 0.94	
Year3	x 0.97	x 0.94	
	2,73,802	2,49,175	
(x) Iv of Options	x 15	x 15	x 15
	41,07,030	37,37,625	37,80,000
Amount to be provided	$\frac{41,07,030}{3}$ x 1	$\frac{37,37,625}{3}$ x 2	$\frac{37,80,000}{3}$ x 3
Total	=13,69,010	=11,22,740	=12,88,250

Question 6 **NOV RTP – 2010**

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

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

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

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

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

Compute the amounts to be recognized for each year.

Solution

	<u>**31/12/09**</u>	<u>**31/12/10**</u>	<u>**31/12/11**</u>
Employees	250 (300-20-30)	245 (300-20-25-10)	240 (300-20-25-15)
Expected Output	122	130	112
Iv of Options	40	30	50
Total Amounts to be provided	$\frac{20,00,000}{3}$ x 1 = 6,66,667	$\frac{14,70,000}{3}$ x 2 = 9,80,000	$\frac{24,00,000}{3}$ x 3 = 24,00,000
Amount already provided		6,66,667	
Total	Nil	3,13,333	9,80,000

	6,66,667		14,20,000

Question 7 – **NOV PAPER – 2010**

Softex Ltd. announced a Stock Appreciation Right (SAR) on 01-04-07 for each of its employees. The scheme gives the employees the right to claim cash payment equivalent to an excess of market price of company shares on, exercise date over the exercise price of `125 per share in respect of 100 shares, subject to a condition of continuous employment of 3 years. The SAR is exercisable after 31-03-2010 but before 30-06-10.

The fair value of SAR was Rs.21 in 2007-08, ` 23 in 2008-09 and ` 24 in 2009-10. In 2007-08 the company estimated that 2% of its employees shall leave the company annually. This was revised to 3% in 2008-09. Actually 15 employees left the company in 2007-08, 10 left in 2008-09 and 8 left in 2009-10. The SAR therefore actually vested in 492 employees on 30-06-2010; when SAR was exercised the intrinsic value was ` 25 per share.

Show the provision for SAR account by fair value method. Is this provision a liability or equity?

Solution

Dr **Books of Softex Ltd** **Cr**

Date	Particular	Amount	Date	Particular	Amount
2007-08	To Balance c/d	3,45,891	2007-08	By Employee Compensation Exp A/c	3,45,891
		3,45,891			3,45,891
2008-09	To Balance c/d	7,35,785	2008-09	By Balance B/d	3,45,891
				By Employee Compensation Exp A/c	3,89,894
		7,35,785			7,35,785
2009-10	To Balance c/d	11,80,800	2009-10	By Balance B/d	7,35,785
				By Employee Compensation Exp A/c	4,45,015
		11,80,800			11,80,800
2010-11	To Bank A/c	12,30,000	2010-11	By Balance B/d	11,80,800
				By Employee Compensation Exp A/c	49,200
		12,30,000			12,30,000

Working Notes

	2007-08	2008-09	2009-10
Employees	525	510	492

	(492+15+10+8)	(525-15)	
(x) Expected forfeiture			
Year1	x 0.98	x 0.94	x 100
Year2	x 0.98	x 0.94	
Year3	x 0.98		
	49,413	47986	49,200
(x) Iv of Options	x 21	x 23	x 24
	10,37,673	11,03,678	11,80,800
Total Amount to be provided	$\frac{10,37,673}{3}$ x 1	$\frac{11,03,678}{3}$ x 2	$\frac{11,80,800}{3}$ x 3
	=3,45,891	=7,35,785	=11,80,800
(-) Amount provided	NIL	3,45,891	7,35,785
	3,45,891	3,89,894	4,45,015

2010-11

Cash Payment – 49,200 x 25 = 12,30,000

(-) Already provided = 11,80,800

To be provided = 49,200

2011

Question 8 – **May RTP – 2011**

Beta Ltd. grants 1,000 employees stock options on 1.4.2007 at ` 80, when the market price is ` 320. The vesting period is 2½ years and the maximum exercise period is one year. 300 unvested options lapse on 1.5.2009. 600 options are exercised on 30.6.2010. 100 vested options lapse at the end of the exercise period.

Solution

Journal of Beta Ltd

Date	Particulars	L.F	Amount (Dr.)	Amount (Cr.)

2007-08 31/3/08	Employee Compensation Expenses A/c Dr To Employee Stock Option Outstanding A/c (Being Employees Compensation Expense for 1000 Employees provided)		96,000	96,000
31/3/08 2008-	Profit and Loss A/ Dr To Employee Compensation Exp A/c (Being Expense changed to profit and loss A/c)		96,000 96,000	96,000
09 31/3/08	Employee Compensation Expenses A/c Dr To Employee Stock Option Outstanding A/c (Being Employees Compensation Expense for 1000 Employees provided)		96,000	96,000 96,000
31/3/08 2009-10	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense changed to profit and loss A/c)		24,000	24,000
31/3/10 2010-11 30/6/10	Employee Stock Option Outstanding A/c Dr To General Reserve A/c (Being options Excess Reversed)		48,000 1,44000	6000 1,86,000
	Bank A/c (600 x 80) Dr Employee Stock Option Outstanding A/ Dr To Equity Share Capital A/c (x10) To Security Premium A/c (x 310) (Being 600 Employees exercised options)		24,000	24,000
30/9/10	Employees Stock Options Outstanding A/c Dr. To General Reserve A/c (Being 100 options lapsed)			

Question 9 **NOV 2011 RTP – Similar to Nov 2008 RTP**

Question 10 **Nov Paper – 2011**

On 1st april 2010, A company offered 100 shares to each of its employees at ` 50 per share. The employees are given a month to decide whether or not to accept the offer. The shares issued under the plan (ESPP) shall be subject to lock in on transfers for three years from grant date. The market price of shares of the company on the grant date is ` 60 per share. Due to post-vesting restrictions on transfer, the fair value of shares issued under the plan is estimated at ` 56 per share.

On 30th April, 2010, 400 employees accepted the offer and paid ` 50 per share purchased. Nominal value of each share is ` 10.

Record the issue of shares in the book of the company under the aforesaid plan.

Solution

Journal of ______ Ltd

Date	Particulars	L.F	Amount (Dr.)	Amount (Cr.)
30/4/2010				
	Bank A/c (40000 x 50) Dr		20,00,000	
	Employee Compensation Expenses A/c (x 6) Dr		2,40,000	
	To Equity Share Capital A/c (x 10)			4,00,000
	To Security Premium A/c (x 46)			18,40,000
	(Being 4,000 shares issued under ESPP)			
31/3/2011	Profit and Loss A/c Dr		2,40,000	
	To Employee Compensation Exp A/c			2,40,000
	(Being Compensation Expense changed to profit and loss A/c)			

2012

Question 11 – **May RTP – 2012**

At the beginning of year 1, the enterprise grants 100 stock options to each of its 500 employees, conditional upon the employees remaining in the employment of the enterprise during the vesting period. The options will vest at the end of year 1 if the earnings of the enterprise is 18 per cent; at the end of year 2 if the earnings of the enterprise is an average of 13 per cent per year over the two year period; and at the end of year 3 if the earnings of the enterprise is an average of 10 per cent per year over the three year period. The fair value of the options, calculated at the grant date using an option pricing model, is ` 30 per option. No dividends are expected to be paid over the three-year period.

By the end of year 1, the earnings of the enterprise was 14 per cent, and 30 employees had left. The enterprise expected that earnings will continue at a similar rate in year 2, and, therefore, expected that the options will vest at the end of year 2. The enterprise expected on the basis of a weighted average probability, that a further 30 employees will leave during the year 2, and, therefore, assumed that options will vest in 440 employees at the end of the year 2.

By the end of year 2, the earnings of the enterprise was only 10 per cent. 28 employees have left during the year. The enterprise expected that a further 25 employees will leave during year 3, and that the earnings of the enterprise will be at least 6 per cent, thereby achieving the average of 10 per cent per year.

By the end of the year 3, 23 employees had left and the earnings of the enterprise had been 8 per cent. You are required to determine the compensation expense to be recognised each year.

Solution

	Year 1	Year 2	Year 3
No of Employees	500	470	442
(-) Left	30	28	23
(-) Expected to Leave	30	25	--
	440	417	419
(x) No of Options/Employees	100	100	100
	44,000	41,700	41,900
(x) Iv	30	30	30
Total Options value	13,20,000	12,51,000	12,57,000
Total Value to be provided	$\frac{13,20,000}{2} \times 1$	$\frac{12,51,000}{3} \times 2$	$\frac{12,57,000}{3} \times 3$
	= 6,60,000	= 8,34,000	= 12,57,000
Value Provided	NIL	6,60,000	8,34,000
(-) Amount provided	6,60,000	1,74,000	4,23,000
Vesting Period	18%	13%	10%
Actual	14%	12%	10.67%

Question 12 **NOV RTP – 2012 – Similar to May 2010**

Question 13 **NOV Paper – 2012**

Goodluck Limited grants 180 share options to each of its 690 employees. Each grant containing condition on the employees working for Goodluck Ltd. over the next 4years. Goodluck Ltd. has estimated that the fair value option is ` 15. Goodluck Ltd. also estimated that 30% of employees will leave during four year period and hence forfeit their rights to the share option. If the above expectations are correct, what amount of expenses to be recognized during vesting period?

Solution

Amount to be expensed in 4 Years

= 690 Employees

X 180 Options

1, 24,200 Total Options

X 70% (30% Employees we expected to leave)

86,940

X 15 Fair Value/Options

13, 04,100 Total Amount to be recognized

Amount to be recognized every Year = $\frac{13,04,100}{4}$ = ` 3,26,025

2013

Question 14 – **May Paper – 2013**

On 1st April 2012, A company offered 100 shares to each of its employees at ` 40 per share. The employees are given a month to decide whether or not to accept the offer. The shares issued under the plan (ESPP) shall be subject to lock in on transfers for three years from grant date. The market price of shares of the company on the grant date is ` 50 per share. However the fair value of shares issued under this plan is estimated at ` 48 per share.

On 30th April, 2012, 400 employees accepted the offer and paid ` 40 per share purchased. Nominal value of each share is ` 10.

Record the issue of shares in the book of the company under the aforesaid plan.

Solution

Journal of Company

Date	**Particulars**	**L.F**	**Amount (Dr.)**	**Amount (Cr.)**
30/4/2012	Bank A/c (40000 x 40) Dr		16,00,000	
	Employee Compensation Expenses A/c (x 8) Dr		3,20,000	
	To Equity Share Capital A/c (x 10)			4,00,000
	To Security Premium A/c (x 38)			15,20,000
	(Being 4,000 shares issued under ESPP)			
	Profit and Loss A/c Dr		3,20,000	
	To Employee Compensation Exp A/c			3,20,000
	(Being Compensation Expense changed to profit and loss A/c)			

Notes :-

Fair Value of Share should be taken as ` 48 and not ` 50 because share as issued with post vest Restriction

Iv of Option = 48 – 40 = ` 8/-

Question 15 – **Nov RTP – 2013**

On 1.1.2010, Happy Ltd. grants to its senior officer, a right to choose either 250 shares (with some post-vesting restrictions) or a cash payment equal to value of 200 shares, conditional upon remaining in service for 3 years.

Fair value of a share without considering post-vesting restrictions is ` 70 on 1.1.2010, ` 75 on 31.12.2010, ` 80 on 31.12.2011 and ` 85 on 31.12.2012. Fair value of a share after taking into account post-vesting restrictions is ` 68 on 1.1.2010. Face value per share is ` 10. Give the amounts to be recognised each year. Also, give the journal entries for settlement if (1) employee chooses cash payments (2) employee chooses shares

Solution

Working Notes

Options Provision

	Cash Options	**Share Options**	
	200	250	
	X 70	x 68	
	14,000		17,000

Excess Share Options = 17,000 – 14,000 = 3,000

Share Options to be Recognized each Year = $\frac{3,000}{3}$ = 1,000

Cash Options

Year 1	**Year 2**	**Year 3**
$= \frac{200 \times 75}{3} \times 1 =$ 5,000	$= \frac{200 \times 80}{3} \times 2 =$ 10,667 (-) 5,000 5,667	$= \frac{200 \times 85}{3} \times 3 =$ 17,000 (-) 10,667 6,333

Journal of Happy Ltd

Date	**Particulars**	**L.F**	**Amount (Dr.)**	**Amount (Cr.)**
Year1				
1.	Employee Compensation Expenses A/c Dr		6,000	
	To Employee Cash Option Outstanding A/c			5,000
	To Employee Stock Option Outstanding A/c			1,000
2.	(Being Cash and Stock Options provided)		6,000	
				6,000
	Profit and Loss A/c Dr			
Year2	To Employee Compensation Exp A/c			
1.	(Being Expense changed to profit and loss A/c)		6,667	
				5,667
				1,000
	Employee Compensation Expenses A/c Dr			
	To Employee Stock Option Outstanding A/c			
2.			6,667	
	To Employee Cash Option Outstanding A/c			6,667
Year3	(Being Cash and Stock Options provided)			
1.			7,333	
	Profit and Loss A/c Dr			6,333
	To Employee Compensation Exp A/c			1,000
	(Being Expense changed to profit and loss A/c)			
2.			7,333	
	Employee Compensation Expenses A/c Dr			7,333
	To Employee Cash Option Outstanding A/c			

1.	To Employee Stock Option Outstanding A/c (Being Cash and Stock Options provided)		17,000	17,000
2.	Profit and Loss A/c Dr To Employee Compensation Exp A/c (Being Expense changed to profit and loss A/c)		3,000	3,000
	Exercise – Cash Options Employee Stock Option Outstanding A/c Dr To Cash A/c (Being options Excess Cashed)			
	E mployees Stock Options Outstanding A/c Dr To General Reserve A/c (Being options lapsed)			

Stock Option

Date	Particulars	L.F	Amount(Dr.)	Amount (Cr.)
30/4/2012	Employee Cash Option Outstanding A/cDr Employee Stock Option Outstanding A/c Dr To Equity Share Capital A/c To Security Premium A/c (Being Share options Exercised)		17,000 3,000	2,500 17,500

Question 16 – **NOV Paper – 2013**

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 :

A) The eligible employees can either have the option to claim the difference between the exercise price of ` 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.

B) Any shares subscribed to by the employees shall carry a 3 year lock in restriction. All shares carry face Value of ` 10.

C) The Current Fair Value of the shares at (ii) above is ` 60 and that in respect of freely tradable shares is higher by 20%.

D) 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:

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

Solution

Working Notes

Options Provision

Share Option = 6,000 x 6 x 10 = 3, 60,000

Cash Option = 5000 x 60 x 120% = 3, 60,000

Excess Share Options = 3, 60,000 – 3, 60,000 = NIL

Cash Provision

	Year 1	**Year 2**	**Year 3**
No of Options	5000	5000	5000
(x) Fair Value	76.32 (60 x 120% +6%)	83.952 (76.32 +10%)	96.5448 (83.952 +15%)
Total Amount	381600	419760	482724
Amount to be provided	$\frac{3,81,600}{3} \times 1$ = 1,27,200	$\frac{4,19,760}{3} \times 2$ = 2,79,840	$\frac{4,82,724}{3} \times 3$ = 4,82,724
(-) Amount provided	Nil	1,27,200	2,79,840
Balance to be provided	$\boxed{1,27,200}$	$\boxed{1,52,640}$	$\boxed{2,02,844}$

Equity Components = <u>NIL</u>

Dr **Employee Compensation A/c** **Cr**

Date	**Particular**	**Amount**	**Date**	**Particular**	**Amount**
Year1	To Provision for Liability	1,27,200	Year1	By Profit and Loss A/c	1,27,200
		1,27,200			1,27,200
Year2		1,52,640	Year2		1,52,640
	To Provision for Liability	1,52,640		By Profit and Loss A/c	1,52,640
Year3		2,02,884	Year3		2,02,884
	To Provision for Liability	2,02,884		By Profit and Loss A/c	2,02,884

Dr **Provision for Liability A/c** **Cr**

Date	Particular	Amount	Date	Particular	Amount
Year1	To Balance C/d	1,27,200	Year 1	By Provision for Expenses A/c	1,27,200
		1,27,200			1,27,200
Year 2	To Balance C/d	2,79,840		By Balance b/d	1,27,200
			Year 2	By Provision for Expenses A/c	1,52,640
		2,79,840			2,79,840
	To Balance C/d	4,82,724		By Balance b/d	2,79,840
Year 3				By Provision for Expenses A/c	2,02,884
		4,82,724	Year 3		4,82,724

Cash Option

Date	Particular	Amount	Date	Particular	Amount
2013-14	To Cash/Bank	4,82,724	2013-14	By Balance C/d	4,82,724
		4,82,724			4,82,724

Equity Share Options Outstanding A/c

Date	Particular	Amount	Date	Particular	Amount
2013-14	To Equity capital A/c (6000 x 10)	60,000	2013-14	By Equity Share Options O/S A/c	4,82,724
	To Security Premium A/c	4,22,724			
		4,82,724			4,82,724

2014

Question 17 **May RTP – 2014**

Arihant Limited has its share capital divided into equity shares of `10 each. On 1-10-2012, it granted 20,000 employees' stock option at ` 50 per share, when the market price was ` 120 per share. The options were to be exercised between 10th December, 2012 and 31st March, 2013. The employees exercised their options for 16,000 shares only and the remaining options lapsed. The company closes its books on 31st March every year. Show Journal Entries (with narration) as would appear in the books of the company up to 31st March, 2013.

Solution

Journal of Arihant Ltd

Date	Particulars	L.F	Amount (Dr.)	Amount (Cr.)
10/12/2012	Bank A/c (16000 x 50) Dr		8,00,000	
	Employee Compensation Exp A/c (16000 x 70)		11,20,000	
	To Equity Share Capital A/c (16000x 10)			1,60,000
	To Security Premium A/c (16000x 10)			17,60,000
	(Being 16,000 Employee Stock Options recognized)			
31/3/2013	Profit and Loss A/c Dr		11,20,000	
	To Employee Compensation Exp A/c			11,20,000
	(Being Compensation Expense changed to profit and loss A/c)			

Question 18 – **May Paper – 2014**

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 share on exercise date over exercise price in respect of 60shares.
3. The exercise price is fixed at ` 75 per share.
4. The option to exercise the SAR is open from 1st April, 2014 for 45days and the same vested on 975 employees.

5. The intrinsic value of the company's share on date of closing(15th May, 2014) was `.30 per share.
6. The fair value of the SAR was ` 20 in 2011-12; ` 25 in 2012-13 and ` 27 in 2013-14.
7. In 2011-12 the expected rate of employee attrition was 5% which rate was doubled in the next year.
8. Actual attrition year wise was as under:

   2011-12 35 employees of which 5 had served the company for less than 3 years.

   2012-13 35 employees of which 20 served the company 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.

Solution

Working Notes

	20011-12	**2012-13**	**2013-14**
Employees	1040	1010	975
	(975+35-5+20+20-5)	1040-(35-5)	1040-(35-5)-20-(20-5)
(x) Expected forfeiture	5% for 3 years	10% for 2 years	---
Year1	x 0.95	x 0.9	x 60
Year2	x 0.95	x 0.9	
Year3	x 0.95	x 60	
		49,086	
Total SAR's	53,500	x 25	58,500
(x) Iv of SAR's	x 20	12,27,150	x 27
	10,70,000		15,79,500
To be recognized	$\frac{10,70,000}{3} \times 1$	$\frac{12,27,150}{3} \times 2$	$\frac{15,79,500}{3} \times 3$
		=8,18,100	
	=3,56,667	3,56,667	=15,79,500
(-) Amount provided	NIL	4,61,433	8,18,100
Balance to be provided	3,56,667		7,61,400

2014-15

Total Fair Value for SAR's = 17, 55,000

(975 x 60 x 30) (-)15, 79,500

1, 75,500

Dr **Provision for SAR's A/c** **Cr**

Date	**Particular**	**Amount**	**Date**	**Particular**	**Amount**

2011-12			2011-12		
31/3/12	To Balance c/d	3,56,667	31/3/12	By Employee Compensation Exp A/c	3,56,667
		3,56,667			3,56,667
2012-13			2012-13		
31/3/13	To Balance c/d	8,18,100	1/4/12	By Balance B/d	3,56,667
			31/3/13	By Employee Compensation Exp A/c	4,61,433
		8,18,100			8,18,100
2012-13			2013-14		
31/3/14	To Balance c/d	15,79,500	1/4/13	By Balance B/d	8,18,100
			31/3/14	By Employee Compensation Exp A/c	7,61,400
		15,79,500			15,79,500
2014-15			2014-15		
31/3/15	To Bank A/c	17,55,000	1/4/14	By Balance B/d	15,79,500
			31/3/15	By Employee Compensation Exp A/c	1,75,500
		17,55,000			17,55,000

Question 19 – **NOV RTP – 2014**

At the beginning of year 1, an enterprise grants 100 stock options to each of its 500 employees. The grant is conditional upon the employee remaining in service over the next three years. The enterprise estimates that the fair value of each option is ` 15. The enterprise estimates that 100 employees will leave during the three-year period and therefore forfeit their rights to the stock options.

40 employees left during year 1. By the end of year 1, the share price of the enterprise has dropped, and the enterprise reprises its stock options, and that the reprised stock options will vest at the end of year 3. The enterprise estimates that further 70 employees will leave during years 2 and 3.

During year 2, further 35 employees left, and the enterprise estimates that further 30 employees will leave during year 3. During year 3, 28 employees left. The stock options vested at the end of year 3 to the remaining employees.

The enterprise estimates that, at the date of reprising, the fair value of each of the original stock options granted (i.e., before taking into account the reprising) is ` 5 and that the fair value of each reprised stock option is ` 8.

Calculate the amount to be recognised towards employees services received in years 1-3.

Solution

Working Notes

	Year 1	**Year 2**	**Year 3**
No of Employees	500	460	425
(-) Left	40	35	28
(-) Expected to Leave	70	30	
	390	395	397
(x) No of Options/Employees	100	100	100
	39,000	39,500	39,700
(x) Iv	15	15	15
Total Amount to be recognized	5,85,000	5,92,500	5,95,500
	$\frac{5,85,000}{3}$ x 1	$\frac{5,92,500}{3}$ x 2	$\frac{5,95,500}{3}$ x 3
Value Provided	= 1,95,000	= 3,95,000	= 5,95,500
(-) Already recognized	NIL	1,95,000	3,95,000
To be recognized	1,95,000	2,00,000	2,00,500
		39,500 x 3 x 1/2	39,700 x 3 x 2/2
Additional Provision		59,250	1,19,100 - 59,250 = 59,850
Total		2,59,250	2,60,350

Question 20 – Nov 2014 Paper – Similar to NOV RTP - 2008

2015

Question 21 – May 2015 RTP – Similar to Nov 2013 Paper

Question 22 – Nov 2015 RTP

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

Grant Date 01/04/2012

Number of Employees covered 400

Number of options granted per employee 60

Nominal Value per share ` 100

Exercise price per share ` 125

Offer was put in three groups, group 1 was for 20% of shares offered with vesting period 1 year, Group 2 was for 40% of shares offered with vesting period 2 years, Group 3 was for 40% for shares offered with vesting period three years. Fair value of option per share on grant date was `. 10 for group 1, `. 12.50 for group 2 and `. 14 for group 3.

Position as on 31.03.2013	**Position on 31.03.2014**
Number of Employees left = 40 Estimate of number of employees to leave in 2013- 14 = Rs. 36 Estimate of number of employees to leave in 2014-15 = 34 Number of employees exercise option in group 1 = 350	Number of employees left = 35 Estimate of number of employees to leave in 2014 – 15 = 30 Number of employees exercising options in group II = 319

Position on 31.03.2015

Number of Employees left = 28 Number of employees at the end of the last vesting period = 297 Number of employees exercising options in Group III = 295

Options not exercised immediately on vesting, were forfeited. Compute expenses to recognise in each year and show important accounts in the books of the company.

Solution

Computation of Share / Fair Value expected to vest at the end of each accounting period

(a) Shares graded every year

Particulars	Options Vesting	Vesting Period
Total shares under ESOP	60	-
Group 1 20% of 60	12	I Year
Group 2 40% of 60	24	2 Year
Group 3 40% of 60	24	3 Year

(b) Value of Option Vesting

Group	Year	No. of Employees expected to qualify		Shares Vested per employee	Total No. of shares expected to vest	Fair Value of Option per share	Fair Value of the option
I	12-13	Actual	400-40=360	12	4,320	10.00	43,200
II	12-13	Expected	400-40-36=324	24	7,776	12.50	97,200
	13-14	Actual	400-40-35=325	24	7,800	14.00	97,500
III	12-13	Expected	400-40-36-34=290	24	6,960	14.00	97,440
	13-14	Expected	400-40-35-30=295	24	7,080	14.00	99,120
	14-15	Actual	297	24	7,128	14.00	99,792

No. of employees=Opening Employees-Employees left-Employees expected to leave

(c) Options forfeited and value to be transferred to General Reserve

Particulars	Group 1	Group 2	Group 3

	2012-13	2013-14	2014-15
Number of employee qualifying Less: No. of employees actually exercising No. of employees not exercising(forfeitures) No. of options per employee No. of options forfeited Fair Value Total Value forfeited and transferred to general Reserve	360 (350) 10 12 120 10 1200	325 (319) 6 24 144 12.50 1800	297 (295) 2 24 48 14 672

Computation of Employee Compensation Expenses to be recognised

(a) For Year 2012-13

Particulars	Group 1 2012 – 13	Group 2 2013 – 14	Group 3 2014 – 2015
Total fair value to be recognized as Expense Vesting period Amount of expense to be recognized (Total value ÷ vesting period)	4,320 1 Year 43,200	97,200 2 Year 48,600	97,440 3 Year 32,480

(b) For Year 2013-14

PARTICULARS	GROUP 2 2013-14	GROUP 3 2014-15
Total fair value to be recognized as expense	97,500	99,120
Vesting period	2 Year	3 Year
Amount of expense to be recognized	97,500	66,080
(Total value ÷ vesting period) Less: Amount expense recognised till 2012-13 Amount of expenses to be recognised in 2013-14	(48,600) 48,900	(32,480) 33,600

Total= ` 48,900+` 3,600=` 82,500

(c) For Year 2014-15

PARTICULARS	Group 3
Total Fair Value to be recognized as expense *Less:* Amount of Expense Recognised till 2013-14 Amount of Expense to be recognized in 2014-15	99,792 (66,080) 33,712

Ledger Accounts

(a) Employees ‘ Compensation Amount

Year	Particulars	Amount	Date	Particulars	Amount

2012-13	To ESOP Outstanding A/c	1,24,280	2012-13	By Profit and Loss Account	1,24,280
		1,24,280			1,24,280
2013-14	To ESOP Outstanding A/c	82,500	2013-14	By Profit and Loss Account	82,500
		82,500			82,500
2014-15	To ESOP Outstanding A/c	33,712	2014-15	By Profit and Loss Account	33,712
		33,712			33,712

(b) ESOP Outstanding A/c

Year	Particulars	Amount	Year	Particulars	Amount
2012-13	To General Reserve (120 x `. 10) To share Capital (4,200 x `. 100) To Securities Premium To Balance c/d	1,200 4,20,000 1,47,000 81,080	2012-13	By Employee compensation A/c By Bank	1,24,280 5,25,000
		6,49,280			6,49,280
2013-14	To General Reserve (144 x `. 12.50) To share Capital (7,656 x `. 100) To Securities Premium (7,656 x 37.50) To Balance c/d	1,800 7,65,600 2,87,100 66,080	2013-14	By Balance c/d By Employee compensation A/c By Bank (7,656 x 125)	81,080 82,500 9,57,000
		11,20,580			11,20,580
2014-15	To General Reserve (48 x Rs. 14) To share Capital (7,080 x Rs. 100) To Securities Premium (7,080 x 39)	672 7,08,000 2,76,120	2014-15	By Balance c/d By Employee compensation A/c By Bank (7,080 x 125)	66,080 33,712 8,85,000
		9,84,792			9,84,792

Working Notes:

Calculation of Securities Premium

Particulars	Group 1 2012-13	Group 2 2013-14	Group 3 2014-15
Excise Price Received per share (Bank)	125.00	125.00	125.00
Add: Value of service received per share	10.00	12.50	14.00
Consideration received per share	135.00	137.50	139.00
Less: Nominal value per share	(100.00)	(100.00)	(100.00)
Securities premium per share	35.00	37.50	39.00

Question 23 **Nov 2015 – Paper**

A company announced a stock Appreciation Right (SAR) on 01/04/2011 for each of its 600 employees. The scheme gives the employees the right to claim cash payment equivalent to excess on market price of company's shares, on exercise date, over the exercise price of ` 130 share in respect of 100 shares, subject to the condition of continuous employment of 3 years. The SAR is exercisable after 31/03/14 but before 30/06/14.

Particulars	**2011 – 12**	**2012 – 13**	**2013 – 14**
Fair Value of SAR	25	28	32
Actual No. of employees Left	25	15	10
Company estimation for left employees	3%	5%	-

On 30/06/2014 When SAR was exercised, the intrinsic value per share was ` 35 per share.

Show Provision of SAR Account by Fair Value Method.

Solution

Dr **Provision for SAR's A/c** **Cr**

Date	**Particular**	**Amount**	**Date**	**Particular**	**Amount**
2011-12 31/3/12	To Balance c/d	4,50,833	2011-12 31/3/12	By Employee Compensation Exp A/c	4,50,833
		4,50,833			3,56,667
2012-13 31/3/13	To Balance c/d	9,93,067	2012-13 1/4/12 31/3/13	By Balance B/d By Employee Compensation Exp A/c	4,50,833 5,42,234
		9,93,067			9,93,067
2012-13 31/3/14	To Balance c/d	17,60,000	2013-14 1/4/13 31/3/14	By Balance B/d By Employee Compensation Exp A/c	9,93,067 7,66,933
		17,60,000			17,60,000
2014-15 31/3/15	To Bank A/c	19,25,000	2014-15 1/4/14 31/3/15	By Balance B/d By Employee Compensation Exp A/c	17,60,000 1,65,000
		19,25,000			19,25,000

Working Notes

	20011-12	**2012-13**	**2013-14**
Employees	600-25=575	575-15=560	560-10=550

(x) Expected forfeiture	575x100x0.97x0.97 =54,100 x 25 13,52,500	560x100x0.95 =53,200 x 28 14,89,600	550x100 55,000 x 32 17,60,000
Total SAR's (x) Iv of SAR's	$\frac{13,52,500}{3}$ x 1	$\frac{14,89,600}{3}$ x 2	$\frac{17,60,000}{3}$ x 3
To be recognized	=4,50,833	=9,93,067	=17,60,000
(-) Amount provided Balance to be provided	NIL 4,50,833	(-)4,50,833 5,42,234	(-)9,93,067 7,66,933

2014-15

Total Fair Value for SAR's =		19, 25,000
(550 x 100 x 35)	(-)	17, 60,000
		1, 65,000

❑ ❑ ❑

10

Chapter

Human Resource Management

Years	May		Nov	
	RTP	Paper	RTP	Paper
2008	NA	NA	Yes	NA
2009	Yes	NA	NA	Yes
2010	Yes	Yes	NA	NA
2011	Yes	Yes	NA	Yes
2012	NA	NA	Yes	Yes
2013	NA	NA	Yes	NA
2014	Yes	NA	Yes	Yes
2015	NA	NA	NA	NA

2008

Question 1 – **NOV RTP – 2008**

XYZ Ltd., has a capital base of ` 5,00,000 and it earned profits of ` 50,000. The return on investment of the same group of firms is 12%. If the services of a particular Engineer, Mr. X is acquired, it is expected that the profits will raise by ` 30,000 over and above the target profit. Determine the amount of maximum bid price for that particular engineer.

Solution

Target Profit = 5,00,000 x 12% = ` 60,000/-

Expected Profit on Employing the Particular Executive

= Target Profit + Increase in Profit

= ` 60, 000 + 30,000

= ` 90, 000/-

Additional Profit = Expected Profit – Actual Profit

= 90,000 – 50,000

= ` 40,000/-

$$\text{Maximum Bid Price} = \frac{\text{Additional Profit}}{\text{Rate of Return on Investment}} \times 100$$

$$= \frac{40,000}{12} \times 100$$

= ` 3,33,333.33/-

Maximum Salary that can be offered

= ` 3,33,333.33 x 12%

= ` 40,000/-

(321)

2009

Question 2 **May RTP – 2009**

A company has a capital base of ` 1 crore and has earned profits to the tune of ` 11 lakhs. The Return on Investment (ROI) 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 ` 2.5 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.

Solution:

Capital Base = ` 1,00,00,000

Actual Profit = ` 11,00,000

RoI = 12.5%

Target Profit = 1,00,00,000 x 12.5%

= ` 12,50,000/-

Expected Profit = Target Profit + Increase in Profit

= ` 12,50,000 + 2,50,000

= Rs. 15,00,000/-

Additional Profit = Expected Profit – Actual Profit

= 15,00,000 – 11,00,000

= ` 4,00,000/-

$$\text{Maximum Bid Price} = \frac{\text{Additional Profit}}{\text{Rate of Return of Investment}}$$

$$= \frac{40,00,000}{12.5} \times 100$$

= ` 32,00,000/-

Maximum Salary that can be Offered

= 32,00,000 x 12.5% = ` 4,00,000/-

Question 3 – **Nov 2009 – Paper**

From the following details, compute according to Lev and Schwartz (1971) model, the total value of human resources of the employee groups skilled and unskilled.

		Skilled	Unskilled
(i)	Annual average earnings of an employee till the retirement age	`.50,000	`.30,000
(ii)	Age of retirement	65 years	62 years
(iii)	Discount rate	15%	15%
(iv)	No. of employees	20	25
(v)	Average age	62 years	60 years

Solution

Computation of Value of Human Resource as per Lav and Schwartz Model:

Skilled Employees

Age	Salary	Discounting Factor @ 15%	Present Value
62	50,000	0.870	43,500
63	50,000	0.756	37,800
64	50,000	0.658	32,900
			1,14,200
No of Employees X 20			
Value of Skilled Employees `.22,84,000			

Unskilled Employees

Age	Salary	Discounting Factor @ 15%	Present Value
60	30,000	0.870	26,100
61	30,000	0.756	22,680
			48,780
No of Employees X 25			
Value of Unskilled Employees 12,19,500			

Total Value of Human Resources

= [A]+[B]

= 22,84,000 + 12,19,500 = Rs. 35,03,500/-

2010

Question 4 **MAY RTP – 2010 – Similar to Nov 2009 Paper – Question 3**

Question 5 **May Paper – 2010**

From the following data in respect of an employer kindly calculate the total value of Human Capital under Lev and Schwartz' Model

Distribution of Employees

Age Group	Unskilled No.	Unskilled Average Annual earning `	Semi-skilled No.	Semi-skilled Average Annual earning `	Skilled No.	Skilled Average Annual earning `
30-39	100	18000	60	36000	40	84000
40-49	50	30000	30	48000	20	120000
50-54	30	36000	20	60000	10	180000

Retirement age is 55 years. Apply discount factor of 20%. In calculation of total value of Human factor the lowest value of each class should be taken. Annuity factor @ 20 per cent.

For 5 years	2.991
For 10 years	4.192
For 15 years	4.675
For 20 years	4.870
For 25 years	4.948

Solution

Unskilled Employees

Age group	Classification (Yrs)	Salary	Annuity Factor	Present Value	Total per employee	No. of employees	Total
30-39	1-10	18,000	4.192	75,456			
	11-20	30,000	0.678	20,340			
	21-25	36,000	0.078	2,808	98604	100	98,60,400
40-49	1 -10	30,000	4.192	1,25,760			
	11-15	36,000	0.483	17,388	143148	50	71,57,400
50-54	1-5	36,000	2.991	1,07,676	1,07,676	30	32,30,280
						Total	**2,02,48,080**

Semi- Skilled Employees

Age group	Classification (Yrs)	Salary	Annuity Factor	Present Value	Total per employee	No. of employees	Total
30-39	1-10	36,000	4.192	1,50,912			
	11-20	48,000	0.678	32,544			
	21-25	60,000	0.078	4,680	1,88,136	60	1,12,88,160
40-49	1 -10	48,000	4.192	201216			
	11-15	60,000	0.483	28980	230196	30	69,05,880
50-54	1-5	60,000	2.991	179460	179460	20	35,89,200

Total	**2,17,83,240**

Skilled Employees

Age group	Classification (Yrs)	Salary	Annuity Factor	Present Value	Total per employee	No. of employees	Total
30-39	1-10 11-20 21-25	84,000 1,20,000 1,80,000	4.192 0.678 0.078	3,52,128 81,360 14,040	4,47,528	40	1,79,01,120
40-49	1 -10 11-15	1,20,000 1,80,000	4.192 0.483	5,03,040 86,940	5,89,980	20	1,17,99,600
50-54	1-5	1,80,000	2.991	5,38,380	5,38,380	10	53,83,800
						Total	**3,50,84,520**
						Final Total	**7,71,16,840**

2011

Question 6 **May RTP – 2011 - Similar to Nov 2009 Paper – Question 3**

Question 7 **May Paper – 2011**

A company has a capital base of ` 3 crore and has earned profits of ` 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 ` 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

Solution:

Capital Base = ` 3,00,00,000

Actual Profit = ` 33,00,000

RoI = 12.5%

Target Profit = 3,00,00,000 x 12.5%

= ` 37,50,000/-

Expected Profit = Target Profit + Increase in Profit

= 37,50,000+ 7,50,000 = ` 45,00,000/-

Additional Profit = Expected Profit – Actual Profit

= 45,00,000 – 33,00,000 = ` 12,00,000/-

Maximum Bid Price $= \dfrac{\text{Additional Profit}}{\text{Rate of Return of Investment}} = \dfrac{12{,}00{,}000}{12.5} \times 100 =$ ` 96,00,000/-

Maximum Salary that can be Offered = 96,00,000 x 12.5% = ` 12,00,000/-

Question 8 – Nov Paper – 2011 – Similar to Nov 2009 – Question 3

2012

Question 9 **NOV RTP – 2012 – Similar to Nov 2009 – Question 3**

Question 10 **NOV Paper – 2012 – Similar to Nov 2009 – Question 3**

2013

Question 11 **Nov RTP – 2013 – Similar to Nov 2009 – Question 3**

2014

Question 12 **May RTP – 2014 Similar to Question 2 – May RTP 2009**

Question 13 **NOV RTP – 2014**

From the following details, compute according to Lev and Schwartz (1971) model, the value of human resources of skilled employees group.

(i)	Annual average earnings of an employee till the retirement age	`.1,00,000
(ii)	Age of retirement	65 years
(iii)	Discount rate	15%
(iv)	No. of employees	20
(v)	Average age	62 years

Solution:

Value of Skilled Employees

$$= \frac{1{,}00{,}000}{(1 + 0.15)\,(65 - 62)} + \frac{1{,}00{,}000}{(1 + 0.15)\,(65 - 63)} + \frac{1{,}00{,}000}{(1 + 0.15)\,(65 - 64)}$$

= ` 65,751.62+ ` 75,614.37+` 86,956.52

= ` 2,28,322.51x20

= ` 45,66,450.20/-

Question 14 **Nov Paper – 2014**

From the following details, compute according to Lev and Schwartz (1971) model, the total value of human resources of the employee groups skilled and unskilled.

		Skilled	Unskilled
(i)	Annual average earnings of an employee till the retirement age	` 75,000	` 50,000
(ii)	Age of retirement	68 years	65 years
(iii)	Discount rate	15%	15%
(iv)	No. of employees	40	50
(v)	Average age	65 years	63 years

Solution

Computation of Value of Human Resource as per Lav and Schwartz Model:

Skilled Employees

Age	Salary	Discounting Factor @ 15%	Present Value
65	75,000	0.870	65,250
66	75,000	0.756	56,700
67	75,000	0.658	49,350
			1,71,300
No of Employees		X 40	
Value of Skilled Employees		` 68,52,000	

Unskilled Employees

Age	Salary	Discounting Factor @ 15%	Present Value
63	50,000	0.870	43,500
64	50,000	0.756	37,800
			81,300
No of Employees		X 50	
Value of Unskilled Employees		` 40,65,000	

Total Value of Human Resources

= [A]+[B]

= ` 68,52,000+` 40,65,000=` 1,09,17,000

2015

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