## FR

## (Question Book)

## FOR CA. FINAL OLD SYLLABUS (BOOSTER)

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Important Note:
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## VALUATION

## Valuation of Goodwill

## Trend Average Method

Q1.
B K Ltd. gives the following profit figures for the last five years:

| Year | Profits ('000) |
| :---: | :---: |
| 1996 | 37,20 |
| 1997 | 42,00 |
| 1998 | 47,50 |
| 1999 | 53,50 |
| 2000 | 57,20 |

Since past profits show increasing trend, time series trend may be used to determine future maintainable profit. Applying Linear trend equation three to five years profit may be predicated and average of such future profits may be taken as future maintainable profit. Calculate FMP for next three years.

Ans.
(Study Material)

| Year | $X$ | Y | XY | X2 |
| :--- | :---: | ---: | ---: | :--- |
| 1996 | -2 | 37,20 | $-74,40$ | 4 |
| 1997 | -1 | 42,00 | $-42,00$ | 1 |
| 1998 | 0 | 47,50 | 0 | 0 |
| 1999 | 1 | 53,50 | 53,50 | 1 |
| 2000 | $\underline{2}$ | 57,20 | 114,40 | 4 |
|  | $\underline{0}$ | 237,40 | 51,50 | 10 |
|  | $A=\frac{Y}{n}=\frac{237,40}{5}=47,48$ |  |  |  |
|  |  |  |  |  |

$B=\frac{X Y}{X Y 2}=\frac{51,50}{10}=5,15$
Trend Equation given by:
$y=4748+515 x$
Ans.: FMP T6293, 6808, 7323.
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## Goodwill and leverage effect

Q2.
The following is the extract from the Balance Sheets of Popular Ltd.:

| Liabilities | As at <br> 31.3 .2016 <br> Rs in lakhs | As at <br> 31.3 .2017 <br> Rs in lakhs | Assets | As at <br> 31.3 .2016 <br> Rs in lakhs | As at <br> 31.3 .2017 <br> Rs in lakhs |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Share capital | 500 | 500 | Fixed assets | 550 | 650 |
| General reserve | 400 | 425 | $10 \%$ <br> Investment | 250 | 250 |
| Profit and Loss <br> account | 60 | 90 | Inventory | 260 | 300 |
| 18\% Term loan | 180 | 165 | Trade <br> Receivables | 170 | 110 |
| Trade Payables | 35 | 45 | Cash at bank | 46 | 45 |
| Provision for <br> tax | 11 | 13 | Fictitious <br> assets | 10 | 8 |
| Dividend <br> payable | 100 | 125 |  |  |  |
|  | 1,286 | 1,363 |  | 1,286 | 1,363 |

Additional information:
(i) Replacement values of fixed assets were Rs 1,100 lakhs on 31.3.16 and Rs 1,250 lakhs on 31.3.2017 respectively.
(ii) Rate of depreciation adopted on fixed assets was $5 \%$ p.a.
(iii) $50 \%$ of the inventory is to be valued at $120 \%$ of its book value.
(iv) $50 \%$ of investments were trade investments.
(v) Trade Receivables on 31st March, 2017 included foreign trade receivables of $\$$ 35,000 recorded in the books at Rs 35 per U.S. Dollar. The closing exchange rate was \$ 1= Rs 39.
(vi) Trade Payables on 31st March, 2017 included foreign trade payables of $\$ 60,000$ recorded in the books at \$ $1=$ Rs 33 . The closing exchange rate was $\$ 1=$ Rs 39 .
(vii) Profits for the year 2016-2017 included Rs 60 lakhs of government subsidy which was not likely to recur.
(viii) Rs 125 lakhs of Research and Development expenditure was written off to the Profit and Loss Account in the current year. This expenditure was not likely to recur.
(ix) Future maintainable profits (pre-tax) are likely to be higher by $10 \%$.
(x) Tax rate during 2016-2017 was 50\%, effective future tax rate will be 40\%.
(xi) Normal rate of return expected is $15 \%$.

One of the directors of the company Arvind, fears that the company does not enjoy goodwill in the prevalent market circumstances.
Critically examine this and establish whether Popular Ltd. has or has not any goodwill.
If your answers were positive on the existence of goodwill, show the leverage effect it has on the company's result.
Industry average return was $12 \%$ on long-term funds and $15 \%$ on equity funds.

## Answer

| 1. Calculation of Capital employed (CE) | Rs in lakhs |  |
| :--- | :---: | :---: |
|  | As on 31.3.16 | As on 31.3.17 |
| Replacement Cost of Fixed Assets | $1,100.00$ | $1,250.00$ |
| Trade Investment $(50 \%)$ | 125.00 | 125.00 |
| Current cost of inventory |  |  |
| $130+130 \times 120 \div 100$ | 286.00 |  |
| $150+150 \times 120 \div 100$ | 170.00 | 330.00 |
| Trade Receivables | 46.00 | 111.40 |
| Cash at Bank | $1,727.00$ | $1,861.40$ |
| Total (A) | 180.00 | 165.00 |
| Less: Outside Liabilities | 35.00 | 48.60 |
| $18 \%$ term loan | 11.00 | 13.00 |
| Trade Payables | 226.00 | 226.60 |
| Provision for tax | 1501.00 | 1634.80 |
| Total (B) |  |  |
| Capital employed (A-B) |  |  |
| Averge Cait |  |  |

Average Capital employed at current value

> = Opening capital employed + closing capital employed $/ 2$ =lakhs $1501+1634.80 / 2=1567.90$

| 2. Future Maintainable Profit | Rs in lakhs |  |
| :---: | :---: | :---: |
| Increase in General Reserve | 25 |  |
| Increase in Profit and Loss Account | 30 |  |
| Dividends | 125 |  |
| Profit After Tax | 180 |  |
| Pre-tax Profit = 180 $\div 1-0.5$ |  | 360 |
| Less: Non-Trading investment income (10\% of Rs 125) | 12.50 |  |
| Subsidy | 60.00 |  |
| Exchange Loss on Trade Payables [0.6 lakhs x (39-33)] | 3.60 |  |
| Additional Depreciation on increase in value of Fixed Assets (current year) (1250-650) $\times 5 \div 100$ i.e., | 30.00 | (106.10) |
|  |  | 253.90 |
| Add: Exchange Gain on trade receivables [ 0.35 lakhs $\times$ $(39-35)]$ | 1.40 |  |
| Research and development expenses written off | 125.00 |  |
| Inventory Adjustment (30-26) | 4.00 | 130.40 |
|  |  | 384.30 |
| Add: Expected increase of 10\% |  | 38.43 |
| Future Maintainable Profit before Tax |  | 422.73 |
| Less: Tax @ 40\% (40\% of Rs 422.73) |  | (169.09) |
| Future Maintainable Profit |  | 253.64 |
| 3. Valuation of Goodwill | Rs in lakhs |  |
| (i) According to Capitalisation of Future Maintainable Profit Method Capitalised value of Future Maintainable |  | 1,690.93 |

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| Profit $=253.64 \times 100 \div 15$ |  |  |
| :--- | :--- | :--- |
| Less: Closing capital employed |  | $1,634.80$ |
| Value of Goodwill |  | 56.13 |
| Or |  | 253.64 |
| (ii) According to Capitalization of Super Profit Method |  | 235.19 |
| Future Maintainable Profit |  | 18.45 |
| Less: Normal Profit @ $15 \%$ on average capital employed <br> $(1,567.90 \times 15 \%)$ | 123.00 |  |
| Super Profit | Capitalised value of super profit $18.45 \times 100 \div 15$ i.e. |  |
| Goodwill |  |  |

Goodwill exists; hence director's fear is not valid.
Leverage Effect on Goodwill

|  | Rs in lakhs |  |
| :---: | :---: | :---: |
| Future Maintainable Profit on equity fund |  | 253.64 |
| Future Maintainable Profit on Long-term Trading Capital employed |  |  |
| Future Maintainable Profit After Tax | 253.64 |  |
| Add: Interest on Long-term Loan (Term Loan) |  |  |
| (After considering Tax) $165 \times 18 \%=29.7 \times(100-40)$ $\div 100=17.82$ Add: $10 \%$ Increase of FMP $=1.78$ | 19.602 | 273.242 |
| Average capital employed (Equity approach) |  | 1,567.90 |
| Add: 18\% Term Loan (180+165)/2 |  | 172.50 |
| Average capital employed (Long-term Fund approach) |  | 1,740.40 |
| Value of Goodwill |  |  |
| (A) Equity Approach |  |  |
| Capitalised value of Future Maintainable Profit = = $273.242 \times 100 \div 15$ |  | 1,690.93 |
| Less: Average capital employed |  | (1,567.90) |
| Value of Goodwill |  | 123.03 |
| (B) Long-Term Fund Approach |  |  |
| Capitalized value of Future Maintainable Profit = $271.46 \times 100 \div 12$ |  | 2277.00 |
| Less: Average capital employed |  | $(1,740.40)$ |
| Value of Goodwill |  | 536.62 |

Comments on Leverage effect of Goodwill: Adverse Leverage effect on goodwill is 413.59 lakhs (i.e., Rs 536.62-123.03). In other words, Leverage Ratio of Popular Ltd. is low for which its goodwill value has been reduced when calculated with reference to equity fund as compared to the value arrived at with reference to long term fund.
Working Notes:

|  |  | Rs in lakhs |  |
| :---: | :---: | :---: | :---: |
| (1) | Inventory adjustment | 30.00 |  |
|  | (i) | Excess current cost of closing inventory over its <br> Historical cost (330-300) | 26.00 |
|  | (ii) | Excess current cost of opening inventory over its <br> Historical cost (286-260) |  |

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|  | (iii) | Difference [(i- ii)] | 4.00 |
| :---: | :---: | :--- | :---: |
| (2) | Trade Receivables' adjustment | 13.65 |  |
|  | (i) | Value of foreign exchange Trade Receivables at the <br> closing exchange rate ( $\$ 35,000 \times 39)$ | 12.25 |
|  | ii) | Value of foreign exchange Trade Receivables at the <br> original exchange rate $(\$ 35,000 \times 35)$ | 1.40 |
|  | (iii) | Difference [(i)- (ii)] | 23.40 |
|  | Trade Payables' adjustment | 19.80 |  |
|  | (i) | Value of foreign exchange Trade Payables at the <br> closing exchange rate (\$ 60,000×39) | 3.60 |

Q3.
The Balance Sheet of D Ltd. on 31st March, 2017 is as under:

| Liabilities | Rs | Assets | Rs |
| :--- | :---: | :--- | :---: |
| $1,25,000$ <br> 100 each fully paid up | $1,25,00,000$ | Goodwill | $10,00,000$ |
|  |  | Building | $80,00,000$ |
| Bank overdraft | $46,50,000$ | Machinery | $70,00,000$ |
| Trade Payables | $52,75,000$ | Inventory | $80,00,000$ |
| Provision for taxation | $12,75,000$ | Trade receivables (all <br> considered good) | $50,00,000$ |
| Profit and loss account | $53,00,000$ |  | $\mathbf{2 , 9 0 , 0 0 , 0 0 0}$ |
|  | $\mathbf{2 , 9 0 , 0 0 , 0 0 0}$ |  |  |

In 2000, when the company started its activities the paid up capital was the same. The Profit/Loss for the last five years is as follows:
2012-2013: Loss (13,75,000), 2013-2014: Profit Rs 24,55,000, 2014-2015: Profit Rs 29,25,000, 2015-2016: Profit Rs 36,25,000, 2016-2017: Profit Rs 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 2016-2017, the rate of income-tax should be taken at 45\%. $10 \%$ dividend in 2013-2014, 2014-2015 and 15\% dividend in 2015-2016 and 2016-2017 has been paid. Market price of this share on 31st March, 2017 is Rs 125 . With effect from 1st April, 2017, the Managing Directors remuneration will be Rs $20,00,000$ instead of Rs $15,00,000$. The company has secured a contract from which it can earn an additional Rs $10,00,000$ 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).

## Answer

(i) Future Maintainable Profit

| Year | Profit (P) Rs | Weight (W) | Products (PW) Rs |
| :---: | :---: | :---: | :---: |
| $2013-2014$ | $24,55,000$ | 1 | $24,55,000$ |
| $2014-2015$ | $29,25,000$ | 2 | $58,50,000$ |

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| $2015-2016$ | $36,25,000$ | 3 | $1,08,75,000$ |
| :--- | :---: | :---: | :---: |
| $2016-2017$ | $42,50,000$ | 4 | $1,70,00,000$ |
| 10 |  |  | $3,61,80,000$ |
| Weighted average annual profit (after tax) $=3,61,80,00010 / 10=$ Rs $36,18,000$ |  |  |  |
| Weighted average annual profit before tax is <br> $36,18,000 \times 100 / 60$ | $60,30,000$ |  |  |
| Less: Increase in Managing Director's remuneration | $(5,00,000)$ |  |  |
| Add: Contract advantage $10,00,000$ <br>  $65,30,000$ <br> Less: Tax @ 45\% $(29,38,500)$ <br> Future maintainable profit $35,91,500$ |  |  |  |

(ii) Average Capital Employed

|  | Rs. |  |
| :--- | :--- | :--- |
| Assets |  |  |
| Building |  | $80,00,000$ |
| Machinery |  | $70,00,000$ |
| Inventory |  | $80,00,000$ |
| Trade Receivables |  | $50,00,000$ |
|  | $4,80,00,000$ |  |
| Liabilities | $46,50,000$ |  |
| Bank Overdraft | $52,75,000$ |  |
| Trade Payables | $12,75,000$ |  |
| Provision for taxation | $3,54,167$ | $(1,15,54,167)$ |
| Additional provision for taxation** |  | $1,64,45,833$ |
| Capital employed at the end of the year | $(19,47,917)$ |  |
| Less: $\frac{1}{2}$ profit after tax for the year $[(42,50,000-$ <br> $3,54,167) / 2]$ |  | $1,44,97,916$ |
| Average capital employed |  |  |

* Loss amounting Rs 13,75,000 for the year 2012-2013 has not been considered in calculation of weighted average profit assuming that the loss was due to abnormal conditions.
* Additional provision for taxation $5 \%$ of Rs $70,83,333$ (Rs $42,50,000 / 60 \%$ ) has also been created assuming that the necessary rectification is being done in the financial statements for the year 2016-2017.
(iii) Normal Profit

Average dividend for the last four years
$=12.5=10+10+15+15 / 4$
Market Price of share =Rs 125
Normal rate of return $=12.5 / 125 \times 100=10 \%$
Normal profit 10\% of Rs 1,44,97,916
Rs 14,49,792
(iv) Valuation of Goodwill

|  | Rs |
| :--- | ---: |
| Future maintainable profit | $35,91,500$ |
| Less: Normal profit | $(14,49,792)$ |
| Super Profit | $21,41,708$ |

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Q4. The following is the Balance Sheet (as at 31st December, 2006) of Sun Ltd:

## Equity \& Liabilities

Rs.
Shareholders Fund
80,000 Equity shares of Rs. 10 each fully paid up 800,000
50,000 Equity shares of Rs. 10 each Rs. 8 paid up 400,000
36,000 Equity shares of Rs. 5 each fully paid up 180,000
30,000 . Equity shares of Rs. 5 each Rs. 4 paid-up 120,000
$3,00010 \%$ Preference shares of Rs. 100 each fully paid 300,000
General reserve 140,000
Profit and Loss account 210,000
Preliminary Expenses -10,000
Non-Current Liabilities
Secured Loan: $12 \%$ debenture 200,000
Unsecured loan: 15\% term loan 150,000
Deposits 100,000

| Current Liabilities |  |
| :--- | ---: |
| Bank Loan | 50,000 |

Creditors 150,000
Outstanding expenses 20,000
Provision for tax 200,000
$\begin{array}{ll}\text { Proposed Dividend: } & \\ \text { Equity } & 150,000\end{array}$
Preference 30,000
3,190,000

## Assets

Rs.
Non-Current Assets

| Goodwill | $1,00,000$ |
| :--- | ---: |
| Plant and Machinery | $8,00,000$ |
| Land and Building | $10,00,000$ |
| Furniture and Fixtures | $1,00,000$ |
| Vehicles | $2,00,000$ |
| Investments | $3,00,000$ |
| Current Assets |  |
| Stock | $2,10,000$ |
| Debtors | $1,95,000$ |
| Prepaid Expenses | 40,000 |
| Advance | 45,000 |
| Cash and Bank balance | $2,00,000$ |

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## 31,90,000

## Additional Information:

(1) In 2004 a new machinery costing Rs 50,000 was purchased, but wrongly charged to revenue (no rectification has yet been made for the same).
(2) Stock is overvalued by Rs 10,000 in 2005. Debtors are to be reduced by Rs 5,000 in 2006, some old furniture (Book value Rs 10,000 ) was disposed of for Rs 6,000 .
(3) Fixed assets are worth 5 percent more than their actual book value. Depreciation on appreciated value of Fixed assets except machinery is not to be considered for valuation of goodwill.
(4) Of the investment 20 per cent is trading and the balance is non-trading. All trade investments are to be valued at 20 per cent below cost. Trade investment was purchased on 1st January, 2006. 50 percent of the nontrade investments were acquired on 1st January, 2005 and the rest on 1st January, 2004. A uniform rate of dividend of 10 percent is earned on all investments.
(5) Expected increase in expenditure without commensurate increase in selling price is Rs.20,000.
(6) Research and Development expenses anticipated in future Rs.30,000 per annum.
(7) In a similar business a normal return on capital employed is $10 \%$.
(8) Profit (after tax) are as follows:

In 2004 - Rs. 2,10,000, in 2005 - Rs. 1,90,000 and in 2006 - Rs.2,00,000,
(9) Current income tax rate is 50\%, expected income tax rate will be $40 \%$.

From the above, ascertain the ex-dividend and cum-dividend intrinsic value for different categories of Equity shares. For this purpose goodwill may be taken as 3 years purchase of super profits, Depreciation is charged on machinery @ 10\% on reducing system.
(Answer: FMP-202581; Goodwill - 5557: CCE - 2106273; ACE - 2007286; IV (Ex) 1.23 Per Rupee) (May 2007: 16 Marks)

Q5. Find out Leverage effect on Goodwill from the following information:
(i) Average capital employed (Equity Approach) Rs. 11,50,000
(ii) FMP on equity fund (After Tax) Rs. 1,80,000
(iii) $10 \%$ Long Term Loan Rs. $4,50,000$
(iv) TaxRate 40\%
(v) Normal Rate of return

On equity capital employed 15\%
On Long term capital employed 12\%
(May18 \& Nov15, 6 Marks)

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## Solution:

## Determination of leverage effect on goodwill

|  |  | Rs. |  |
| :---: | :---: | :---: | :---: |
| A | Profit available for equity fund after tax |  | 1,80,000 |
|  | Profit (as per long term fund approach) |  |  |
|  | Profit for equity fund | 1,80,000 |  |
|  | Add: Interest on long term loan (net of tax $4,50,000 \times\{10 \% \times(1-0.4)]$ | 27,000 | 2,07,000 |
| C | Capital employed (by Equity approach) |  | 11,50,000 |
|  | Capital employed as per long term fund approach |  |  |
|  | Capital employed (by Equity approach) | 11,50,000 |  |
|  | Add: 10\% long term loan | 4,50,000 | 16,00,000 |
| E | Value of goodwill <br> (a) By equity approach |  |  |
|  | Capitalized value of profit as per equity approach $(1,80,000 / 15 \times 100)$ |  | 12,00,000 |
|  | Less: capital employed as per equity approach |  | $(11,50,000)$ |
|  | value of Goodwill |  | 50,000 |
|  | (b) By long term fund approach |  |  |
|  | Capitalized value of profit as per long-term fund approach ( $2,07,000 / 12 \times 100$ ) |  | 17,25,000 |
|  | Less: capital employed as per long term fund approach |  | 16,00,000 |
|  | Value of Goodwill |  | 1,25,000 |

Leverage effect on Goodwill:
Adverse leverage effect on goodwill is Rs 75,000 (i.e. Rs $1,25,000$ - Rs 50,000)
In other words, leverage ratio is low for which its goodwill value has been reduced when calculated with reference to equity fund as compared to value arrived at with reference to long term fund.

Q6: The summarised Balance Sheet of Domestic Ltd. as on $31_{\mathrm{st}}$ March, 2017 is as under:

| Liabilities | (Rs in <br> lakhs) | Assets | (Rs in <br> lakhs) |
| :--- | :---: | :--- | :---: |
| Equity shares of Rs 10 each | 3,000 | Patent | 744 |
|  |  | Premises and Land at cost | 400 |
| Reserves (including provision for <br> taxation of Rs 300 lakhs) | 1,000 | Plant and Machinery | 3,000 |
| $5 \%$ Debentures | 2,000 | Motor vehicles (purchased on <br> $1.10 .16)$ | 40 |
| Secured loans | 200 | Raw materials at cost | 920 |
| Trade Payables | 300 | Work-in-progress at cost | 130 |
| Profit \& Loss A/c: |  | Finished goods at cost | 180 |
| Balance from previous year | 32 | Trade Receivables | 400 |

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| Profit for the year (after <br> taxation) | 1,100 | Investment (meant for <br> replacement of plant and <br> machinery) | 1,600 |
| :--- | :--- | :--- | :---: |
|  |  | Cash at bank and cash in hand | 192 |
|  |  | Discount on debentures | 10 |
|  |  | Underwriting commission | 16 |
|  | $\mathbf{7 , 6 3 2}$ |  | $\mathbf{7 , 6 3 2}$ |

1. The resale value of premises and land is Rs 1,200 lakhs and that of plant and machinery is Rs 2,400 lakhs. Patent appearing in the balance sheet is of no use and should be ignored for the valuation purpose.
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 Rs 1,500 lakhs.
5. $10 \%$ of trade receivables are 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 Rs 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 2011-2012 and in 2012-2013, the normal business was hampered. The profit earned during 2011-2012 is Rs 67 lakhs, but during 2012-2013 the company incurred a loss of Rs 1,305 lakhs.
Past 3 years' profits of the company were as under:
2013-2014 Rs 469 lakhs
2014-2015 Rs 546 lakhs
2015-2016 Rs 405 lakhs
The unusual negative profitability of the company during 2012-2013 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 2011-2012 and continued till the last quarter of 2012-2013.
Value the goodwill of the company on the basis of 4 years' purchase of the super profit.
Answer
9. Rectification of current year's profit i.e. 2016-2017

Profit after Tax = Rs 1,100 lakhs
Provision for taxation = Rs 300 lakhs
Profit before Tax = PAT + Provision for taxation
$=$ Rs 1,100 lakhs + Rs 300 lakhs $=$ Rs 1,400 lakhs
Rate of tax $=$ Provision for $\operatorname{tax} \times 100=300 \div 1400 \times 100=21.43 \%$ (approx.)
Profit before tax

|  | Rs in lakhs |
| :--- | :--- |
| Profit for the year after tax | 1,100 |
| Less: Depreciation net of tax on motor vehicles (Rs 40 lakhs $\times 20 \%$ <br> $\times 6 / 12) \times(100-21.43) \%$ | $(3.1428)$ |
| Depreciation net of tax on Premises and Land (Rs 400 lakhs $\times 2 \%) \times$ <br> $(100-21.43) \%$ | $(6.2856)$ |

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| Depreciation net of tax on Plant and Machinery (Rs 3,000 lakhs $\times$ <br> $10 \%) \times(100-21.43) \%$ | $(235.71)$ |
| :--- | :--- |
| Provision for doubtful receivables net of $\operatorname{tax}(R s 400$ lakh $\times 10 \%) \times$ <br> $(100-21.43) \%$ | $(31.428)$ |
| Rectified profit of 2016-2017 | 823.43 |

2. Calculation of Capital Employed

|  | (Rs in <br> lakhs) | (Rs in <br> lakhs) |
| :--- | :---: | :---: |
| Premises and land |  | 1,200 |
| Plant and machinery |  | 2,400 |
| Motor vehicles (book value less depreciation for $\frac{1}{2}$ year) |  | 36 |
| Raw materials |  | 920 |
| Work-in-progress |  | 130 |
| Finished goods |  | 180 |
| Trade Receivables (400 × 90\%) |  | 360 |
| Investments (market value) |  | 1,500 |
| Cash at bank and in hand |  | 6,918 |
|  | 300 |  |
| Less: Liabilities: | 2,000 |  |
| Provision for taxation | 200 |  |
| $5 \%$ Debentures | 300 | $(2,800)$ |
| Secured loans |  | 4,118 |
| Trade Payables |  | $(411.72)$ |
| Total capital employed on 31.3.2017 |  | $3,706.28$ |
| Less: Half of current year's rectified profit (823.43 $\times 1 / 2$ ) |  |  |
| Average Capital Employed |  |  |

3. Calculation of Future Maintainable Profits

|  | (Rs in lakhs) |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | $2013-14$ | $2014-15$ | $2015-16$ | $2016-17$ |
| Profit after tax | 469 | 546 | 405 | 823.43 |
| Less: Depreciation net of tax on <br> Premises and Land (Rs 400 lakhs $\times 2 \%$ ) <br> $\times(100-21.43) \%$ | $(6.29)$ | $(6.29)$ | $(6.29)$ |  |
| Depreciation net of tax on Plant and <br> Machinery (Rs 3,000 lakhs $\times 10 \%) \times$ <br> $(100-21.43) \%$ | $(235.71)$ | $(235.71)$ | $(235.71)$ |  |
| Adjusted Profit |  |  |  |  |
| Average adjusted profit (227+304+163+823.43)/4 | 304 | 163 | 823.43 |  |
| Less: Excess depreciation (net of tax) due to upward revaluation of <br> premises and land [(1,200-400) $\times 2 \%$ ] $\times(100-21.43) \%$ | $(12.57)$ |  |  |  |
| Depreciation on motor vehicle (net of tax) for remaining six months (in <br> future depreciation on motor vehicle will be charged for full year) (Rs | $(3.14)$ |  |  |  |
| 40 lakhs $\times 20 \% \times 6 / 12) \times(100-21.43) \%$ |  |  |  |  |
| Add: Short depreciation (net of tax) due to downward revaluation of <br> plant and machinery [(3,000 - 2,400$) \times 10 \%$ ] $\times(100-21.43) \%$ | 47.14 |  |  |  |
| Future Maintainable Profit |  |  |  |  |

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## 4. Calculation of General Expectation

Similar Company pays Rs 2.5 as dividend (25\%) for each share of Rs 10.
Market value of an equity share of the same denomination is Rs 25 which fetches dividend of $25 \%$.
Therefore, share of Rs 10 (Face value of shares of Domestic Ltd.) is expected to fetch $(2.5 / 25) \times 100=10 \%$ return.
A nominal rate of $1 \%$ or $2 \%$ may be added as Risk premium, to the normal rate of return for uncertainty associated with dividend distribution.
Since, Domestic Ltd. is not having a stable record in payment of dividend, therefore, the expectation from it may be assumed to be slightly higher, say $11 \%$ instead of $10 \%$.
5. Calculation of value of goodwill of Domestic Ltd.

|  | (Rs in lakhs) |
| :--- | :--- |
| Future maintainable profit | 410.79 |
| Less: Normal profit i.e. $11 \%$ of average capital employed <br> $(3,706.28 \times 11 \%)$ | $(407.69)$ |
| Super Profit | 3.1 |
| Goodwill at 4 years' purchase of Super Profit $(3.1 \times 4)$ | 12.4 |

Notes:
(1) It is assumed that 'Provision for Taxation' included in reserves is made in the current year only.
(2) It is assumed that plant and machinery given in the balance sheet is at cost.
(3) It is assumed that depreciation on 'Premises and Land' and 'Plant and Machinery' is charged on Straight Line method.
(4) It is assumed that resale value of 'Premises and Land' and 'Plant and Machinery' given in the question is for depreciated value of respective assets. Therefore, no adjustment for depreciation has been made in such assets while calculating capital employed.
(5) It is assumed that profit for the year 2013-2014, 2014-2015 and 2015-2016 given in the questions is after tax and no depreciation was charged in the earlier years also.
(6) Average Capital employed has been taken for valuation of goodwill.
(7) While considering past profits for determining average profit, the years 2011-2012 and 2012-2013 have been left out, as during these years normal business was hampered.

## Valuation of Shares

## INTRINSIC VALUE METHOD

Q7. The Balance Sheet of Mulyan Ltd. as on 31st December, 2016 is as follows:

| Liabilities | Rs | Rs | Assets | Rs |
| :--- | :---: | :---: | :--- | :---: |
| Share Capital: |  |  |  |  |
| Equity shares of Rs 10 each <br> less, calls in arrear (Rs 2 <br> for final call) | $5,00,000$ | 10,000 | $4,90,000$ | Fixed Assets: <br> Machinery <br> Factory shed | | $2,30,000$ |
| :---: |
| $3,00,000$ |
| $8 \%$ Preference shares of <br> Rs 10 each fully paid |
| Reserve and Surplus: |
| General Reserve |

Additional Information:
(i) Fixed assets are worth 20\% above their actual book value, depreciation on appreciated portion of fixed assets is to be ignored for valuation of goodwill.
(ii) 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.
(iii) For the purpose of valuation of shares, Goodwill is to be considered on the basis of 6 year's purchase of the super profits based on simple average profit of the last 3 years. Profits after tax @ 50\%, are as follows:

| Year | Rs |
| :---: | :---: |
| 2014 | $1,90,000$ |
| 2015 | $2,00,000$ |
| 2016 | $2,50,000$ |

(iv) In a similar business, return on capital employed is 20\%. In 2014, a new furniture costing Rs 10,000 was purchased but wrongly charged to revenue. No effect has yet been given for rectifying the same. Depreciation is charged on furniture @ $10 \%$ p.a. (Diminishing Balance Method).
Find out the value of each fully paid and partly paid equity share.

## Answer

Valuation of an equity share-
Value of an equity share $=$ Net assets available to equity shareholders (W.N. 6) / Number of equity shares

$$
\text { = 9,47,746/50,000 = Rs. } 18.95492
$$

Value of a Rs 10 fully paid up share $=$ Rs 18.95492 per share
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Value of Rs 10 share, Rs 8 per share paid up = (Rs 18.95492 - Rs 2) per share = Rs. 16.95492 per share

## Working Notes:

1. Capital employed

|  | Rs |  |
| :--- | :---: | :--- |
| Fixed Assets: |  |  |
| Machinery | $2,30,000$ |  |
| Factory shed | $3,00,000$ |  |
| Furniture (Rs 25,000 + Rs 7,290) | 32,290 |  |
| Vehicles | 60,000 |  |
|  | $6,22,290$ |  |
| Add: 20\% increase | $1,24,458$ |  |
|  | $7,46,748$ |  |
| Trade investments (Rs 1,00,000 × 20\% $\times 80 \%$ ) | 16,000 |  |
| Inventory in trade | $2,10,000$ |  |
| Trade Receivables | $3,50,000$ |  |
| Cash at bank | 75,000 | $13,97,748$ |
| Less: Outside liabilities: |  |  |
| Bank Loan | $1,00,000$ |  |
| Trade Payables | $2,70,000$ | $(3,70,000)$ |
| Capital employed |  | $10,27,748$ |

2. Calculation of average adjusted profit

|  | 2014 Rs | 2015 Rs | 2016 Rs |
| :--- | :---: | :---: | :---: |
| Profit after tax | $1,90,000$ | $2,00,000$ | $2,50,000$ |
| Add: Tax @ 50\% | $1,90,000$ | $2,00,000$ | $2,50,000$ |
| Profit before tax | $3,80,000$ | $4,00,000$ | $5,00,000$ |
| Add: Capital expenditure on <br> furniture | 10,000 |  |  |
| Less: Depreciation on furniture* | $(1,000)$ | $(900)$ | $(810)$ |
| Income from non-trade <br> investments | $(8,000)$ | $(8,000)$ | $(8,000)$ |
|  | $3,81,000$ | $3,91,100$ | $4,91,190$ |
| Less: Tax @ 50\% | $(1,90,500)$ | $(1,95,550)$ | $(2,45,595)$ |
| Adjusted profit | $1,90,500$ | $1,95,550$ | $2,45,595$ |


|  | Rs |
| :--- | :--- |
| Total adjusted profit for three years (1,90,500 + 1,95,550 + <br> $2,45,595)$ | $6,31,645$ |
| Adjusted Average profit (Rs 6,31,645/3) | $2,10,548$ |

3. Normal Profit: 20\% on capital employed i.e. $20 \%$ on Rs $10,27,748=\operatorname{Rs} 2,05,550$

* Furniture is assumed to be purchased at the beginning of the year and therefore, depreciation is charged for the whole year in 2014.

4. Super profit: Average Adjusted profit - Normal profit

$$
=\text { Rs } 2,10,548-\operatorname{Rs} 2,05,550=\operatorname{Rs} 4,998
$$

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5. Goodwill: 6 years' purchase of super profit

$$
=\text { Rs } 4,998 \times 6=\text { Rs } 29,988
$$

6. Net assets available to equity shareholders

|  | Rs |
| :--- | :---: |
| Capital employed (W.N.1) | $10,27,748$ |
| Goodwill (W.N.5) | 29,998 |
| Add: Non-trade investments | 80,000 |
|  | $11,37,746$ |
| Less: Preference share capital | $(2,00,000)$ |
|  | $9,37,746$ |
| Add: Notional calls received for calls in arrears | 10,000 |
| Net assets for equity shareholders | $9,47,746$ |

Q8. The following is the summarized Balance Sheet of N Ltd. as on 31st March, 2017:
Balance Sheet

| Liabilities | Rs | Assets | Rs |
| :--- | :---: | :--- | :---: |
| 4,00,000 Equity shares of Rs 10 <br> each fully paid | $40,00,000$ | Building | $24,00,000$ |
| $13.5 \% ~ R e d e e m a b l e ~ p r e f e r e n c e ~$ <br> shares of Rs 100 each fully paid | $20,00,000$ | Machinery <br> Furniture | $22,00,000$ |
| General Reserve | $10,00,000$ |  |  |
| Profit and Loss Account | $3,20,000$ | Investments | $16,00,000$ |
| Bank Loan (Secured against fixed <br> assets) | $12,00,000$ | Inventory | $11,00,000$ |
| Trade Payables | $37,00,000$ | Trade <br> Receivables | $18,00,000$ |
|  |  | Bank Balance | $3,20,000$ |
|  | $1,22,20,000$ |  | $1,22,20,000$ |

Further information:
(i) Return on capital employed is $20 \%$ in similar businesses.
(ii) Fixed assets are worth $30 \%$ more than book value. Inventory is overvalued by Rs $1,00,000$, Trade Receivables are to be reduced by Rs 20,000 . Trade investments, which constitute $10 \%$ of the total investment are to be valued at $10 \%$ below cost.
(iii) Trade investments were purchased on 1.4.2016. 50\% of Non-Trade Investments were purchased on 1.4.2014 and the rest on 1.4.2015. Non-Trade Investments yielded $15 \%$ return on cost.
(iv) In 2014-2015 new machinery costing Rs 2,00,000 was purchased, but wrongly charged to revenue. This amount should be adjusted taking depreciation at $10 \%$ on reducing value method.
(v) In 2015-2016 furniture with a book value of Rs 1,00,000 was sold for Rs 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:
2013-2014 Rs $16,00,000,2014-2015$ Rs $18,00,000,2015-2016$ Rs $21,00,000,2016-$ 2017 Rs 22,00,000.

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(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.

## Answer

Calculation of intrinsic value of equity shares of $N$ Ltd.

1. Calculation of Goodwill
(i) Capital employed

| Fixed Assets | Rs | Rs |
| :--- | :---: | :---: |
| Building | $24,00,000$ |  |
| Machinery (Rs 22,00,000 + Rs 1,45,800) | $23,45,800$ |  |
| Furniture | $10,00,000$ |  |
| Vehicles | $18,00,000$ |  |
|  | $75,45,800$ |  |
| Add: $30 \%$ increase | $22,63,740$ |  |
|  | $98,09,540$ |  |
| Trade investments (Rs 16,00,000 $\times 10 \% \times 90 \%$ ) | $1,44,000$ |  |
| Trade Receivables (Rs 18,00,000 - Rs 20,000) | $17,80,000$ |  |
| Inventory (Rs 11,00,000 - Rs 1,00,000) | $10,00,000$ |  |
| Bank balance | $3,20,000$ | $1,30,53,540$ |
| Less: Outside liabilities |  |  |
| Bank Loan | $12,00,000$ |  |
| Trade Payables | $37,00,000$ | $(49,00,000)$ |
| Capital employed |  | $81,53,540$ |

(ii) Future maintainable profit

Calculation of average profit

|  | 2013-2014 | 2014-2015 | 2015-2016 | 2016-2017 |
| :---: | :---: | :---: | :---: | :---: |
|  | Rs | Rs | Rs | Rs |
| Profit given | 16,00,000 | 18,00,000 | 21,00,000 | 22,00,000 |
| Add: Capital expenditure of machinery charged to revenue |  | 2,00,000 |  |  |
| Loss on sale of furniture |  |  | 40,000 |  |
|  | 16,00,000 | 20,00,000 | 21,40,000 | 22,00,000 |
| Less: Depreciation on machinery |  | $(20,000)$ | $(18,000)$ | $(16,200)$ |
| Income from non-trade investments |  | $(1,08,000)$ | $(2,16,000)$ | $(2,16,000)$ |
| Reduction in value of inventory |  |  |  | $(1,00,000)$ |
| Bad debts |  |  |  | $(20,000)$ |
| Adjusted profit | 16,00,000 | 18,72,000 | 19,06,000 | 18,47,800 |
|  |  |  |  | (Rs.) |
| Total adjusted profit for four years (2013-2014 to 2016-2017) |  |  |  | 72,25,800 |
| Average profit (Rs 72,25,800/4) |  |  |  | 18,06,450 |

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| Less: Depreciation at $10 \%$ on additional value of machinery <br> $(22,00,000+1,45,800) \times 30 / 100$ i.e. Rs $7,03,740$ | $(70,374)$ |
| :--- | :--- |
| Adjusted average profit | $17,36,076$ |

(iii) Normal Profit: $20 \%$ on capital employed i.e. $20 \%$ on Rs $81,53,540=$ Rs $16,30,708$
(iv) Super profit: Expected profit - normal profit Rs $17,36,076$ - Rs $16,30,708=$ Rs $1,05,368$
(v) Goodwill: 2 years' purchase of super profit

Rs $1,05,368 \times 2=$ Rs. $2,10,736$
2. Net assets available to equity shareholders

|  | Rs |  |
| :--- | :--- | :---: |
| Goodwill as calculated in 1(v) above |  | $2,10,736$ |
| Sundry fixed assets |  | $98,09,540$ |
| Trade and Non-trade investments |  | $15,84,000$ |
| Trade Receivables |  | $17,80,000$ |
| Inventory |  | $10,00,000$ |
| Bank balance |  | $3,20,000$ |
|  | $12,00,000$ |  |
| Less: Outside liabilities | $37,00,000$ |  |
| Bank loan |  | $1,47,04,276$ |
| Trade Payables |  | $(20,00,000)$ |
|  |  | $78,04,276$ |
| Preference share capital |  |  |
| Net assets for equity shareholders |  |  |

3. Valuation of equity shares

Value of equity share $=$ Net assets available to equity shareholders / Number of equity shares
$=$ Rs 78,04,276 / 4,00,000 = Rs 19.51

## Note:

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

## Valuation of Shares: Yield Basis

Q9. The Capital Structure of XYZ Ltd., on 31st March, 2017 was as follows:

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

[^0]Generally the return on equity shares of this type of Industry is $15 \%$.
Subject to:
(a) The profit after tax covers Fixed Interest and Fixed Dividends at least 4 times.
(b) The Debt Equity ratio shall be at least 2;
(c) Yield on shares is calculated at $60 \%$ of distributed profits and $10 \%$ of undistributed profits;
(d) The Company has been paying regularly an Equity dividend of $15 \%$.
(e) The risk premium for Dividends is generally assumed at $1 \%$.

Find out the value of Equity shares of the Company.

## Answer

| Calculation of profit after tax (PAT) | Rs | Rs |
| :--- | :---: | :---: |
| Profit before interest \& tax (PBIT) |  | $7,20,000$ |
| Less: Debenture interest (Rs 5,00,000 $\times 12 / 100)$ |  | $(60,000)$ |
| Profit before tax (PBT) |  | $6,60,000$ |
| Less: Tax @ 40\% |  | $(2,64,000)$ |
| Profit after tax (PAT) |  | $3,96,000$ |
| Less: Preference dividend (Rs 5,00,000 $\times 12 / 100)$ | 60,000 |  |
| Equity dividend (Rs $18,00,000 \times 15 / 100)$ | $2,70,000$ | $(3,30,000)$ |
| Retained earnings (undistributed profit) |  | 66,000 |

## Calculation of Interest and Fixed Dividend Coverage

=PAT + Debenture interest / Debenture interest + Preference dividend
Rs 3,96,000 + Rs 60,000 / Rs 60,000 + Rs 60,000 = Rs 4,56,000 / Rs 1,20,000 $=3.8$ times
Calculation of Debt Equity Ratio
Debt Equity Ratio = Debt (long term loans) / Equity (shareholders' funds)
Debentures / Preference share capital + Equity share capital + Reserves
5,00,000 / 5,00,000 + 18,00,000 + 5,00,000
Debt Equity Ratio $=$ Rs 5,00,000 / Rs 28,00,000 $=.179$
The ratio is less than the prescribed ratio.
Calculation of Yield on Equity Shares
Yield on equity shares is calculated at 60\% of distributed profits and $10 \%$ of undistributed profits:

| $60 \%$ of distributed profits (60\% of Rs 2,70,000) | $1,62,000$ |
| :--- | ---: |
| $10 \%$ of undistributed profits (10\% of Rs 66,000) | 6,600 |
|  | $1,68,600$ |

Yields on equity shares $=$ Yield on shares $\times 100 /$ Equity share capital
Rs $1,68,600 \times 100 /$ Rs $18,00,000=9.37 \%$

| Calculation of Expected Yield on Equity Shares |  |
| :--- | :---: |
| Normal return expected | $15 \%$ |
| Add: <br> $(3.8<4)$ | $1 \%^{*}$ |
| Risk formium for debt equity ratio not required | Nil** |
|  | $16 \%$ |
| Value of an Equity Share $=$ Actual yield $\times$ Paid up value of a share $/$ <br> Expected yield $=9.37 \times 100 / 16=58.56$ |  |

[^1]* When interest and fixed dividend coverage is lower than the prescribed norm, the riskiness of equity investors is high. They should claim additional risk premium over and above the normal rate of return.
** The debt equity ratio is lower than the prescribed ratio that means outside funds (Debts) are lower as compared to shareholders' funds. Therefore, the risk is less for equity shareholders. Therefore, no risk premium is required to be added in this case.
Ans.: Earning Rate 9.37\%, Earning 168600, Value of equity share 58.56 NRR 16\% (without considering advantages)

Q10. The following abridged Balance Sheet as at 31st March, 2017 pertains to Glorious Ltd.

| Liabilities | Rs in lakhs | Assets | Rs in lakhs |
| :--- | :---: | :--- | :---: |
| Share Capital: |  | Goodwill, at cost | 420 |
| 180 lakhs Equity shares of <br> Rs 10 each, fully paid up | 1,800 | Other Fixed Assets <br> Current Assets | 11,166 <br> 2,910 |
| 90 lakhs Equity shares of Rs <br> 10 each, Rs 8 paid up | 720 | Loans and Advances | 933 |
| 150 lakh Equity shares of Rs <br> 5 each, fully paid-up | 750 |  |  |
| Reserves and Surplus | 5,457 |  |  |
| 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 the 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, 2017 the company has earned Rs 1,371 lakhs as profit after tax, which can be considered to be normal for the company. Average EPS for a fully paid share of Rs 10 of a Company in the same industry is Rs 2.
Answer
(i) Intrinsic value on the basis of book values

|  | Rs in lakhs | Rs in lakhs |
| :--- | :---: | :---: |
| Goodwill |  | 420 |
| Other Fixed Assets |  | 11,166 |
| Current Assets |  | 2,910 |
| Loans and Advances |  | 933 |
|  | 4,500 | 15,429 |
| Less: Secured loans |  |  |

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| Current liabilities | 1,242 |  |
| :--- | :---: | :---: |
| Provisions | 960 | $(6,702)$ |
|  |  | 8,727 |
| Add: Notional call on 90 lakhs equity shares @ <br> Rs 2 per share |  | 180 |
|  |  | 8,907 |

Equivalent number of equity shares of Rs 10 each.

|  | No. of Equity shares |
| :--- | :---: |
| Fully paid shares of Rs 10 each | 180 |
| Partly-paid shares after notional call | 90 |
| Fully paid shares of Rs 5 each, $[150$ lakhs $\times 5 / 10]$ | 75 |
|  | 345 |

Value per equivalent share of Rs 10 each = Rs 8,907 lakhs $/ 345$ lakhs $=$ Rs 25.82
Hence, intrinsic values of each equity share are as follows:
Value of fully paid share of Rs $10=$ Rs 25.82 per equity share.
Value of share of Rs 10 , Rs 8 paid-up $=$ Rs 25.82 - Rs $2=$ Rs 23.82 per equity share.
Value of fully paid share of Rs $5=25.82 / 2=$ Rs 12.91 per equity share.
(ii) Valuation on dividend yield basis:

Value of fully paid share of Rs $10=20 \times 10 / 15=$ Rs 13.33
Value of share of Rs 10 , Rs 8 paid-up $=20 \times 8 / 15=$ Rs 10.67
Value of fully paid share of Rs $5=20 \times 5 / 15=$ Rs 6.67
(iii) Valuation on the basis of EPS:

Profit after tax = Rs 1,371 lakhs
Total share capital $=$ Rs $(1,800+720+750)$ lakhs $=$ Rs 3,270 lakhs
Earning per rupee of share capital $=1,371$ lakhs $/ 3,270$ lakhs $=$ Rs 0.419
Earnings per fully paid share of Rs $10=$ Rs $0.419 \times 10=$ Rs 4.19
Earnings per share of Rs 10 each, Rs 8 paid-up $=$ Rs $0.419 \times 8=$ Rs 3.35
Earnings per share of Rs 5, fully paid-up $=$ Rs $0.419 \times 5=$ Rs 2.10
Value of fully paid share of Rs $10=4.19 \times 10 / 2=$ Rs 20.95
Value of share of Rs 10 , Rs 8 paid-up $=3.35 \times 10 / 2=$ Rs 16.75
Value of fully paid share of Rs $5=2.10 \times 10 / 2=$ Rs 10.50
Q11. Yogesh Ltd. showed the following performance over 5 years ended 31 ${ }^{\text {st }}$ March, 2015:

| Year Ended on <br> $31^{\text {st }}$ March | *Net Profit before <br> Tax |  | Prior Period <br> adjustment | Remarks |
| :--- | :--- | :--- | :--- | :--- |
| 2011 | $4,00,000$ | $(-)$ | $1,00,000$ | Relating to 2009-10 |
| 2012 | $3,50,000$ | $(-)$ | $2,50,000$ | Relating equally to 09-10 |
| 2013 | $6,50,000$ | $(+)$ | $1,50,000$ | and 10-11 |
| 2014 | $5,50,000$ | $(-)$ | $1,75,000$ | Relating to 11-12 |
| 2015 | $6,00,000$ | $(-)$ | $1,00,000$ | Relating to 11-12 |
| 2015 |  | $(+)$ | 25,000 | Relating to 11-12 |

[^2]*Net Profit before tax is after debiting or crediting the figures of loss (-) or gains (+) mentioned under columns for prior period adjustments.

The net worth of the business as per balance sheet of $31^{\text {st }}$ march, 2010 is Rs. $6,00,000$ backed by 10,000 fully paid equity shares of Rs. 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 31.03.2015, assuming:
(i) $40 \%$ TaxRate
(ii) Anticipated after tax yield of 20\%
(iii) Differential weight of 1 to 5 given for 5 years starting on 1.04 .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 31.03.2015

Looking to the performance of the company over 5 years period, would you invest in the company? (RTP - May 2015)
(Answer: 184/- on yield basis and (46.50, 69, 97.5, 127.5, 172.5 and 213 on net asset basis)

## Solution:

(a) Valuation of Shares on Yield basisas on 31st March, 2015
$\left.\begin{array}{|c|c|c|c|c|c|c|c|c|}\hline \begin{array}{c}\text { Year } \\ \text { ended } \\ \text { 31 } \\ \text { March }\end{array} & \begin{array}{c}\text { Profits } \\ \text { as } \\ \text { given }\end{array} & \begin{array}{c}\text { Increas } \\ \text { e }\end{array} & \text { decrease } & \text { Revised } & \text { Profits } & \begin{array}{c}\text { Tax } \\ \text { Provision }\end{array} & \begin{array}{c}\text { After } \\ \text { tax } \\ \text { Profits }\end{array} & \text { weight }\end{array} \begin{array}{c}\text { Weighted } \\ \text { Profits }\end{array}\right]$

Weighted average profit (after tax) $=$ Rs 55,20,000 / $15=$ Rs 3,68,000
Value of business $=$ Rs $3,68,000 / 20 \%=18,40,000$
Value of equity share $=$ Rs $18,40,000 / 10,000=$ Rs 184
(c) Valuation of Shares on Net Asset Basis

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| (i) | Revised net worth as on 31st March, 2010 | Rs | Rs |
| :---: | :---: | :---: | :---: |
| (ii) | 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 |
|  | Net asset value (No. of shares $=10,000$ ) |  |  |
|  | As on 31st March | Rs |  |
|  | 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 31.3.2013 | 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 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 <br> worth as on <br> $31^{\text {st }}$ March | Rs | Profit during the <br> year ended 31 <br> Mt <br> March |  | Return on <br> net Worth |
| :---: | :---: | :---: | :---: | :---: |
| 2010 | $4,65,000$ | 2011 | Rs | $\%$ |
| 2011 | $6,90,000$ | 2012 | $2,25,000$ | 48.39 |
| 2012 | $9,75,000$ | 2013 | $3,00,000$ | 41.30 |
| 2013 | $12,75,000$ | 2014 | $4,50,000$ | 30.77 |
| 2014 | $17,25,000$ | 2015 | $4,05,000$ | 23.48 |

The company's return has fallen from $48.39 \%$ to $23.48 \%$. This may be perhaps due to the fact that the company has been ploughing back its profits without having adequate reinvestment opportunities. Unless the company has profitable investment opportunities, it may not be advisable to invest in the company.

Note: Return on net worth may also be calculated on the basis of average net worth during the relevant year.

## VALUATION OF SHARES: FAIR VALUE

Q12. A Company $Q$ is willing to sell its business. The purchaser has sought 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 31-3-2016 is as under:

| Liabilities | Rs | Assets | Rs |
| :--- | :---: | :--- | :---: |
| Equity Share Capital <br> (shares of Rs 100 each) | $9,50,000$ | Land \& Building | $5,45,000$ |
| 8\% Preference Share <br> Capital (shares of Rs 100 <br> each) | $2,25,000$ | Plant \& Machinery <br> Investments in <br> shares <br> Inventories | $4,55,000$ |
| Reserves \& Surplus | $7,50,500$ | Trade Receivables <br> (net) | $4,80,000$ |
| 9\% Debentures | $5,60,000$ | Cash \& Bank balance |  |
| Current Liabilities | $3,25,640$ |  | $5,20,520$ |
|  | $28,11,140$ |  | $28,11,140$ |

(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 Rs $4,95,200$. 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:

| $31-3-2016$ | Rs $2,95,000$ |
| :---: | :---: |
| $31-3-2015$ | Rs $4,99,000$ |
| $31-3-2014$ | Rs $3,25,000$ |

(5) Goodwill is valued at three years purchase of the adjusted average super profit.
(6) In the year 2015, 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 Rs 62,400 and $8 \%$ return is expected from the property.
(8) On 31-3-2016, $8 \%$ 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 Rs 25,000 has perspired and is to be accounted for.
(10) No Debenture interest shall be payable in future due to its redemption.

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## Answer

Valuation of goodwill: Super profits method

| Particulars | Rs | Rs |
| :--- | :---: | :---: |
| Net trading assets attributable to equity share <br> holders |  |  |
| As computing in (WN 1) | $23,18,506$ |  |
| Less: Preference share Capital | $(2,25,000)$ | $20,93,506$ |
| Normal Rate of Return (NRR) to equity share holders |  | $10 \%$ |
| Normal Profit available to equity share holders (a $\times b)$ |  | $2,09,351$ |
| Future Maintainable Profits (FMP) to equity share <br> holders |  |  |
| As computed in (WN 3) | $3,75,096$ |  |
| Less: Preference dividend* (8\% of 2,25,000) | $(18,000)$ | $3,57,096$ |
| Super profits to equity share holders |  | $1,47,745$ |
| Goodwill (1,47,745 $\times 3$ ) |  | $4,43,235$ |

*Since, NRR is given as percentage of net assets attributable to equity shareholders, preference share capital and preference share dividend have been deducted from the net assets and future maintainable profit respectively.

## Value Per Equity Share

Net Trading Assets attributable to equity shareholders
Rs 20,93,506
Add: Goodwill
Rs 4,43,235
Rs 25,36,741
Number of Equity Shares $=9,500$ shares,
Value per share $=25,36,741 / 9,500=$ Rs 267 (approx.)
Working Notes:

1. Computation of net trading assets

| Particulars | Rs | Rs |
| :--- | :---: | :---: |
| Sundry assets |  |  |
| i | Land \& Building $(62,400 \div 8 \%)$ | $7,80,000$ |
| ii | Plant and Machinery | $4,55,000$ |
| iii | Inventory | $3,80,000$ |
| iv | Trade receivables $(4,25,620 \div 92 \%)$ | $4,62,630$ |
| v | Bank balance (given balance $5,20,520$ + Sale of |  |
| investment 4,95,200 - redemption of debentures <br> $5,60,000 \times 75 \%)$ | $5,95,720$ | $26,73,350$ |
| Less: Outside liabilities: |  |  |
| i | Current Liabilities | $3,25,640$ |
| ii | Contingent Liability now to be accounted for | 25,000 |
| iii | Tax provision (WN 2) | 4,204 |
| Net assets |  | $(3,54,844)$ |

2. Calculation of tax provision

|  | Rs |
| :--- | ---: |
| Profit on reversal of provision for bad debts | 37,010 |
| Loss on recognizing omitted claim (assuming tax deductible) | $(25,000)$ |
| Net incremental profit on which tax is payable | 12,010 |
| Tax provision 35\% | 4,204 |

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3. Computation of future maintainable profit for the year ended on 31st March

| Particulars | 2014 | 2015 | 2016 |
| :--- | :---: | :---: | :---: |
| Profit after tax | $3,25,000$ | $4,99,000$ | $2,95,000$ |
| Less: Non-recurring profits (after <br> tax) $(20 \%$ of 2015 Profit) | - | $(99,800)$ | - |
| Less: Claims not recorded (after tax) <br> [25,000 $\times(1-35 \%)]$ | - | - | $(16,250)$ |
| Add: Provision no longer required (net <br> of tax) [4,25,620 $\times 8 / 92 \times(1-35 \%)]$ | - | - | 24,057 |
| Adjusted profits after tax | $3,25,000$ | $3,99,200$ | $3,02,807$ |


| Simple average of the profits (as profits are fluctuating) | $3,42,336$ |
| :--- | :---: |
| Adjustments for items which will not be reflected in future |  |
| Add: Debenture interest (net of tax) $[5,60,000 \times 9 \% \times(1-0.35)]$ | 32,760 |
| Future maintainable profit [for shareholders- both preference <br> and equity) | $3,75,096$ |

Assumptions

1. Tax effect has been ignored on profit on sale of investments and discount on redemption of debentures.
2. Assets and liabilities are recorded at realizable value or fair value. In the absence of information, book values are assumed to be fair values.
3. Additional depreciation on revaluation of property is ignored.
4. Profits for past three years given in the question have been assumed as profits after tax.

## VALUATION OF BUSINESS

Q13. Jayadev Ltd. has earned a PAT of Rs. 48 lakhs for the year ended 2013. It wants you to ascertain the value of its Business, based on the following information:
(a) Tax rate for the year 2013 was $36 \%$. Future Tax rate is estimated at $34 \%$.
(b) The company's equity shares are quoted at Rs. 120 at the Balance Sheet date. The company had an equity share capital of Rs. 100 lakhs, dividend into shares of Rs. 50 Each.
(c) Profits for the year 2013 have been calculated after considering the following in the Profit and Loss Account:
(i) Subsidy of Rs. 2 lakhs received from the Government towards fulfillment of certain social obligations. The govt. has withdrawn this subsidy and hence this amount will not be received in future.
(ii) Interest of Rs. 8 lakhs on term loan. The final installment of this term loan was fully settled this year.
(iii)Managerial remuneration Rs. 15 Lakhs. The Shareholders have approved an increase of

Rs. 6 lakhs in the overall managerial remuneration from the next year onwards.
(iv)Loss on sale of Fixed assets and investment amounting to Rs. 8 lakhs.
(RTP - May 2014)

## Solution:

Computation of Future Maintainable Profits

| Particulars | Rs |
| :--- | :---: |
| Profit after tax for the year 2013 | $48,00,000$ |
| Add: Tax epense (Tax is $36 \%$, So, PAT $=64 \%$. Hence, Tax | $27,00,000$ |
| $=48,00,000 \times 36 / 64$ ) | $75,00,000$ |
| Profit before tax for the year 2013 |  |
| Add/ (Less) Adjustments in respect of non-recurring items | $(2,00,000)$ |
| Subsidy income not receivable in future | $8,00,000$ |
| Interest on term loan not payable in future, hence saved | $(6,00,000)$ |
| Additional managerial remuneration Loss on sale of fixed assets | $8,00,000$ |
| and investments (nonrecurring) | $83,00,000$ |
| Future maintainable profits before tax | $(28,22,000)$ |
| Less: Tax expense at 34\% | $54,78,000$ |

Computation of capitalization rate and value of business

| Particulars | Rs. |
| :--- | :--- |
| (a) Profit after tax for the year 2013 Rs | 48 Lakhs |
| (b) Number of equity shares (Rs 100 lakhs / Rs 50 per share) | 2 lakhs |
| (c) Earnings per share (EPS) = PAT/Number of Equity Shares | $24 /-$ |
| (d) Market price per share on balance sheet date | $120 /-$ |
| (e) Price Earnings Ratio = MPS / EPS | 5 |
| (f) Capitalisation Rate = (1 / PE Ratio) $\times 100$ | $20 \%$ |
| Value of Business = Future Maintainable Profits /Capitalisation <br> Rate= Rs 54.78 Lakhs / 20\% | 273.90 Lakhs |
|  |  |

Q14. The summarized Balance Sheet of R Ltd. for the year ended on 31st March, 2015, 2016 and 2017 are as follows:

|  | (Rs in thousands) |  |  |
| :--- | :---: | :---: | :---: |
| Liabilities | 31.3 .2015 | 31.3 .2016 | 31.3 .2017 |
| $3,20,000$ <br> paid equity shares of Rs 10 each, fully | 3,200 | 3,200 | 3,200 |
| General reserve | 2,400 | 2,800 | 3,200 |
| Profit and Loss account | 280 | 320 | 480 |
| Trade Payables | 1,200 | 1,600 | 2,000 |
|  | $\mathbf{7 , 0 8 0}$ | $\mathbf{7 , 9 2 0}$ | $\mathbf{8 , 8 8 0}$ |
| Assets |  |  |  |

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| Goodwill | 2,000 | 1,600 | 1,200 |
| :--- | :---: | :---: | :---: |
| Building and Machinery less, depreciation | 2,800 | 3,200 | 3,200 |
| Inventory | 2,000 | 2,400 | 2,800 |
| Trade Receivables | 40 | 320 | 880 |
| Bank balance | 240 | 400 | 800 |
|  | 7,080 | 7,920 | 8,880 |

Additional information:
(a) Actual valuations were as under

| Building and machinery less, depreciation | 3,600 | 4,000 | 4,400 |
| :--- | :---: | :---: | :---: |
| Inventory | 2,400 | 2,800 | 3,200 |
| Net profit (including opening balance after <br> writing off depreciation, goodwill, tax <br> provision and transferred to general <br> reserve) | 840 | 1,240 | 1,640 |

(b) Capital employed in the business at market value at the beginning of 2014-2015 was Rs $73,20,000$ which included the cost of goodwill. The normal annual return on average capital employed in the line of business engaged by R Ltd. is $12 \frac{1}{2} \%$.
(c) The balance in the general reserve on 1st April, 2014 was Rs 20 lakhs.
(d) The goodwill shown on 31.3.2015 was purchased on 1.4.2014 for Rs 20 lakhs on which date the balance in the Profit and Loss account was Rs $2,40,000$. Find out the average capital employed in each year.
(e) Goodwill is to be valued at 5 year's purchase of Super profit (Simple average method). Find out the total value of the business as on 31.3.2017.

## Answer

| Total value of business | Rs |
| :--- | :---: |
| Total net Asset as on 31.3.2017 | $84,80,000$ |
| Less: Goodwill as per Balance Sheet | $(12,00,000)$ |
| Add: Goodwill as calculated in Working Note 2 | $41,12,500$ |
| Value of Business | $1,13,92,500$ |

## Working Notes:

1. Capital Employed at the end of each year

|  | 31.3 .2015 <br> Rs | 31.3 .2016 <br> Rs | $\mathbf{3 1 . 3 . 2 0 1 7}$ <br> Rs |
| :--- | :---: | :---: | :---: |
| Goodwill | $20,00,000$ | $16,00,000$ | $12,00,000$ |
| Building and Machinery (Revaluation) | $36,00,000$ | $40,00,000$ | $44,00,000$ |
| Inventory (Revalued) | $24,00,000$ | $28,00,000$ | $32,00,000$ |
| Trade Receivables | 40,000 | $3,20,000$ | $8,80,000$ |
| Bank Balance | $2,40,000$ | $4,00,000$ | $8,00,000$ |
| Total Assets | $82,80,000$ | $91,20,000$ | 10480000 |
| Less: Trade Payables | $(12,00,000)$ | $(16,00,000)$ | $(20,00,000)$ |
| Closing Capital | $70,80,000$ | $75,20,000$ | $84,80,000$ |
| Add: Opening Capital | $73,20,000$ | $70,80,000$ | $75,20,000$ |
| Total | $1,44,00,000$ | $1,46,00,000$ | $1,60,00,000$ |
| Average Capital | $72,00,000$ | $73,00,000$ | $80,00,000$ |

Since the goodwill has been purchased, it is taken as a part of Capital employed.

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## 2. Valuation of Goodwill

| (i) Future Maintainable Profit | $\mathbf{3 1 . 3 . 2 0 1 5}$ | $\mathbf{3 1 . 3 . 2 0 1 6}$ | $\mathbf{3 1 . 3 . 2 0 1 7}$ |
| :--- | :---: | :---: | :---: |
| Net Profit as given | $8,40,000$ | $12,40,000$ | $16,40,000$ |
| Less: Opening Balance | $(2,40,000)$ | $(2,80,000)$ | $(3,20,000)$ |
| Adjustment for Valuation of <br> Opening Inventory | - | $(4,00,000)$ | $(4,00,000)$ |
| Add: Adjustment for Valuation of <br> closing inventory | $4,00,000$ | $4,00,000$ | $4,00,000$ |
| Goodwill written off | - | $4,00,000$ | $4,00,000$ |
| Transferred to General Reserve | $4,00,000$ | $4,00,000$ | $4,00,000$ |
| Future Maintainable Profit | $14,00,000$ | $17,60,000$ | $21,20,000$ |
| Less: $12.50 \%$ Normal Return | $(9,00,000)$ | $(9,12,500)$ | $(10,00,000)$ |
| (ii) Super Profit | $5,00,000$ | $8,47,500$ | $11,20,000$ |

(i) Average Super Profit $=\operatorname{Rs}(5,00,000+8,47,500+11,20,000) \div 3=\operatorname{Rs} 8,22,500$
(ii) Value of Goodwill at five years' purchase=Rs $8,22,500 \times 5=$ Rs $41,12,500$.
(Answer: Goodwill: 5195.85: Value of Business: 12475.85/ 11392.5 on simple avg Or
Goodwill-4112.5 SP (Avg) - 822.50)

Q15. Timby Ltd. is in the business of making sports equipment. The Company operates from Thailand. To globalise its operations, Timby has identified Fine Toys Ltd. an Indian Company, as a potential takeover candidate. After due diligence of Fine Toys Ltd. the following information is available:
(a)

| Cash Flow Forecasts |  |  |  |  |  |  |  |  |  |  |  |  |  | (Rs in crore) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
| Year | 10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 |  |  |  |  |
| Fine Toys Ltd. | 24 | 21 | 15 | 16 | 15 | 12 | 10 | 8 | 6 | 3 |  |  |  |  |
| Timby Ltd. | 108 | 70 | 55 | 60 | 52 | 44 | 32 | 30 | 20 | 16 |  |  |  |  |

(b) The net worth of Fine Toys Ltd. (Rs in lakhs) after considering certain adjustments suggested by the due diligence team reads as under:

| Tangible |  | 750 |
| :--- | :---: | :---: |
| Inventories |  | 145 |
| Receivables |  | 75 |
|  |  | 970 |
| Less: |  |  |
| Trade Payables | 165 |  |
| Bank Loans | 250 | $(415)$ |
| Represented by equity shares of Rs 1,000 each |  | 555 |

Talks for takeover have crystalized on the following:

1. Timby Ltd. will not be able to use Machinery worth Rs 75 lakhs which will be disposed of by them subsequent to take over. The expected realization will be Rs 50 lakhs.
2. The inventories and receivables are agreed for takeover at values of Rs 100 and Rs 50 lakhs respectively which is the price they will realize on disposal.
3. The liabilities of Fine Toys Ltd. will be discharged in full on take over alongwith an employee settlement of Rs 90 lakhs for the employees who are not interested in continuing under the new management.

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4. Timby Ltd. will invest a sum of Rs 150 lakhs for upgrading the Plant of Fine Toys Ltd. on takeover. A further sum of Rs 50 lakhs will also be incurred in the second year to revamp the machine shop floor of Fine Toys Ltd.
5. The Anticipated Cash Flows (in Rs crore) post takeover are as follows:

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

You are required to advise the management the maximum price which they can pay per share of Fine Toys Ltd. if a discount factor of 20 per cent is considered appropriate.
Answer
Calculation of Maximum Price that can be quoted for takeover of Fine Toys Ltd.

|  | Rs in lakhs | Rs in lakhs |
| :--- | :---: | :---: |
| Present (Discounted) value of incremental cash <br> flows (Refer Working Note) |  | $7,845.02$ |
| Add: Proceeds from disposal of fixed assets | 50.00 |  |
| Proceeds from disposal of inventories | 100.00 |  |
| Receipts from Trade Receivables | 50.00 | 200.00 |
|  | 165.00 | $8,045.02$ |
| Less: Settlement of Trade Payables | 250.00 |  |
| Bank Loans | 90.00 |  |
| Employee settlement | 150.00 |  |
| Renovation of Plant | 34.72 | $(689.72)$ |
| Revamp of machine shop floor (Rs 50 lakhs× <br> 0.6944)* |  | $7,355.30$ |
| Maximum value that can be offered |  |  |
| Maximum price per share of Fine Toys Ltd. (Rs 7,355.30 lakhs / 55,500 shares) <br> Rs 13,252.79 |  |  |

## Working Note:

Present Value of Incremental Cash Flows
(Rs in lakhs)

| Year | Cash flow <br> after <br> takeover | Cash flows <br> before <br> takeover | Incremental <br> Cash flows | Discount <br> factor @ <br> $\mathbf{2 0 \%}$ | Discounted <br> Cash flows |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1,800 | 1600 | 200 | 0.8333 | 166.66 |
| 2 | 2,400 | 2000 | 400 | 0.6944 | 277.76 |
| 3 | 3,600 | 3000 | 600 | 0.5787 | 347.22 |
| 4 | 4,400 | 3200 | 1200 | 0.4823 | 578.76 |
| 5 | 6,000 | 4400 | 1600 | 0.4019 | 643.04 |
| 6 | 8,000 | 5200 | 2800 | 0.3349 | 937.72 |
| 7 | 9,600 | 6000 | 3600 | 0.2791 | $1,004.76$ |
| 8 | 10,000 | 5500 | 4500 | 0.2326 | $1,046.70$ |
| 9 | 14,000 | 7000 | 7000 | 0.1938 | $1,356.60$ |
| 10 | 20,000 | 10800 | 9200 | 0.1615 | $1,485.80$ |
|  |  |  |  |  | $7,845.02$ |

## BRAND VALUATION

Brand may be SELF GENERATED or ACQUIRED.
Valuation of Acquired Brand is given below:

1. Brand Value = Price paid to acquire such brand; or
2. Brand Value $=$ Purchase Consideration - Net Assets taken over

Valuation of Self Generated Brand is given below:

1. Historical Cost Method

Brand Value $=$ Actual Cost Incurred in Brand Building (Development + Marketing + Promotion Cost)

## 2. Potential Earning Model

Brand Value = Profit arising due to Brand / Capitalisation Factor
How to Calculate Profit due to Brand?
PAT $x x x$
Less: Expected Return due to unbranded Products ( $x x x$ )
(From Tangible and Intangible Assets other than Brand)

Q16. From the Following, determine the possible value of brand as per potential earning model:

|  |  | Rs. In Lakhs |
| :--- | :--- | :--- |
| 1 | Profit after tax (PAT) | 2500 |
| 2 | Tangible Fixed Assets | 10000 |
| 3 | Identifiable intangible assets other than brand | 1500 |
| 4 | Weighted average cost of capital (\%) | $14 \%$ |
| 5 | Expected normal return on tangible assets |  |
|  | [weighted average cost (14\%) + normal spread 4\%] | $18 \%$ |
| 6 | Appropriate capitalization factor for intangibles | $25 \%$ |
|  |  |  |

## Answer

Calculation of possible value of brand
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|  | Rs in lakhs |
| :--- | :--- |
| Profit after Tax | 2,500 |
| Less: Profit allocated to tangible assets [18\% of Rs 10,000] | $(1,800)$ |
| Profit allocated to intangible assets including brand | 700 |
| Capitalisation factor 25\% |  |
| Capitalised value of intangibles including brand [700/25×100] | 2,800 |
| Less: Identifiable intangibles other than brand | $(1,500)$ |
| Brand value | 1,300 |

Q17. 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 brand of 'Zed' and are full outsourced from 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:

|  | Year 1 | Year 2 | Year 3 |
| :--- | :--- | :--- | :--- |
| Earnings before interest and Tax from Sale of | 5100 | 7500 | 9900 |
| Products |  |  |  |
| Other Income - Royalty from partial use of Zed | 190 | 135 | 225 |
| Brand | 9000 | 10800 | 13500 |
| Tangible Fixed Assets employed | $14 \%$ | $12 \%$ | $14 \%$ |
| Returns (Before interest and Tax) on cost of <br> tangible assets <br> Spread over return | $2 \%$ | $3 \%$ | $3 \%$ |

The average annual fund's used in the company's operations is Rs. 5200 lakhs of which Rs. 2800 lakhs is in 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 Brand Zed considering a capitalization rate of $20 \%$.
(November - 2013, 8 Marks)
(Answer: Value of Brand - 19490 by Weighted avg. or 17170 by Simple avg.)

## Solution:

1. Calculation of EBIT on unbranded product (Rs In lakhs)

|  | Year 1 | Year 2 | Year 3 |
| :--- | :---: | :---: | :---: |
| Tangible Fixed Assets | 9,000 | 10,800 | 13,500 |
| Return on cost +spread (5\%) | 16 | 15 | 17 |
| Absolute value of the above | 1,440 | 1,620 | 2,295 |

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| EBIT from sale of unbranded products | 1,440 | 1,620 | 2,295 |
| :--- | :---: | :---: | :---: | :---: |

2. Calculation of Average earnings after tax on Branded Products (Rs In Lakhs)

|  | Year 1 | Year 2 | Year 3 |
| :--- | :---: | :---: | :---: |
| Total EBIT | 5,100 | 7,500 | 9,900 |
| Less: EBIT in respect of unbranded products | 1,440 | 1,620 | 2,295 |
| Add: Brand Royalty | 90 | 135 | 225 |
| EBIT from ZED Branded products | 3,750 | 6,015 | 7,830 |
| Average EBIT from Branded sold <br> [(3750+6015+7830)/3] |  |  | 5,865 |
| Less : Tax @ 33.33\% |  |  | 1,955 |
| Average post tax earnings from Branded <br> Goods (including tax shelter on interest) |  |  | 3,910 |

3. Net Earnings from Brand (Rs Lakh)
= 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 $=2,800 \times 17 \% 476$
Net earnings from brand 3,434
Brand Value $=$ Net Earnings from Brand $\times$ Capitalisation Rate $=$
$=3,434 \times 100 / 20=17,170$
Value of the ZED Brands is ` 17,170 lakh

## Q18.

Agile Limited is a manufacturer-cum-dealer of 'R Tuff' brand of trousers. With passage of time, its brand has been well accepted in the market. The company has been approached by 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 is available:
(i) Garment industry of which Agile is a constituent, is expected to grow by $9 \%$ per annum during the next five years. The present market size of the industry is Rs 7,500 crores.
(ii) There are other brands both 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.
(iii) The expected foreign partner needs the production line of the company to be reengineered 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 the foreign company, considering the discount factor for 1 st five years as $0.909 ; 0.826 ; 0.751 ; 0.683$ and 0.621 (Monetary values in crores to be rounded off to nearest 2 decimal places).

## Answer

## Market Share of Agile Ltd.

Calculation of last year's market share $=100 \%-63 \%=37 \%$
Increase or decrease in market share of other players [0.25+(. $25 \times 150 \%)-2.5 / 5$ ] $=0.125 \%$ i.e. increase in others' market share every year over the period of 5 years. Hence, market share of Agile Ltd. is expected to decrease by $0.125 \%$ every year over the period of 5 years, from the current level of $37 \%$.

## Brand Valuation under Market Approach

| Year | Market <br> Size (Rs <br> in Crores) | Market Share of Agile Ltd. | Market Share (Rs in Crores) | Expected Profit (Rs in Crores) | Discount Factor | Discounted Cash Flow (Rs in Crores) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{gathered} 7500 \times \\ 109 \%= \\ 8,175 \end{gathered}$ | 36.875\% | 3014.53 | $\begin{gathered} \text { @ 10\% = } \\ 301.45 \end{gathered}$ | 0.909 | 274.02 |
| 2 | $\begin{aligned} & 8,175 \times \\ & 109 \%= \\ & 8910.75 \\ & \hline \end{aligned}$ | 36.75\% | 3274.70 | $\begin{gathered} \text { @ 13\% = } \\ 425.71 \end{gathered}$ | 0.826 | 351.64 |
| 3 | $\begin{gathered} \hline 8,910.75 x \\ 109 \%= \\ 9712.72 \\ \hline \end{gathered}$ | 36.625\% | 3557.28 | $\begin{aligned} & \text { @18\% = } \\ & 640.31 \end{aligned}$ | 0.751 | 480.87 |
| 4 | $\begin{gathered} 9,712.72 \\ \times 109 \%= \\ 10,586.86 \\ \hline \end{gathered}$ | 36.5\% | 3864.20 | $\begin{aligned} & \text { @23\% = } \\ & 888.77 \end{aligned}$ | 0.683 | 607.03 |
| 5 | $\begin{gathered} 10,586.86 \\ \times 109 \%= \\ 11,539.68 \\ \hline \end{gathered}$ | 36.375\% | 4197.56 | $\begin{aligned} & \hline \text { @28\% = } \\ & 1,175.32 \end{aligned}$ | 0.621 | 729.87 |
| Brand Value |  |  |  |  |  | 2,443.43 |

Brand Value of Agile Ltd. under Market Oriented Approach is Rs $2,443.43$ crores.

## Important Notes:

## CORPORATE RESTRUCTURING

## Part - 1 Amalgamation Of Companies

Q19. (PM)
A Ltd. agreed to absorb B Ltd. on 31st March 1999, whose balance sheet stood as follows:
Equity \& Liabilities:
Shareholders Fund:
Share Capital 80,000 shares of Rs. 10 each 800,000

## Reserves \& Surplus:

General Reserve 100,000
Non-Current Liabilities:
Secured Loan
Unsecured Loan
Current Liabilities:
Sundry Creditors
100,000
1,000,000

## Assets:

Non-Current Assets:
Fixed Assets 700,000
Investments
Current Assets:
Stock in trade 100,000
Sundry Debtors 200,000
1,000,000
The consideration was agreed to be paid as follows:
(a) A payment in cash of Rs. 5 per share in B Ltd. and the issue of shares of Rs. 10 each in A Ltd., on the basis of 2 Equity Shares (valued at Rs. 15) and one $10 \%$ cum. Preference share (valued at Rs. 10) for every five shares held in B Ltd.
The whole of the share capital consists of shareholdings in exact multiple of five except the following holding:
Chopra 116

Karki 76
Amar Singh 72
Malhotra 28
Other individuals 8 (Eight members holding one share each) 300
It was agreed that $A$ Ltd. will pay in cash for fractional shares equivalent at agreed value of shares in B Ltd. i.e. Rs. 65 for five shares of Rs. 50 paid.
Prepare a statement showing the purchase consideration receivable in share and cash.
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## Solution:

Purchase Consideration

|  | Rs |
| :--- | :---: |
| 31,994 Equity shares @ Rs 15 each | $4,79,910$ |
| 15,997 Preference shares @ Rs 10 each | $1,59,970$ |
| Cash on 79,985 shares (i.e $80,000-15$ ) of B Ltd.@ Rs 5 each | $3,99,925$ |
|  | $10,39,805$ |
| Add: Cash for fractional shares (W.N. 3) | 195 |
|  | $10,40,000$ |

## Working Notes:

1. Schedule showing fractional shares

| Holding of Shares |  | Exchangeable <br> in multiple of <br> five | Exchange <br> in Equity <br> shares | Exchange in <br> preference <br> shares | Non <br> exchangeable <br> shares |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 116 | 115 | 46 | 23 | 1 |
| B | 76 | 75 | 30 | 15 | 1 |
| C | 72 | 70 | 28 | 14 | 2 |
| D | 28 | 25 | 10 | 5 | 3 |
| Others | 8 | - | - | - | 8 |
|  | 300 | 285 | 114 | 57 | 15 |

2. Shares Exchangeable: Equity Shares in A Ltd.

|  | No. of shares |  | No. of shares |
| :--- | :---: | :--- | :---: |
| (i) $80,000-300$ | 79,700 | $2 / 5$ thereof | 31,880 |
| (ii) $300-15$ | 285 | $2 / 5$ thereof | 114 |
|  | 79,985 |  | 31,994 |

Shares Exchangeable: Preference Shares in A Ltd.

|  | No. of shares |  | No. of shares |
| :--- | :---: | :--- | :---: |
| (i) $80,000-300$ | 79,700 | $1 / 5$ thereof | 15,940 |
| (ii) $300-15$ | 285 | $1 / 5$ thereof | 57 |
|  | 79,985 |  | 15,997 |

3. There are 15 shares (W.N.1) in B Ltd. which are not capable of exchange into equity and preference shares of $A$ Ltd. They will be paid cash $=15 \times 10 \times 65 / 50=195$

## Accounting under Purchase Method

## Q20. (PM)

T. Ltd. and V. Ltd. propose to amalgamate. Their summarized balance sheets as at 31st March, 2016 were as follows:

| Liabilities | T. Ltd. | V. Ltd. | Assets | T. Ltd. | V. Ltd. |
| :--- | :---: | :---: | :--- | :---: | :---: |
|  | Rs | Rs |  | Rs | Rs |
| Share <br> capital: |  |  | Fixed assets |  |  |
| Equity shares <br> of Rs 10 each | $15,00,000$ | $6,00,000$ | Less: <br> Depreciation | $12,00,000$ | $3,00,000$ |


| General <br> reserve | $6,00,000$ | 60,000 | Investments <br> (fetching <br> interest @ <br> $6 \%$ ) | $3,00,000$ | - |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Profit \& Loss <br> A/c | $3,00,000$ | 90,000 | Inventory | $6,00,000$ | $3,90,000$ |
| Trade <br> payables | $3,00,000$ | $1,50,000$ | Trade <br> receivables | $5,10,000$ | $1,80,000$ |
|  |  | Cash and bank <br> balances | 90,000 | 30,000 |  |
|  | $27,00,000$ | $9,00,000$ |  | $27,00,000$ | $9,00,000$ |

Their net profits (after taxation) were as follows:

| Year | T. Ltd. | V. Ltd. |
| :---: | :---: | :---: |
| $2013-2014$ | $3,90,000$ | $1,35,000$ |
| $2014-2015$ | $3,75,000$ | $1,20,000$ |
| $2015-2016$ | $4,50,000$ | $1,68,000$ |

Normal trading profit may be considered as $15 \%$ on closing capital invested. Goodwill may be taken as 4 years' purchase of average super profits. The inventory of T. Ltd. and V. Ltd. are to be taken at Rs $6,12,000$ and Rs $4,26,000$ respectively for the purpose of amalgamation. W. Ltd. is formed for the purpose of amalgamation of two companies. Assume tax @ 40\%.
(a) Suggest a scheme of capitalization of W. Ltd. and ratio of exchange of shares; and
(b) Draft the opening balance sheet of W. Ltd.

## Answer

(a) Scheme of capitalization of W. Ltd. and ratio of exchange of shares Computation of Net Assets of amalgamating companies

|  | T. Ltd. | V. Ltd. |
| :--- | :--- | :--- |
|  | Rs | Rs |
| Goodwill (W.N.2) | $3,22,080$ | $1,29,840$ |
| Fixed Assets | $12,00,000$ | $3,00,000$ |
| $6 \%$ investments (Non-trade) | $3,00,000$ | - |
| Inventory | $6,12,000$ | $4,26,000$ |
| Trade receivables | $5,10,000$ | $1,80,000$ |
| Cash and Bank Balances | 90,000 | 30,000 |
|  | $30,34,080$ | $10,65,840$ |
| Less: Trade payables | $(3,00,000)$ | $(1,50,000)$ |
| Provision for tax | 4,800 | 14,400 |
| Net Assets | $27,29,280$ | $9,01,440$ |
| No. of Equity shares | $1,50,000$ | 60,000 |
| Intrinsic value of a share | Rs 18.1952 | Rs 15.024 |
| No of shares to be issued by W. Ltd to |  |  |
| T. Ltd (1,50,000 $\times 18.1952 / 10)$ | $2,72,928$ shares |  |
| V. Ltd $(60,000 \times 15.024 / 10)$ |  | 90,144 shares |

In total 2,72,928 + 90,144 i.e. 3,63,072 shares will be issued by W. Ltd.

## Ratio of exchange of shares will be as follows:

1. Holders of $1,50,000$ equity shares of TLtd. will get $2,72,928$ shares in W. Ltd.
2. Similarly, holders of 60,000 equity shares of $V$ Ltd. will get 90,144 shares in W. Ltd.
(b) Opening Balance Sheet of W. Ltd.

| Particulars | Note No. | (Rs) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| Share Capital | 1 | $36,30,720$ |
| (2) Current Liabilities |  |  |
| Trade payables [3,00,000 + 1,50,000] |  | $4,50,000$ |
| Provision for tax (4,800 +14,400) |  | 19,200 |
| Total |  | $40,99,920$ |
| II. Assets |  |  |
| (1) Non-current assets | 2 | $15,00,000$ |
| (a) Fixed assets | 4 | $4,51,920$ |
| i. Tangible assets |  | $3,00,000$ |
| ii. Intangible assets |  | $10,38,000$ |
| (b) Non-current investments |  | $6,90,000$ |
| (2) Current assets |  | $1,20,000$ |
| (a) Inventories [6,12,000+4,26,000] |  | $40,99,920$ |
| (b) Trade receivables [5,10,000 + 1,80,000] |  |  |
| (c) Cash and cash equivalents [90,000 + 30,000] |  |  |
| Total |  |  |

Notes to Accounts

|  |  | (Rs) |
| :--- | :--- | :---: |
| 1. | Share Capital |  |
| Equity share capital | $36,38,400$ |  |
| $3,63,840$ Equity shares of Rs 10 each |  |  |
| (Issued for consideration other than cash, pursuant to <br> scheme of amalgamation) |  |  |
| 2. | Tangible Assets | $15,00,000$ |
| Other Fixed Assets (Rs 12,00,000+Rs 3,00,000) |  |  |
| 3. | Intangible assets | $4,51,920$ |
| Goodwill (W.N.2) (Rs 3,22,080 +Rs 1,29,840) |  |  |
| 4. | Non-current investments | $3,00,000$ |
| $6 \%$ Investments |  |  |

## Working Notes:

1. Calculation of closing trading capital employed on the basis of net assets

|  | T. Ltd. Rs | V. Ltd. Rs |
| :--- | :---: | :---: |
| Fixed Assets | $12,00,000$ | $3,00,000$ |
| Inventory | $6,12,000$ | $4,26,000$ |
| Trade receivables | $5,10,000$ | $1,80,000$ |
| Cash and Bank Balances | 90,000 | 30,000 |
|  | $24,12,000$ | $9,36,000$ |

[^3]| Less: Trade payables | $(3,00,000)$ | $(1,50,000)$ |
| :--- | :---: | :---: |
| Tax provision on appreciation in inventory | $(4,800)$ | $(14,400)$ |
| Net Assets | $21,07,200$ | $7,71,600$ |

2. Calculation of value of goodwill

|  |  | T. Ltd. Rs | V. Ltd. Rs |
| :---: | :---: | :---: | :---: |
| (i) | Average Trading Profit |  |  |
| 2013-2014 |  | 3,90,000 | 1,35,000 |
| 2014-2015 |  | 3,75,000 | 1,20,000 |
| 2015-2016 |  | 4,50,000 | 1,68,000 |
| Profit after tax |  | 12,15,000 | 4,23,000 |
| Profit before tax @ 40\% |  | 20,25,000 | 7,05,000 |
| Add: Under valuation of closing inventory |  | 12,000 | 36,000 |
|  |  | 20,37,000 | 7,41,000 |
| Average of 3 years' profit before tax |  | 6,79,000 | 2,47,000 |
| Less: Income from non-trade investments (Rs $3,00,000 \times 6 \%$ ) |  | $(18,000)$ | - |
| Average profit before tax |  | 6,61,000 | 2,47,000 |
| Less: 40\% tax |  | $(2,64,400)$ | $(98,800)$ |
| Average profit after tax |  | 3,96,600 | 1,48,200 |
| (ii) | Super Profits |  |  |
| Average trading profit |  | 3,96,600 | 1,48,200 |
| Less: Normal Profit |  |  |  |
| T. Ltd. Rs 21,07,200 $\times 15 \%$ |  | $(3,16,080)$ |  |
| V. Ltd Rs 7,71,600 $\times 15 \%$ |  |  | $(1,15,740)$ |
| Super Profit |  | 80,520 | 32,460 |
| (iii) | Value of goodwill at 4 year s' purchase of super profits | 3,22,080 | 1,29,840 |

Note: It is assumed that investments are made before 2013-2014.

## Q21. (PM)

The summarised Balance Sheets of R Ltd. and P Ltd. for the year ending on 31.3.2016 are as under:

|  | R Ltd. | P Ltd. |  | R Ltd. | P Ltd. |
| :--- | :---: | :---: | :--- | :---: | :---: |
|  | Rs | Rs |  | Rs | Rs |
| Equity share Capital <br> (in shares of Rs 10 <br> each) | $24,00,000$ | $12,00,000$ | Fixed Assets | $55,00,000$ | $27,00,000$ |
| $8 \%$ Preference Share <br> Capital (in shares of <br> Rs 10 each) | $8,00,000$ | - | Current <br> Assets | $25,00,000$ | $23,00,000$ |
| $10 \%$ Preference <br> Share Capital (in <br> shares of Rs 10 each) | - | $4,00,000$ |  |  |  |
| Reserves | $30,00,000$ | $24,00,000$ |  |  |  |
| Current Liabilities | $18,00,000$ | $10,00,000$ |  |  |  |
|  | $80,00,000$ | $50,00,000$ |  | $80,00,000$ | $\overline{50,00,000}$ |

The following information is provided:
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|  |  | R Ltd. | P Ltd. |
| :--- | :--- | :---: | :---: |
| (1) | Profit before tax | Rs | Rs |
| (b) | Taxation | $10,64,000$ | $4,80,000$ |
| (c) | Preference dividend | $4,00,000$ | $2,00,000$ |
| (d) | Equity dividend | 64,000 | 40,000 |

1. The equity shares of both the companies are quoted in the market. Both the companies are carrying on similar manufacturing operations.
2. R Ltd. proposes to absorb P Ltd. as on 31.3.2016. The terms of absorption are as under:
(a) Preference shareholders of $P$ Ltd. will receive $8 \%$ preference shares of $R L t d$. sufficient to increase the income of preference shareholders of $P$ Ltd. by $10 \%$.
(b) The equity shareholders of $P$ Ltd. will receive equity shares of $R$ Ltd. on the following basis:
(i) The equity shares of $P$ Ltd. will be valued by applying to the earnings per share of P Ltd. 75\% of price earnings ratio of R Ltd. based on the results of 20152016 of both the companies.
(ii) The market price of equity shares of $R L+d$. is 40 per share.
(iii) The number of shares to be issued to the equity shareholders of $P$ Ltd. will be based on the above market value.
(iv) In addition to equity shares, $8 \%$ preference shares of $R L t d$. will be issued to the equity shareholders of $P$ Ltd. to make up for the loss in income arising from the above exchange of shares based on the dividends for the year 2015-2016.
(a) The assets and liabilities of P Ltd. as on 31.3.2016 are revalued by professional valuer as under:

|  | Increased by Rs | Decreased by Rs |
| :--- | :---: | :---: |
| Fixed Assets | $1,00,000$ | - |
| Current Assets | - | $2,00,000$ |
| Current Liabilities | - | 40,000 |

For the next two years, no increase in the rate of equity dividend is expected.
You are required to:
(i) Set out in detail the purchase consideration.
(ii) Give the Balance Sheet as on 31.3.2016 after absorption.

Note: Journal entries are not required.

## Answer

(i) Computation of Purchase Consideration

|  |  |
| :--- | :---: |
| (a) | Preference Shareholders |
| Current income of preference shareholders of P Ltd. | 40,000 |
| Add: $10 \%$ increase thereof | 4,000 |
|  |  |
| Preference shares to be issued $=44,000 \times 100 \div 8$ | 5,000 |
| (b) $\quad$ Equity Shareholders |  |
| (1) Issue of Equity Shares |  |
| Profit before tax of R Ltd. | $10,64,000$ |
| Less: Tax | $(4,00,000)$ |

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|  | $6,64,000$ |
| :--- | :--- |
| Less: Preference dividend | $(64,000)$ |
| Profit available for equity shareholders of R Ltd. | $6,00,000$ |

Basic EPS = Earnings available for Shareholders / Average no. of shares
Earnings per share (EPS) $=6,00,000 \div 2,40,000=$ Rs 2.50
PE Ratio = Marke + Price $/$ EPS
Price earnings ratio $(P / E)=40 / 2.50=16$
EPS of $P$ Ltd.

|  |  |
| :--- | ---: |
| Profit before tax | Rs |
| Less: Tax | $4,80,000$ |
| Profit after tax | $(2,00,000)$ |
| Less: Preference dividend | $2,80,000$ |
| Profit available for equity shareholders | $(40,000)$ |

$$
\text { EPS }=2,40,000 / 1,20,000=\text { Rs } 2
$$

Valuation of equity shares of $P$ Ltd.

$$
=1,20,000 \text { shares } \times(\text { Rs } 2 \times 16 \times 0.75 \text { i.e. Rs } 24)=\text { Rs } 28,80,000
$$

Number of equity shares to be issued $=28,80,000 / 40=72,000$

|  | Rs |
| :---: | :---: |
| (1) Equity Share Capital | 7,20,000 |
| Securities Premium | 21,60,000 |
| 28,80,000 |  |
| (2) Issue of Preference Shares to make up loss to equity shareholders | Rs |
| Current equity dividend | 1,92,000 |
| Less: Expected equity dividend from $R$ Ltd. i.e. in proportion of the existing dividend policy (Rs $7,20,000 \times 2,88,000 / 24,00,000$ ) | $(86,400)$ |
| Loss in income | 1,05,600 |
| (i) 8\% Preference Shares to be issued $=1,05,600$ / $0.08=\text { Rs 13,20,000 }$ |  |
| Total Purchase Consideration: | Rs |
| Preference shares to be issued 5,50,000 |  |
| 13,20,000 | 18,70,000 |
| Equity shares to be issued (at premium) | 28,80,000 |
|  | 47,50,000 |

(ii) R Ltd.

Balance Sheet as at 31st March, 2016 (after absorption)

| Particulars | Note No. | Amount (Rs) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $57,90,000$ |
| (b) Reserves and Surplus | 2 | $51,60,000$ |
| (2) Current Liabilities | 3 | $27,60,000$ |
| Total |  | $1,37,10,000$ |
| II. Assets |  |  |

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| (1) Non-current assets |  |  |
| :--- | :---: | :---: |
| (a) Fixed assets |  |  |
| i. Tangible assets | 4 | $83,00,000$ |
| ii. Intangible assets | 5 | $8,10,000$ |
| (2) Current assets | 6 | $46,00,000$ |
| Total |  | $1,37,10,000$ |

Notes to Accounts

|  | (Rs ) | (Rs) |
| :---: | :---: | :---: |
| 1. Share Capital |  |  |
| $3,12,000$ Equity Shares of Rs 10 each (of the above shares, 72,000 Equity shares are allotted as fully paid up for consideration other than cash) | 31,20,000 |  |
| $2,67,0008 \%$ Preference Shares of Rs 10 each (of the above, $1,87,000$ are allotted as fully paid up for consideration other than cash) | 26,70,000 | 57,90,000 |
| 2. Reserves and surplus |  |  |
| Reserves (As per last Balance Sheet) | 30,00,000 |  |
| Securities Premium | 21,60,000 | 51,60,000 |
| 3. Current Liabilities |  |  |
| As per last balance sheet | 18,00,000 |  |
| Taken over on absorption of P Ltd. Rs (10,00,00040,000) | 9,60,000 | 27,60,000 |
| 4. Tangible Assets |  |  |
| As per last Balance Sheet | 55,00,000 |  |
| Taken over on absorption of P Ltd. | 28,00,000 | 83,00,000 |
| 5. Intangible assets |  |  |
| Goodwill (See Working Note) | 8,10,000 |  |
| 6. Current Assets |  |  |
| As per last Balance Sheet | 25,00,000 |  |
| Taken over on absorption of P Ltd. Rs (23,00,0002,00,000) | 21,00,000 | 46,00,000 |

## Working Note:

Calculation of Goodwill on Absorption

|  | Rs |  |
| :--- | :---: | :---: |
| Purchase consideration |  | $47,50,000$ |
| Fixed assets taken over $[27,00,000+1,00,000]$ | $28,00,000$ |  |
| Current assets taken over $[23,00,000-2,00,000]$ | $21,00,000$ |  |
| $49,00,000$ |  |  |
| Less: Current liabilities $[10,00,000-40,000]$ | $(9,60,000)$ |  |
| Net assets taken over |  | $(39,40,000)$ |
| Goodwill |  | $8,10,000$ |$\quad$ P.C. 47,50,000; Goodwill 8,10,000; $\quad$ Balance $\quad$ Sheet Total

## AMALGAMATION IN THE NATURE OF MERGAR

Q22.
Long Ltd. and Short Ltd. were amalgamated on and from 1st April, 1999. A new company Moderate Ltd. was formed to take over the business of the existing companies. The balance sheets of Long Ltd. and Short Ltd as on 31st March, 1999 are given below:
Equity \& Liabilities
Shareholders Fund:
Share Capital:
Equity shares of Rs. 100 each 850
$14 \%$ Pref. Shares of Rs. 100 each 320 175
Reserves and Surplus:
Revaluation reserve 12580
General Reserve 240160
Investment Allowance Reserve 5030
Profit \&Loss A/c 75

## Non-Current Liabilities:

$13 \%$ debentures (Rs. 100 each) 28
Unsecured Loan:
Public deposits 25
Current Liabilities:
Sundry Creditors $145 \quad 75$
Bill Payable 20

Non Current Assets: Long Ltd. Short Ltd.
Fixed assets:
Land \& Building 460275
Plant \& Machinery 325
Investments 750

| Current Assets: |  |  |
| :--- | :--- | :--- |
| Stock | 325 | 269 |

Sundry Debtors 305
Bills receivable 25
Cash and Bank 385251
19,00 13,25

## Other information:

1. $13 \%$ Debenture holders of Long Ltd. and Short Ltd. are discharged by Moderate Ltd. by issuing such number of its $15 \%$ Debentures of Rs. 100 each so as to maintain the same amount of interest.
2. Preference shareholders of the two companies are issued equivalent number of $15 \%$ preference shares of Moderate Ltd. at a price of Rs. 125 per share (face value Rs. 100).
3. Moderate Ltd. will issue 4 equity shares for each equity share of Long Ltd. and 3 equity shares for each equity share of Short Ltd. The shares are to be issued @ Rs. 35 each, having a face value of Rs. 10 per share.
4. Investment allowance reserve is to be maintained for two more years.

Prepare the balance sheet of Moderate Ltd. as on 1st April, 1999 after the amalgamation has been carried out on the basis of the following assumption:
(a) Amalgamation is in the nature of merger.
(b) Amalgamation is in the nature of purchase.
(Ans : Balance Sheet Total (i) 32.25 (ii) 33.05; P.C. Long Ltd. 1,590; Short Ltd. 980)

## AMALGAMATION - INTER COMPANY HOLDINGS, CROSS

## HOLDINGS, COMPLEX HOLDINGS:

Q23.
No. of Shares
Holding of

Intrinsic Value
Calculate Purchase Consideration.

|  | Old Co. | New Co. |
| :--- | ---: | ---: |
|  | 40,000 | 50,000 |
| Old Co. | - | 5,000 |
| New Co. | 4,000 | - |
|  | 20 | 15 |

(Ans.: Purchase Consideration Rs. 7,40,000/-: Payment to be discharged Rs. 6,40,000/-.)

Q24. (PM - Two Transferor companies holding shares in each other)
$A B L t d$. and $M B L t d$. decide to amalgamate and to form a new company $A M L t d$. The following are their summarised balance sheets as at 31.3.2017: (Rs)

| Liabilities | AB Ltd. | MB Ltd. | Assets | AB Ltd. | MB Ltd. |
| :--- | :---: | :---: | :--- | :--- | :--- |
| Share Capital |  |  | Fixed Assets | $7,50,000$ | $2,00,000$ |
| (Rs 100) each | $10,00,000$ | $6,00,000$ | Investments: |  |  |
| General Reserve | $1,00,000$ | 50,000 | 1,500 Shares in <br> MB | $3,50,000$ | - |
| Investment <br> Allowance |  | 4,000 Shares in <br> AB | - | $5,00,000$ |  |
| Reserve | 40,000 | 30,000 |  | Current Assets | $4,00,000$ |
| $12 \%$ <br> Debentures |  | $1,00,000$ |  |  |  |
| (Rs 100 each) | $3,00,000$ | $1,00,000$ |  |  |  |
| Trade payables | 60,000 | 20,000 |  |  |  |

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|  |  |  |  | - |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $15,00,000$ | $8,00,000$ |  | $15,00,000$ | $\overline{8,00,000}$ |

Calculate the amount of purchase consideration for $A B$ Ltd. and MB Ltd. and draw up the balance sheet of AM Ltd. after considering the following:
(a) Assume amalgamation is in the nature of purchase.
(b) Fixed assets of AB Ltd. are to be reduced by Rs 50,000 and that of MB Ltd. are to be taken at Rs 3,00,000.
(c) $12 \%$ debenture holders of $A B L+d$. and MB Ltd. are discharged by $A M L+d$. by issuing such number of its $15 \%$ debentures of RS 100 each so as to maintain the same amount of interest.
(d) Shares of AM Ltd. are of Rs 100 each.

Also show, how the investment allowance reserve will be treated in the Financial Statement assuming the Reserve will be maintained for 3 years.

## Answer

## Calculation of Purchase consideration

(i) Value of Net Assets of AB Ltd. and MB Ltd. as on 31st March, 2017

|  | AB Ltd. |  | MB Ltd. |  |
| :--- | :--- | :--- | :--- | :--- |
|  | (Rs) |  | (Rs) |  |
| Assets taken over: |  |  |  |  |
| Fixed Assets | $7,00,000$ |  |  | $3,00,000$ |
| Current Assets | $4,00,000$ | $11,00,000$ | $1,00,000$ | $4,00,000$ |
| Less: Liabilities taken over: |  |  |  |  |
| Debentures (WN) | $2,40,000$ |  |  | 80,000 |
| Trade payables | 60,000 | $(3,00,000)$ | 20,000 | $(1,00,000)$ |
| $8,00,000$ |  |  | $3,00,000$ |  |

(ii) Value of Shares of AB Ltd. and MB Ltd.
$A B L t d$. holds 1,500 shares in MB Ltd. i.e. $1 / 4$ th of the shares of $M B L t d$.
The value of shares of $A B$ Ltd. is Rs $8,00,000$ plus $1 / 4$ of the value of the shares of MB LTd.
MB Ltd. holds 4,000 shares in AB Ltd. i.e. 2/5th of the shares of $A B L+d$.
Similarly, the value of shares of MB Ltd. is Rs $3,00,000$ plus $2 / 5$ of the value of shares of AB Ltd.
Let ' $a$ ' denote the value of shares of $A B L+d$. and ' $m$ ' denote the value of shares of MB Ltd. then
$a=8,00,000+1 / 4 \mathrm{~m}$; and
$m=3,00,000+2 / 5 a$.
Substituting the value of $m$,

$$
\begin{aligned}
& a=8,00,000+1 / 4(3,00,000+2 / 5 a) \\
& a=8,00,000+75,000+1 / 10 a \\
& 9 / 10 a=8,75,000 \\
& a=9,72,222 \\
& m=3,00,000+2 / 5(9,72,222) \\
& m=6,88,889
\end{aligned}
$$

(iii) Amount of Purchase Consideration

|  | AB Ltd. | MB Ltd. |
| :--- | :---: | :---: |
|  | Rs | Rs |
| Total value of shares (as determined above) | $9,72,222$ | $6,88,889$ |
| Less: Internal investments: |  |  |
| $2 / 5$ for shares held by MB Ltd. |  | $(3,88,889)$ |
| $1 / 4$ for shares held by $A B$ Ltd. | $\overline{5,83,333}$ | $(1,72,222)$ |
| Amount due to outsiders | $5,16,667$ |  |

Purchase Consideration will be satisfied by AM Ltd. as follows:

|  | AB Ltd. | MB Ltd. |
| :--- | :---: | :---: |
|  | Rs | Rs |
| In shares (of Rs 100 each) | $5,83,300$ | $5,16,600$ |
| In cash | 33 | 67 |

(iv) Net Amount of Goodwill/Capital Reserve

|  | Rs | Rs |
| :--- | :---: | :---: |
| Total Purchase Consideration |  |  |
| AB Ltd. | $5,83,333$ |  |
| MB Ltd. | $5,16,667$ | $11,00,000$ |
| Less: Net Assets taken over | $8,00,000$ |  |
| AB Ltd. | $3,00,000$ | $(11,00,000)$ |
| MB Ltd. |  |  |
| Nil |  |  |

(Alternatively, the calculations may be made separately for both the companies)
Balance Sheet of AM Ltd. as at 31st March, 2017

| Particulars | Note No. | Amount (Rs) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $10,99,900$ |
| (b) Reserves and Surplus | 2 | Nil |
| (2) Non-Current Liabilities |  |  |
| Long-term borrowings |  | $3,20,000$ |
| (3) Current Liabilities |  |  |
| Trade payables |  | 80,000 |
| Total |  | $14,99,900$ |
| II. Assets |  |  |
| (1) Non-current assets | 4 | $10,00,000$ |
| (a) Fixed assets |  | $14,99,900$ |
| (2) Current assets |  |  |
| Total |  |  |

## Notes to Accounts

| Share Capital |  | (Rs) | (Rs) |
| :--- | :--- | :---: | :---: |
| 10,999 shares of Rs 100 each (All the above shares are |  | $10,99,900$ |  |
| allotted as fully paid- up for consideration other than |  |  |  |
| cash) |  |  |  |

[^4]| 2. | Reserves and surplus |  |  |
| :--- | :--- | :---: | :---: |
| Investment Allowance Reserve |  | 70,000 |  |
| Amalgamation Adjustment Reserve | $(70,000)$ | Nil |  |
| 3. | Long Term Borrowings |  |  |
| $15 \%$ Debentures (W.N.) |  | $3,20,000$ |  |
| 4. | Current assets [4,00,000 $+1,00,000]$ | $5,00,000$ |  |
| Less: Purchase consideration paid in cash Rs (33+67) |  |  |  |

## Working Note:

Calculation of Debentures to be issued

|  | AB Ltd. | MB Ltd. |
| :--- | :---: | :---: |
| 12\% Debentures | $3,00,000$ | $1,00,000$ |
| Interest on Debentures @ 12 \% (a) | 36,000 | 12,000 |
| AM Ltd. Debentures rate of interest (b) | $15 \%$ | $15 \%$ |
| Debenture Value to earn above calculated interest (a/b) | $2,40,000$ | 80,000 |

Q25. (PM)
The following are the summarized Balance Sheets of $X$ Ltd. and $Y \operatorname{Ltd}$. as on 31stMarch, 2017:

|  | Amount in Rs |  |
| :--- | :---: | :---: |
|  | X Ltd. | Y Ltd. |
| Assets |  |  |
| Fixed Assets | $7,00,000$ | $2,50,000$ |
| Inventory | $2,40,000$ | $3,20,000$ |
| Trade receivables | $4,20,000$ | $2,10,000$ |
| Cash at Bank | $1,10,000$ | 40,000 |
| Investments in: |  |  |
| 6,000 shares of Y Ltd. | 80,000 | - |
| 5,000 shares of X Ltd. | - | 80,000 |
|  | $15,50,000$ | $9,00,000$ |
| Liabilities |  |  |
| Share Capital: | $6,00,000$ | $3,00,000$ |
| Equity shares of Rs 10 each | $2,00,000$ | $1,00,000$ |
| $10 \%$ preference shares of Rs 10 each | $3,00,000$ | $2,00,000$ |
| Reserve and Surplus | $2,00,000$ | $1,50,000$ |
| $12 \%$ Debentures | $2,50,000$ | $1,50,000$ |
| Trade payables | $15,50,000$ | $9,00,000$ |
|  |  |  |

Details of Trade payables and Trade receivables:

|  | X Ltd. | Y Ltd. |
| :--- | :---: | :---: |
| Trade payables |  |  |
| Bills Payable | 30,000 | 25,000 |
| Sundry creditors | $2,20,000$ | $1,25,000$ |
|  | $2,50,000$ | $1,50,000$ |
| Trade receivables | $3,60,000$ | $1,90,000$ |
| Debtors |  |  |

[^5]| Bills Receivables | 60,000 | 20,000 |
| :--- | :---: | :---: |
|  | $4,20,000$ | $2,10,000$ |

Fixed assets of both the companies are to be revalued at $15 \%$ above book values and inventory and debtors are to be taken over at $5 \%$ less than their book values. Both the companies are to pay $10 \%$ equity dividends, preference dividends having been paid already. After the above transactions are given effect to, X Ltd. will absorb Y Ltd. on the following terms:
(i) 8 Equity shares of Rs 10 each will be issued by $X$ Ltd. at par against 6 shares of $Y$ Ltd.
(ii) $10 \%$ preference shares of $Y$ Ltd. will be paid off at $10 \%$ discount by issue of $10 \%$ preference shares of Rs 100 each of $X L+d$. at par.
(iii) $12 \%$ Debenture holders of $Y \operatorname{Ltd}$. are to be paid off at a $8 \%$ premium by $12 \%$ debentures in $\times L t d$. issued at a discount of $10 \%$.
(iv) Rs 30,000 to be paid by $X L t d$. to $Y$ Ltd. for liquidation expenses.
(v) Creditors of Y Ltd. include Rs 10,000 due to X Ltd.

Prepare:
(a) A statement of purchase consideration payable by $X L+d$.
(b) A Balance Sheet of $X$ Ltd. after its absorption of $Y$ Ltd.

## Answer

Total No. of shares of X Ltd. $=6,00,000 / 10=60,000$ shares
$X$ Ltd's shares held by Y Ltd. $\quad=5,000$ shares
Total No. of shares of Y Ltd. $=3,00,000 / 10=30,000$ shares
Y Ltd's shares held by X Ltd. $\quad=6,000$ shares
Hence, $X$ Ltd. hold's $1 / 5$ th $(6,000 / 30,000)$ of $Y$ Ltd.'s total shares
(a) Statement of Purchase Consideration payable by $X$ Ltd.
i. For Equity Shareholders

8 Equity Shares of $X$ Ltd. for every 6 Equity Shares of Y Ltd. 30,000 shares $6 / 8 x=40,000$ shares
Less:1/5th Share of $X$ Ltd.
$(8,000)$ shares
Balance for outsiders 32,000 shares
Less: 5,000 Shares of $X$ Ltd. already with Y Ltd. $(5,000)$ shares Shares to be issued

27,000 shares
Value of 27,000 equity shares at Rs 10 Rs 2,70,000
ii. For Preference Shareholders

| Preference Share Capital of Y Ltd. | Rs $1,00,000$ |
| :--- | :---: |
| Less: $10 \%$ Discount | Rs 10,000 |
| XLtd.'s Preference shares to be issued | Rs 90,000 |

Total Purchase Consideration

| Particulars | Numbers | Amount |
| :--- | :---: | :---: |
| Equity Shares @ Rs 10 each | 27,000 | Rs 2,70,000 |
| Preference Shares @ Rs 100 each | 900 | Rs 90,000 |
| Total Purchase Consideration |  | Rs 3,60,000 |

(b) Balance Sheet of X Ltd. after its absorption of Y Ltd.

| Particulars | Note No. | Rs |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $11,60,000$ |

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| (b) Reserves and Surplus | 2 | $3,57,000$ |
| :--- | :---: | :---: |
| (2) Non-Current Liabilities |  |  |
| Long-term borrowings | 3 | $3,80,000$ |
| (3) Current Liabilities | 4 | $3,90,000$ |
| Trade payables |  | $22,88,000$ |
| Total |  |  |
| II. Assets |  |  |
| (1) Non-current assets |  | $10,92,500$ |
| (a) Fixed assets [7,00,000 $\times 115 \%+2,87,500]$ |  |  |
| (2) Current assets | 5 | $6,44,000$ |
| (a) Inventories (2,40,000 + 3,04,000) | 6 | 41,000 |
| (b) Trade receivables |  | $22,88,000$ |
| (c) Cash and cash equivalents |  |  |
| Total |  |  |

## Notes to Accounts

|  |  | Rs | Rs |
| :---: | :---: | :---: | :---: |
| 1. | Share Capital |  |  |
| Equity share capital |  |  |  |
| $87,000(60,000+27,000)$ Equity shares of Rs 10 each, fully paid up (Out of the above, 27,000 equity shares have been issued for consideration other than cash) |  | 8,70,000 |  |
| 20,000 10\% Preference shares of Rs 10 each |  | 2,00,000 |  |
| $90010 \%$ Preference shares of Rs 100 each |  | 90,000 | 11,60,000 |
| 2. | Reserves and Surplus |  |  |
| Revaluation Reserve [15 \% of Rs 7,00,000] |  | 1,05,000 |  |
| Capital Reserve (W. N.1) |  | 25,000 |  |
| Other Reserves (W.N.4) |  | 2,46,000 |  |
| Discount on issue of Debentures [W.N. 5, Calculation (C)] |  | $(18,000)$ | 3,57,000 |
| 3. | Long Term Borrowings |  |  |
| Secured (assumed) |  |  |  |
| 12\% Debentures Existing <br> Add: Issued to Y Ltd. [W.N. 5, Calculation (B)] |  | $\begin{aligned} & 2,00,000 \\ & 1,80,000 \end{aligned}$ | 3,80,000 |
| 4. | Trade payables |  |  |
| Creditors (2,20,000 + 1,25,000-10,000) |  | 3,35,000 |  |
| Bills Payable ( $30,000+25,000$ ) |  | 55,000 | 3,90,000 |
| 5. | Trade receivables |  |  |
| Debtors (3,60,000 + 1,80,500-10,000) |  | 5,30,500 |  |
| Bills Receivable ( $60,000+20,000$ ) |  | 80,000 | 6,10,500 |
| 6. | Cash \& cash equivalents |  |  |
| Cash at Bank (W.N. 3) |  |  | 41,000 |

## Working Notes:

1. Calculation of Capital Reserve

Net Assets taken over from Y Ltd.

| Fixed Assets (Rs 2,50,000 $\times 115 \%$ ) | 2,87,500 |
| :---: | :---: |
| Inventory (Rs 3,20,000 $\times 95 \%$ ) | 3,04,000 |
| Debtors (Rs 1,90,000 $\times 95 \%$ ) | 1,80,500 |
| Bills Receivable | 20,000 |
| Cash at Bank (W.N. 2) | 15,000 |
| Total Assets (A) | 8,07,000 |
| Liabilities taken over: |  |
| Debentures [W.N. 5, Calculation (A)] | 1,62,000 |
| Creditors | 1,25,000 |
| Bills Payable | 25,000 |
| Total Liabilities (B) | 3,12,000 |
| Net Asset taken over ( $A-B$ ) | 4,95,000 |
| Less: Investment cancelled (i.e. 5,000 shares held in $\times$ Ltd.) | $(80,000)$ |
|  | 4,15,000 |
| Purchase Consideration | $(3,60,000)$ |
| Capital Reserve | 55,000 |
| Less: Liquidation expenses reimbursed to Y Ltd. | $(30,000)$ |
| Capital Reserve | 25,000 |

2. Cash taken over from Y Ltd.

|  | Rs |
| :--- | :---: |
| Cash balance given in Balance Sheet of Y Ltd. | 40,000 |
| Add: Dividend received from $\times$ Ltd. (5,000 shares $\times$ Rs 1) | 5,000 |
|  | 45,000 |
| Less: Dividend paid (30,000 shares $\times$ Rs 1) | $(30,000)$ |
|  | 15,000 |

3. Cash balance in Balance Sheet (after absorption)

|  | Rs |
| :--- | :---: |
| Cash balance given in Balance Sheet of X Ltd. | $1,10,000$ |
| Add: Cash taken over from Y Ltd. (W.N. 2) | 15,000 |
|  | $1,25,000$ |
| Less: Dividend paid Rs 60,000 |  |
| Expenses on liquidation RS 30,000 | $(90,000)$ |
|  | 35,000 |
| Add: Dividend from Y Ltd. | 6,000 |
|  | 41,000 |

4. Other Reserves in the Balance Sheet (after absorption)

|  | Rs |
| :--- | :---: |
| Reserves given in the Balance Sheet of $\times$ Ltd. | $3,00,000$ |
| Add: Dividend from Y Ltd. [6,000 shares $\times$ Rs 1$)$ | 6,000 |
|  | $3,06,000$ |
| Less: Dividend declared [60,000 shares $\times$ Rs 1$)$ | $(60,000)$ |
|  | $2,46,000$ |

5. Debenture Holders Payment

| Debenture Holders of Y Ltd. | Rs $1,50,000$ |
| :--- | :--- |
| Add: Premium @ 8 \% | Rs 12,000 |


| Value of Debenture Holder Liability taken over by $X$ Ltd. (A) | Rs 1,62,000 |
| :--- | :--- |
| Issue Price of $X$ Ltd. Debentures @ $10 \%$ discount $[(A) / 90 \%]$ <br> $(B)$ | Rs 1,80,000 |
| Discount on Issue of Debentures (C) | Rs 18,000 |

6. Inter-company transactions

Creditors of Y Ltd. include Rs 10,000 due to X Ltd.
Therefore, journal entry in the books of $X$ Ltd. will be
Creditors A/c
Dr.
10,000
To Debtors A/c
10,000

Q26. (PM)
The following are the Balance Sheets of Big Ltd. and Small Ltd. as at 31.3.2017:
(Rs in lakhs)

|  | Big Ltd. | Small Ltd. |  | Big Ltd. | Small Ltd. |
| :--- | :---: | :---: | :--- | :---: | :---: |
|  | Rs | Rs |  | Rs | Rs |
| Share Capital | 40 | 15 | Sundry Assets <br> (including cost <br> of shares) | 56 | 20 |
| Profit \& Loss A/c | 7.5 | -- | Goodwill | 4 | 5 |
| Sundry Creditors | 12.5 | 12.5 | Profit and Loss <br> A/c | -- | 2.5 |
|  | 60.0 | 27.5 |  | 60.0 | 27.5 |

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

You are required to:
(ii) Prepare the Balance Sheet of Medium Ltd., as at 31st March, 2017 after giving effect to the above transactions; and
(iii)Prepare a statement showing the shareholdings in the new company attributable to the shareholders of the merged companies.

## Answer

(i)

Balance Sheet of Medium Ltd. as on 31st March, 2017

| Particulars | Note No. | (Rs ) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| Share Capital | 1 | $45,50,000$ |
| (2) Current Liabilities |  |  |
| Trade Payables |  | $25,00,000$ |

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| Total |  | $70,50,000$ |
| :--- | :---: | :---: |
| II. Assets |  |  |
| (1) Non-current assets |  |  |
| Fixed assets |  |  |
| Intangible assets | 2 | $4,00,000$ |
| (2) Current assets (Rs 53,50,000+ Rs 13,00,000) |  | $66,50,000 *$ |
| Total |  | $70,50,000$ |

## Notes to Accounts:

| Share Capital |  | (Rs in crores) |
| :--- | :--- | :---: |
| 1. | Share |  |
| $1,82,000$ shares of Rs 50 each, Rs 25 paid up | $45,50,000$ |  |
| [Issued for consideration other than cash] |  |  |
| 2. | Intangible Assets | $4,00,000$ |
| Goodwill (Rs $1,50,000+$ Rs $2,50,000$ ) |  |  |

(ii) Statement of Shareholding in Medium Ltd.

|  | Big Ltd. Rs | Small Ltd. Rs |
| :--- | :---: | :---: |
| Total value of Assets | $44,20,513$ | $8,52,564$ |
| Less: Pertaining to shares held by the other company | $5,52,564$ | $1,70,513$ |
|  | $38,67,949$ | $6,82,051$ |
| Rounded off | $38,67,950$ | $6,82,050$ |
| Shares of new company (at Rs 25 per share) | $1,54,718$ | 27,282 |
| Total purchase consideration to be paid to Big Ltd and Small Ltd. | Rs $45,50,000$ |  |
| (Rs 38,67,950 +Rs 6,82,050) |  |  |
| Number of shares in Big Ltd. (40,00,000/100) | 40,000 shares |  |
| Number of shares in Small Ltd. (15,00,000/30) | 50,000 shares |  |
| Holding of Small Ltd. in Big Ltd. (5,000/40,000) | $1 / 8$ |  |
| Holding of Big Ltd. in Small Ltd. (10,000/50,000) | $1 / 5$ |  |
| Number of shares held by outsiders in Big Ltd. (40,000-5,000)= | 35,000 |  |
| Number of shares held by outsiders in Small L+d. ( $50,000-10,000)$ | 40,000 |  |

* Sundry assets are assumed to be current assets.


## Working Note:

Calculation of Book Value of Shares
$\left.\begin{array}{|l|c|c|}\hline & \text { Big Ltd } & \text { Small Ltd. } \\ \hline & \text { Rs } & \text { Rs } \\ \hline \text { Goodwill } & 1,50,000 & 2,50,000 \\ \hline \begin{array}{l}\text { Sundry Assets other than shares in other } \\ \text { company }\end{array} & & \\ \hline(56,00,000-2,50,000) & 53,50,000 & 13,00,000 \\ (20,00,000-7,00,000)\end{array}\right)$

If " $x$ " is the Book Value of Assets of Big Ltd and " $y$ " of Small Ltd.
$x \quad=42,50,000+1 / 5 y$
$y=3,00,000+1 / 8 x$
$x=42,50,000+1 / 5(3,00,000+1 / 8 x)$
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$$
\begin{aligned}
& \quad=42,50,000+60,000+1 / 40 \times \\
& \quad=43,10,00039 \times 40 \\
& x=39 / 40 x=43,10,000 \\
& x=44,20,513 \text { (approx.) } \\
& y=3,00,000+\text { ) } 44,20,513(81 \\
& =3,00,000+5,52,564=\operatorname{Rs} 8,52,564 \text { (approx.) }
\end{aligned}
$$

Book Value of one share of Big Ltd. $=44,20,513 / 40,000=$ Rs 110.513 (approx.)
Book Value of one share of Small Ltd. $=8,52,564 / 50,000=$ Rs17.05 (approx.)

## SPECIAL QEUSTIONS:

## Q27. (PM)

The summarized Balance sheets of $X L+d$. and its subsidiary $Y$ Ltd. as at 31.3 .2016 were as follows:

| Liabilities | X Ltd. Rs | Y Ltd. Rs | Assets | X Ltd. Rs | Y Ltd. Rs |
| :--- | :---: | :---: | :--- | :---: | :---: |
| Share capital | $50,00,000$ | $10,00,000$ | Fixed assets | $60,00,000$ | $18,00,000$ |
| (Share of Rs <br> 10 each) |  |  | Investment in <br> y <br> $(60,000 \quad$ Ltd. <br> shares | $6,00,000$ | --- |
| General <br> reserves | $50,00,000$ | $20,00,000$ | Trade <br> receivables | $35,00,000$ | $5,00,000$ |
| Profit and <br> Loss account | $20,00,000$ | $15,00,000$ | Inventories | $30,00,000$ | $25,00,000$ |
| Secured loan | $20,00,000$ | $2,50,000$ | Cash and bank | $39,00,000$ | $2,00,000$ |
| Current <br> liabilities | $30,00,000$ | $2,50,000$ |  |  |  |
|  | $1,70,00,000$ | $50,00,000$ |  | $1,70,00,000$ | $50,00,000$ |

$X$ 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 $\times \operatorname{Ltd}$. to the following effect:
(i) 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 Rs 12 lakhs, 18 lakhs and 24 lakhs respectively. (Average tax rate was $40 \%$ ).
(ii) The actual cost of shares to the foreign company was Rs $4,40,000$ 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.
(iii) For the balance of consideration, $\times$ Ltd. would issue its shares at their intrinsic value.

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

The entire arrangement was approved and put through by all concern effective from 1.4.2016.

You are required to prepare a Balance Sheet after absorption of $Y$ Ltd., in the books of $X$ Ltd. Workings should form part of your answer.

## Answer

X Ltd.Balance Sheet as at 1st April, 2016

| Particulars | Note No. | Amount (Rs) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $53,35,220$ |
| (b) Reserves and Surplus | 2 | $89,63,764$ |
| (2) Non-Current Liabilities | 3 |  |
| Long-term borrowings | 4 | $32,50,000$ |
| (3) Current Liabilities |  | $1,50,000$ |
| Total |  |  |
| II. Assets |  |  |
| (1) Non-current assets | 5 |  |
| (a) Fixed assets |  | $76,20,000$ |
| Tangible assets | 6 | $54,75,000$ |
| (2) Current assets | 7 | $39,00,000$ |
| (a) Inventories |  | $27,03,984$ |
| (b) Trade receivables |  | $1,96,98,984$ |
| (c) Cash and cash equivalents |  |  |
| Total |  |  |

## Notes to Accounts

|  |  | Rs | Rs |
| :--- | :--- | :---: | :---: |
| 1. | Share Capital |  |  |
| $5,33,522$ <br> 33,522 <br> shares of Rs 10 each issued for consideration <br> other than cash) |  | $53,35,220$ |  |
| 2. | Reserves and surplus |  |  |
| General Reserve | $50,00,000$ |  |  |
| Capital Reserve 13,20,000 |  |  |  |
| Less: unrealized profit on inventory (Rs 25,000) <br> Profit and Loss Account | $12,95,000$ |  |  |
| Securities Premium (Rs 33,522×19.95) | $20,00,000$ |  |  |
| 3. | Long Term Borrowings | $6,68,764$ | $89,63,764$ |
| Secured Loans (Rs 20,00,000 + Rs 2,50,000) |  |  |  |
| 4. | Current Liabilities |  | $22,50,000$ |


| (Rs 30,00,000 + Rs 2,50,000) |  | 32,50,000 |  |
| :---: | :---: | :---: | :---: |
| Less: Mutual owing |  | $(1,00,000)$ | 31,50,000 |
| 5. | Tangible Assets |  |  |
| Fixed Assets |  | 78,00,000 |  |
| Less: Revaluation loss |  | $(1,80,000)$ | 76,20,000 |
| 6. | Inventories (Rs 30,00,000+Rs 25,00,000) |  | 55,00,000 |
| Less: Unrealised profit on inventory |  | $(25,000)$ | 54,75,000 |
| 7. | Trade receivables |  |  |
| Trade receivables (Rs 35,00,000+Rs 5,00,000) |  | 40,00,000 |  |
| Less: Mutual owings |  | $(1,00,000)$ | 39,00,000 |

## Working Notes:

(1) Yield of Y Ltd.

Average of Pre Tax Profit $=12+18+24 / 3=$ Rs 18 lakhs
Yield $=18 \times 50 / 100=$ Rs 9 lakhs
(2) Price per share of $Y$ Ltd:-

Capitalized value of yield of Y Ltd. 9 lakhs $\times 100 / 15=$ Rs 60 lakhs
No. of shares $=1,00,000$
Price per share $=60$ lakhs $/ 1$ lakhs $=$ Rs 60 per share
(3) Purchase consideration for $40 \%$ of share capital of $Y$ Ltd.
$=1,00,000 \times 60 \times 40 / 100=$ Rs 24,000
(4) Calculation of intrinsic value of shares of $\times$ Ltd.

|  | Rs |  |
| :--- | :--- | :---: |
| Total Assets excluding Investments in Y Ltd. | $1,64,00,000$ |  |
| Value of Investment $60,000 \times$ Rs 60 |  | $36,00,000$ |
|  |  | $2,00,00,000$ |
| Less: Loading on Stock |  | $(25,000)$ |
| Less: Outside Liabilities: |  |  |
| Secured Loan | $20,00,000$ |  |
| Current Liabilities | $30,00,000$ | $(50,00,000)$ |
| Net Assets |  | $1,49,75,000$ |

Intrinsic value per share $=$ Net Assets $/$ No. of Shares $=$ Rs $1,50,000 / 5,00,000=$ Rs 29.95 per shares

* By setting the trend, weighted average profit can also be calculated.
(5) Discharge of purchase consideration by $\times$ Ltd.

|  |  | Equity share <br> capital Rs | Cash Rs | Total Rs |
| :--- | :--- | :---: | :---: | :---: |
| (i) | Payment of Tax (Rs 24 Lakh - Rs <br> 4.40 Lakh) $x=20 / 100$ | --- | $3,92,000$ | $3,92,000$ |
| (ii) | Issue of shares to foreign company |  |  |  |
|  | [50\% of (24 Lakh - 3.92 Lakh) $=$ <br> 10.04 lakhs |  |  |  |
|  | No. of shares issued by X Ltd. |  |  |  |

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|  | $10,04,000 \quad$ / 29.05 = <br> $33,522.5375655626$ shares |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  | Value of shares capital $=33,522 \times$ <br> Rs 29.95 $=$ | $10,03,984$ | --- | $10,03,984$ |
| (iii) | Cash Payment [50\% of (Rs 24 Lakh <br> - Rs 3.92 Lakh) $=10.04$ lakhs | --- | $10,04,000$ | $10,04,000$ |
| (iv) | Cash for fractional shares $=$ <br> $0.5375626 \times$ Rs 29.95 | --- | 16 | 16 |
|  | Total | $10,03,984$ | $13,96,016$ | $24,00,000$ |

(6) Calculation for Goodwill/Capital Reserve to $\times$ Ltd.

|  | Rs |
| :--- | :---: |
| Total of assets as per Balance Sheet of Y Ltd. | $50,00,000$ |
| Less: $10 \%$ Reduction in the value of Fixed Assets $(10 \times 18,00,000 /$ <br> $100)$ | $(1,80,000)$ |
|  | $48,20,000$ |
| Less: Secured Loan $2,50,000$ | $(5,00,000)$ |
| Current Liabilities $2,50,000$ | $43,20,000$ |
| Net Assets | $(24,00,000)$ |
| Less: Purchase consideration (outside shareholders) | $19,20,000$ |
|  | $(6,00,000)$ |
| Less: Investment in Y Ltd. as per Balance Sheet of X Ltd. | $13,20,000$ |
| Capital Reserve |  |

(7) Cash and Bank Balance of $\times$ Ltd. after acquisition of shares

|  | Rs |
| :--- | :---: |
| Opening Balance (XLtd.) | $39,00,000$ |
| Cash and Bank Balance of Y Ltd. | $2,00,000$ |
|  | $41,00,000$ |
| Less: Remittance to the foreign company | $(10,04,016)$ |
|  | $30,95,984$ |
| Less: T.D.S. paid to Government | $(3,92,000)$ |
|  | $27,03,984$ |

(8) Unrealized profit included in inventory of $\times$ Ltd. $=$ Rs $1,50,000 \times 20 / 120=$ Rs 25,000

## Q28 (PM)

The following was the abridged Balance Sheet of X Co. Ltd, as at 31st March, 2016:

| Liabilities | Rs | Assets | Rs |
| :--- | :---: | :--- | :---: |
| Capital: <br> Authorized: 10,000 Equity <br> shares of Rs 100 each | $10,00,000$ | Plant and machinery at <br> depreciated value | $8,60,000$ |
|  | Land | $7,00,000$ |  |
| Issued and paid up: 8,000 <br> Equity shares of Rs 100 <br> each, fully paid up | $8,00,000$ | Current assets <br> Trade receivables <br> Patents, trademarks <br> and copyrights | $8,00,000$ |


| Reserves and surplus: |  |  |  |
| :--- | :---: | :--- | :--- |
| General reserve $-5,00,000$ |  |  |  |
| Securities premium |  |  |  |
| $4,00,000$ Drofit and loss - 3,60,000 | $12,60,000$ |  |  |
| Probentures secured | $5,00,000$ |  |  |
| $11 \%$ Ded |  |  |  |
| against the assets of the Co. |  | $29,60,000$ |  |
| Trade payables | $4,00,000$ |  |  |

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

|  | Rs. |
| :--- | :--- |
| Plant and machinery | $4,00,000$ |
| Land (used for business) | $2,00,000$ |
| Current assets | $2,00,000$ |
| Trademarks and copyrights | $3,50,000$ |
|  | $11,50,000$ |
| Trade payables | $2,50,000$ |
| Net Assets | $9,00,000$ |

Due to managerial constraints, $X$ is unable to develop this department. An overseas buyer is interested to acquire this department and after due diligence, offers a consideration of Rs $20,00,000$ to the company for transfer of business. The buyer offered to discharge the purchase consideration immediately after 31st March, 2016, in the following manner:
(i) Issue of equity shares of the buyer's company for Rs $10,00,000$ nominal value at a premium of $20 \%$ over the face value; and
(ii) Payment of the balance consideration in $£$ Sterling. The exchange rate agreed upon is Rs 80 per $£$ Sterling. This amount will be retained in London, till the actual takeover of the business is done by the buyer.
(a) Expenses to put through the transaction come to Rs $8,00,000$ initially to be incurred by $X$ but to be shared equally by the parties.
(b) The balance value of trademarks, copyrights and patents left with $X$ does not enjoy any market value and has to be written off.
(c) The value of the balance of land in X's possession will be taken at its market value in the books of account. Such a value, determined by an approved valuer, is 200 percent of the book value.
(d) The parties agree that the date of legal ownership of the transferred business shall be 31st March, 2016, though certain formalities may have to be gone through and agree that the actual transfer to the buyer will be affected before 30th April, 2016.
$X$ Co. Ltd to carry on the business in the normal course and account for the profits of the transferred department to the foreign buyer. $X$ made a net profit of Rs 2,40,000 from the whole business for April, 2016; 40 percent of the net profit related to the business of the transferred department.

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(e) The shares of the overseas buyer's company were quoted on the London Stock Exchange and on 30th April, 2016 were quoted at 95 percent of their face value.
(f) The cash received by $X$ at London was remitted by it to its Indian banking account on 30th April 2016 when the rupee sterling rate was Rs 75 per UK sterling pound.

Draw the Balance Sheet of X Co. Ltd. as at 30th April, 2016, after the transfer of the business to the overseas buyer.

## Answer

Balance Sheet of X Co. Ltd. as at 30th April, 2016 (after demerger)

| Particulars | Note No. | (Rs ) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $8,00,000$ |
| (b) Reserves and Surplus | 2 | $20,54,000$ |
| (2) Non-Current Liabilities |  |  |
| Long-term borrowings |  | 5 |
| (3) Current Liabilities |  |  |
| Trade payables |  | $1,50,000$ |
| Total |  | $35,04,000$ |
| II. Assets |  |  |
| (1) Non-current assets | 4 | $14,60,000$ |
| Fixed assets |  |  |
| Tangible assets |  | $6,00,000$ |
| (2) Current assets |  | $9,50,000$ |
| (a) Trade receivables (8,00,000-2,00,000) |  | $3,94,000$ |
| (b) Current investment |  |  |
| (c) Cash and cash equivalents (W.N.2) |  |  |
| Total |  |  |

## Notes to Accounts

|  |  | Rs | Rs |
| :--- | :--- | :---: | :---: |
| 1. | Share Capital |  |  |
| Authorised share capital: |  |  |  |
| 10,000 Equity shares of Rs 100 each | $10,00,000$ |  |  |
| Issued share capital: |  |  |  |
| 8,000 Equity shares of Rs 100 each |  | $8,00,000$ |  |
| $2 . \quad$ Reserves and surplus | $5,00,000$ |  |  |
| Revaluation reserve (W.N.6) | $5,00,000$ |  |  |
| General reserve | $11,00,000$ |  |  |
| Capital reserve (W.N.3) | $4,00,000$ |  |  |
| Securities Premium |  | $(4,46,000)$ | $20,54,000$ |
| Profit and Loss Account (W.N.1) |  |  |  |
| 3. | Long-term Borrowings |  |  |
| Secured borrowings |  |  |  |

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| $\%$ Debentures secured against the assets of the Co. |  |  |  |
| :--- | :--- | :--- | :--- |
| $4,00,000$ |  |  |  |
| Plant \& Machinery at depreciated value ( $8,60,000-$ <br> $4,00,000$ ) | $4,60,000$ |  |  |
| Land (W.N.6) | $10,00,000$ | $14,60,000$ |  |

## Working Notes:

1. Computation of Profit and Loss Account as on 30th April, 2016

|  | Rs |  |
| :--- | :--- | :--- |
| Balance as on 31st March, 2016 |  | $3,60,000$ |
| Add: Profit earned during the month of April, 2016 <br> (W.N.4) |  | $1,44,000$ |
|  |  | $5,04,000$ |
| Less: Expenses on sale of department (share of X Co.) <br> (Rs 8,00,000 $\times 50 \%$ ) | $4,00,000$ |  |
| Patents, trademarks and copyrights written off (W.N.5) | $2,50,000$ |  |
| Diminution in the value of investment (W.N.7) | $2,50,000$ |  |
| Loss due to on foreign exchange translation difference <br> (W.N.8) | 50,000 | $(9,50,000)$ |
|  |  | $(4,46,000)$ |

2. Cash and bank

|  | Rs |  |
| :--- | :--- | :---: |
| Cash received from Overseas buyer on 30th April, 2016 <br> ( $£ 10,000 \times$ Rs 75) |  | $7,50,000$ |
| Add: Cash reimbursed by Overseas buyer (Rs <br> $8,00,000 \times 50 \%)$ |  | $4,00,000$ |
| Cash profit earned during the month of April, 2016 by X <br> Co. Ltd. (See Note) |  | $2,40,000$ |
|  |  | $13,90,000$ |
| Less: Expenses on sale of department to overseas buyer | $8,00,000$ |  |
| Share of profit (for April, 2016) paid to Overseas buyer <br> (W.N.4) | 96,000 | $(8,96,000)$ |
|  |  | $4,94,000$ |

3. Calculation of gain on sale of department and discharge of purchase consideration.

|  | Rs |
| :--- | ---: |
| Purchase consideration | $20,00,000$ |
| Less: Net assets sold | $9,00,000$ |
| Gain on sale of department transferred to capital reserve | $11,00,000$ |
| Purchase consideration | $20,00,000$ |
| Less: Discharged by issue of Overseas Buyer's Equity shares of Rs <br> $10,00,000$ at 20\% premium | $12,00,000$ |
| Balance discharged in cash i.e. $(8,00,000 / 80)=£ 10,000$ | $8,00,000$ |

4. Profit earned during the month of April, 2016

|  | Rs |
| :--- | ---: |
| Total profit earned by X Co. Ltd. during the month of April, 2016 | $2,40,000$ |
| Less: $40 \%$ Profit of the sold department | 96,000 |
| Profit of $\times$ Co. Ltd. on the retained department | $1,44,000$ |

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5. Patents, trademarks and copyrights written off

|  | Rs |
| :--- | ---: |
| Patents, trademarks and copyrights as per balance sheet of $\times$ Co. <br> Ltd. | $6,00,000$ |
| Less: Patents, trademarks and copyrights taken over by Overseas <br> buyer | $(3,50,000)$ |
| Patents, trademarks and copyrights written off (charged to Profit <br> and Loss Account) | $2,50,000$ |

6. Land

|  | Rs |
| :--- | ---: |
| Land as per balance sheet of X Co. Ltd. | $7,00,000$ |
| Less: Land taken over by Overseas buyer | $(2,00,000)$ |
| Book value of land retained by $\times$ Co. Ltd. | $5,00,000$ |
| Revalued value (200\% of book value) | $10,00,000$ |
| Revaluation reserve (10,00,000-5,00,000) | $5,00,000$ |

7. Diminution in the market value of equity shares of Overseas Buyer

|  | Rs |
| :--- | ---: |
| Nominal value of shares | $10,00,000$ |
| Issued at $20 \%$ Premium | $12,00,000$ |
| Market value of shares on 30th April, 2016 is $95 \%$ of nominal value <br> $(10,00,000 \times 95 \%)$ | $9,50,000$ |
| Diminution charged to Profit and Loss Account | $2,50,000$ |

8. Loss due to foreign exchange translation difference

|  | Rs |
| :--- | :--- |
| Cash payment by overseas buyer $£ 10,000$ due on 31st March, 2016 <br> @ Rs 80 per $£$ | $8,00,000$ |
| Exchange rate on 30th April, 2016 is Rs 75 per $£$ Less: Amount <br> remitted in Indian Currency $(£ 10,000 \times$ Rs 75$)$ | $(7,50,000)$ |
| Loss on foreign exchange translation transferred to Profit and Loss <br> Account | 50,000 |

## Note:

1. The above solution has been given on the assumption that $X$ Co. Ltd intends to hold investment in shares of overseas buyer as temporary investment. Therefore, its carrying value has been shown in the balance sheet at market value and reduction to market value has been included in the profit and loss account. In case it is assumed as long term investment, then investment in shares of Overseas buyer will be shown at cost i.e. Rs 12,00,000 and Profit and Loss account balance will be Rs 9,04,000. The Balance Sheet total will be Rs $37,54,000$.
2. It is also assumed that the profit earned during the month of April, 2016 is entirely the cash profit and also the amount of current assets and current liabilities of $X$ Co. Ltd. has been same as on 31.3.2016.

Q29. (PM)
Small Ltd. and Little Ltd., two companies in the field of speciality chemicals, decided to go in for a follow on Public Offer after completion of an amalgamation of their businesses. As per agreed terms initially a new company Big Ltd. will be incorporated on 1st January, 2017 D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla
with an authorized capital of Rs 2 crore comprised of 20 lakh equity shares of Rs 10 each. The holding company would acquire the entire equity shareholding of Small Ltd. \& Little Ltd. and in turn would issue its shares to the outside holders of these shares. It is also agreed that the consideration would be a multiple of the average $P / E$ ratio for the period 1st January, 2016 to 31st March, 2016 times the rectified profits of each company, subject to necessary adjustments for complying with the terms of the share issue.
The following information is supplied to you:

|  | Small Ltd. | Little Ltd. |
| :--- | :---: | :---: |
| Ordinary Shares of Rs 10 each (Nos.) | 40 lakhs | 20 lakhs |
| $10 \%$ Preference shares of Rs 100 each (Nos.) | 2 lakhs | Nil |
| $10 \%$ Preference shares of Rs 10 each (Nos.) | Nil | 2 lakhs |
| $5 \%$ debentures of Rs 10 each (Nos.) | 4 lakhs | 4 lakhs |
| Investments Held |  |  |
| (a) 4 lakh ordinary shares in Small Ltd. | - | Rs 40 lakhs |
| (b) 2 lakh ordinary shares in Little Ltd. | Rs 20 lakhs | - |
| Profit before Interest\& Tax (PBIT) after considering <br> impact of Inter-company Transactions and Holdings. | Rs 50 lakhs | Rs 25 lakhs |
| Average P/E ratio January, 2016 to March, 2016 | 10 | 8 |

The following additional information is also furnished to you in respect of adjustments required to the profit figure as given above:

1. The profits of the respective companies would be adjusted for half the value of contingent liabilities as on 31st March, 2016.
2. Trade receivables of Small Ltd. include an irrecoverable amount of Rs 2 lakh agains $\dagger$ which Rs 1 lakh was recovered but kept in Advance account.
3. Little Ltd. had omitted to provide for increased FOREX liability of US\$ 10,000 on loan availed in financial year 2015-2016 for purchase of Machinery. The machinery was acquired on 1st January, 2016 and put to use in financial year 2016-2017. The additional liability arose due to change in exchange rates and is arrived at in conformity with prevailing provisions of AS 11. The exchange rate is US \$ 1 = INR 50.
4. Small Ltd. has omitted to invoice a sale that took place on 31st March, 2016 of goods costing Rs 2,50,000 at a mark-up of 15 per cent instead the goods were considered as part of closing inventory.
5. Closing Inventory of Rs 45 lakhs of Little Ltd. as on 31st March, 2016 stands undervalued by 10 per cent.
6. Contingent liabilities of Small Ltd. and Little Ltd. as on 31st March, 2016 stands at Rs 5 lakhs and Rs 10 lakhs respectively.
The terms of the share issue are as under:
(i) Shares in Big Ltd. will be issued at a premium of Rs 13 per share for all external shareholders of Small Ltd. The Premium will be Rs 15 per share for shares in Big Ltd. issued to all external shareholders of Little Ltd.
(ii) No shares in Big Ltd. will be issued in lieu of the investments (intercompany holdings) of both companies. Instead the shares so held shall be transferred to Big Ltd. at the close of the financial year ended 31st March, 2017 at Par Value consideration payable on date of transfer.
(iii) Big Ltd. would in addition to the issue of shares to outside shareholders of Small Ltd. and Little Ltd. make a preferential allotment on 31st March, 2017 of 2 lakhs ordinary
shares at a premium of Rs 28 per share to Virgin Capital Ltd. (VCL). These shares will not be eligible for any dividends declared or paid till that date.
(iv) Big Ltd. will go in for a 18 per cent unsecured Bank overdraft facility to meet incorporation costs of Rs 16 lakhs and towards management expenses till 31st March, 2017 estimated at Rs 14 lakhs. The overdraft is expected to be availed on 1st February, 2017 and closed on 31st March, 2017 out of the proceeds of the preferential allotment.
(v) It is agreed that interim dividends will be paid on 31.03 .2017 for the period January, 2017 to March, 2017 by Big Ltd. at 2 per cent; Small Ltd. at 3 per cent and Little Ltd. at 2.5 per cent. Ignore Dividend Distribution tax.
(vi) The prevailing Income Tax Rate is 25 per cent.

You are required to compute the number of shares to be issued to the shareholders of each of the companies and prepare the projected Profit and Loss Account for the period from 1st January, 2017 to 31.03.2017 of Big Ltd. and its Balance Sheet as on 31st March, 2017.

## Answer

Computation of number of shares issued
Calculation of Rectified Profits and Purchase consideration

|  | Rs | Rs |
| :---: | :---: | :---: |
| Small Ltd. |  |  |
| Given profits |  | 50,00,000 |
| Less: Irrecoverable Trade receivables | 1,00,000 |  |
| 50\% Contingent Liability | 2,50,000 | $(3,50,000)$ |
|  |  | 46,50,000 |
| Add: Profit on omitted sale ( $15 \%$ of Rs 2,50,000) |  | 37,500 |
|  |  | 46,87,500 |
| Less: Debenture interest ( $4,00,000 \times \mathrm{Rs} 10 \times 5 \%$ ) |  | $(2,00,000)$ |
|  |  | 44,87,500 |
| Less: Income Tax @ 25\% |  | $(11,21,875)$ |
| Profits after Tax (PAT) |  | 33,65,625 |
| Less: Preference Dividend (10\% of Rs 2,00,00,000) |  | (20,00,000) |
| Rectified Profits |  | 13,65,625 |
| Average PE ratio $=10$ |  |  |
| Total consideration for all equity shareholders (Average PE ratio $\times$ Profit) |  | 1,36,56,250 |
| Less:10\% thereof for shareholders of Little Ltd. [As Little Ltd. holds 4 lakhs out of 40 lakhs shares of Small Ltd.] |  | $(13,65,625)$ |
| Balance available for other shareholders of Small Ltd. [A] |  | 12290625 |
|  |  |  |
| Little Ltd. |  |  |
| Given profits |  | 25,00,000 |
| Less: Increase in FOREX liability (US\$10,000 5 50) * | 5,00,000 |  |
| 50\% Contingent Liability | 5,00,000 | $(10,00,000)$ |

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|  |  | $15,00,000$ |
| :--- | :---: | :---: |
| Add: Undervaluation of inventory $(45,00,000 \times 10 / 90)$ | $5,00,000$ |  |
|  |  | $20,00,000$ |
| Less: Debenture interest $(4,00,000 \times$ Rs $10 \times 5 \%)$ |  | $18,00,000)$ |
|  |  | $(4,50,000$ |
| Less: Income Tax @ 25\% |  | $13,50,000$ |
| Profits after Tax (PAT) | $(2,00,000)$ |  |
| Less: Preference Dividend (10\% of Rs 20,00,000) | $11,50,000$ |  |
| Rectified Profits | 8 |  |
| Average PE ratio | $92,00,000$ |  |
| Total consideration for all equity shareholders <br> (Average PE ratio $\times$ Profit) | $\mathbf{9 , 2 0 , 0 0 0 )}$ |  |
| Less:10\% thereof for shareholders of Small Ltd. [As <br> Small Ltd. holds 2 lakhs out of 20 lakhs shares of Little <br> Ltd.] | $82,80,000$ |  |
| Balance available for other shareholders of Little Ltd. <br> [B] |  |  |

Statement showing Disposal of Purchase Consideration

|  | Small Ltd. | Little Ltd. | Total |
| :--- | :---: | :---: | :---: |
|  | Rs | Rs | Rs |
| Purchase Consideration | $1,22,90,625$ <br> $[A] a b o v e$ | $82,80,000$ <br> $[B] a b o v e$ | $2,05,70,625$ |
| Number of shares [Purchase <br> consideration/(Face <br> Securities Premium)] | $5,34,375$ | $3,31,200$ | $8,65,575$ |
| Share Capital |  | $53,43,750$ | $33,12,000$ |
| Securities Premium | $69,46,875$ | $49,68,000$ | $1,19,14,875$ |
| Purchase Consideration | $1,22,90,625$ | $82,80,000$ | $2,05,70,625$ |

* As per para 46 and 46A of AS 11 as per the Companies (Accounting Standards) Rules, 2006, the Companies have the option to treat the exchange difference on long-term foreign currency monetary items i.e. they can be added to or deducted from the cost of the asset. It is assumed, that this option has not been exercised, hence the exchange difference been taken to profit and loss. Other alternative is also possible.
Projected Statement of Profit and Loss of Big Ltd. for the period 1st January, 2017 to 31st March, 2017

| Particulars | Note No. | Rs |
| :--- | :---: | :---: |
| I. Revenue from operations |  | $-\overline{000}$ |
| II. Other income | 5 | $17,00,000$ |
| III. Total Revenue(I+II) |  | $17,00,000$ |
| IV. Expenses: | 7 | $14,00,000$ |
| Employee benefits expense | 6 | 90,000 |
| Finance costs | 8 | $16,00,000$ |
| Other expenses |  | $30,90,000$ |
| V. Total expenses |  | $(13,90,000)$ |
| VI. Loss for the period (V - III) |  |  |

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Projected Balance Sheet of Big Ltd. as on 31st March, 2017

| Particulars | Note No. | (Rs) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $1,06,55,750$ |
| (b) Reserves and Surplus | 2 | $1,59,51,760$ |
| Total |  | $2,66,07,510$ |
| II. Assets |  |  |
| (1) Non-current assets | 3 | $2,65,70,625$ |
| Non-current investments | 4 | 36,885 |
| (2) Current assets |  | $\mathbf{2 , 6 6 , 0 7 , 5 1 0}$ |
| Cash and cash equivalents |  |  |
| Total |  |  |

Notes to Accounts

|  | (Rs) | (Rs) |
| :---: | :---: | :---: |
| 1. Share Capital |  |  |
| Authorised |  |  |
| 20 lakhs shares of Rs 10 each | 2,00,00,000 |  |
| Issued \& Paid up |  |  |
| $10,65,575$ shares of Rs 10 each (out of the above $8,65,575$ shares have been issued for consideration other than cash) | 1,06,55,750 | 1,06,55,750 |
| 2. Reserves and surplus |  |  |
| Securities Premium (Rs 1,19,14,875 + 56,00,000) |  | 1,75,14,875 |
| Loss for the period | $(13,90,000)$ |  |
| Less: Dividend ( $2 \%$ of Rs $86,55,750$ ) | $(1,73,115)$ | $(15,63,115)$ |
| Balance of Profit and Loss Account carried forward |  | 1,59,51,760 |
| 3. Non-current investments |  |  |
| Shares in Subsidiaries (W.N. 4) |  | 2,65,70,625 |
| 4. Cash and cash equivalents |  |  |
| Cash at Bank (W.N. 3) |  | 36,885 |
| 5. Other income |  |  |
| Dividends received from Subsidiaries (Rs 12,00,000 + 5,00,000) |  | 17,00,000 |
| 6. Finance costs |  |  |
| Interest on Bank O/D |  | 90,000 |
| 7. Employee benefits expenses |  |  |
| Management expenses |  | 14,00,000 |
| 8. Other expenses |  |  |
| Preliminary expenses* |  | 16,00,000 |

* As per para 56 of AS 26, 'Intangible Assets', preliminary expenses are to be recognized as expenses as and when they are incurred.


## Working Notes:

1. Shares issued by Big Ltd. to Virgin capital Ltd. (VCL)

| Number of shares issued | $2,00,000$ |
| :--- | :---: |
| Face Value of Share Capital @`10 each & Rs \(20,00,000\) \\ \hline Securities Premium @` 28 each | Rs $56,00,000$ |
| Total cash received from VCL | Rs $76,00,000$ |

2. Overdraft of Big Ltd. as on 31.3.2017

|  | Rs |
| :--- | ---: |
| Towards Incorporation expenses i.e. preliminary expenses | $16,00,000$ |
| Towards Management expenses | $14,00,000$ |
| Total Bank Overdraft availed | $30,00,000$ |
| Interest @ 18\% p.a. for 2 months | 90,000 |

3. Bank balance of Big Ltd. as on 31.3.2017

Bank Account of Big Ltd.

|  |  | Rs |  |  | Rs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 01.02.2017 | To Overdraft | 30,00,000 | 01.02.2017 | By Incorporation expenses | 16,00,000 |
| 31.03.2017 | To VCL | 76,00,000 | 31.03.2017 | By Management expenses | 14,00,000 |
| 31.03.2017 | To Dividend Small | 12,00,000* | 31.03.2017 | By Interest on Overdraft | 90,000 |
|  | Little | 5,00,000 ${ }^{+}$ | 31.03.2017 | By Overdraft | 30,00,000 |
|  |  |  | 31.03.2017 | By Dividend paid | 1,73,115 ${ }^{\ddagger}$ |
|  |  |  | 31.03.2017 | By Shares in Small Ltd. bought from Little Ltd. | 40,00,000 |
|  |  |  | 31.03.2017 | By Shares in Little Ltd. bought from Small Ltd. | 20,00,000 |
|  |  |  |  | By Balance c/d (Bal. fig.) | 36,885 |
|  |  | 1,23,00,000 |  |  | 1,23,00,000 |

* $(40,00,000 \times 10) \times 3 \%=12,00,000$.
${ }^{\dagger}(20,00,000 \times 10) \times 2.5 \%=5,00,000$.
${ }^{\ddagger}[(5,34,375+3,31,200) \times 10] \times 2 \%=1,73,115$.

4. Investments of Big Ltd. in Projected Balance Sheet

|  | Rs |
| :--- | :---: |
| Purchase consideration paid for acquiring shares of outside holders <br> of- |  |
| Small Ltd | $1,22,90,625$ |
| Little Ltd. | $82,80,000$ |
| Consideration paid in cash for acquiring cross holdings | $20,00,000$ |
| From Small Ltd. (shares of Little Ltd.) | $40,00,000$ |
| From Little Ltd. (shares of Small Ltd.) | $2,65,70,625$ |
|  |  |

Q30. (PM)
The following are the summarized Balance Sheets of Andrew Ltd. and Barry Ltd., as at 31.12.2016:

Andrew Ltd.

| Liabilities | Amount (Rs '000) | Assets | Amount (Rs '000) |
| :---: | :---: | :---: | :---: |
| Share capital |  | Fixed assets | 3,400 |
| 3,00,000 Equity shares of Rs 10 each 10,000 Preference shares of Rs 100 each | $\begin{aligned} & 3,000 \\ & 1,000 \end{aligned}$ | Inventory (pledged with secured loan trade payables) | 18,400 |
| General reserve | 400 | Other Current assets | 3,600 |
| Secured loans (secured against |  | Profit and Loss account | 16,600 |
| pledge of inventories) | 16,000 |  |  |
| Unsecured loans | 8,600 |  |  |
| Current liabilities | 13,000 |  |  |
|  | 42,000 |  | 42,000 |

Barry Ltd.

| Liabilities | Amount <br> (Rs '000) | Assets | Amount <br> (Rs '000) |
| :--- | :---: | :--- | :---: |
| Share capital |  | Fixed assets | 6,800 |
| $1,00,000$ <br> 10 Equity shares of Rs | 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:
i. All Current assets of two companies, except pledged inventory 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.
ii. The break-up of Current liabilities is as follows:

|  | Andrew Ltd. <br> Rs | Barry Ltd. <br> Rs |
| :--- | :---: | :---: |
| Statutory liabilities (including Rs 22 lakhs in case <br> of Andrew Ltd. in case of a claim not having been <br> 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 trade payables.
iii. Secured loans include Rs 16,00,000 accrued interest in case of Barry Ltd.
iv. 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.
v. Preference shareholders are issued Equity shares worth Rs 2,00,000 in lieu of present holdings.
vi. Secured loan payables 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.
vii. Unsecured loans are taken over by Charlie Ltd. at $25 \%$ of Loan amounts.
viii. Employees are issued fully paid Equity shares in Charlie Ltd. in full settlement of their dues.
ix. Statutory liabilities are taken over by Charlie Ltd. at full values and trade payables are taken over at $80 \%$ of the book value.
Show the opening Balance Sheet of Charlie Ltd. Workings should be part of the answer.
Answer
Balance sheet of Charlie Ltd. as at 31st December, 2016

| Particulars | Note No. | (Rs '000) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| Share Capital | 1 | 7,000 |
| (2) Non-Current Liabilities | 2 | 10,630 |
| Long-term borrowings |  |  |
| (3) Current Liabilities | 3 | 5,440 |
| (a) Trade Payables | 7 | 8,200 |
| (b) Other current liabilities |  | 31,270 |
| Total |  |  |
| II. Assets | 4 |  |
| (1) Non-current assets | 5 | 10,200 |
| (a) Fixed assets |  | 9,470 |
| i. Tangible assets |  | 2,000 |
| ii. Intangible assets | 6 | 9,600 |
| (2) Current assets |  | 31,270 |
| (a) Cash and cash equivalents |  |  |
| (b) Other current assets |  |  |
| Total |  |  |

Notes to Accounts

| Share Capital |  | (Rs 000) |  |
| :--- | :--- | :---: | :---: |
| 1. |  |  |  |
| Issued, subscribed \& Paid up: |  |  |  |
| $7,00,000$ equity shares of Rs 10 each, fully paid up <br> (W.N.5) |  | 7,000 |  |
| (of the above 5,00,000 shares have been issued for |  |  |  |
| consideration other than cash) <br> 2. Long Term Borrowings |  |  |  |
| Secured loans (Rs 1,280 + Rs 7,200) - W.N. 2 |  |  |  |
| Unsecured Loans (25\% of Rs 8,600) | 8,480 |  |  |

[^6]| 3. Trade Payables (W.N.1) |  |  |
| :---: | :---: | :---: |
| Andrew Ltd. | 4,000 |  |
| Barry Ltd. | 1,440 | 5,440 |
| $4 . \quad$ Tangible Assets |  |  |
| Fixed Assets (Rs 3,400 + Rs 6,800) |  | 10,200 |
| 5. Intangible assets |  |  |
| Goodwill (W.N.4) |  | 9,470 |
| 6. Other Current Assets |  |  |
| Andrew Ltd. | 2,880 |  |
| Barry Ltd. | 6,720 | 9,600 |
| 7. Other Current liabilities |  |  |
| Andrew Ltd. | 7,200 |  |
| Barry Ltd. | 1,000 | 8,200 |

## Working Notes:

1. Value of trade payables taken over by Charlie Ltd.
(Rs '000)

|  | Andrew Ltd. | Barry Ltd. |
| :--- | :---: | :---: |
| Given in balance sheet | 13,000 | 4,600 |
| Less: Statutory liabilities [72 lakhs - 22 lakhs] | $(5,000)$ | $(1,000)$ |
| Liability to employees | $(3,000)$ | $(1,800)$ |
| Trade payables | 5,000 | 1,800 |
| $80 \%$ thereof | 4,000 | 1,440 |

2. Value of total liabilities taken over by Charlie Ltd.

|  | Andrew Ltd. |  | Barry Ltd. |  |
| :--- | :---: | :---: | :---: | :---: |
| Current liabilities |  |  |  |  |
| Statutory liabilities | 7,200 |  | 1,000 |  |
| Liability to employees | 3,000 |  | 1,800 |  |
| Trade payables (W.N.1) | 4,000 | 14,200 | 1,440 | 4,240 |
| Secured loans |  |  |  |  |
| Given in Balance Sheet | 16,000 |  | 8,000 |  |
| Interest waived | - |  | 800 | 7,200 |
| Value of Inventory (80\% of Rs 184 lakhs) | 14,720 | 1,280 |  |  |
| Unsecured Loans (25\% of Rs 86 lakhs) |  | 2,150 | - |  |
|  |  |  |  |  |

3. Assets taken over by Charlie Ltd. (' ' 000 )

|  | Andrew Ltd. Rs | Barry Ltd. Rs |
| :--- | :---: | :---: |
| Fixed Assets | 3,400 | 6,800 |
| Current Assets $80 \%$ and $70 \%$ respectively of <br> book value | 2,880 | 6,720 |
|  | 6,280 | 13,520 |

4. Goodwill / Capital Reserve on amalgamation
(Rs '000)

| Liabilities taken over (W.N. 2) | 17,630 | 11,440 |  |
| :--- | :---: | :---: | :---: |
| Equity shares to be issued to Preference <br> Shareholders | 200 | - |  |
| Less: Total assets taken over (W.N. 3) |  |  |  |

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|  | A-B | 11,550 | $(2,080)$ |
| :--- | :---: | :---: | :---: |
| Goodwill |  | Capital <br> Reserve |  |
| Net Goodwill | 9,470 |  |  |

5. Equity shares issued by Charlie Ltd.

|  |  | Number |  |
| :--- | :--- | :--- | :--- |
| (i) | For Cash |  | $2,00,000$ |
| For consideration other than cash |  |  |  |
| (ii) | In Discharge of Liabilities to Employees |  | $4,80,000$ |
| (iii) | To Preference shareholders | 20,000 | $5,00,000$ |
| Value of shares (Rs $10 \times 7,00,000)$  |  |  | Rs 70 lakhs |

## PART 2 - DEMERGER

## Q31: (PM)

The summarized Balance Sheet of $Z \operatorname{Ltd}$. as at $31_{\text {st }}$ March, 2016 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.

| (Rs in crores) |  |  |  |
| :--- | :---: | :---: | :---: |
| Fixed Assets: | S Division | W Division | Total |
| Cost |  |  |  |
| Less: Depreciation | 875 | 249 |  |
| Written-down value | $(360)$ | $(81)$ |  |
| Investments | 515 | 168 | 683 |
| Net Current assets: | - | 97 | 97 |
| 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 Rs 10 each |  |  | 345 |
| Reserves and surplus |  |  | 685 |
|  |  |  | 1,447 |

Loan funds included, inter alia, Bank Loans of Rs 15 crores specifically taken for W Division and Debentures of the paid up value of Rs 125 crores redeemable at any time between $1_{\text {st }}$ October, 2015 and 30th September, 2016.

On 1st April, 2016 the company sold all of its investments for Rs 102 crores 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 Rs 900 crores divided into shares of Rs 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 Rs 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 Rs 218 crores and all other assets and liabilities at the same values at which they appeared in the books of $Z \operatorname{Ltd}$.
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.
(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.

## Answer

(i) Journal Entries in Z Ltd.'s books
(Rs in crores)

|  | Dr. <br> Amount | Cr. <br> Amount |
| :--- | :---: | :---: |
| Bank Account (Current Assets) | 102 |  |
| To Investments |  | 97 |
| To Profit and Loss Account (Reserves and Surplus) |  | 5 |
| (Sale of investments at a profit of Rs 5 crores) |  |  |
| Debentures (Loan Funds) Dr. | 125 |  |
| To Bank Account (Current Assets) |  | 125 |
| (Redemption of debentures at par) |  |  |
| Current Liabilities | Dr. | 93 |
| Bank Loan (Loan Funds) | 15 |  |
| Provision for Depreciation | 81 |  |
| Reserves and Surplus (Loss on Demerger) $\quad$ Dr. | 645 |  |
| To Fixed Assets |  | 249 |
| To Current Assets |  | 585 |
| (Assets and liabilities pertaining to W Division <br> taken out of the books on transfer of the division <br> to Y Ltd.) |  |  |

(ii)
(a)

Z Ltd.'s Balance Sheet after demerger

| Particulars | Note No. | (Rs in crores) |
| :--- | :--- | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital |  | 345 |

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| (b) Reserve and Surplus | 1 | 45 |
| :--- | :---: | :---: |
| (2) Non-Current Liabilities |  |  |
| Long-term borrowings | 2 | 277 |
| (3) Current Liabilities |  | 270 |
| Total |  | 937 |
| II. Assets |  |  |
| (1) Non-current assets |  |  |
| Fixed assets |  | 515 |
| Tangible assets | 3 | 422 |
| (2) Current assets |  | 937 |
| Total |  |  |

## Notes to Accounts:

|  | (Rs in crores) |
| :--- | :---: |
| 1. Reserves and Surplus |  |
| Balance as on 31st March, 2016 | 685 |
| Add: Profit on sale of investments | 5 |
|  | 690 |
| Less: Loss on demerger | $(645)$ |
| Balance shown in balance sheet after demerger (gain) | 45 |
| 2. Loan Funds | 417 |
| Balance as on 31st March, 2016 |  |
| Less: Bank Loan transferred to Y Ltd. 15 | $(140)$ |
| Debentures redeemed 125 | 277 |
| Balance shown in balance sheet after demerger | 445 |
| 3. Current Assets | 102 |
| Balance as on 31st March, 2016 | 547 |
| Add: Cash received from sale of investments | $(125)$ |
|  | 422 |
| Less: Cash paid to redeem debentures |  |
| Balance in balance sheet after demerger |  |

(b) Initial Balance Sheet of Y Ltd.

| Particulars | Note No. | (Rs in crores) |  |
| :--- | :---: | :---: | :---: |
| I. Equity and Liabilities |  |  |  |
| (1) Shareholder's Funds |  |  |  |
| (a) Share Capital | 1 | 690 |  |
| (b) Reserves and Surplus | 2 | 5 |  |
| (2) Non-Current Liabilities |  |  |  |
| Long-term borrowings | 3 | 15 |  |
| (3) Current Liabilities |  | 93 |  |
|  | Total |  |  |
| II. Assets |  | 803 |  |
| (1) Non-current assets |  |  |  |
| Fixed assets (Revalued) |  |  |  |
| (2) Current assets |  | 218 |  |
| \begin{tabular}{lll\|}
\hline
\end{tabular} |  |  |  | | Total |
| :--- |

## Notes to Accounts:

1. Share Capital

| Authorised capital | (Rs in crores) |
| :---: | :---: |
| 90 crores Equity shares of Rs 10 each <br> Issued and subscribed capital <br> 69 crores Equity shares of Rs 10 each <br> (issued for consideration other than cash) | 900 |

2. Reserves and Surplus

|  | (Rs in crores) |
| :--- | :--- |
| Capital Reserve |  |
| Purchase consideration | 690 |
| Less: Assets transferred* |  |
| Loan funds transferred | (15) |
| Capital reserve | 5 |

* The fixed assets have been recorded at 218 crores instead of 168 crores as in the books of $Z$ Ltd before demerger. Therefore, Y Ltd. makes a capital profit of 5 crores whereas $Z$ Ltd is having a capital gain of 45 crores.

3. Long-term borrowing

Loan Funds 15
(iii) Calculation of intrinsic value of one share of $Z \operatorname{Ltd}$.

| Particulars | Before demerger <br> (Division S and W) | After demerger <br> (Division S) |
| :--- | :---: | :---: |
| Fixed Assets | 683 | 515 |
| Net Current Assets | $(667-125+102) 644$ | $(175-125+102) 152$ |
| Total Assets | 1,327 | 667 |
| Less: Loan Funds | $(292)$ | $(277)$ |
|  | $(417-125)$ | $(417-125-15)$ |
| Net Asset Value | 1,035 | 390 |
| No. of share | 34.5 | 34.5 |
| Intrinsic Value per share | Rs 30/Share | Rs 11.30/Share |

Intrinsic Value of one share $=$ Rs 390/34.5 crores = Rs 11.30 per share
(iv) Gain per share to Shareholders:

After demerger, for every share in Z Ltd. the shareholder holds 2 shares in Y Ltd.

|  | Rs |
| :--- | :---: |
| Value of one share in Z Ltd. | 11.30 |
| Value of two shares in Y Ltd. <br> Value per share $=($ Net Assets / No. of shares i.e.695/69 = Rs <br> $10.07 \times 2)$ | 20.14 |
|  | 31.44 |
| Less: Value of one share before demerger | $(30.00)$ |
| Gain per share | 1.44 |

The gain per share amounting Rs 1.44 is due to appreciation in the value of fixed assets by Y Ltd.

## PART 3 - SALE OF UNITS

## Q32: (PM)

Ksha Ltd. and Yaa Ltd. are two companies. On 31st March, 2016 their summarised Balance Sheets were as under:

|  | Ksha Ltd. |  | Yaa Ltd. |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Rs | Rs | Rs | Rs |
| Sources of funds: |  |  |  |  |
| Share Capital: |  |  |  |  |
| Authorised: |  | 500 |  | 500 |
| Issued: Equity shares of Rs 10 each <br> fully paid up |  | 300 |  | 200 |
| Reserves and surplus: |  |  |  |  |
| Capital reserves | 40 |  | 20 |  |
| Revenue reserves | 700 |  | 425 |  |
| Surplus | 10 | 750 | 5 | 450 |
| Owners' funds |  | 1,050 |  | 650 |
| Loan funds |  | 250 |  | 350 |
|  |  |  |  |  |
| Fund employed in: | 1,000 |  | 700 |  |
| Fixed assets: | $(400)$ | 600 | $(300)$ | 400 |
| Cost |  |  |  |  |
| Less: Depreciation | 2,000 |  | 1,500 |  |
| Net current assets: | $(1,300)$ | 700 | $(900)$ | 600 |
| Current assets |  | 1,300 |  | 1,000 |
| Less: Current liabilities |  |  |  |  |

Ksha Ltd. has 2 divisions, very profitable division $A$ and loss making division $B$.
Yaa Ltd. similarly has 2 divisions, very profitable division $C$ and loss making division D.
The two companies decided to reorganize. Necessary approvals from trade payables and members and sanction by High Court have been obtained to the following scheme:

1. Division B of Ksha Ltd. which has fixed assets costing Rs 400 crores (written down value Rs 160 crores), Current assets Rs 900 crores, Current liabilities Rs 750 crores and loan funds of Rs 200 crores is to be transferred at Rs 125 crores to Yaa Ltd.
2. Division D of Yaa Ltd. which has fixed assets costing Rs 500 crores (depreciation Rs 200 crores), Current assets Rs 800 crores, Current liabilities Rs 700 crores, and loan funds Rs 250 crores is to be transferred at Rs 140 crores to Ksha Ltd.
3. The difference in the two considerations is to be treated as loan carrying interest at $15 \%$ per annum.
4. The directors of each of the companies revalued the fixed assets taken over as follows:
(i) Division of D of Yaa Ltd. taken over: Rs 325 crores.
(ii) Division B of Ksha Ltd. taken over: Rs 200 crores.

All the other assets and liabilities are recorded at the balance sheet values.
(a) The directors of both the companies ask you to prepare the balance sheets after reconstruction (showing the corresponding figures before reconstruction).
(b) Master Richie Rich, who owns 50,000 equity shares of Ksha Ltd. and 30,000 equity shares of Yaa Ltd. wants to know whether he has gained or lost in terms of net asset value of equity shares on the above reorganizations.

## Answer

(a)

Ksha Ltd. Balance Sheet as at 31st March, 2016

| Particulars | Note <br> No. | After <br> reconstruction | Before <br> reconstruction |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| (Rs in crores) | (Rs in crores) |  |  |
| I. Equity and Liabilities |  |  |  |
| (1) Shareholder's Funds | 1 | 300 | 300 |
| (a) Share Capital | 2 | 800 | 750 |
| (b) Reserve and Surplus |  |  |  |
| (2) Non-Current Liabilities | 3 | 315 | 250 |
| Long-term borrowings |  | 1,250 | 1,300 |
| (3) Current Liabilities |  | 2,665 | 2,600 |
| Total |  |  |  |
| II. Assets |  |  |  |
| (1) Non-current assets | 4 | 765 | 600 |
| (a) Fixed assets |  | 1,900 | 2,000 |
| Tangible assets |  | 2,665 | 2,600 |
| (2) Current assets |  |  |  |
| Total |  |  |  |

## Notes to Accounts

| Particulars | After reconstruction |  | Before reconstruction |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (Rs in Crores) |  | (Rs in Crores) |  |
| 1. Share Capital |  |  |  |  |
| Authorised: |  |  |  |  |
| 50 crores equity shares of Rs 10 each Issued and subscribed: |  | 500 |  | 500 |
| 30 crores equity shares of Rs 10 each fully paid up |  | 300 |  | 300 |
| 2. Reserves and surplus |  |  |  |  |
| Capital reserves | 40 |  | 40 |  |
| Add: Capital profit on reconstruction [WN 1(ii \& iii)] | 50 |  | - |  |
| Revenue reserves |  |  | 700 | 700 |
| Surplus | 10 | 800 | 10 | 750 |
| 3. Long term Borrowings |  |  |  |  |
| Yaa Ltd. (Interest @ 15\% p.a.) [WN 1(i)] | 15 |  |  |  |

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| 4. $\quad$ Long-term loans and advances |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Loan to Ksha Ltd.[WN 2(i)] |  | 15 |  | --- |

(b) Net asset value of Master Riche Rich's holdings

|  | Prereorganisation | Postreorganisation | Change (Gain) |
| :---: | :---: | :---: | :---: |
|  | (Rs) | (Rs) | (Rs) |
| Net asset value of one equity share: |  |  |  |
| (Refer to working notes) |  |  |  |
| Ksha Ltd. | 35.00 | 36.67 | 1.67 |
| YaaLtd. | 32.50 | 33.25 | 0.75 |
| Net asset value of equity shares owned by Master Riche Rich |  |  |  |
| Ksha Ltd. ( 50,000 shares) | 17,50,000 | 18,33,500 | 83,500 |
| Yaa Ltd. (30,000 shares) | 9,75,000 | 9,97,500 | 22,500 |
|  | 27,25,000 | 28,31,000 | 1,06,000 |

Master Riche Rich has gained in terms of net asset value of his holdings as indicated in the last column.
Working Notes:
3. Ksha Ltd.
(Rs in crores)

|  | Pre-re- <br> organisati <br> on figures | Sale of <br> division B | Purchase of <br> division D of <br> Yaa Ltd. | Post-re- <br> organisation <br> figures |
| :--- | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) $=($ (a) - <br> (b) + (c) |
| (i) Fixed assets: |  |  |  |  |
| Cost | 1,000 | 400 | 325 | 925 |
| Depreciation | $(400)$ | $(240)$ | - | $(160)$ |
| Written down value (I) | 600 | 160 | 325 | 765 |
| Current assets | 2,000 | 900 | 800 | 1,900 |
| Current liabilities | $(1,300)$ | $(750)$ | $(700)$ | $(1,250)$ |
| Net current assets (II) | 700 | 150 | 100 | 650 |
| Funds employed [(I) + (II)] | 1,300 | 310 | 425 | 1,415 |
| Loan funds: |  |  |  |  |
| Others (III) | $(250)$ | $(200)$ | $(250)$ | $(300)$ |
| Yaa Ltd. (balance payable on <br> transfers of divisions i.e. Rs <br> 140-Rs 125) (IV) |  |  |  | $(15)$ |
| Net worth (I + II - III - <br> IV) | 1,050 | 110 | 175 | 1,100 |

Calculation of Profit/(Loss) on Division sale and purchase

| (ii) | Sale of division B | (Rs in crores) |
| :--- | :--- | :--- |
| Transfer price | 125 |  |
| Cost of the division (Rs 160 + Rs 150 - Rs 200) | $(110)$ |  |
| Capital Profit | 15 |  |
| (iii) | Purchase of division D of Yaa Ltd. |  |
| Agreed value of assets less liabilities taken over Rs (325 + |  | 175 |

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| $800-700-250)$ |  |
| :--- | :--- |
| Less: Transfer price | $(140)$ |
| Capital Profit | 35 |
| (iv) Pre-reorganisation net worth | 1,050 |
| Add: Capital profit on |  |
| Sale 15 |  |
| Acquisition 35 | 50 |
| Post-reorganisation net worth | 1,100 |

No. of equity shares
Net asset value of equity share:
Pre-reorganisation
Post-reorganisation
4. Yaa Ltd.
(i)

|  | Pre-re- <br> organisation <br> figures | Sale of <br> division D | Purchase of <br> division B of <br> Ksha Ltd. | Post-re- <br> organisation <br> figures |
| :--- | :--- | :--- | :--- | :--- |
|  | (a) | (b) | (c) | (d) = (a) - <br> (b) + (c) |
| Fixed assets: |  |  |  |  |
| Cost | 700 | 500 | 200 | 400 |
| Depreciation | $(300)$ | $(200)$ | - | $(100)$ |
| Written down value (I) | 400 | 300 | 200 | 300 |
| Current assets | 1,500 | 800 | 900 | 1,600 |
| Current liabilities | $(900)$ | $(700)$ | $(750)$ | $(950)$ |
| Net current assets (II) | 600 | 100 | 150 | 650 |
| Funds employed [(I) + <br> (II)] | 1,000 | 400 | 350 | 950 |
| Loan funds-others (III) | $(350)$ | $(250)$ | $(200)$ | $(300)$ |
| 650 |  | 150 | 150 | 650 |
| Ksha Ltd. (balance on <br> account of transfers of <br> divisions) (IV) | - | - | - | 15 |
| Net worth (I + II - III + <br> IV) | 650 | 150 | 150 |  |

(ii)

|  | Purchase of <br> division B of <br> Ksha Ltd. |  | Sale of <br> division D |
| :--- | :---: | :---: | :---: |
| Value of assets less liabilities |  |  |  |
| (Value to Yaa Ltd.) (200 + 900 - <br> $750-200)$ | 150 | $(300+800-$ <br> $700-250)$ | 150 |
| Less: Transfer Price |  | $(125)$ | $(140)$ |
| Capital Profit/(Capital Loss) |  | 25 | $(10)$ |
|  |  |  |  |

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(i)
(Rs in crores)

| Pre-reorganisation net worth |  | 650 |
| :--- | :---: | :---: |
| Add: Capital profit - on acquisition | 25 |  |
| -Sale | $(10)$ | 15 |
| Post-reorganisation net worth |  | 665 |
| 20 crores |  |  |
| $\quad$ No. of equity shares | Rs |  |
| $\quad$ Net asset value of equity share: |  |  |
| $\quad$ Post-reorganisation | $650 / 20=32.50$ |  |
|  | $665 / 20=33.25$ |  |

## Important Notes:

## CONSOLIDATION OF FINANCIAL

## STATEMENTS OF GROUP COMPANIES

Basics, Cost of Control, AOP, Minority Interest
Q33.
Balance Sheet 31-3-2012

| Equity \& Liabilities | H | s |
| :---: | :---: | :---: |
| Share capital | 1,50,000 | 1,00,000 |
| Profit \& Loss a/c | 40,000 | 30,000 |
| Current Liabilities: |  |  |
| Creditors | 30,000 | 20,000 |
|  | 2,20,000 | 1,50,000 |
| Assets | H | S |
| Non Current Assets: |  |  |
| Fixed assets | 1,00,000 | 60,000 |
| Investment in Subsidy. 80\% share | 50,000 |  |
| Current Assets | 70,000 | 90,000 |
|  | 2,20,000 | 1,50,000 |

H Ltd. had purchased $80 \%$ share of S Ltd. on 31.3.12 Prepare consolidated Balance sheet.
(Answer: COC: 54000 and MI: 26000)

| Equity \& Liabilities | H | S |
| :--- | :--- | ---: |
| Shareholder Funds: |  |  |
| Share capital | $2,00,000$ | 30,000 |
| Profit \& Loss a/c | 70,000 | 20,000 |
| Current Liabilities: | 60,000 | $1,50,000$ |
| Creditors | $3,30,000$ | S |
|  | H | $1,20,000$ |
| Non Current Assets: | $1,00,000$ | - |
| Fixed Assets | $1,90,000$ | $1,50,000$ |
| Investment 60\% | 40,000 |  |
| Current Assets | $3,30,000$ |  |
|  |  |  |

H Ltd Purchases investment on on 1-4-2011 when Balance in Profit \& Loss a/c of S Ltd. was Rs. 18,000. Prepare consolidated Balance Sheet.
(Answer: Goodwill: 119200 and MI: 52000)

Q35. Assume same Balance Sheet as in question 2, but with following information. Investment were purchased by H Ltd. in S Ltd. on 1.10.03 Balance in Profit and Loss Account of S Ltd. was 26,000 on 1.4.03. (Answer: Goodwill 13,400 and Min Int. 30,000)

## ABNORMAL ITEMS

Q36.

## Balance Sheet 31.3.2010

## Equity \& Liabilities

H
Shareholder Funds:

| Share capital | 400,000 | 300,000 |
| :--- | :--- | ---: |
| Profit \& Loss a/c | 100,000 | 80,000 |
| General reserve | 200,000 | 50,000 |
| Capital reserve | 100,000 | 50,000 |
| Current Liabilities: | 50,000 |  |
| Creditors | 850,000 | 500,000 |
|  |  |  |
| Non Current Assets: | 500,000 | 300,000 |
| Fixed Assets | 200,000 | - |
| Investment in 80\% shares | 150,000 | 200,000 |
| Current Assets | 850,000 | 500,000 |

H Ltd. had acquired shares of S Ltd. on 1/8/09. Balance of S Ltd. reserves on. 1/4/09.
Profit \& Loss $a / c$ 20,000
General reserve 14,000
Capital reserve.
26,000
There were abnormal items on certain dates.

## Date Item

1-11-09 Abnormal loss

## Amount

2000
1-7-09 Abnormal gain 3000
Prepare Consolidated Balance Sheet.
(Answer: CR: 122134, MI: 96000, BS Total: 1150000)

## BONUS DISTRIBUTION

Q37.
Balance Sheet 31.3.2012

| Equity \& Liabilities | H | S |
| :--- | :--- | :--- |
| Shareholder Funds: |  |  |
| Share Capital | $4,00,000$ | $1,00,000$ |
| Profit and Loss A/c | $5,00,000$ | $3,00,000$ |
| Current Liabilities: |  |  |

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| Creditors | 70,000 | $2,00,000$ |
| :--- | :--- | :--- |
|  | $9,70,000$ | $6,00,000$ |
| Assets |  |  |
| Non-Current Assets: | $6,00,000$ | $4,00,000$ |
| Fixed Assets | 70,000 | - |
| Investments in S Ltd. | $3,00,000$ | $2,00,000$ |
| Current Assets | $9,70,000$ | $6,00,000$ |
|  |  |  |

H Ltd. purchased 6,000 shares of S Ltd. on 1-7-2011. Balance in Profit \& Loss A/c of S Limited on 1.4.2011 was Rs. 1,00,000. There was Abnormal Loss Rs. 12,000 on 1-11-2011 at S Limited. S Ltd. distributed bonus in ratio of 1:2 whose entry has not been passed by $S$ Ltd. Prepare Consolidated Balance Sheet
(Ans: CR - 81,800/-; MI - 1,60,000/- and BS Total - 15,00,000/-)
Q38. A Ltd. acquired 8,000 shares of Rs. 100 each in B Ltd. on 30th September, 1991. The Summarized Balance Sheet of the two companies as on 31st March 1992 were as follows:

|  | A Ltd | B Ltd. |
| :---: | :---: | :---: |
| Equity \& Liabilities: | Rs. | Rs. |
| Shareholder Funds: |  |  |
| Share Capital |  |  |
| 30,000 shares of Rs. 100 each | 30,00,000 | - |
| 10,000 shares of Rs. 100 each | - | 10,00,000 |
| Capital Reserves | - | 5,50,000 |
| General Reserves | 3.00,000 | 50,000 |
| Profit and Loss Account | 3,82,000 | 1,80,000 |
| Non-Current Liabilities |  |  |
| Loans from B Ltd | 21,000 | - |
| Current Liabilities: |  |  |
| Bills Payable (including Rs. 5,000 to A Ltd.) - |  | 17,000 |
| Creditors | 1,79,000 | 70,000 |
|  | 38,82,000 | 18,67,000 |
| Non Current Assets: | A Ltd. | B Ltd. |
| Fixed Assets | 15,00,000 | 14,47,000 |
| Investment in B Ltd. at cost | 17,00,000 | - |
| Current Assets: |  |  |
| Stock in hand | 4,00,000 | 2,00,000 |
| Loans to A Ltd. | - | 20,000 |
| Bills Recevb. (Including 5,000 from B Ltd.) 12,000 |  | - |
| Debtors | 2,50,000 | 1,80,000 |
| Cash and Bank Balance | 20,000 | 20,000 |
|  | 38,82,000 | 18,67,000 |

Note: On the balance sheet of $A$ Ltd.: There is a contingent liability for bills discounted of Rs. 6,000

You are given the following information:

1. B Ltd. made a bonus issue on 31st march, 1992 of one share for every two shares held, reducing the capital reserve equivalently but the accounting effect to this has not been given in the above Balance Sheet.
2. Interest receivable for the year (Rs. 1,000 ) in respect of the loan due by $A \operatorname{Ltd}$. to B Ltd. has not been credited in the books of B Ltd.
3. The credit balance in the Profit and Loss Account of B Ltd. as on 1-4-1991 was Rs. 21,000.
4. The Director decided on the date of acquisition that the fixed assets of B Ltd. were over-valued and should be written down by Rs. 50,000. Consequential adjustments on depreciation are to be ignored.
Prepare the consolidated Balance Sheet as at 31 st march, 1992 showing your working.
(Ans.: Minority Intt. 3,46,200 Goodwill 3,79,200 and BS Total: 43,53,200)

## DIVIDENDS DISTRIBUTION

Q39. Calculate Cost of Control and Minority interes $\dagger$

$$
\begin{array}{lll}
\text { Investments Purchased (75\%) on 1-7-2010Rs. 5,00,000 } \\
\text { Share capital of S Ltd. } & 31-3-2012 & \text { Rs. } 10,00,000 \\
\text { Balance is Profit \& Loss A/c } & 1-4-2010 & \text { Rs. } 4,00,000 \\
\text { Balance is Profit \& Loss A/c } & 31-3-2012 & \text { Rs. } 7,50,000
\end{array}
$$

## Dividend Paid by $S$ limited

| On | Type | Amount |
| :--- | :--- | :--- |
| 01-08-2010 | Final Dividend | 10,000 |
| $01-01-2011$ | Interim Dividend | 18,000 |
| $01-05-2011$ | Final Dividend | 24,000 |
| $01-10-2011$ | Interim Dividend | 12,000 |

All Dividends received were credited by HLtd. in its P\&L a/c (Ans: Capital Reserve 5,88,813/- and Minority Interest 4,37,500)

## DIVIDEND WITH BONUS

Q40.
Balance Sheet as on 31-3-2011

| Equity \& Liabilities | H | $s$ |
| :---: | :---: | :---: |
| Shareholder Funds: |  |  |
| Share Capital | 10,00,000 | 4,00,000 |
| Profit \& Loss A/c | 5,00,000 | 3,00,000 |
| Current Liabilities: |  |  |
| Creditor | 5,00,000 | 5,00,000 |
|  | 20,00,000 | 12,00,000 |
| Non-Current Assets: | H | 5 |
| Fixed Assets | 7,50,000 | 6,50,000 |
| Investments in Shares | 5,00,000 | - |
| Current Assets | 7,50,00 | 5,50,000 |
|  | 20,00,000 | 12,00,000 |

H Ltd. had purchased shares of S Ltd. on 1-10-2010. H Ltd. held 30,000 shares of S Ltd. on 31-3-2011. Balance in Profit \& Loss A/c of S Ltd. on 1-4-2010 was Rs. 2,00,000.

1. Abnormal Loss Rs. 20,000 on 1-5-2010.
2. S Ltd, distributed dividend of 10\% on 1-1-2011 for the year 2009-2010. H Ltd. credited its Profit \& Loss A/c for receipt of dividend.
3. On 31-3-2011 S Ltd. declared \& distributed Bonus 1:4, whose entry is yet to be passed by S Ltd. Prepare Consolidated Balance Sheet.
(Ans: Goodwill 1,04,000/- and Min. Int. 2,80,000/-)

Q41. A Ltd. acquired 70\% equity shares of B Ltd. on 01.04.2008 at cost of Rs. 10,00,000 when B Ltd. had an equity share capital of Rs. 10,00,000 and reserves and surplus of Rs. 80,000 . In the four consecutive years, B Ltd. fared badly and suffered losses of Rs. $2,50,000$, Rs. 4,00,000, Rs. 5,00,000 and Rs. 1,20,000 respectively. Thereafter in 2012-13, B Ltd. experienced turnaround and registered an anuual profit of Rs. 50,000. In the next two years i.e. 2013-14 and 2014-15, B Ltd. recorded annual profits of Rs. 1,00,000 and Rs. $1,50,000$ respectively. Show the Minority Interests and Cost of Control at the end of each year for the purpose of Consolidation.
(RTP - May 2015)
(Answer: COC - 2,44,000 and MI-3,24,000; 2,49,000, 1,29,000; Nil; Nil, Nil, Nil, $33,000)$

## Note:

Para 26 of AS 21: Losses applicable to Minority in Consolidated Financial Statements may exceed the Minority Interest in the equity/net worth of the subsidiary. The excess and any further losses applicable to minority are adjusted against majority interest except to the extent the minority has binding obligation to, and is able to make good the losses. If D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla
subsidiary subsequently reports profits, then all such profits are allocated to the majority interest until the minority's share of losses previously absorbed by the majority has been recovered.

Q42. On 31st March, 2004 the Balance Sheets of H Ltd. and its subsidiary S Ltd, stood as follows:
(In Lakhs)
Equity \& Liabilities
H Ltd.
S Ltd.
Shareholder Funds:

| Authorized Share Capital | $\underline{15,000}$ | $\underline{\mathbf{6 , 0 0 0}}$ |
| :--- | :--- | :--- |
| Issued shares of Rs. 10 each | 12,000 | 4,800 |
| General Reserve | 2,784 | 1,380 |
| Profit and Loss A/c | 2,715 | 1,620 |

Current Liabilities:
Bills Payable 372
160
Sundry Creditors $\quad 1,461 \quad 854$
Provision for Taxation 855394
Proposed Dividend 1,200
21,387 9,208
ASSETS:
Non-Current Assets:
Land and Building 2,718

| Plant and Machinery | 4,905 | 4,900 |
| :--- | :--- | :--- |

Furniture and Fittings $\quad 1,845$
Investments in shares in S Ltd. 3,000
Current Assets:

| Stock | 3,949 | 1,956 |
| :--- | :--- | :--- |
| Debtors | 2,600 | 1,363 |
| Cash and Bank balances | 1,490 | 204 |
| Bills Receivable | 360 | 199 |
| Sundry Advances | 520 | - |
|  | 21,387 | 9,208 |

The following information is also provided to you:
D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla
(a) H Ltd. purchased 180 lakh shares in S Ltd. on $1^{\text {st }}$ April, 2003 when the balances to General Reserve and Profit and Loss Account of S Ltd. stood at Rs. 3,000 lakh and 1,200 lakh respectively.
(b) On $4^{\text {th }}$ July, 2003 S Ltd. declared \& paid a dividend @ $20 \%$ for the year ended $31^{\text {st }}$ March, 2003. H Ltd. credited the dividend received by it to its Profit and Loss Account.
(c) On $1^{\text {st }}$ January, 2004 S Ltd. issued 3 fully paid-up shares for every 5 shares held as bonus shares out of balances to its general reserve as on 31st March, 2003.
(d) On 31st March, 2004 all the bills payable in S Ltd.'s balance sheet were acceptances in favour of H Ltd. But on that date, H. Ltd. held only Rs. 45 lakh of these acceptances in hand, the rest having been endorsed in favour of its creditors.
(e) On 31st March, 2004 S Ltd.'s stock included goods which it had purchased for Rs. 100 lakh from H Ltd. which made a profit @ $25 \%$ on cost.

Prepare a Consolidated Balance Sheet of H Ltd. and its subsidiary S Ltd. as at 31st March, 2004 bearing in mind the requirements of AS 21.
(May 2004, Marks 16)
(Ans.: Capital reserve Rs.1,320; Minority Interest Rs.3120)

## Updation of Accounts

## Q43. (ICAI MODULE)

Consider the following summarised balance sheets:

|  | $\begin{gathered} \text { A Ltd. } \\ \text { 31.3.20X2 } \end{gathered}$ | $\begin{gathered} \text { B LTd. } \\ 31.12 .20 \times 1 \end{gathered}$ |  | $\begin{gathered} \text { ALTd. } \\ \text { 31.3.20X2 } \end{gathered}$ | $\begin{gathered} \text { B LTd. } \\ 31.12 .20 \times 1 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rs | Rs |  | Rs | Rs |
| Share Capital (Shares of Rs 10 each) | 10,00,000 | 5,00,000 | Fixed Assets | 6,50,000 | 4,05,000 |
| Reserves and Surplus | 4,50,000 | 2,05,000 | Investment: 40,000 Shares in B Ltd. | 8,00,000 | - |
| Secured Loan: 13\% Debentures (Rs 100 each) | - | 3,00,000 | 1,000 Debentures In B Ltd. | 1,50,000 | - |
| Current Liabilities: |  |  | Current Assets: |  |  |
| Trade payables | 3,80,000 | 80,000 | Inventory | 2,00,000 | 3,50,000 |

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| Other liabilities | $2,00,000$ | 40,000 | Trade Receivables | $1,50,000$ | $2,65,000$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Cash and Bank | 80000 | 105000 |
|  | $20,30,000$ | $11,25,000$ |  | $20,30,000$ | $\mathbf{1 1 , 2 5 , 0 0 0}$ |

On 5th January 20X2, certain inventory of B Ltd. costing Rs 20,000 were completely destroyed by fire. The insurance company paid $75 \%$ of the claim.
On 20th January, 20X2, A Ltd. sold goods to B Ltd. costing Rs 1,50,000 at an invoice price of cost plus $20 \%$.
$50 \%$ of those goods were resold by B Ltd. to A Ltd. within 31st March, 20X2 (these were then sold by A Ltd. to a third party before 31st March, 20X2). As on 31st March, 20X2, B Ltd. owes Rs 60,000 to A Ltd. in respect of those goods. Pre-acquisition profits of B Ltd. were Rs 75,000. Prepare consolidated balance sheet as on 31st March, 20X2 after making necessary adjustments in the balance sheet of B Ltd.

## Solution:

Consolidated Balance Sheet of A Ltd. and its subsidiary B Ltd.
As on 31st March, 20X2

| Particulars | Note No. | (Rs) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| I. Equity and Liabilities |  |  |  |  |  |
| (1) Shareholder's Funds |  |  |  |  |  |
| (a) Share Capital |  | $10,00,000$ |  |  |  |
| (b) Reserves and Surplus (W.N.5.) |  | $5,09,000$ |  |  |  |
| (2) Minority Interest (W.N 3.) |  | $1,46,000$ |  |  |  |
| (3) Non-current liabilities |  |  |  |  |  |
| (a) Long term borrowings | 1 | $2,00,000$ |  |  |  |
| (4) Current Liabilities |  |  |  |  |  |
| (a) Trade Payables | 2 | $4,60,000$ |  |  |  |
| (b) Other current liabilities (Rs 2,00,000 + Rs 40,000) |  | $2,40,000$ |  |  |  |
| Total |  |  |  |  | $25,55,000$ |
| II. Assets |  |  |  |  |  |
| (1) Non-current assets |  |  |  |  |  |
| (a) Fixed assets |  |  |  |  |  |
| (i) Tangible assets | 3 | $10,55,000$ |  |  |  |
| (ii) Intangible assets | 4 | $3,40,000$ |  |  |  |
| (2) Current assets |  |  |  |  |  |
| (a) Inventories | 5 | $6,05,000$ |  |  |  |
| (b) Trade receivables | 6 | $3,55,000$ |  |  |  |
| (c) Cash \& Cash equivalents | 7 | $2,00,000$ |  |  |  |
|  |  |  |  |  |  |

## Notes to Accounts

|  |  |  | Rs |
| :---: | :--- | :--- | :---: |
| 1. | Long Term Borrowings |  |  |


|  | Secured loans |  |  |
| :---: | :--- | :--- | :--- |
|  | $13 \%$ Debentures (Rs 100 each) |  | $2,00,000$ |
| $\mathbf{2 .}$ | Trade Payables | $3,80,000$ |  |
|  | A Ltd. | $1,40,000$ |  |
|  | B Ltd.(W.N 1) |  |  |
|  | $5,20,000$ | $60,000)$ | $4,60,000$ |
|  | Less : Mutual indebtedness |  |  |
| $\mathbf{3 .}$ | Tangible Assets | $6,50,000$ |  |
|  | A Ltd. | $4,05,000$ | $10,55,000$ |
|  | B Ltd. |  |  |
| $\mathbf{4 .}$ | Intangible assets | $3,40,000$ |  |
|  | Goodwill (W.N 2) | $2,00,000$ |  |
| $\mathbf{5 .}$ | Inventories | $4,20,000$ |  |
|  | A Ltd. |  |  |
|  | B Ltd. [WN 1 | $(15,000)$ | $6,05,000$ |
|  | 6,20,000 |  |  |
|  | Less : Unrealised profit [90,000 $\times 20 / 120]$ | $1,50,000$ |  |
| $\mathbf{6}$ | Trade Receivables | $2,65,000$ |  |
|  | A Ltd. |  |  |
|  | B Ltd. | $(60,000)$ | $3,55,000$ |
|  | 4,15,000 |  |  |
|  | Less : Mutual indebtedness | 80,000 |  |
| $\mathbf{7}$ | Cash \& Cash equivalents | $1,20,000$ | $2,00,000$ |
|  | A Ltd. |  |  |
|  | B Ltd.[W.N 1] |  |  |

## Working Notes:

1. Adjustments to be made in the balance sheet items of B Ltd.:

| Assets side | Rs |
| :--- | :---: |
| Inventories: |  |
| As given on 31.12.20X1 | $3,50,000$ |
| Add : Unsold Inventory out of goods purchased from A Ltd. | 90,000 |
|  | $4,40,000$ |
| Less: Loss of Inventory by fire | $(20,000)$ |
|  | $4,20,000$ |
| Cash \& Bank balance: |  |
| As given on 31.12.20X1 | $1,05,000$ |
| Add: Insurance claim received [20,000 × 75 \%] | 15,000 |
|  | $1,20,000$ |
| Liabilities side: |  |
| Trade payables: |  |
| As given on 31.12.20X1 | 80,000 |
| Add: Owings to A Ltd. on 31.3.20X2 | 60,000 |
|  | $1,40,000$ |

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| Reserves and Surplus: |  |
| :--- | :---: |
| As given on 31.12.20X1 | $2,05,000$ |
| Less: Abnormal Loss on goods destroyed $[20,000-15,000]$ | $(5,000)$ |
|  | $2,00,000$ |
| Add: Profit from sale of goods purchased from A L+d. | 30,000 |
|  | $2,30,000$ |

2. Goodwill / capital reserve on consolidation:

|  | Rs | Rs |
| :--- | :---: | :---: |
| Amount paid for 40,000 Shares | $8,00,000$ |  |
| Less: Nominal value of proportionate share capital | $4,00,000$ |  |
| Share of pre-acquisition profits (80\% of Rs 75,000) | 60,000 | $(4,60,000)$ |
| Goodwill |  | $3,40,000$ |

3. Minority Interest: $10,000 / 50,000$ shares $=20 \%$

| Paid up value of 10,000 shares | Rs |
| :--- | :--- |
| Add: $20 \%$ of Reserves \& Surplus of B Ltd. (20\% of Rs 2,30,000) | 46,000 |
|  | $1,46,000$ |

4. Profit /Loss on Debentures acquired

|  | Rs |
| :--- | :---: |
| Amount paid for 1,000 Debentures | $1,50,000$ |
| Less: Nominal value of proportionate 13\% debentures | $(1,00,000)$ |
| Loss charged to Profit and Loss Account | 50,000 |

5. Reserves and Surplus of A Ltd.

| Balance as on 31.3.20X2 | $4,50,000$ |
| :--- | :---: |
| Add: Share of revenue reserves of B L+d. |  |
| ([80\% of Rs $1,55,000(2,30,000-75,000)]$ | $1,24,000$ |
|  | $5,74,000$ |
| Less: Unrealised profit on Inventory $1 / 6 \times$ Rs 90,000 | $(15,000)$ |
| Loss on elimination of debentures acquired | $(50,000)$ |
|  | $5,09,000$ |

## Q44. (ICAI MODULE)

Consider the following summarized balance sheets of subsidiary B Ltd.:

|  | 20X1 <br> Rs | $20 \times 2$ <br> Rs |  | $20 \times 1$ <br> Rs | $20 \times 2$ Rs |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Share-Capital |  |  | Fixed Assets |  |  |
| Issued <br>  <br> 5,000 equity |  |  | Cost | $3,20,000$ | $3,20,000$ |
| shares |  |  |  |  |  |

[^7]| of Rs 100 each | $5,00,000$ | $5,00,000$ | depreciation | $(48,000)$ | $(96,000)$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Reserves \& Surplus |  |  |  |  |  |$\quad$| Net Value | $2,72,000$ | $2,24,000$ |
| :---: | :---: | :---: |
| Revenue reserves | $2,86,000$ | $7,14,000$ |
| Current Liabilities <br> \& Provisions: |  |  |
|  |  |  |

Consider also the following information:
(a) B Ltd. is a subsidiary of $A \operatorname{Ltd}$. Both the companies follow calendar year as the accounting year.
(b) A Ltd. Values its inventory on LIFO basis while B Ltd. used FIFO basis. To bring B Ltd.'s values in line with those of A Ltd. its value of inventory is required to be reduced by Rs 12,000 at the end of 20X1 and Rs 34,000 at the end of 20X2.
(c) Both the companies use straight-line method of depreciation. However, A Ltd. charges depreciation @ 10\%.
(d) B Ltd. deducts $1 \%$ from Trade Receivables as a general provision against doubtful debts.
(e) Prepaid expenses in B Ltd. include advertising expenditure carried forward of Rs 60,000 in $20 \times 1$ and Rs 30,000 in 20X2, being part of initial advertising expenditure of Rs 90,000 in 20X1 which is being written off over three years. Similar amount of advertising expenditure of A Ltd. has been fully written off in 20X1.
Restate the balance sheet of B Ltd. as on 31st December, 20X2 after considering the above information, for the purpose of consolidation. Such restatement is necessary to make the accounting policies adopted by A Ltd. and B Ltd. Uniform.

## Solution:

Adjusted revenue reserves of $B$ Ltd.

|  | Rs | Rs |
| :--- | :---: | :---: |
| Revenue reserves as given |  | $7,14,000$ |
| Add: Depreciation over charged (Rs 16,000 $\times 2$ ) | 32,000 | - |
| Provision for doubtful debts [8,91,000 / 99 $\times 1]$ | 9,000 | 41,000 |
|  |  | $7,55,000$ |
| Less: Reduction in value of Inventory | 34,000 |  |
| Advertising expenditure to be written off | 30,000 | $(64,000)$ |
| Adjusted revenue reserve |  | $6,91,000$ |

Restated Balance Sheet of B Ltd.
as at 31st December, 20X2

| Particulars | Note No. | Rs |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| I. Equity and Liabilities |  |  |  |  |  |
| (1) Shareholder's Funds |  |  |  |  |  |
| (a) Share Capital |  | $5,00,000$ |  |  |  |
| (b) Reserves and Surplus | 1 | $6,91,000$ |  |  |  |
| (2) Current Liabilities |  |  |  |  |  |
|  | 2 | $1,70,000$ |  |  |  |
| (a) Short term borrowings |  |  |  |  |  |
| (b) Trade Payables |  | $4,94,000$ |  |  |  |
| (c) Short-term provision | 3 | $4,30,000$ |  |  |  |
|  |  | $22,85,000$ |  |  |  |
| II. Assets |  |  |  |  |  |
| (1) Notal |  |  |  |  |  |
| (a) Fixed assents assets |  | $2,56,000$ |  |  |  |
| Tangible assets |  | $4,00,000$ |  |  |  |
| (b) Non-current Investment |  |  |  |  |  |
| (2) Current assets |  | $7,08,000$ |  |  |  |
| (a) Inventories |  | $9,00,000$ |  |  |  |
| (b) Trade Receivables |  | 3,000 |  |  |  |
| (c) Cash \& Cash Equivalents |  | 18,000 |  |  |  |
| (d) Other current assets | 5 | $22,85,000$ |  |  |  |
| Total |  |  |  |  |  |

Notes to Accounts

|  |  |  |  |
| :--- | :--- | :--- | :---: |
| 1. | Reserves and Surplus |  |  |
|  | Revenue Reserve |  | $6,91,000$ |
| 2. | Short term borrowings |  |  |
|  | Bank overdraft |  | $1,70,000$ |
| 3. | Short-term provision |  |  |
|  | Provision for taxation |  | $4,30,000$ |
| 4. | Tangible Assets |  |  |
|  | Cost | $3,20,000$ |  |
|  | Less: Depreciation to date | $(64,000)$ | $2,56,000$ |
| 5. | Other current assets |  |  |
|  | Prepaid expenses |  | 18,000 |

## Unit - 2 (AS - 21)

## Multiple Acquisition of Shares and Disposal of Shares in Single Subsidiary

Q45. H Ltd. acquired shares of $S L+d$. as follows:

| Date | No. of shares | $\%$ | Amount |
| :--- | :--- | :--- | :--- |
| $1 / 1 / 2000$ | 8000 | $40 \%$ | 120,000 |
| $1 / 4 / 2001$ | 3000 | $15 \%$ | 40,000 |
| $1 / 4 / 2002$ | 3000 | $15 \%$ | 42,000 |

Every year on 31st May, Subsidiary Co. pays dividend of $10 \%$ for previous year. Shares of S Ltd. are of Rs.10/- each. Profit \& loss of subsidiary is as follows:
Balance on 1/1/2000
Add profit for year 2000

Less dividend paid in year 2000
Balance as on $1 / 1 / 0$ I
Add Profit for the year 2001
Less: Dividend paid in year 2001

Add profit for the year 2002
Less Dividend paid in year 2002
Balance on 31/12/2002
(Ans: Cost of Control Rs. 38,375; M/1 Rs 1,53,000 and Cons. P\&L - 1,16,625)

## Q46. (ICAI MODULE)

'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 20X1 were as under:

| Equity and Liabilities | HIM Limited <br> (Rs) | SIM Limited <br> (Rs) |
| :--- | :---: | :---: |
| 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 |  |  |

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| Trade Payable | $4,55,000$ | $2,35,500$ |
| :--- | :---: | :---: |
| Bills Payable | 28,000 | 83,000 |
| Total | $34,95,500$ | $12,23,500$ |
| Assets |  |  |
| Non-Current Assets | $21,70,000$ | $6,25,000$ |
| Fixed Assets | $5,10,000$ | - |
| Investments |  |  |
| 4060 Shares in SIM <br> Limited | $4,80,000$ | $3,19,200$ |
| Current Assets | $1,80,000$ | $1,64,000$ |
| Inventories | 68,000 | $1,00,000$ |
| Trade Receivable | 87,500 | 15,300 |
| Bills Receivable | Total | $34,95,500$ | $\mathbf{1 2 , 2 3 , 5 0 0}$.

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 <br> Reserve | Balance in Profit and Loss <br> Account |
| :--- | :--- | :--- |
| $1_{\text {st }}$ acquisition 3480 | 80,000 | 25,000 |
| nnd acquisition 580 | 85,000 | $1,02,000$ |

(ii) Bills Receivable of HIM Limited includes Rs 15,000 being acceptance from SIM Limited.
(iii) Both the companies have declared dividends of $10 \%$ on $31_{\text {st }}$ March 20X1, but it has not been provided in the books of account.
(iv) SIM Limited's inventory includes stock of Rs 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 Ltd. and its subsidiary Sim Ltd. as on 31 st March, 20X1

| Particulars | Note No. | Amount |
| :--- | :--- | :--- |
| I. Equity and Liabilities | 1 |  |
| (1) Shareholder's Funds | 2 | $25,00,000$ |
| Share Capital | $3,79,300$ |  |
| Reserves and Surplus | $2,54,100$ |  |
| (2) Minority Interest (W.N.2) | 3 | $7,86,500$ |
| (3) Current Liabilities | 3 | $2,67,400$ |
| Trade payable | $41,87,300$ |  |
| Other current liability |  |  |
| Total |  |  |
| II. Assets |  |  |

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| (1) Fixed Assets | 5 | $27,95,000$ |
| :--- | :--- | :--- |
| Tangible assets $(21,70,000+6,25,000)$ | 5 | 22,300 |
| Intangible assets | 6 | $7,70,200$ |
| (2) Current assets | 7 | $4,97,000$ |
| Inventories | 8 | $1,02,800$ |
| Trade Receivables | $41,87,300$ |  |
| Cash and Cash equivalents $(87,500+15,300)$ | 9 |  |
| Total |  |  |

Notes to Accounts


|  | Bills Receivable |  |  |
| :--- | :--- | :---: | :---: |
|  | Him Ltd. 68,000 |  |  |
|  | Less: Mutual owings (15,000) | 53,000 |  |
|  | Sim Ltd. | $1,00,000$ | $1,53,000$ |
|  |  |  | $4,97,000$ |
| 9. | Cash and Cash equivalents |  |  |
|  | Him Ltd. | 87,500 |  |
|  | Sim Ltd. | 15,300 | $1,02,800$ |

## Working Notes:

1. Analysis of Profits

|  | Pre-acquisition Profits | Post-acquisition |  |
| :---: | :---: | :---: | :---: |
|  |  | General Reserve | Profit \& Loss Account |
|  | Rs | Rs | Rs |
| General Reserve | 80,000 | 40,000 |  |
| Profit \& Loss Account | 25,000 |  | 1,80,000 |
| For Lot 1 (A) | 1,05,000 | 40,000 | 1,80,000 |
| Pre-acquisition for Lot 2 |  |  |  |
| $\begin{aligned} & \text { General Reserve }(85,000- \\ & 80,000) \end{aligned}$ |  | 5,000 |  |
| Profit \& Loss Account $(1,02,000-25,000)$ |  |  | 77,000 |
| Post-acquisition for Lot 2 |  | 35,000 | 1,03,000 |
| Him Ltd. (70\%) of (A) | 73,500 | 28,000 | 1,26,000 |
| Adjustment of pre-acquisition General Reserve for Lot 2 (10\%) | 500 | (500) |  |
| Adjustment of pre-acquisition Profit \& Loss Account for Lot 2 (10\%) | 7,700 |  | $(7,700)$ |
| Him Ltd. | 81,700 | 27,500 | 1,18,300 |
| Minority Interest (30\%) of (A) | 31,500 | 12,000 | 54,000 |

## 2. Minority Interest

|  | Rs |
| :--- | :---: |
| Share Capital (30\%) | $1,74,000$ |
| Add: Share of pre-acquisition profit of Sim Ltd. | 31,500 |
| Share of post-acquisition General Reserve | 12,000 |
| Share of post-acquisition Profit \& Loss Account | 54,000 |
|  | $2,71,500$ |
| Less: Share of Dividend declared and payable | $(17,400)$ |
|  | $2,54,100$ |

## 3. Cost of Control/Goodwill

|  |  |
| :--- | ---: |
| Cost of investments | $5,10,000$ |
| Less: Share capital (70\%) | $(4,06,000)$ |
| Share of pre-acquisition profit | $(81,700)$ |
| Goodwill | 22,300 |

4. Consolidated General Reserve \& Profit and Loss Account

|  | General <br> Reserve Rs | Profit and Loss <br> Rs |
| :--- | :---: | :---: |
| Him Ltd. | $2,00,000$ | $3,12,500$ |
| Less: Dividend declared by Him Ltd. |  | $(2,50,000)$ |
| Less: Unrealised profit | $2,00,000$ | $3,000)$ |
|  | 27,500 | $1,18,300$ |
| Add: Share in post-acquisition item of Sim <br> Ltd. | $2,27,500$ | $1,51,800$ |

Q47. From the following Summarized Balance Sheet of X Ltd. and its subsidiary Y Ltd., prepare a consolidated Balance Sheet as on 31st December, 1999.

Equity \& Liabilities:
Shareholder Funds:
Share Capital

| Equity Shares of Rs. 10 each | 100,000 | 20,000 |
| :--- | ---: | ---: |
| Profit on sale of Shares | 3,000 | - |
| Profit \& Loss a/c Brought forward | 6,000 | 7,200 |
| Profit for the year | 2,000 | 4,800 |
|  | $1,11,000$ | 32,000 |
| Non-Current Assets: | K Ltd. | Y Ltd. |
|  | Rs. | Rs |
| Sundry Assets | 93,000 | 32,000 |
| Shares in Y Ltd. 1,200 shares at Rs.15 each 18,000 | - |  |
|  | $1,11,000$ | 32,000 |

$\times$ Ltd. bought in earlier years 1,600 equity shares in $Y \operatorname{Ltd}$. @ 15 when the Profit and Loss Account balance in Y Ltd. was Rs. 4,400. X Ltd. sold 400 shares @ Rs.22.50, credited the difference between the sale proceeds and cost to "Profit on sale of investment account" on 30th June, 1999 and crediting the balance to the investment account. Profit during the year accrued uniformly.
(Ans: Godwill 3,360/-: Min Intt. 12,800/-)

## Q48.

H Ltd. acquired 20\% shares in S Ltd. on 1-7-20X1 for Rs 50 million, then another 20\% on 1-10-20X1 for Rs 60 million and finally, another 20\% on 1-11-20X1 for Rs 80 million. S Ltd. D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla
became subsidiary of H Ltd. on and from 1-11-20X1. Balance of Reserve of S Ltd. as on 1-420X1 (Rs in million) 60.

Summarised Balance Sheets of H Ltd. and S Ltd. as on 31-3-20X2

|  | Rs in Million |  |
| :--- | :---: | :---: |
|  | H Ltd. | S Ltd. |
| Equity Share Capital | 500 | 200 |
| General Reserve | 400 | 120 |
| Profit \& Loss A/c | 10 | 12 |
| Sources | 910 | 332 |
| Fixed Assets |  |  |
| Gross Block | 800 | 350 |
| Less: Accumulated Depreciation | $(100)$ | $(30)$ |
| Net Block | 700 | 320 |
| Investments | 190 |  |
| Current Assets | 20 | 12 |
| Applications | 910 | 332 |

## Solution:

In this case goodwill paid in acquiring cost of control should be computed step by step basis:

| Rs in million |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Goodwill | 1-7-20X1 | 1-10-20X1 | 1-11-20X1 | Total | Minority <br> Interest |
| Cost of investments <br> (A) | 50 | 60 | 80 | 190 |  |
| Book Value of Investments: |  |  |  |  |  |
| Equity Share Capital | $\begin{aligned} & 40(200 x \\ & 20 \%) \end{aligned}$ | $\begin{aligned} & 40(200 x \\ & 20 \%) \end{aligned}$ | $\begin{aligned} & 40(200 x \\ & 20 \%) \end{aligned}$ | 120.00 | 80 (200-120) |
| General Reserve 1-4- 20X1 | 12 (60 $\times 20 \%$ ) | 12 (60 x 20\%) | 12 (60 $\times 20 \%$ ) | 36.00 | 24 (60-36) |
| Preacquisition profit of 20X1-20X2 WN 1 | 3.6 | 7.2 | 8.40 | 19.20 |  |
| (B) | 55.6 | 59.2 | 60.40 | 175.20 |  |
| $\begin{aligned} & \text { Cost of } \\ & \text { Control (A-B) } \end{aligned}$ | 5.60 | 0.80 | 19.60 | 14.80 |  |
| 40\% of post-acquisition reserve and profit |  |  |  |  | 28.80 |
|  |  |  |  |  | 132.80 |

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| Consolidated Profit \& Loss a/c |  |  |  |
| :--- | :--- | :--- | :--- |
| Balance of P\&L A/c of H Ltd. |  |  | 10 |
| Share of current reserve $[72 \times 60 \%-19.2]$ |  | 24 |  |
|  |  |  | 34 |

## Working Note:

Total Profit from 1-4-20X1 to 31-03-20X2 $=120+12-60=72$ Million

| Acquisition <br> Date | Pre-acquisition Period | Pre-acquisition <br> Duration $[A]$ | $\%$ Holding <br> $[B]$ | Profit amount <br> $72 \times[A] / 12 \times[B]$ |
| :--- | :--- | :--- | :--- | :--- |
| $1-7-20 \times 1$ | $1-4-20 \times 1$ to 1-7-20X1 | 3 Months | 20 | 3.6 |
| $1-10-20 \times 1$ | $1-4-20 \times 1$ to 1-10-20X1 | 6 Months | 20 | 7.2 |
| $1-11-20 \times 1$ | $1-4-20 \times 1$ to 1-11-20X1 | 7 Months | 20 | 8.4 |

Consolidated Balance Sheet of H Ltd. and its Subsidiary S Ltd. as at 31st March, 20X2

| Particular | Note No. | (Rs in million) |
| :--- | :---: | :---: |
| I. Equity and Liability |  |  |
| (1) Shareholder's Fund |  |  |
| (a) Share Capital |  | 500.00 |
| (b) Reserves and surplus | 1 | 434.00 |
| (2) Minority Interest Total |  | 132.80 |
| II. Assets |  | $1,066.80$ |
| (1) Non-current assets |  |  |
| (a) Fixed assets |  |  |
| (i) Tangible Assets | 2 | $1,020.00$ |
| (ii) Intangible Assets |  | 14.80 |
| (2) Current Assets (20+12) |  | 32.00 |
| Total |  |  |

## Notes to Accounts

| Notes to Accounts |  | (' in million) |
| :--- | :---: | ---: |
| 1.Reserves and Surplus |  |  |
| General reserve | 400 |  |
| Profit and Loss A/c [ As calculated above] | 34 | 434.00 |
| 2.Tangible assets |  |  |
| Gross Block |  | $1,150.0$ |
| Less: Accumulated Depreciation |  | $(130.0)$ |
| Net Block |  | $1,020.0$ |

Q49. A Ltd. had acquired $80 \%$ shares in the $B$ Ltd. for Rs 15 lakhs. The net assets of $B$ Ltd. on that day are Rs 22 lakhs. During the year, A Ltd. sold the investment for Rs 30 lakhs and net assets of B Ltd. on the date of disposal was Rs 35 lakhs. Calculate the profit
or loss on disposal of this investment to be recognized in the Financial Statements of $A$ Ltd.

## Solution:

A Ltd. had acquired 80\% shares in the B Ltd. for Rs 15 lakhs. The net assets of B Ltd. on that day are Rs 22 lakhs. During the year, A Ltd. sold the investment for Rs 30 lakhs and net assets of B Ltd. on the date of disposal was Rs 35 lakhs. Calculate the profit or loss on disposal of this investment to be recognized in the Financial Statements of $A$ Ltd.

Calculation of Profit/Loss on disposal of investment in subsidiary

| Particulars | Rs |
| :--- | :---: |
| Proceeds from the sale of Investment | $30,00,000$ |
| Less: A Ltd.'s share in net assets of B Ltd. (W.N.1) | $(28,00,000)$ |
|  | $2,00,000$ |
| Add: Capital Reserve at the time of acquisition of shares <br> in B Ltd. (W.N.2) | $2,60,000$ |
| Profit on sale of investment | $4,60,000$ |

## Working Notes:

1. A Ltd.'s share in net assets of $B$ Ltd.

| Rs |  |
| :--- | :---: |
| Net Assets of B Ltd. on the date of disposal | $35,00,000$ |
| Less: Minority Interest (20\% of ` 35 lakhs) | $(7,00,000)$ |
| A Ltd.'s share in the net assets of B Ltd. | $28,00,000$ |

2. Capital Reserve at time of acquisition of shares in B Ltd.

|  | Rs |
| :--- | ---: |
| A Ltd.'s share in the net assets of B Ltd. on the date of <br> acquisition (80\% of Rs 22 lakhs) | $17,60,000$ |
| Less: Cost of investment | $(15,00,000)$ |
| Capital Reserve at time of acquisition of shares in B Ltd. | $2,60,000$ |

## UNIT - 3 <br> AS 27 - INTEREST IN JOINT VENTURES

Q50.
Balance Sheet 31-3-2011

| Equity \& Liabilities | H | S | J |
| :--- | ---: | ---: | ---: |
| Shareholder Funds: |  |  |  |
| Share Capital | 4.00 | 2.00 | 1.00 |
| Reserves | 1.00 | 0.50 | 0.50 |
| Profit \& Loss A/c | 1.00 | 1.20 | 0.80 |
| Current Liabilities: |  |  |  |
| Creditor | 3.00 | 0.80 | 1.10 |
|  | 9.00 | 4.50 | 3.40 |
|  | H | S | J |
| Non-Current Assets: | 2.00 |  |  |
| Fixed Assets | 3.00 | 1.50 | 1.20 |
| Investments in 80\% S | 1.50 | --- | --- |
| 40\% shares in J | 2.50 | 3.00 | --- |
| Current Assets: | 9.00 | 4.50 | 2.20 |
|  |  |  |  |

1. H Ltd. has a Joint Venture with B Ltd. for control of J Ltd.
2. Where Investments were purchased in S Ltd. and J Ltd.

| Profit were as follows: | S | J |
| :--- | ---: | ---: |
| Reserve | .20 | .30 |
| Profit \& Loss $A / C$ | .75 | .25 |

Prepare Consolidated Balance Sheet
(Answer: Balance Sheet: 11.88)

## Q51.

Air Ltd., a listed company, entered into an expansion programme on 1st October, 2009. On that date 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 up $30^{\text {th }}$ 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 Rs. 20 lakhs of Cold Ltd. for the year 30 September, 2009. The consideration was settled by Air Ltd. issuing 8\% debentures for Rs. 140 lakhs (at par) and the balance by a new issue of Rs. 1 equity shares, based on its market value of Rs.2.50 each.

## Dry Ltd.

The market value of Dry Ltd. on first October, 2009 was mutually agreed as Rs. 375 lakhs. Air Ltd. satisfied its share of $50 \%$ of this amount by issuing 75 lakhs Rs. 1 equity shares (market value Rs. 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:

## Equity \& Liabilities

Shareholder Funds:

| Equity capital: Rs. 1 Each | 10,000 | 20,000 | 25,000 |
| :--- | :---: | :---: | :---: |
| Retained earnings | 20,800 | 15,000 | 4,500 |
| Current Liabilities: |  |  |  |
| Trade and other payables | 17,120 | 5,270 | 14,100 |

## D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

| Overdraft | 1,540 | - | - |
| :--- | ---: | ---: | ---: |
| Provision for taxes | 5,640 | 2,400 | 760 |
|  | 55,100 | 42,670 | 44,360 |
| Non-Current Assets: |  |  |  |
| Tangible Assets | 34,260 | 27,000 | 21,060 |
| Current Assets: | 9,640 | 7,200 | 18,640 |
| Inventories | 11,200 | 5,060 | 4,620 |
| Debtors | - | 3,410 | 40 |
| Cash | 55,100 | 42,670 | 44,360 |

The following information is relevant.
(a) The book values 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 $30^{\text {th }}$ September, 2010 were Rs. 80 lakhs and Rs. 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 Rs10 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.
(November 2010 New Course; 16 Marks)

## Solution:

Consolidated Balance Sheet of Air Ltd. with its Subsidiary Cold Ltd. and Jointly controlled Dry Ltd. as on $30^{\text {th }}$ Sep, 2010

| Particulars | Note No. | (Rs in thousands) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | 21,500 |
| (b) Reserves and Surplus | 2 | 49,050 |
| (2) Non-Current Liabilities | 3 |  |
| Long-term borrowings |  | 15,540 |
| (3) Current Liabilities |  |  |

D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

| (a) Trade Payables Rs $(17,120+5,270+7,050)$ |  | 29,440 |
| :--- | :---: | :---: |
| (b) Short-term provisions | 4 | 8,420 |
| Total |  | $1,23,950$ |
| II. Assets |  |  |
| (1) Non-current assets |  |  |
| Fixed assets |  | 71,790 |
| (a) Tangibles assets Rs (34,260+27,000+10,530) |  | 4,000 |
| (b) Intangible assets (W.N.6) |  |  |
| (2) Current assets |  | 26,160 |
| (a) Inventories Rs (9,640 + 7,200 +9,320) |  | 18,570 |
| (b) Trade receivables Rs (11,200+5,060+2,310) |  | 3,430 |
| (c) Cash and cash equivalents | 5 | $1,23,950$ |
| Total |  |  |

## Notes to Accounts

| Rs in thousands |  |  |  |
| :---: | :---: | :---: | :---: |
| 1. | Share Capital |  |  |
| Equity Capital Rs ( $10,000+4,000+7,500)$ |  |  |  |
| (Out of the above 11,500 thousand shares have been issued for consideration other than cash) |  |  | 21,500 |
| 2. | Reserves and Surplus |  |  |
| Retained Earnings (W.N.4) |  | 28,800 |  |
| Capital Reserve (W.N.5) |  | 3,000 |  |
| Securities Premium |  | 17,250 | 49,050 |
| 3. | Long Term Borrowings |  |  |
| 8\% Debentures |  | 14,000 |  |
| Overdraft |  | 1,540 | 15,540 |
| 4. | Short-term provisions |  |  |
| Provision for taxes Rs ( $5,640+2,400+380)$ |  | 8,420 |  |
| 5. | Cash and cash equivalents |  |  |
| Cash Rs ( $3,410+20$ ) |  | 3,430 |  |

## Working Notes:

1. Purchase consideration paid to Cold Ltd.

Earnings per share for the year $30^{\text {th }}$ Sep, 2009
$=20,00,000 / 2,00,00,000=$ Rs 0.10 per share
Market price per share $=$ Rs $0.10 \times 12$ (i.e. $P / E$ ratio) $=$ Rs 1.20 per share
Purchase consideration = Rs $1.20 \times 2,00,00,000$ shares= Rs $2,40,00,000$
Purchase consideration to be paid as under:
8\% Debentures
Rs $1,40,00,000$
Equity Shares (40,00,000 shares of Rs 2.50 each) Rs 1,00,00,000
Rs 2,40,00,000

Purchase consideration paid to Cold Ltd. will be Rs 24,000 thousands.
2. Consideration paid to Dry Ltd. (Rs in thousands)

Total market value (as given) 37,500
50\% Shares acquired by Air Ltd.(75,00,000 shares @ Rs 2.50 each) 18,750
3. Analysis of retained earnings of Cold Ltd. as on $30^{\text {th }}$ Sep, 2017

$$
\begin{array}{ll}
\text { Retained earnings given in balance sheet on 31.3.2017 } & 15,000 \\
\text { Less: Current profits for the year ended 31.3.2017 (Post acquisition) } & \underline{(8,000)} \\
\text { Pre acquisition retained earnings } & 7,000 \\
\text { Air Ltd. has } 100 \% \text { share in pre and post acquisition profits of Cold Ltd. }
\end{array}
$$

4. Retained Earnings in the Consolidated Balance Sheet

|  | Rs in thousands |
| :--- | :---: |
| Balance in Air Ltd. balance sheet | 20,800 |
| Add: Share in post acquisition profits of Cold Ltd. | 8,000 |
| Add: Share in post acquisition profits of Dry Ltd. (joint venture) | 1,000 |
|  | 29,800 |
| Less: Goodwill (written off) | $(1,000)$ |
|  | 28,800 |

5. Capital Reserve

|  | Rs in thousands |
| :--- | :---: |
| Amount Paid | 24,000 |
| Less: Paid up value of shares 20,000 |  |
| Pre-acquisition profit 7,000 | $(27,000)$ |
| Capital Reserve | 3,000 |

6. Goodwill

|  | Rs in thousands |
| :--- | :---: |
| Amount paid for shares of Dry Ltd (Rs $37,500 \times 50 \%$ ) | 18,750 |
| Less: Paid up value of shares (Rs $25,000 \times 50 \%$ ) | $(12,500)$ |
| Pre-acquisition profit (Rs $2,500 \times 50 \%$ ) | $(1,250)$ |
| Goodwill | 5,000 |
| Less: Impairment (Written off) | $(1,000)$ |
|  | 4,000 |

## TRANSACTIONS BETWEEN JOINT VENTURE AND VENTURER IN CASE OF

## JCA/JCO

Q52. Journalise assuming JV of JCO nature between $A$ and $B$ in ratio of $1: 1$

1. A \& B Jointly Purchased machine Rs. $1,00,000$
2. A Sold machine of Rs.70,000 to JV for Rs.1,10,000
3. B Sold Machine of Rs.1,60,000 To JV for Rs.2,00,000
4. A Sold Machine of Rs.1,00,000 to JV for Rs.90,000
5. B Sold Machine of Rs.2,00,000 to JV for Rs. 150,000
6. Machine of Book Value Rs. 1,00,000 to Joint Venture was sold to A for Rs.1,20,000

## ASSOCIATE - AS 23

| Q53. | Balance Sheet | 31-3-2011 |  |
| :--- | :--- | :---: | ---: |
| Shareholder Funds: | H | S |  |
| Share Capital | 10.00 | 3.00 | 2.00 |
| Reserves | 1.00 | 2.00 | 0.50 |
| Profit \& Loss A/c | 1.00 | 1.00 | 0.50 |
| Current Liabilities: |  |  |  |
| Liability | 2.00 | 0.50 | 2.20 |
|  | 14.00 | 6.50 | 5.20 |
|  | H | S | A |
| Non-Current Assets: |  |  |  |
| Fixed Assets | 7.00 | 6.00 | 5.00 |
| Investments in 80\% S | 4.00 | - |  |
| 30\% of A | 2.00 | - | - |
| Current Assets: | 1.00 | 0.50 | 0.20 |
|  | 14.00 | 6.50 | 5.20 |

H Ltd. had acquired shares in S \& A on 1-4-2010 when Balances were:

|  | S | A |
| :--- | :--- | :--- |
| Reserves | 1.50 | .30 |
| Profit \& Loss A/c | 20 | 20 |

## Q54. (ICAI)

A Ltd. acquired $40 \%$ share in B Ltd. on April 01, 20X1 for Rs 10 lacs. On that date B Ltd. had $1,00,000$ equity shares of Rs 10 each fully paid and accumulated profits of Rs 2,00,000.
During the year 20X1-20X2, B Ltd. suffered a loss of Rs 10,00,000.
During 20X2-20X3 loss of Rs $12,50,000$ and during 20X3-20X4 again a loss of Rs $5,00,000$. Show the extract of consolidated balance sheet of $A \operatorname{Ltd}$. on all the four dates recording the above events.
Solution
Calculation of Goodwill/Capital Reserve under Equity Method

| Particulars | Rs |
| :--- | :---: |
| Equity Shares | $10,00,000$ |
| Reserves \& Surplus | $2,00,000$ |
| Net Assets | $12,00,000$ |
| $40 \%$ of Net Asset | $4,80,000$ |
| Less: Cost of Investment | $(10,00,000)$ |
| Goodwill | $5,20,000$ |

Consolidated Balance Sheet (Extract) as on April 01, 20X1
D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

| Assets | Rs | Rs |
| :--- | :--- | :--- |
| Investment in B Ltd. | $4,80,000$ |  |
| Add: Goodwill | $5,20,000$ | $10,00,000$ |

Calculation of Carrying Amount of Investment in the year ended on 20X1-20X2

| Particulars | Rs |
| :--- | :---: |
| Investment in B Ltd. | $4,80,000$ |
| Add: Goodwill | $5,20,000$ |
| Cost of Investment | $10,00,000$ |
| Less: Loss for the year $(10,00,000 \times 40 \%)$ | $(4,00,000)$ |
| Carrying Amount of Investment | $6,00,000$ |

Consolidated Balance Sheet (Extract) as on March 31, 20X2

| Assets | Rs | Rs |
| :--- | :---: | :---: |
| Investment in B Ltd. | 80,000 |  |
| Add: Goodwill | $5,20,000$ | $6,00,000$ |

Calculation of Carrying Amount of Investment in the year ended on 20X2-20X3.

| Particulars | Rs |
| :--- | :---: |
| Carrying Amount of Investment | $6,00,000$ |
| Less: Loss for the year $(12,50,000 \times 40 \%)$ | $(5,00,000)$ |
| Carrying Amount of Investment | $1,00,000$ |

Consolidated Balance Sheet (Extract) as on March 31, 20×3

| Assets | Rs | Rs |
| :--- | :---: | :---: |
| Investment in B Ltd. | - | - |
| Add: Goodwill | $1,00,000$ | $1,00,000$ |

Calculation of Carrying Amount of Investment in the year ended on 20X3-20X4

| Particulars | Rs |
| :--- | :---: |
| Carrying Amount of Investment | $1,00,000$ |
| Less: Loss for the year $(5,00,000 \times 40 \%)$ | $(2,00,000)$ |
| Carrying Amount of Investment | $(1,00,000)$ |

Consolidated Balance Sheet (Extract) as on March 31, 20X4

| Assets | Rs | Rs |
| :---: | :---: | :---: |

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```
Investment in B Ltd.
```

Q55. Eagle Ltd. had acquired 51\% in Sparrow Ltd. for Rs. 75.80 lakhs on $1^{\text {st }}$ April, 2010. On the date of the acquisition Sparrow's Assets stood at Rs. 196 lakhs and liabilities at Rs. 16 lakhs. The net asset position of Sparrow Ltd. as on $31^{\text {st }}$ March, 2011 and $30^{\text {th }}$ Sep 2011 were Rs. 280 lakhs and Rs. 395 lakhs respectively, the increase resulting from profits during the period.
On 1st October, $201125.5 \%$ holdings were sold for Rs. 125 lakhs. You are required explain the nature of the relationship between the two companies on the relevant dates and the accounting adjustments that are necessary as a result of any change in the relationship. The profit arising on part sale of investment, carrying value of the portion unsold and goodwill/capital reserve that arises on change in nature of the investment may also be worked out by you.
(November 2011, 8 marks)

## Solution:

Sparrow Ltd. became a subsidiary of Eagle Ltd. on 1st April $20 X 0$ when $51 \%$ thereof was acquired. The holding-subsidiary relationship continued till 30th September 20X1 and from 1st October, 20X1 the relationship between the two companies will change to Associate. As per para 24 of AS 21, "Consolidated Financial Statements", the carrying value of the investment at the date it ceases to be subsidiary is regarded as cost thereafter. Accordingly, if the nature of the investee changes to that of an associate, the carrying amount of the investment in Consolidated Financial Statements of the investor, as on date it ceases to be a subsidiary, would be considered as cost of investment in the associate.

Goodwill or capital reserve arising on account of the change in the nature of the investment will be computed as on the date of such change. Accordingly, when a part of the investment takes the form of an investment in an associate, the results of operations of the subsidiary will be included in the consolidated statement of Profit and Loss for the period from the beginning of the period until it ceased to be a subsidiary.

> Ascertainment of Gain or Loss
> on the Disposal of the Part of the Investment in Sparrow Ltd.

|  |  | Rs |
| :--- | :---: | :---: |
| Proceeds received on sale of 25.5\% holdings in Sparrow Ltd. |  | $1,25,00,000$ |
| Net Assets of sparrow Ltd. on the date of disposal | $3,95,00,000$ |  |
| Less: Minority's interest in Sparrow Ltd. on the date of <br> disposal | $(1,93,55,000)$ |  |
| Share of Eagle Ltd. in Net Assets | $2,01,45,000$ |  |
| Less: Capital reserve on acquisition (Refer W.N.) | $(16,00,000)$ |  |

D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

| Total value of investment in consolidated financial <br> statements of Eagle Ltd. | $1,85,45,000$ |  |
| :--- | :--- | :--- |
| Less: Carrying Value of investment disposed off |  | $92,72,500$ |
| Profit on sale of $25.5 \%$ of investment |  | $32,27,500$ |

## Carrying Value of the Investment retained in the Consolidated Financial Statements

|  | Rs |  |
| :--- | :--- | :---: |
| Total value of investment in consolidated financial <br> statements of Eagle Ltd. | $1,85,45,000$ |  |
| Less: Carrying value of investment disposed off | $(92,72,500)$ |  |
| Carrying Value of the investment retained in consolidated <br> financial statements including capital reserve |  | $92,72,500$ |
| This amount of Rs $92,72,500$ would be used to apply the <br> equity method of accounting as specified in AS 23 |  |  |

Goodwill / Capital Reserve arising on the Carrying Value of Unsold Portion of the Investment

|  |  |
| :--- | ---: |
| Carrying value of $25.5 \%$ holdings in Sparrow Ltd. as on 1st <br> October, 20X1 | $92,72,500$ |
| Less: Share in value of equity of Sparrow Ltd., as at date of <br> investment when subsidiary relationship is transformed to an <br> associate ( $3,95,00,000 \times 25.5 \%$ ) | $(1,00,72,500)$ |
| Capital reserve arising on such investment under Equity <br> method as per AS 23 | $(8,00,000)$ |

## Working Note:

Calculation of Goodwill/Capital Reserve on the Date of Acquisition of Shares in Sparrow Ltd.

|  | Rs |
| :--- | ---: |
| Net Assets on Acquisition date (Rs 1,96,00,000 - Rs <br> $16,00,000)$ | $1,80,00,000$ |
| $51 \%$ thereof | $91,80,000$ |
| Less: Cost of investment | $(75,80,000)$ |
| Capital reserve on acquisition | $16,00,000$ |

Q56. A Ltd acquired $30 \%$ Equity share Capital of B Ltd a cost of Rs. 4,50,000. The comparative balance sheets of $B$ Ltd. on the date of acquisition and year end are given below:

## D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

## Balance Sheet of B Ltd.

| Equity \& Liabilities | Begining | Year end |
| :--- | ---: | ---: |
| Shareholder Funds: | Rs. | Rs. |
| Share Capital | $10,00,000$ | $10,00,000$ |
| General Reserve | $2,00,000$ | $3,30,000$ |
| Securities Premium | $1,00,000$ | $1,00,000$ |
| Current Liabilities: |  |  |
| Current Liabilities | $1,50,000$ | $2,10,000$ |
| Proposed Dividend | $14,50,000$ | $16,90,000$ |
|  | Beginning | Year end |
| Assets | Rs. | Rs. |
| Non-Current Assets: | $6,00,000$ | $7,00,000$ |
| Fixed Assets | $3,50,000$ | $4,80,000$ |
| Investment | $5,00,000$ | $5,10,000$ |
| Current Assets | $14,50,000$ | $16,90,000$ |

There was no revaluation of asset by B Ltd. during the year. Current Assets of B Ltd. at year-end include stock costing Rs60,000 purchased from A Ltd. which sells at cost + 20\%. Show the investment in associates in the consolidated balance sheet to be prepared by $A$ Ltd. in the beginning and at year-end. (RTP Nov. 05)

Ans.:

## Calculation of Goodwill/Capital Reserve

Share capital of B Ltd. $10,00,000$
General Reserve of BLtd.
2,00,000
Securities Premium of B Ltd. $1,00,000$
Total Equity of B Ltd.
13,00,000
\% holding of A Ltd. 30\%

## Share of $A$ Ltd.

3,90,000
Cost of Acquisition $4,50,000$
Goodwill

Calculation of share of profit earned during the year

D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla


# UNIT - 4 <br> Consolidation of Two or More Subsidiary 

## Same Date Acquisitions:

## Q57.

From the following summarized Balance Sheets of a group of companies and the other information provided, draw up the consolidated Balance Sheet as on 31.3.2017. Figures given are in Rs Lakhs:

Balance Sheets as on 31.3.2017

|  | $\mathbf{X}$ | $\mathbf{y}$ | $\mathbf{Z}$ |  | $\mathbf{x}$ | $\mathbf{y}$ | $\mathbf{Z}$ |
| :--- | :---: | :---: | :---: | :--- | :---: | :---: | :---: |
| Shares capital (in <br> shares of Rs 100 <br> each) | 300 | 200 | 100 | Fixed Assets less <br> depreciation | 130 | 150 | 100 |
| Reserves | 50 | 40 | 30 | Cost of investment <br> in Y Ltd. | 180 | - | - |
| Profit and loss <br> balance | 60 | 50 | 40 | Cost of investment <br> in Z Ltd. | 40 | - | - |
| Trade payables | 40 | 10 | 15 | Cost of investment <br> in Z Ltd. | - | 80 | - |
| Y Ltd. balance | - | - | 15 | Inventory | 50 | 20 | 20 |
| ZLtd. balance | 50 | - | - | Trade receivables | 70 | 20 | 40 |
|  |  |  |  | ZLtd. balance | - | 10 | - |
|  | - | - | - | Cash bance and bank <br> balance | 30 | 20 | 10 |
|  | 500 | 300 | 200 | 200 |  |  |  |

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 1.7.2016 on which date the provision was as follows:

|  | Y Ltd. | Z Ltd. |
| :--- | :---: | :---: |
| Reserves | 20 | 10 |
| Profit and loss account | 30 | 16 |

In December, 2016 Y Ltd. invoiced goods to X Ltd. for Rs 40 lakhs at cost plus 25\%. The closing inventory of $X$ Ltd. includes such goods valued at Rs 5 lakhs.
Z Ltd. sold to Y Ltd. an equipment costing Rs 24 lakhs at a profit of $25 \%$ on selling price on 1.1.2017. Depreciation at $10 \%$ per annum was provided by $Y$ Ltd. on this equipment.

X Ltd. declared dividend at $10 \%$ on 31.3.2017.
Details of Trade payables and Trade receivables:

|  | $\mathbf{X}$ | $\mathbf{y}$ | $\mathbf{Z}$ |
| :--- | :---: | :---: | :---: |
| Trade payables |  |  |  |
| Bills Payable | 10 | - | 5 |
| Sundry creditors | 30 | 10 | 10 |
|  | 40 | 10 | 15 |

D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

| Trade receivables |  |  |  |
| :--- | :---: | :---: | :---: |
| Debtors | 70 | 10 | 20 |
| Bills Receivables | - | 10 | 20 |
|  | 70 | 20 | 40 |

Bills payables of $Z$ Ltd. represent acceptances given to $Y$ Ltd. out of which Y Ltd. had discounted bills worth Rs 3 lakhs.
Trade receivables of $X L+d$. include Rs 5 lakhs being the amount due from $Y L+d$.

## Answer

Consolidated Balance Sheet of X Ltd. and its subsidiaries Y Ltd. and Z Ltd. as at 31st March, 2017

| Particulars | Note No. | (Rs in Lacs) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| I. Equity and Liabilities |  |  |  |  |  |
| (1) Shareholder's Funds |  |  |  |  |  |
| (a) Share Capital |  | 300.00 |  |  |  |
| (b) Reserves and Surplus | 1 | 151.90 |  |  |  |
| (2) Minority Interest (W.N 4) |  | 79.30 |  |  |  |
| (3) Current Liabilities |  |  |  |  |  |
| (a) Trade payables | 2 | 58.00 |  |  |  |
| (b) Other current liabilities | 3 | 55.00 |  |  |  |
|  | Total |  |  |  |  |
| II. Assets |  | 644.20 |  |  |  |
| (1) Non-current assets |  |  |  |  |  |
| Fixed assets |  |  |  |  |  |
| Tangible assets | 4 | 372.20 |  |  |  |
| (2) Current assets |  |  |  |  |  |
| (a) Inventories | 5 | 89.00 |  |  |  |
| (b) Trade receivables | 6 | 123.00 |  |  |  |
| (c) Cash and cash equivalents | 7 | 60.00 |  |  |  |
| Total |  |  |  |  | 644.20 |

## Notes to Accounts

|  |  | (Rs in lacs) | (Rs in lacs) |
| :--- | :--- | :---: | :---: |
| 1. Reserves and Surplus |  |  |  |
| Capital Reserve [W.N. 3] | 13.40 |  |  |
| Other Reserves [W.N. 7] |  | 81.60 |  |
| Profit and Loss Account [W.N. 6] | 56.90 | 151.90 |  |
| 2. Trade payables |  |  |  |
| X Ltd. Rs 40.00 |  |  |  |
| Y Ltd. Rs 10.00 | 65.00 |  |  |
| Z Ltd. Rs 15.00 |  |  |  |
| Less: Mutual indebtedness Rs (5.00) |  |  |  |
| Less :Mutual indebtedness [5-3] Rs (2.00) | $(7.00)$ | 58.00 |  |
| 3. Other current liabilities |  |  |  |
| (a) Current Account Balances |  |  |  |
| XLtd. Rs 50.00 |  |  |  |
| Z Ltd. Rs 15.00 |  |  |  |


| Rs 65.00 |  |  |
| :---: | :---: | :---: |
| Less: Mutual indebtedness (Rs 10+ 30) (Rs 40.00) | 25.00 |  |
| (b) Dividend payable | 30.00 | 55.00 |
| 4. Tangible assets |  |  |
| Fixed Assets |  |  |
| XLtd. | 130.00 |  |
| Y Ltd. | 150.00 |  |
| Z Ltd. | 100.00 |  |
| 380.00 |  |  |
| Less: Unrealised profit [W.N. 5] | (7.80) | 372.20 |
| $5 . \quad$ Inventories |  |  |
| XLtd. | 50.00 |  |
| Y Ltd. | 20.00 |  |
| Z Ltd. | 20.00 |  |
| 90.00 |  |  |
| Less: Unrealised profit [ $5 \times 25 / 125$ ] | (1.00) | 89.00 |
| 6. Trade receivables |  |  |
| X Ltd. Rs 70.00 |  |  |
| Y Ltd. Rs 20.00 |  |  |
| Z Ltd. Rs 40.00 | 130.00 |  |
| Less: Mutual indebtedness `(5.00) & & \\ \hline Less: Mutual indebtedness` (2.00) | (7.00) | 123.00 |
| 7. Cash and Cash Equivalents |  |  |
| X Ltd. Rs 30.00 |  |  |
| Y Ltd. Rs 20.00 |  |  |
| Z LTd. Rs 10.00 | 60.00 |  |

## Working Notes:

Shareholding Pattern


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| Share of X LTd. [30\%] | 7.80 | 6.00 | 7.20 |
| :---: | :---: | :---: | :---: |
| Share of Y Ltd. [60\%] | 15.60 | 12.00 | 14.40 |
| (2) Analysis of Profits of Y Ltd. |  |  |  |
| Reserves on 1.7.2016 | 20.00 |  |  |
| Profit and Loss A/c on 1.7.2016 | 30.00 |  |  |
| Increase in Reserves |  | 20.00 |  |
| Increase in Profit |  |  | 20.00 |
|  | 50.00 | 20.00 | 20.00 |
| Share in Z Ltd. [WN 1] |  | 12.00 | 14.40 |
|  | 50.00 | 32.00 | 34.40 |
| Less: Minority Interest (20\%) | (10.00) | (6.40) | (6.88) |
| Share of X Ltd.[80\%] | 40.00 | 25.60 | 27.52 |
| (3) Cost of Control |  |  |  |
| Investments in Y Ltd. |  |  | 180.00 |
| Investments in Z Ltd. |  |  | 120.00 |
|  |  |  | 300.00 |
| Less: Paid up value of investments |  |  |  |
| in Y Ltd. | (160.00) |  |  |
| in Z Ltd. | (90.00) | (250.00) |  |
| Capital Profit |  |  |  |
| in Y Ltd. [WN 1] | (40.00) |  |  |
| in Z Ltd. [WN 2] | (23.40) | (63.40) | (313.40) |
| Capital Reserve |  |  | 13.40 |
| (4) Minority Interest | Y LTd. | Z LTd. |  |
| Share Capital | 40.00 | 10.00 |  |
| Capital Profit | 10.00 | 2.60 |  |
| Revenue Reserves | 6.40 | 2.00 |  |
| Revenue Profits | 6.88 | 2.40 |  |
|  | 63.28 | 17.00 |  |
| Less: Unrealised profit on inventory (20\% of 1) | (.20) |  |  |
| Unrealised profit on equipment (10\% of Rs 7.8) |  | (0.78) |  |
|  | 63.08 | 16.22 |  |
| (5) Unrealised Profit on equipment sale |  |  |  |
| Cost | 24.00 |  |  |
| Profit [25 \% on selling price] | 8.00 |  |  |
| Selling Price | 32.00 |  |  |
| $\begin{aligned} & \text { Unrealised profit }=[8-(8 \times 10 / 100 \times 3 / 12)] \\ & =8.00-0.20=7.80 \end{aligned}$ |  |  |  |
| (6) Profit and Loss Account - X Ltd. |  |  |  |
| Balance | 60.00 |  |  |
| Less: Dividend | (30.00) |  |  |
|  | 30.00 |  |  |
| Share in Y Ltd. | 27.52 |  |  |
| Share in Z Ltd. | 7.20 |  |  |
| 64.72 |  |  |  |


| Less: Unrealised profit on equipment (90\% of <br> $7.8)$ | $(7.02)$ |  |  |
| :--- | :--- | :--- | :--- |
|  | 57.70 |  |  |
| Less: Unrealised profit on inventory (5 $\times 25 /$ <br> $125 \times 80 \%)$ | $(0.80)$ |  |  |
|  | 56.90 |  |  |
| $(7)$ |  |  |  |
| X Ltd. | 50.00 |  |  |
| Share in Y Ltd. [WN 2] | 25.60 |  |  |
| Share in Z Ltd. [WN 1] | 6.00 |  |  |
|  | 81.60 |  |  |

## Q58. (Homework)

The Balance Sheets of three companies Sun Ltd., Moon Ltd. and Light Ltd. as at 31 st March, 2010 are given below:

Sun Ltd. Moon Ltd.
Light Ltd.

## Equity \& Liabilities:

Shareholder Funds:
Share Capital (of Rs. 10 each)

| $1,50,000$ | $1,00,000$ | 60,000 |
| :--- | ---: | ---: |
| 50,000 | 40,000 | 30,000 |
| 60,000 | 50,000 | 40,000 |
|  |  |  |
| 30,000 | 35,000 | 25,000 |
| - | 10,000 | 8,000 |
| $2,90,000$ | $2,35,000$ | $1,63,000$ |

## Assets:

Non Current Assets:
Fixed Assets
Investments (at Cost)
Shares in Moon Ltd.
Shares in Light Ltd.
Shares in Light Ltd.
Current Assets:
Stock-in-Trade
Debtors
Due from Moon Ltd.
Due from Light Ltd.
Cash in Hand

| 70,000 | $1,20,000$ | $1,03,000$ |
| :--- | ---: | ---: |
| 90,000 | --- | --- |
| 40,000 | --- | -- |
| - | 50,000 | - |
| 40,000 | 30,000 | 20,000 |
| 20,000 | 25,000 | 30,000 |
| 12,000 | - | - |
| 8000 |  | - |
| 10,000 | 10,000 | 10,000 |
| $2,90,000$ | $2,35,000$ | $1,63,000$ |

(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, 2009.

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(d) The following balances were there on 1st July, 2009:

Moon Ltd. Light Ltd.
Reserves
25,000 15,000
Profit and Loss A/c
20,000 25,000
(e) Moon Ltd. invoiced goods to Sun Ltd. for Rs. 40,000 as cost plus $25 \%$ in December, 2009. The Closing stock of Sun Ltd. includes such goods valued at Rs. 5,000
(f) Light Ltd. sold to Moon Ltd. an equipment costing Rs. 24,000 at a profit of $25 \%$ on selling price on $1^{\text {st }}$ Jan, 2010. Depreciation at $10 \%$ per annum was provided by Moon Ltd. on this equipment.
(g) Sun Ltd. proposes dividend at $10 \%$

Prepare the Consolidated Balance Sheet of the group as at $31^{\text {st }}$ March, 2010. Working should be part of the answer.
(Answer: CR - 26,000; MI - 52,680; BS - 4,81,200; Cons. R\&S - 1,88,520)

## Solution: (Suggested solution of ICAI)

Consolidated Balance Sheet of Sun Ltd. and its subsidiaries Moon Ltd. and Light Ltd. as at 31st March, 2017

| Particulars | Note No. | (Rs) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $1,50,000$ |
| (b) Reserves and Surplus | 2 | $1,73,516$ |
| (2) Minority Interest |  | 52,684 |
| (3) Current Liabilities | 3 |  |
| (a) Trade Payables | 4 | 90,000 |
| (b) Other current liabilities |  | 15,000 |
| Total |  | $4,81,200$ |
| II. Assets | 5 |  |
| (1) Non-current assets |  | $2,85,200$ |
| Fixed assets | 6 | 89,000 |
| (2) Current assets | 7 | 75,000 |
| (a) Inventories | 8 | 32,000 |
| (b) Trade receivables |  | $4,81,200$ |
| (c) Cash and cash equivalents |  |  |
| Total |  |  |

Notes to Accounts

|  |  | Rs |  |
| :--- | :--- | :---: | :---: |
| 1. | Reserves and Surplus |  |  |
| Capital Reserve (W.N.3) | 26,000 |  |  |
| Other Reserves (W.N.7) | 73,700 |  |  |
| Profit and Loss Account (W. N. 6) | 73,816 | $1,73,516$ |  |

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| 2. | Minority interest |  |  |
| :---: | :---: | :---: | :---: |
| Moon Ltd. (W. N. 4) |  | 40,464 |  |
| Light Ltd. (W.N.4) |  | 12,220 | 52,684 |
| 3. Trade Payables |  |  |  |
| Sun Ltd. |  | 30,000 |  |
| Moon Ltd. |  | 35,000 |  |
| Light Ltd. |  | 25,000 | 90,000 |
| 4. | Other current liabilities |  |  |
| Dividend |  | 15,000 |  |
| 5. Fixed Assets |  |  |  |
| Sun Ltd. |  | 70,000 |  |
| Moon Ltd. Rs 1,20,000 |  |  |  |
| Less: Unrealised Profit (W.N.5) Rs $(7,800)$ |  | 1,12,200 |  |
| Light Ltd. |  | 1,03,000 | 2,85,200 |
| 6. | Inventories |  |  |
| Sun Ltd. Rs 40,000 |  |  |  |
| Less: Unrealised Profit Rs $(1,000)$ |  | 39,000 |  |
| Moon Ltd. |  | 30,000 |  |
| Light Ltd. |  | 20,000 | 89,000 |
| 7. $\quad$ Trade Receivables |  |  |  |
| Sun LTd. |  | 20,000 |  |
| Moon Ltd. |  | 25,000 |  |
| Light Ltd. |  | 30,000 | 75,000 |
| 8. | Cash and cash equivalents |  |  |
| Cash in hand |  |  |  |
| Sun Ltd. Rs 10,000 |  |  |  |
| Moon Ltd. Rs 10,000 |  |  |  |
| Light Ltd. Rs 10,000 |  | 30,000 |  |
| Cash in transit (W.N.8) |  | 2,000 | 32,000 |

## Working Notes:

1. Analysis of Profits of Light Ltd.

|  | Pre-acquisition | Post-acquisition <br> Capital Profit <br> Rs |  |
| :--- | :---: | :---: | :---: |
| Reserves on 1.7.2016 | Revenue <br> Reserves Rs | Revenue <br> Profits Rs |  |
| Profit and Loss A/c on 1.7.2016 | 25,000 | - | - |
| Increase in Reserves | - | - | - |
| Increase in Profit | - | 15,000 | - |
|  | 40,000 | 15,000 | 15,000 |
| Less: Minority Interest (10\%) | $(4,000)$ | $(1,500)$ | $(1,500)$ |
|  | 36,000 | 13,500 | 13,500 |
| Share of Sun Ltd. | 12,000 | 4,500 | 4,500 |
| Share of Moon Ltd. | 24,000 | 9,000 | 9,000 |

2. Analysis of Profits of Moon Ltd.*

|  | Pre-acquisition | Post-acquisition |
| :--- | :---: | :---: |

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|  | Capital Profit <br> Rs | Revenue <br> Reserves Rs | Revenue <br> Profits Rs |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Reserves on 1.7.2016 | 25,000 | - | - |  |  |  |  |
| Profit and Loss A/c on 1.7.2016 | 20,000 | - | - |  |  |  |  |
| Increase in Reserves | - | 15,000 | - |  |  |  |  |
| Increase in Profit | - | - | 30,000 |  |  |  |  |
|  | 45,000 | 15,000 | 30,000 |  |  |  |  |
| Add: Share in Light Ltd. (post <br> acquisition) | - | 9,000 | 9,000 |  |  |  |  |
| Less: Unrealised profit on <br> equipment (60\% of 7,800) |  | $(4,680)$ |  |  |  |  |  |
| Less: Minority Interest (20\%) |  |  |  |  | $(9,000)$ | $(4,800)$ | $(6,864)$ |
| Share of Sun Ltd. | 36,000 | 19,200 | 27,456 |  |  |  |  |

* Treatment of capital profit of sub-subsidiary company i.e. Light Ltd. has been done by applying direct approach.

3. Cost of Control

|  | Rs |  |
| :---: | :---: | :---: |
| Investment in Moon Ltd. |  | 90,000 |
| Investment in Light Ltd. <br> Rs <br> by Moon Ltd. 50,000 <br> by Sun Ltd. 40,000 |  | $\frac{90,000}{1,80,000}$ |
| Less: Paid up value of shares |  |  |
| in Moon Ltd. 80,000 |  |  |
| in Light Ltd. 54,000 | 1,34,000 |  |
| Capital Profit of Sun Ltd. |  |  |
| in Moon Ltd. 36,000 |  |  |
| in Light Ltd. 12,000 | 48,000 |  |
| Capital profit of Moon Ltd. in Light Ltd. | 24,000 | $(2,06,000)$ |
| Capital Reserve |  | 26,000 |

4. Minority Interest

|  | Moon Ltd. Rs | Light Ltd. Rs |
| :--- | :--- | :--- |
| Share Capital | 20,000 | 6,000 |
| Capital Profit | 9,000 | 4,000 |
| Revenue Reserves | 4,800 | 1,500 |
| Revenue Profits | 6,864 | 1,500 |
|  | 40,664 | 13,000 |
| Less: Unrealised Profit on Inventory 20\% of (Rs <br> $5,000 \times 25 / 125)$ | $(200)$ |  |
| Unrealised Profit on Equipment (10\% of Rs <br> $7,800)$ |  | $(780)$ |
|  | 40,464 | 12,220 |

5. Unrealised Profit on Equipment Sale
$\square$ Rs
[^8]| Selling price of the equipment $(24,000 \times 100 / 75)$ | 32,000 |
| :--- | ---: |
| Less: Cost price of the equipment | $(24,000)$ |
| Profit on sale | 8,000 |
| Unrealised profit $=[8,000-(8,000 \times 10 / 100 \times 3 / 12)]=$ Rs 7,800 |  |

6. Profit and Loss Account - Sun Ltd.

|  | Rs |
| :--- | :---: |
| Balance as per separate Balance Sheet | 60,000 |
| Less: Dividend | $(15,000)$ |
|  | 45,000 |
| Add: Share in Moon Ltd. | 27,456 |
| Share in Light Ltd. | 4,500 |
|  | 76,956 |
| Less: Unrealised profit on Equipment (30\% of 7,800) | $(2,340)$ |
|  | 74,616 |
| Less: Unrealised profit on Inventory () $255,000 \times \times 80 \% 125$ | $(800)$ |
|  | 73,816 |

7. Other Reserves - Sun Ltd.

|  | Rs |
| :--- | :---: |
| Balance as per separate Balance Sheet | 50,000 |
| Share in Moon Ltd. | 19,200 |
| Share in Light Ltd. | 4,500 |
|  | 73,700 |

8. Cash in Transit

|  | Rs |
| :--- | :---: |
| Due to Sun Ltd. from Moon Ltd. | 12,000 |
| Less: Due by Moon Ltd. | $(10,000)$ |
|  | 2,000 |

Q59.
The balance sheet of three companies Anand Ltd., Bajaj Ltd. and Charan Ltd. as on 31st December 2001 are given below:

Equity \& Liabilities
Shareholder Funds:
Share Capital (100 each)
Reserves
Profit \& Loss A/c
Current Liabilities:
Sundry Creditors
Anand Ltd.
Total
Non-Current Assets:
Goodwill
Fixed Assets

Aanad Ltd.Bajaj Ltd. Charan Ltd.

| $1,50,000$ | $1,00,000$ | 60,000 |
| :--- | ---: | ---: |
| 20,000 | 10,000 | 7,500 |
| 50.000 | 30,000 | 25,000 |
|  |  |  |
| 20,000 | 25,000 | 15,000 |
| - | 10,000 | 8,000 |
| $\mathbf{2 , 4 0 , 0 0 0}$ | $\mathbf{1 , 7 5 , 0 0 0}$ | $1,15,500$ |

20,000 15,000
10,000
60,000

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Shares in Bajaj Ltd. (750 shares) 90,000
in Charan Ltd (100 shares) 15,000
in Charan Ltd (350 shares)
Current Assets:
Due from Bajaj Ltd.
Charan Ltd.
Current Assets

| 12,000 | - | - |
| :--- | ---: | ---: |
| 8,000 | - | - |
| 25,000 | 58,000 | 45,500 |
| $\mathbf{2 , 4 0 , 0 0 0}$ | $1,75,000$ | $1,15,500$ |

All shares were acquired on 1st July, 2001. On 1st January, 2001, the balance were:

## Anand Ltd.Bajaj Ltd. Charan Ltd.

## Reserves

Profit \& Loss Account

| 10,000 | 10,000 | 5,000 |
| :--- | ---: | ---: |
| 5,000 | (Dr.) 5,000 | 3,000 |

Profits during 2001 were earned evenly over the year.
In August 2001 each company declared and paid an interim dividend of $10 \%$ p.a. for six months. Anand Ltd. and Bajaj Ltd. have credited their Profit \& Loss Account with the dividends received. During 2001, Charan Ltd. fabricated a machine costing Rs.10,000 which is sold to Bajaj Ltd. for Rs. 12,000. Bajaj Ltd then sold the machine to Anand Ltd., for Rs. 13,000, the transactions being completed on 31 st December 2001.
Prepare the consolidated Balance Sheet of the Group as on 31st December, 2001
(Ans.: Goodwill 47,593; Min. Intt. 58,650; Con P\&L 65,688, BS 3,55,093)

## Different Date Acquisitions

Q60.
The following are the summarized Balance Sheets of Ram Ltd., Shyam Ltd. and Tom Ltd. as on 31.03.2017:

| Particulars | Rs in'000 |  |  |
| :---: | :---: | :---: | :---: |
|  | Ram Ltd. | Shyam Ltd. | Tom Ltd. |
| Liabilities |  |  |  |
| Equity Share Capital (Rs 100 each) | 8,000 | 4,000 | 1,600 |
| General Reserve | 1,600 | 280 | - |
| Profit and Loss Account | 1,360 | 960 | - |
| Current Liabilities | 1,280 | 3,000 | 1,120 |
| Total | 12,240 | 8,240 | 2,720 |
| Assets |  |  |  |
| Investments: |  |  |  |
| 32,000, shares in Shyam Ltd. | 4,800 | - | - |
| 4,000, shares in Tom Ltd. | 200 | - | - |
| 12,000, shares in Tom Ltd. | - | 720 | - |
| Profit and Loss Account | - | - | 640 |
| Current Assets | 7,240 | 7,520 | 2,080 |
| Total | 12,240 | 8,240 | 2,720 |

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From the following information, prepare consolidated Balance Sheet of Ram Ltd. and its subsidiaries as on 31.03.2017:
(i) Shyam Ltd. has advanced Rs $8,00,000$ to Tom Ltd.
(ii) Current Liabilities of Ram Ltd. includes Rs 4,00,000 due to Tom Ltd.
(iii) Shyam Ltd. and Tom Ltd. have not paid any dividend.
(iv) Ram Ltd. acquired its investments on 01.04.2016 from Shyam Ltd. and then amount standing to credit of General Reserve and Profit and Loss account were Rs 2,80,000 and Rs 5,20,000 respectively.
(v) Ram Ltd. acquired investments in Tom Ltd. on 01.04.2016, when the debit balance in Profit and Loss account in books of Tom Ltd. was Rs 4,80,000.
(vi) Shyam Ltd. acquired its investments in Tom Ltd. on 01.04.2014 and then the debit balance in Profit and Loss account was Rs 1,60,000.
(vii) Shyam Ltd.'s inventory includes inventory worth Rs 4,80,000 which was invoiced by Ram Ltd. at 20\% above cost.
(Answer: Goodwill - 712; MI - 976; BS - 16272)

## Solution:

Consolidated Balance Sheet of Ram Ltd. and its subsidiaries Shyam Ltd and Tom Ltd. As on 31.3.2017

| Particulars | Note No. | (Rs in '000s) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital |  | 8,000 |
| (b) Reserves and Surplus | 1 | 3,096 |
| (2) Minority Interest (W.N.7) |  | 952 |
| (3) Current Liabilities | 2 | 4,200 |
|  | Total |  |
| II. Assets |  | 16,248 |
| (1) Non-current assets |  |  |
| Fixed assets |  |  |
| Intangible assets |  | 688 |
| (2) Current assets | 3 | 15,560 |
|  |  | 4 |

## Notes to Accounts

|  | Rs in '000s |  |
| :---: | :---: | :---: |
| 1. Reserves and Surplus |  |  |
| General Reserve | 1,600 |  |
| Profit \& Loss (W.N.6) | 1,496 | 3,096 |
| 2. Current Liabilities |  |  |
| Ram Ltd. | 1,280 |  |
| Shyam Ltd. | 3,000 |  |
| Tom Ltd. | 1,120 |  |
|  | 5,400 |  |
| Less: Mutual Owings | $(1,200)$ | 4,200 |
| $3 . \quad$ Intangible assets |  |  |
| Goodwill (W. N. 5) | 688 |  |

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| 4. | Current Assets |  |  |
| :---: | :---: | :---: | :---: |
|  | Ram Ltd. | 7,240 |  |
|  | Shyam Ltd. | 7,520 |  |
|  | Tom Ltd. | 2,080 |  |
|  |  | 16,840 |  |
| Less: Mutual Owings |  | $(1,200)$ |  |
|  |  | 15,640 |  |
| Less: Unrealised Profit |  | (80) | 15,560 |

## Working Notes:

Shareholding Pattern

|  | Shyam Ltd. | Tom Ltd. |
| :--- | :---: | :---: |
|  | 40,000 shares | 16,000 shares |
| Held by Ram Ltd. | 32,000 shares (80\%) | 4,000 shares (25\%) |
| Held by Shyam Ltd. | NA | 12,000 shares (75\%) |
| Minority Interest | 8,000 shares (20\%) | NIL |

1. General Reserve and Profit and Loss Account of Shyam Ltd.

General Reserve Account of Shyam Ltd.

|  | Rs '000 |  |  |  | Rs '000 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 31.3.15 | To Balance c/d | 280 | 1.4 .14 | By Balance b/d | 280 |

Draft Profit and Loss Account of Shyam Ltd.

| Rs '000 |  |  |  |  |  |  |  |  | Rs '000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31.3.15 | To Balance c/d | 960 | 1.4 .14 | By Balance b/d <br> By Profit earned <br> during the year <br> (Bal. Fig.) | 520 <br> 440 <br> 960 |  |  |  |  |  |  |
|  |  | 960 |  |  |  |  |  |  |  |  |  |

2. Draft Profit and Loss Account of Tom Ltd.

| Rs '000 |  |  | Rs '000 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1.4.12 | To Balance b/d | 160 | 31.3.13 | By Balance c/d | 160 |
|  |  | 160 |  |  | 160 |
| 1.4.13 | To Balance b/d | 160 | 31.3.14 | By Balance c/d | 480 |
| To Loss incurred during the year (Bal. Fig.) |  | $\begin{aligned} & 320 \\ & 480 \end{aligned}$ |  |  | 480 |
| 1.4.14 | To Balance b/d | 480 | 31.3.15 | By Balance c/d | 640 |
| To Loss incurred during the year (Bal. Fig.) |  | $\begin{aligned} & 160 \\ & 640 \end{aligned}$ |  |  | 640 |

3. Analysis of Profits of Tom Ltd.

|  | Capital Profits <br> Rs '000 | Revenue Profits <br> Rs '000 |  |
| :--- | :---: | :---: | :---: |
| (i) | From the viewpoint of Shyam Ltd. |  |  |
| Debit Balance in Profit and Loss Account as <br> on 1.4.2014 | $(160)$ |  |  |
| Loss incurred between 1.4.2014 to 31.3.2017 <br> [(320 + 160)- Refer W.N. 2] |  | $(480)$ |  |
|  | $(160)$ | $(480)$ |  |
| Share of Shyam Ltd.-75\% [ carried forward <br> to W. N. 4] | $(120)$ | $(360)$ |  |

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| (ii) | From the view point of Ram Ltd. |  |  |
| :--- | :--- | :--- | :--- |
| Debit Balance of Profit and Loss Account as <br> on 1.4.14 | (480) |  |  |
| Loss during the year 2016-2017 [WN 2] |  | (160) |  |
| Share of Ram Ltd. (25\%) |  |  |  |

4. Analysis of Profits of Shyam Ltd. (From the viewpoint of Ram Ltd.)

|  | Capital Profits <br> Rs '000 | Revenue Profits <br> Rs '000 |
| :--- | :---: | :---: |
| General Reserve as on 1.4.2016 | 280 |  |
| Profit and Loss Account Balance as on <br> 1.4.2016 | 520 |  |
| Profit earned during 2016-2017 (W.N.1) |  | 440 |
| Brought forward Shyam Ltd.'s share of loss <br> in Tom Ltd. [W. N. 3(i)] | $(120)$ | $(360)$ |
| Share of Shyam Ltd. in revenue loss of Tom <br> Ltd. for the period 1.4.12 to 31.3.14 [75\% of <br> (360- 40)] being treated as capital loss from <br> view point of Ram Ltd. | $(240)$ | 240 |
|  |  |  |
| Less:Share of Minority Interest (20\%) | 440 | 320 |
| Balance taken to Ram Ltd. (80\%) | 352 | 256 |

5. Cost of Control

|  | Rs '000 |  |
| :--- | :---: | :---: |
| Investment by Ram Ltd. in | . |  |
| Shyam Ltd. | 4,800 |  |
| Tom Ltd. | 200 |  |
| Investment by Shyam Ltd. in |  |  |
| Tom Ltd. | 720 | 5,720 |
| Less: Paid up value of shares of: | 3,200 |  |
| Shyam Ltd. | 1,600 |  |
| Tom Ltd. (400 + 1,200) | 4,800 |  |
|  | $(120)$ |  |
| Capital loss of Ram Ltd. in Tom Ltd. [W.N. 3(ii)] | 352 | $(5,032)$ |
| Capital Profit of Ram Ltd. in Shyam Ltd. (W.N. 4) |  | 688 |
| Goodwill |  |  |

6. Consolidated Profit and Loss A/c of Ram Ltd.

|  | Rs '000 |
| :--- | :---: |
| Profit and Loss A/c Balance | 1,360 |
| Post-acquisition share of loss from Tom Ltd. | $(40)$ |
| Post-acquisition share of profit from Shyam Ltd. | 256 |
|  | 1,576 |
| Less: Unrealised Profit on Inventory (th of 480) 61 | $(80)$ |
|  | 1,496 |

7. Minority Interest

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|  | Rs'000 |
| :--- | :---: |
| Paid up value of shares in Shyam Ltd. (20\% of 4,000) | 800 |
| Share of Capital Profit (W.N.4) | 88 |
| Share of Revenue Profit (W.N.4) | 64 |
|  | 952 |

## Treatment of Proposed Dividend - Preference Shares:

This dividend whether declared or not (irrespective of declaration - Para 27 of AS 21), will be appropriated from AOP and distributed among Parent and Minority in the ratio of Preference Shares held.

AOP A/cDr.
To CPL A/c (Parent's Share - Post Acquisition)
To COC A/c (Parent's Share - Pre Acquisition)
To Shot Term Provisions A/c (MI's share)
Q61.
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 Mar 2008 were as follows:

## Equity \& Liabilities:

Shareholder Funds:
Share Capital:

| Equity Shares of Rs. 10 each fully paid | 3,000 | 600 |
| :--- | :--- | :--- |
| $14 \%$ Pref. Shares of Rs. 100 each fully paid | - | 400 |
| General Reserve | 1,900 | 40 |
| Profit \& Loss a/c | 1,600 | 720 |

Current Liabilities:
Creditors

## Non-Current Assets:

Plant \& Machinery
Furniture \& Fixture
Investment Equity Shares of Birat Ltd
Preference Shares of Birat Ltd
Current Assets:
Stock
Debtors
Cash at Bank

Astha Ltd.
Birat Ltd.

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$$
6,800 \quad 2,080
$$

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

Additional Information:
(i) General reserve balances of a Birat Ltd was the same as on 1.4.2007
(ii) The Balances in a profit and Loss A/c of Birat Ltd on 1.4.2007 was Rs. 3,20,000 out of which dividend of $16 \%$ p.a. on the Equity Capital of Rs, $6,00,000$ was paid for the year 2006-07.
(iii) The dividend in respect of preference shares of Birat Ltd. for the year 200708 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 Rs. 1,20,000 for purchases from Birat Ltd on which the later company made a loss of Rs. 10,000.
(vi) Half of the above goods were still 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 contractor.

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

## (May 2008, Marks 16)

(Ans: Goodwill - 1043200; Con. P\&L - 1848800; MI - 350200 and BS - 7610200)

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## Q62. (PM)

The summarized Balance Sheets of Football Ltd. and its subsidiary Hockey Ltd. as on 31st March, 2017 are as under:

| Liabilities | Football Ltd. | Hockey Ltd. | Assets | Football Ltd. | Hockey Ltd. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Rs | Rs |  | Rs | Rs |
| Equity shares of Rs 10 each <br> 10\% Preference shares of Rs 10 each General reserve Profit and loss account Bank overdraft Trade payables | 48,00,000 | 20,00,000 | Goodwill Plant and | 4,50,000 | 3,00,000 |
|  | 7,00,000 | 3,80,000 | machinery Motor vehicles | 12,00,000 | 5,00,000 |
|  |  |  |  | 9,50,000 | 7,50,000 |
|  | 5,50,000 | 4,20,000 | Furniture and fittings | 6,50,000 | 4,00,000 |
|  | 10,00,000 | 6,00,000 |  |  |  |
|  | 1,20,000 | 70,000 | Investments | 26,00,000 | 4,50,000 |
|  | 4,30,000 | 6,40,000 | Inventory | 4,50,000 | 7,20,000 |
|  |  |  | Cash at bank | 2,25,000 | 2,10,000 |
|  |  |  | Trade receivables | 10,75,000 | 7,80,000 |
|  | 76,00,000 | 41,10,000 |  | 76,00,000 | 41,10,000 |

Details of acquisition of shares by Football Ltd. are as under:

| Nature of shares | No. of shares acquired | Date of acquisition | Cost of acquisition |
| :---: | :---: | :---: | :---: |
| Rs. |  |  |  |
| Preference shares | 14,250 | 1.4.2014 | 3,10,000 |
| Equity shares | 80,000 | 1.4.2015 | 9,50,000 |
| Equity shares | 70,000 | 1.4.2016 | 8,00,000 |

Other information:
(i) On 1.4.2016 profit and loss account and general reserve of Hockey Ltd. had credit balances of Rs $3,00,000$ and Rs 2,00,000 respectively.
(ii) Dividend @ 10\% was paid by Hockey Ltd. for the year 2015-2016 out of its profit and loss account balance as on 1.4.2016. Football Ltd. credited its share of dividend to its profit and loss account.
(iii) Hockey Ltd. allotted bonus shares out of general reserve at the rate of 1 share for every 10 shares held. Accounting thereof has not yet been made.
(iv) During the year 2016-2017 Football Ltd. purchased goods from Hockey Ltd. for Rs $1,00,000$ at a sale price of Rs $1,20,000$. $40 \%$ of these goods remained unsold at close of the year.
(v) On 1.4.2016 motor vehicles of Hockey Ltd. were overvalued by Rs 1,00,000. Applicable depreciation rate is $20 \%$.
(vi) Dividends declared for the year 2016-2017 on 31.3.2017 in the holding and the subsidiary companies are $15 \%$ and $10 \%$ respectively.
(vii) Details of Trade payables and Trade receivables:

|  | Football Ltd. | Hockey Ltd. |
| :--- | :---: | :---: |
| Trade payables | - |  |
| Bills Payable | - | $1,60,000$ |
| Sundry creditors | $4,30,000$ | $4,80,000$ |
|  | $\mathbf{4 , 3 0 , 0 0 0}$ | $\mathbf{6 , 4 0 , 0 0 0}$ |

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| Trade receivables |  |  |
| :--- | :---: | :---: |
| Debtors | $9,30,000$ | $7,80,000$ |
| Bills Receivables | $1,45,000$ | - |
|  | $\mathbf{1 0 , 7 5 , 0 0 0}$ | $\mathbf{7 , 8 0 , 0 0 0}$ |

(viii) Bills receivable of Football Ltd. were drawn upon Hockey Ltd.

Prepare consolidated Balance Sheet as on 31st March, 2017.

## Answer

Note: It is assumed that the preference shares given in the question are non-convertible in the nature.
Consolidated Balance Sheet of Football Ltd. and its subsidiary Hockey Ltd.as on 31st March, 2017

| Particulars | Note No. | (Rs) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  |  |
| (a) Share Capital | 1 | $55,00,000$ |
| (b) Reserves and Surplus | 2 | $12,24,750$ |
| (2) Minority Interest (W.N.3) |  | $9,11,000$ |
| (3) Current Liabilities | 3 | $1,90,000$ |
| (a) Short term borrowings | 4 | $9,25,000$ |
| (b) Trade payables | 5 | $8,63,750$ |
| (c) Other current liabilities |  | $96,14,500$ |
| Total |  |  |
| II. Assets |  |  |
| (1) Non-current assets | 6 | $43,70,000$ |
| (a) Fixed assets | 7 | $9,47,500$ |
| i. Tangible assets | 8 | $9,90,000$ |
| ii. Intangible assets |  |  |
| (b) Non-current investments | 9 | $11,62,000$ |
| (2) Current assets | 10 | $17,10,000$ |
| (a) Inventories | 11 | $4,35,000$ |
| (b) Trade receivables |  | $96,14,500$ |
| (c) Cash and cash equivalents |  |  |
| Total |  |  |

## Notes to Accounts

|  | Rs. | Rs. |
| :---: | :---: | :---: |
| 1. Share Capital <br> Authorised, Issued and paid up capital $4,80,000$, Equity shares of Rs 10 each 70,000, 10\% preference shares of Rs 10 each | $\begin{gathered} 48,00,000 \\ 7,00,000 \end{gathered}$ | $55,00,000$ |
| 2. Reserves and surplus <br> General reserve - Football Ltd. <br> Balance $5,50,000$ <br> Add: Share in Hockey Ltd. [W.N. 1] 1,65,000 <br> Profit and loss account (W.N. 4) | $\begin{aligned} & 7,15,000 \\ & 5,09,750 \end{aligned}$ | 12,24,750 |


| 3. Short term borrowings Bank Overdraft Football Ltd. Hockey Ltd. | $\begin{gathered} 1,20,000 \\ 70,000 \end{gathered}$ | 1,90,000 |
| :---: | :---: | :---: |
| 4. Trade payables Football Ltd. Hockey Ltd. Less: Mutual debt | $\begin{gathered} 4,30,000 \\ 6,40,000 \\ (1,45,000) \end{gathered}$ | 9,25,000 |
| 5. Other current liabilities <br> Dividend payable <br> Football Ltd. <br> Equity <br> Preference <br> Hockey Ltd. <br> Equity <br> Preference | $\begin{gathered} 7,20,000 \\ 70,000 \\ \\ 50,000 \\ 23,750 \end{gathered}$ | $\begin{gathered} 7,90,000 \\ \\ 73,750 \\ 8,63,750 \end{gathered}$ |
| 6. Tangible assets <br> Plant and Machinery <br> Football Ltd. Rs 12,00,000 <br> Hockey Ltd. Rs 5,00,000 <br> Motor Vehicles <br> Football Ltd. Rs 9,50,000 <br> Hockey Ltd. (Rs 7,50,000-1,00,000+20,000) <br> Furniture \& Fittings <br> Football Ltd. Rs 6,50,000 <br> Hockey Ltd. Rs 4,00,000 | $\begin{aligned} & 17,00,000 \\ & 16,20,000 \\ & 10,50,000 \end{aligned}$ | 43,70,000 |
| 7. Intangible assets <br> Goodwill <br> Football Ltd. <br> Hockey Ltd. <br> Add: Goodwill on consolidation (W.N. 2) | $\begin{aligned} & 4,50,000 \\ & 3,00,000 \\ & 7,50,000 \\ & 1,97,500 \end{aligned}$ | 9,47,500 |
| 8. Non-current investments <br> Investments <br> Football Ltd. (Rs 26,00,000-20,60,000) <br> Hockey Ltd. | $\begin{aligned} & 5,40,000 \\ & 4,50,000 \end{aligned}$ | 9,90,000 |
| 9. Inventories <br> Inventory <br> Football Ltd. <br> Hockey Ltd. <br> Less: Unrealised profit | $\begin{gathered} 4,50,000 \\ 7,20,000 \\ \hline 11,70,000 \\ (8,000) \end{gathered}$ | 11,62,000 |


| 10. Trade receivables |  |  |
| :--- | :---: | :---: |
| Football Ltd. | $10,75,000$ |  |
| Hockey Ltd. | $7,80,000$ |  |
| Less: Mutual Debt | $(1,45,000)$ | $17,10,000$ |
| 11. Cash and cash equivalents |  |  |
| Cash at Bank | $2,25,000$ |  |
| Football Ltd. | $2,10,000$ | $4,35,000$ |

## Working Notes:

| (1) | Analysis of Profits of Hockey Ltd. |  | Capital | Revenue | Revenue |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Rs | Rs | Rs | Rs |
| (a) | General Reserve as on 1.4.2016 | 2,00,000 |  |  |  |
| Less: Bonus issue (1/10 of Rs 20,00,000) |  | $(2,00,000)$ | - | - |  |
|  | Addition to General Reserve during 2016-2017 <br> (Rs 4,20,000-Rs 2,00,000) |  |  | 2,20,000 |  |
| (c) | Profit and Loss Account balance as on 1.4.2016 | 3,00,000 |  |  |  |
| Less: Dividend paid for the year 2015-2016 |  | $(2,00,000)$ | 1,00,000 |  |  |
| (d) | Profit for the year 2016-2017 (Rs 6,00,000 - Rs 1,00,000) |  |  |  | 5,00,000 |
| (e) | Adjustment for over valuation of motor vehicles |  | $(1,00,000)$ |  |  |
| (f) | Adjustment of revenue profit due to overcharged depreciation (20\% on Rs $1,00,000$ ) |  |  |  | 20,000 |
| (g) | Preference dividend for the year 2016-2017 @ 10\% |  |  |  | $(38,000)$ |
| - |  |  |  | 2,20,000 | 4,82,000 |
| Football Ltd.'s share (3/4) |  |  |  | 1,65,000 | 3,61,500 |
| Minority Interest (1/4) |  |  |  | 55,000 | 1,20,500 |
| 2,20,000 |  |  |  |  | 4,82,000 |
| (2) | Cost of Control |  |  | Rs | Rs |
| Cost of investments in Hockey Ltd. |  |  |  |  | 20,60,000 |
| Less: Paid up value of equity shares (including bonus shares) $[80,000+70,000+(10 \%$ of $1,50,000)] \times$ Rs 10 |  |  |  | 16,50,000 |  |
| Paid-up value of preference shares |  |  |  | 1,42,500 |  |
| Pre-acquisition dividend* |  |  |  | 70,000 | $(18,62,500)$ |
| Cost of control/Goodwill |  |  |  |  | 1,97,500 |
| (3) Minority Interest |  |  |  |  |  |
| Equity share capital [Rs 5,00,000 + Rs 50,000 (Bonus)] |  |  |  |  | 5,50,000 |
| Preference share capital (Rs 3,80,000-Rs 1,42,500) |  |  |  |  | 2,37,500 |
| Share of revenue reserve [W.N. 1] |  |  |  |  | 55,000 |
| Share of revenue profit [W.N. 1] |  |  |  |  | 1,20,500 |
| Preference dividend |  |  |  |  | 23,750 |

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| Less: Unrealised gain $8,000 \times 1 / 4$ |  | $(2,000)$ |
| :---: | :---: | :---: |
|  |  | 9,84,750 |
| Less: Dividend payable |  |  |
| Equity | 50,000** |  |
| Preference | 23,750 | 73,750 |
|  |  | 9,11,000 |
| (4) Profit and Loss Account - Football Ltd. |  |  |
| Balance | 10,00,000 |  |
| Share in profit of Hockey Ltd. [W.N. 1] | 3,61,500 |  |
| Share in preference dividend of Hockey Ltd. | 14,250 |  |
|  |  | 13,75,750 |
| Less: Pre-acquisition dividend credited to profit and loss account* | 70,000 |  |
| Unrealised profit on inventory [(40\% of Rs 20,000$\left.) \times \frac{3}{4}\right]$ | 6,000 |  |
| Equity dividend [ $48,00,000 \times 15 \%$ ] | 7,20,000 |  |
| Preference dividend [ $7,00,000 \times 10 \%$ ] | 70,000 | $(8,66,000)$ |
|  |  | 5,09,750 |

Note: No information has been given in the question regarding date of bonus issue by Hockey. It is also not mentioned whether the bonus shares are issued from pre-acquisition general reserve or post-acquisition general reserve. The above solution is given on the basis that Hockey Ltd. allotted bonus shares out of pre-acquisition general reserve.

* The dividend on 70,000 shares only (acquired on 1.4.2016) is a pre-acquisition dividend.
${ }^{*}$ It is assumed that bonus shares issued during the year 2016-17 are not entitled for dividend


## Investment in Subsidiaries and Associate Co.

Q63.
The draft Balance Sheet of three companies, W, H, and O as at 31.3.2017 is as under:

|  | Rs 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 receivables | 386 | 321 | 251 |
| Inventory | 495 | 389 | 287 |
|  | Total | 2,425 | 1,453 |
| Liabilities |  |  | 967 |
| Share capital (Nominal value Rs 1 per share) | 600 | 200 | 200 |
| Reserves | 1,050 | 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 .2015 when the balance in reserves was Rs 500 thousands.

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(b) The shares in $O$ were purchased on 11.5.2015 when the balance in reserves was Rs 242 thousands.
(c) The following dividend have been declared but not accounted for before the accounting year end.

| W | - | Rs 65 thousands |
| :--- | :--- | :--- |
| $H$ | - | Rs 30 thousands |
| O | - | Rs 15 thousands |

(d) Included in inventory figure of $O$ is inventory valued at Rs 20 thousands which had been purchased from W at cost plus $25 \%$.
(e) Goodwill in respect of the acquisition of H has been fully written off.
(f) On 31.3.2017 H made bonus issue of one share for every share held. This had not been accounted in the balance sheet as on 31.3.2017.
(g) Included in trade payables of $W$ is Rs 18 thousands to $O$, which is included in trade receivables of $O$.
Prepare Consolidated Balance Sheet of $W$ as at 31.3.2017.

## Answer

Consolidated Balance Sheet of W and its subsidiary H as at 31st March, 2017

| Particulars | Note No. | (Rs in thousands) |
| :--- | :---: | :---: |
| I. Equity and Liabilities |  |  |
| (1) Shareholder's Funds |  | 600.00 |
| (a) Share Capital |  | $1,355.80$ |
| (b) Reserves and Surplus (W.N.4) |  | 204.00 |
| (2) Minority Interest (W.N.3) |  |  |
| (3) Non-Current Liabilities | 1 | 550.00 |
| Long-term borrowings |  |  |
| (4) Current Liabilities |  | 628.00 |
| (a) Trade Payables (Rs 375+Rs 253) |  | 71.00 |
| (b) Other Current Liabilities |  | $3,408.80$ |
| Total |  |  |
| II. Assets |  | $1,345.00$ |
| (1) Non-current assets |  | 270.80 |
| (a) Fixed assets (Rs 697+ Rs 648) |  |  |
| (b) Non-current investment |  | 884.00 |
| (2) Current assets | 4 | 707.00 |
| (a) Inventories (Rs 495 + Rs 389) | 5 | 196.00 |
| (b) Trade receivables (Rs 386 + Rs 321) |  | 6.00 |
| (c) Cash and cash equivalents |  | $3,408.80$ |
| (d) Other current asset |  |  |
| Total |  |  |

## Notes to Accounts

|  |  | Rs in thousands |  |
| :--- | :--- | :--- | :---: |
| 1. | Long Term Borrowings |  |  |
| Debentures (Rs 400 + Rs 150) |  | 550.00 |  |
| 2. | Other current liabilities |  |  |
| Dividend (W.N.6) |  |  | 71.00 |
| 3. | Non-current investment |  |  |

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| Investment in Associate (W.N.5) |  | 184.00 |
| :--- | :---: | :---: |
| (including goodwill Rs 7.20 thousand) |  |  |
| Add: Accumulated reserves |  | 86.80 |
| 4. |  | 270.80 |
| Cash and cash equivalents |  |  |
| Cash at Bank (Rs 101+ Rs95) |  | 196.00 |
| 5. Other current asset |  | 6.00 |
| Dividend receivable from O |  |  |

## Working Notes:

## Shareholding Pattern

Total Shares of H Ltd. 2,00,000 Held by W Ltd. 1,60,000 i.e. 80\% Minority Interest 40,000 [20\%]

1. Analysis of profits of H

|  | Rs in thousands |  |
| :--- | :---: | :---: |
|  | Pre acquisition <br> profits | Post acquisition <br> profits |
| Reserves on the date of acquisition | 500 | 350 |
| Less: Bonus issue* | $(200)$ | - |
|  | 300 | 350 |
| Less: Dividend declared on 31.3.2017 | - | $(30)$ |
|  | 300 | 320 |
| Minority interest (20\%) | 60 | 64 |
| W's share (80\%) | 240 | 256 |

2. Cost of control/Goodwill

|  | Rs in thousands |  |
| :--- | :---: | :---: |
| Amount paid for investment |  | 562 |
| Less: Paid up value of shares including bonus (80\% of 400) | 320 |  |
| Share in pre-acquisition profits of H [WN 1] | 240 | $(560)$ |
| Goodwill |  | 2 |

* It is assumed that bonus issue had been made out of pre-acquisition reserves.

3. Minority Interest

|  | Rs in thousands |
| :--- | :---: |
| Paid up value of share including bonus issue (400 $\times 20 \%$ ) | 80 |
| Share in pre acquissition profits of H [WN 1] | 60 |
| Share in post acquisition profits of H [WN 1] | 64 |
|  | 204 |

4. Consolidated Reserves

|  | Rs in thousands |
| :--- | :---: |
| Balance as per W's Balance Sheet | $1,050.00$ |
| Add: Share in post-acquisition profits of H [WN 1] | 256.00 |
| Dividend from H | 24.00 |
| Share of profit from Associate O-86.80 |  |
| Add: Dividend from O - 6.00 | 92.80 |
|  | $1,422.80$ |
| Less: Dividend payable - 65.00 |  |

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| Goodwill written off - 2.00 | $(67.00)$ |
| :--- | :---: |
|  | $1,355.80$ |

5. Investment in Associate $O$ as on 31.03.2017 (As per AS 23)

|  | Rs in thousands |  |
| :--- | :---: | :---: |
| Amount paid for investment |  | 184.00 |
| Less: Paid up value of shares | 80.00 |  |
| Share in pre-acquisition reserves (40\% of Rs 242) | 96.8 | $(176.80)$ |
| Goodwill (Identified at the time of purchase) |  | 7.20 |
| Initial cost |  | 184.00 |
| Add: Increase in equity reserves [40\% of Rs (478-15 <br> -242)] | 88.40 |  |
| Less: Unrealised profit (20×25/125)×40\% | $(1.60)$ | 86.80 |
| Investment in Associate O as on 31.03.2017 |  | 270.80 |
| Share of profit from Associate O Rs (270.80-184 + <br> $6)$ |  | 92.80 |

6. Dividend

|  | Rs in thousands |
| :--- | :---: |
| W | 65 |
| Minority Interest (Rs 30-Rs 24) | 6 |
|  | 71 |

## Important Notes:

## Important Notes:

## Important Notes:

## Important Notes:

## VALUE ADDED STATEMENT

## Q64. (ICAI MODULE)

Value Added Ltd. furnishes the following Profit and Loss A/c:
Profit and Loss A/c for the year ended 31st March, 2007

| Income | Notes | Rs. ('000) |
| :--- | :--- | ---: |
| Turnover | 1 | 29,874 |
| Other Income |  | $\underline{1,040}$ |
|  | $\underline{30,914}$ |  |
| Expenditure | 2 | 26,741 |
| Operating expenses | 3 | 987 |
| Interest on 8\% Debenture | 151 |  |
| Interest on Cash Credit |  | $\underline{1,952}$ |
| Excise duty/GST |  | $\underline{29,831}$ |
|  |  | $\underline{1,083}$ |
| Profit before depreciation | 4 | 741 |
| Less Depreciation | $\underline{376}$ |  |
| Profit before tax | 365 |  |
| Provision for tax | $\underline{65}$ |  |
| Profit after tax | $\underline{300}$ |  |
| Less Transfer to Fixed assets Replacement Reserve | $\underline{125}$ |  |
| Less: Dividend paid |  | $\underline{175}$ |
| Retained Profit |  |  |

## Notes:

(1) Turnover is based on invoice value including GST/excise duty.
(2) Salaries, wages and other employee benefits amounting to Rs 14,761('000) are included in operating expenses.
(3) Cash Credit represents a temporary source of finance. It has not been considered as a part of capital.
(4) Transfer of Rs. 54('000) to the credit of deferred tax account is included in provision for tax.

Prepare value added statement for the year ended 31st March, 2007 and Reconcile total value added with profit before taxation.
(November 2007,- Marks 8)
Ans.: GVA $=16,831$.

Q65. From the following Profit and Loss Account of Brightex Co. Ltd. prepare a gross value added statement for the year ended 31-12-1998:

Show also the reconciliation between gross value added and profit before taxation.
Profit \& Loss Account for the year ended 31-12-1998
Notes (Rs.000) (Rs. 000)

## Income:

Sales 6,240
Other income $\underline{\underline{55}}$
6,295

## Expenditure:

$\begin{array}{llr}\text { Production and operational exp. } & 1 & 4,320 \\ \text { Administration expenses } & 2 & 180 \\ \text { Interest \& other charges } & 3 & 624\end{array}$
Depreciation 16 5,140
Profit before tax $\quad 1,155$
Provision for tax 55

- 1,100

Balance as per last balance sheet 60
Transferred to fixed assets replacement reserve 400 1,160
Dividend paid 160 560
Surplus carried to Balance Sheet 600
Notes
(1) Production \& operation:

Consumption of raw materials 3,210
Consumption of stores 40
Local tax 8
Salaries to administrative staff 620
Other manufacture expenses $\underline{442}$
4,320
(2) Administration expenses include salaries and commission to 5 Directors
(3) Interest and other charges include:
(a) Interest on bank overdraft
(Overdraft is of temporary nature) 109
(b) Fixed loan from I.C.I.C.I. 51
(c) Working capital loan from I.F.C.I. 20
(d) GST amount to one-tenth of total value added by

Manufacturing and trading activities
(Ans.: Total Value Added 1,855 )
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## Bonus Schemes based on Added Value

Q66. The Value added statement of Value Ltd. for the last 5 years are furnished below:

| Year | $2007-08$ | $2008-09$ | $2009-10$ | $2010-11$ | $2011-12$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Sales | 6,000 | 8,000 | 10,000 | 12,000 | 14,000 |

Less :
Bought Out Goods and services:

|  | 2,960 | 4,400 | 5,800 | 7,200 | 8,400 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Value added | 3,040 | 3,600 | 4,200 | 4,800 | 5,600 |

Application Towards:

| To Pay Employees | 1,368 | 1,584 | 1,680 | 1,968 | 2,240 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| To Directors Rem. | 30 | 44 | 40 | 48 | 50 |
| To Providers of Capital | 250 | 336 | 440 | 512 | 630 |
| To Government Tax | 640 | 760 | 840 | 1,000 | 1,120 |
| For Maint. \& Expansion | 752 | 876 | 1,200 | 1,272 | 1,560 |

The above employees cost includes Annual Incentives that were decided and paid after negotiations with labour unions as under:
$100 \quad 108 \quad 118 \quad 130150$

From 2012-13 onwards it was agreed to introduced value added incentive schemes (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 for the last 5 years shall be the target index.
(ii) 50\% of the excess of actual contribution in 2012-13over target shall be paid to the employees as incentives.
(iii) CONTRIBUTION shall mean the value added for the year reduced by Employees 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 and loss account summary for the year 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 the payment of incentives.
Summarized Profit and Loss account of Value Ltd. for the year ended 31.03.2013
Sales
17,250
Less:
Material Consumed 6,400
Wages 1,200
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Production Salaries ..... 400
Production Expenses ..... 1,600
Depreciation on machinery ..... 1,000
Administrative Salaries ..... 600
Administrative Expenses ..... 700
Director Rem ..... 60
Administrative Deprecation ..... 350
Interest on debentures ..... 80
Advertisement and Sales promotion ..... 600
Salaries to sales team ..... 125
Selling Expenses ..... 150
Selling Deprecation ..... 120
Profit Before Taxes ..... 3,865
Taxes ..... 1,190
Dividends proposed ..... 800
Balance C/o

## Important Note:

## ECONOMIC VALUE ADDED

## Q67. (Q15 PM)

From the following information of Vinod Ltd., compute the economic value added:
(i) Share capital
Rs. 2,000 lakhs
(ii) Reserve and surplus
Rs. 4,000 lakhs
(iii) Long-term deb $\dagger$
Rs. 400 lakhs
(iv) Tax rate 30\%
(iv) Risk free rate 9\%
(v) Market rate of return 16\%
(vi) Interest Rs. 40 lakhs
(vii) Beta factor 1.05
(viii) Profit before interest and tax
Rs. 2,000 lakhs
(June 2009; Marks 8)
Ans. 391

## Q68. (Q14 of PM)

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 Rs. 1,000 each 34,000 (number)
Accumulated profit
Rs. 260 lakhs
10 percent Debentures of Rs 10 each 80 lakhs (number)

- Dividend expectations of equity shareholders $17.50 \%$
- Prevailing Corporate Tax rate $30 \%$
(June 2009 Marks 6)
Ans. 35

Q69. You are given the following information about Ram Ltd.:
(i) Beta for the year 2010-11 1.05
(ii) Risk Free Rate $12 \%$
(iii) Long Range Market Rate (based on BSE Sensex) 15.14\%
(iv) Extracts from the liability side of Balance Sheet as at 31 st March, 2011.
(Rs. in lakhs)
Equity
29,160
Reserves and surplus
43,740
Shareholder's fund $\quad 72,900$
Loan funds $\quad 8,100$
Total funds (long-term)
81,000
(v) Profit after tax

Rs. 20,394.16 lakhs
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(vi) Interest deducted from profit

Rs. 487,00 lakhs
(viii) Effective tax rate (i.e. (Provision for Tax/PBT) $\times 100$ ) 24.45\%

Calculate Economic Value Added of Ram Ltd. as on 31 st March 2011.
[May 2012]
Ans.:
We know that EVA = NOPAT - Cost of Capital Employed
Where EVA = Economic Value Added
NOPAT = Net Operating Profit After Tax
Required calculation are as follows:
(i) NOPAT

Profit After Tax Rs. 20,394.16 lakhs
Add Interest Net of Tax [Rs. 487 lakhs (1-0.2445)] Rs. 367.93 lakhs
NOPAT
Rs. 20,762.09 lakhs
(ii) Cost of Equity:

Cost of Equity $=$ Risk free Rate $+b$ [Market Rate - Risk Free Return]
$=12 \%+1.05 \times(15.14-12.00)$
$=12 \%+3.30 \%=15.30 \%$
(iii) Cost of Debt

Cost of Debt $=\frac{487 \times(1-0.2445)}{8,100}$ Rs. $100=4.54 \%$
(iv) Weighted Average Cost of Capital (WACC)

Amount (Rs. Weight Cost WACC\%
lakhs)

| Equity Debt | 72,900 | 90 | 15.30 | 13.77 |
| :--- | :--- | :--- | :--- | :--- |
|  | 8,100 | 10 | 4.54 | 0.454 |
|  | 81,000 | 1.00 |  | 14,224 |

(v) Cost of Capital Employed $=$ Rs. $81,000 \times 14.224 \%=$ RS. $11,521.44$ lakhs
(vi) EVA $=$ NOPAT - Cost of Capital Employed
= Rs. 20,762.09 lakhs - Rs. 11,521.44 lakhs = Rs. 9,240.65 lakhs

## Important Note:

## MARKET VALUE ADDED

Q70. The Capital structure of $W$ Ltd. whose shares are quoted on the NSE is as under -

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

The statutory fund is compulsorily required to be invested in Government securities. The ordinary shares are quoted at a premium of $500 \%$, Preference shares at Rs. 30 and debentures at par value.

You are required to ascertain the Marked Value added of the company and also give your assessement on the market value added as calculated by you.
(Answer: 2673.50)
(May 2014-4 Marks)

## HUMAN RESOURCE REPORTING

## Q71:

From the following information in respect of Exe Ltd., calculate the total value of human capital by following Lev and Schwartz model:

Distribution of employees of Exe Ltd.

| Age | Unskilled |  | Semi-skilled |  | Skilled |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No | Av. Annual <br> earnings | No. | Av. Annual <br> earnings | No. | Av. Annual <br> earnings |
| $30-39$ | 70 | 3 | 50 | 3.5 | 30 | (Rs'000) |

Apply 15\% discount factor.

## Solution

The present value of earnings of each category of employees by applying $15 \%$ discount factor is ascertained as below:
(A) Unskilled employees:

Age group 30-39. Assume that all 70 employees are just 30 years old:

|  | Present value |
| :--- | :---: |
|  | Rs |
| Rs 3,000 p.a. for next 10 years | 15,057 |
| Rs 4,000 p.a. for years 11 to 20 | 4,960 |
| Rs 5,000 p.a. for years 21 to 25 | 1,025 |
|  | 21,042 |

Age group 40-49. Assume that all 20 employees are just 40 years old:

| Rs 4,000 p.a. for next 10 years | 20,076 |
| :--- | :---: |
| Rs 5,000 p.a. for years 11 to 15 | 4,140 |
|  | 24,216 |

Age group 50-54: Assume that all 10 employees are just 50 years old:

| $` 5,000$ p.a. for next 5 years | 16,760 |
| :--- | :--- |

Similarly, present value of each employee under other categories will be calculated.
(B) Semi-skilled employees:

Age group 30-39

|  | Present value |
| :--- | :---: |
|  | Rs |
| Rs 3,500 p.a. for next 10 years | 17,567 |
| Rs 5,000 p.a. for years 11 to 20 | 6,200 |
| Rs 6,000 p.a. for years 21 to 25 | 1,230 |

Age group 40-49

| Rs 5,000 p.a. for next 10 years | 25,095 |
| :---: | :---: |
| Rs 6,000 p.a. for years 11 to 15 | 4,968 |
|  | 30,063 |

Age group 50-54

| Rs 6,000 p.a. for next 5 years | 20,112 |
| :--- | :---: |

(C) Skilled employees:

Age group 30-39

|  | Present value |
| :--- | :---: |
|  | Rs |
| Rs 5,000 p.a. for next 10 years | 25,095 |
| Rs 6,000 p.a. for years 11 to 20 | 7,440 |
| Rs 7,000 p.a. for years 21 to 25 | 1,435 |
|  | 33,970 |

Age group 40-49

| Rs 6,000 p.a. for next 10 years | 30,114 |
| :--- | :---: |
| Rs 7,000 p.a. for years 11 to 15 | 5,796 |
|  | 35,910 |

Age group 50-54

| Rs 7,000 p.a. for next 5 years | 23,464 |
| :--- | :--- |

Total value of Human Capital

| Age | Unskilled |  | Semi-skilled |  | Skilled |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | Av. Annual <br> earnings | No. | Av. Annual <br> earnings | No. | Av. Annual <br> earnings | No. | Av. Annual <br> earnings |
|  |  | (Rs '000) |  | $\left(\right.$ Rs ' $\left.^{\prime} 000\right)$ |  | (Rs '000) |  | (Rs '000) |
| $30-39$ | 70 | $14,72,940$ | 50 | $12,49,850$ | 30 | $10,19,100$ | 150 | $37,41,890$ |
| $40-49$ | 20 | $4,84,320$ | 15 | $4,50,945$ | 15 | $5,38,650$ | 50 | $14,73,915$ |
| $50-54$ | 10 | $1,67,600$ | 10 | $2,01,120$ | 5 | $1,17,320$ | 25 | $4,86,040$ |
|  | 100 | $21,24,860$ | 75 | $19,01,915$ | 50 | $16,75,070$ |  | $57,01,845$ |

## Q72

From the following details, compute the total value of human resources of skilled and unskilled group of employees according to Lev and Schwartz (1971) model:

|  | Skilled | Unskilled |
| :--- | :---: | :---: |
| (i) Annual average earning of an employee till the <br> retirement age. | 60,000 | 40,000 |
| (ii) Age of retirement | 65 years | 62 years |
| (iii) Discount rate | $15 \%$ | $15 \%$ |

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| (iv) No. of employees in the group | 30 | 40 |
| :--- | :---: | :---: |
| (v) Average age | 62 years | 60 years |

## Solution

Value of Employees as per Lev and Schwartz method:
$\mathrm{V}=\sum_{r=r}^{x} \frac{I(c)}{(1+)^{r-r}}$
Where,
$V=$ the human capital value of a person.
$I(t)=$ the person's annual earnings up to retirement.
$r=a$ discount rate specific to the person.
$t=$ retirement age.
Value of Skilled Employees:

$$
\begin{aligned}
& =\frac{60,000}{(1+0.15)^{6562}}+\frac{60,000}{(1+0.15)^{6563}}+\frac{60,000}{(1+0.15)^{6564}} \\
& =\frac{60,000}{(1+0.15)^{3}}+\frac{60,000}{(1+0.15)^{2}}+\frac{60,000}{(1+0.15)^{1}}
\end{aligned}
$$

$=$ Rs $39,450.97+$ Rs $45,368.62+$ Rs $52,173.91=$ Rs $1,36,993.50$
Total value of skilled employees is Rs $1,36,993.50 \times 30$ employees $=$ Rs $41,09,805$
Value of Unskilled Employees:

$$
\begin{aligned}
= & \frac{40,000}{(1+0.15)^{62-60}}+\frac{40,000}{(1+0.15)^{62-61}} \\
& =\frac{40,000}{(1+0.15)^{2}}+\frac{40,000}{(1+0.15)^{1}}
\end{aligned}
$$

= Rs 30,245.74 + Rs 34,782.60 = Rs 65,028.34
Total value of unskilled employees $=$ Rs $65,028.34 \times 40$ employees $=$ Rs $26,01,133.60$
Total value of human resources (skilled and unskilled)
$=$ Rs 41,09,805 + Rs 26,01,133.60= Rs 67,10,938.60

## Q73

The following information is supplied to you about Lookdown Ltd.

| Capital \& Reserves |  |
| :--- | :--- |
| Equity Shares of Rs 100 each of which Rs 75 has been called up | $5,00,000$ |
| Equity Shares in respect of which calls are in arrear @ 25 per <br> share | Rs 1,00,000 |
| General Reserve | Rs 10,00,000 |
| Profit \& Loss account (balance at beginning of the year) | (Rs 25,00,000) |
| Profit/(loss) for the year | (Rs 1,80,000) |
| Industry Average Profitability | $12.50 \%$ |
| $8 \%$ Debentures of Rs 10 each | $8,00,000$ |
| Lookdown Ltd. is proposing to hire the services of Mr. X to turn the company <br> around. |  |
| Minimum take home salary per month demanded by Mr. X | Rs 4,00,000 |

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| Average Income tax rate on salaries after considering the <br> impact of Rs 3 lakhs p.a. i.e., the exemption amount | $25 \%$ |
| :--- | :--- |
| Provident Fund contribution by Employer per month | Rs 50,000 |
| Profits over and above target expected by hiring Mr. X | $10 \%$ |

## Required

You are required to analyze the proposal and see whether it is worthwhile to employ Mr. X and also suggest the maximum emoluments that could be paid to him.
Note:
(i) PF contributions are tax exempt.
(ii) Take home salary is that remaining after employee's contribution to PF @ Rs 50,000 per month and after deduction of Income-tax on salary.

## Solution

Cost to Company in employing Mr. X

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

Maximum emoluments that can be paid to Mr. $X=60,11,500$
Thus, the company is advised not to hire him as his CTC Rs $76,00,000$ is more than Rs 60,11,500.

## Q74

Rose Limited provides you the following information on 31st March, 20X1:

| Capital and Reserves |  |
| :--- | :---: |
| Equity share capital of Rs 10 each of which Rs 8 has been <br> called up | $8,00,000$ shares |
| Calls in arrears | Rs $1,00,000$ |
| General Reserve | Rs $7,50,000$ |
| $50,000,9 \%$ Debentures of ' 100 each | Rs $50,00,000$ |
| Profit/(loss) for the year | (Rs 2,50,000) |
| Industry Average Profitability rate | $12.5 \%$ |

The company is proposing to hire the service of Mr. Raman to turn around the company.

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## Required

You are required to determine the maximum salary that could be offered to him if it is expected that after his appointment, the profits of the company will increase by $10 \%$ over and above the target profit.

## Solution

Calculation of Capital base

|  | Rs |
| :--- | :---: |
| Equity Share Capital paid up $(8,00,000$ shares of Rs 8 each $)$ | $64,00,000$ |
| Less: Calls in arrears | $(1,00,000)$ |
|  | $63,00,000$ |
| General Reserve | $7,50,000$ |
| Loss for the year | $(2,50,000)$ |
| 9\% Debentures | $50,00,000$ |
| Capital base | $1,18,00,000$ |
| Target Profit 12.5\% of capital base | $14,75,000$ |

Expected profits to be achieved by taking the services of Mr. Raman is Rs 16,22,500 (i.e. $14,75,000+10 \%$ of $14,75,000$ ). Therefore, the maximum salary that can be paid to Mr . Raman will be Rs $16,22,500$ p.a.

## Important Notes:

## Mutual Fund

## Q75:

A Mutual fund raised 100 lakhs on $1^{\text {st }}$ April, 2009 by issue of 10 lakh units of Rs. 10 per unit. The fund invested in several capital market instruments to build a portfolio of Rs. 90 lakhs. The initial expenses amounted to Rs. 7 lakhs. During April, 2009, the fund sold certain securities of cost Rs. 38 lakhs for Rs. 40 lakhs and purchased certain other securities for Rs. 28.20 lakhs. The fund management expenses for the month amounted to Rs. 4.50 lakhs of which Rs. 0.25 lakhs was in arrears. The dividend earned was Rs. 1.20 lakhs. $75 \%$ of the realised earnings were distributed. The market value of the portfolio on 30.04.2009 was Rs. 101.90 lakhs. Determine NAV per Unit.
(Answer: 11.10)

## Q76:

On $1^{\text {st }}$ April, 2016, Good Return Mutual Fund has the following assets and prices at 3.00 pm

| Shares of | No. of <br> Shares | Market price per <br> share |
| :--- | :--- | :--- |
| A Ltd. | 10000 | 18.50 |
| B Ltd. | 35000 | 384.40 |
| C Ltd. | 10000 | 263.60 |
| D Ltd. | 75000 | 575.60 |
| E Ltd. | 20000 | 27.65 |
| No. of Units of Funds |  | $5,00,000$ units |

(a) Calculate the Net Asset Value of Fund.
(b) Assuming Mr. Suresh send a cheque of Rs. 75,00,000 to the fund on $1^{\text {st }}$ April, 2016 and Fund Manager purchases 15000 shares of C Ltd. and balance is held in Bank. What will be the new position of the Fund?
(c) Calculate the Net Asset Value of the Fund, if on $2^{\text {nd }}$ April, 2016 at 3.00 pm the market price of shares is as follows:

| Shares of | Rate per <br> Share |  |
| :--- | :--- | :--- |
| A LId. | 21.30 |  |
| B Ltd. | 417.00 |  |
| C Ltd. | 289.80 |  |
| D Ltd. | 512.20 |  |
| E LTd. | 35.00 |  |

(Answer: 120 per unit, 120 per unit and 115.05 per unit)

## Q77: (ICAI Module - Test your knowledge Q2)

On 1.4.2008, a mutual fund scheme has 18 lakh units of face value of Rs. 10 each was outstanding. The scheme earned Rs. 162 lakhs in 2008-09, out of which Rs. 90 lakhs was D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla
earned in the first half of the year. On 30.9.2008, 2 lakh units were sold at a "NAV of Rs. 70.

Pass Journal entries for sale of units and distribution of dividend at the end of 2008-09.
(Answer: DER - 5/- per unit; Dividend Distribution - 8.60/-)

## Q78.

Sparrow Holdings is a SEBI Registered Mutual Fund which made its maiden N.F.O (New Fund Offer) on 10th April, 2016 at `10 face value per unit. Subscription was received for 90 lakhs units. An underwriting arrangement was also entered into with Affinity Capital Markets Ltd., that agreed to underwrite the entire NFO of 100 lakh units on a commission of \(1.5 \%\). Out of the monies received ' 892.50 lakhs was invested in various capital market instruments. The marketing expenses for the N.F.O amounted to` 11.25 lakhs. During the financial year ended March 2013 the Fund sold securities having cost of `127.25 lakh (FV` 54.36 lakhs) for` 141.25 lakhs. The fund in turn purchased securities for` 130 lakhs. The management expenses of the fund are regulated by SEBI stipulations which state that the same shall not exceed $0.25 \%$ of the average funds invested during the year. The actual amount spent towards management expenses was `2.47 lakhs of which` 47,000 was in arrear. The dividends earned on the investments held amounted to ` 2.51 lakhs of which a sum of` 25,000 is yet to be collected. The fund distributed $80 \%$ of realized earnings. The closing market value of the portfolio was` 1120.23 lakhs.
You are required to determine the closing per unit NAV of the fund.

## Solution:

| Particulars | Amount |
| :--- | :--- |
| Net Assets of Sparrow holding |  |
| Closing cash balance (W.N.2) | 79.99 |
| Closing Market Value of Investments | $1,120.23$ |
| Accrued Dividends (collectable) | $\frac{0.25}{1,200.47}$ |
|  |  |
| Less: Current Liabilities | $\underline{(0.47)}$ |
| Outstanding Management Fee (payable) | $\underline{1,200.00}$ |
| Closing Net Assets (A) | 100.00 |
|  | 12.00 |

Working Notes:

|  |  | Rs. in <br> Lakhs |
| :--- | :--- | :--- |
| Computation of opening cash balance <br> Proceeds of NFO in full including underwriters <br> commitment <br> Less: Initial Purchase of Securities | 1000.00 |  |

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## Q79.

Calculate the year-end NAV of the Mutual Fund scheme on the basis of the information given below:
(i) UTI launched a new Fund scheme for`6,000 crore. (ii) Underwriting Commission is \(1 \%\) of the fund shared equally by SBI, PNB, Syndicate Bank and UTI Bank. (iii) The Fund was launched on 1.4.2016 with a face value of` 1000 per unit.
(iv) Underwriting Commission was paid in full.
(vi) Management Expense was allowed by SEBI @ $1 \%$ of the Fund raised. However, during the year management expense was of ' 45 crore only. The management decided to defer the payment of ' 5 crore to the next financial year.
(vii) On 1.5.2016, the total fund received was invested after deduction of underwriting commission and ` 100 crore to meet the day to day management expenses. The investment fund received yielded $10 \%$ interest per annum. The interest was received for 3 quarters and the interest of last quarter is yet to be received. The interest realized in cash has

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been distributed to the unit holders @ 80\%. The financial year runs from April to March. The quarter starts from the date of investment i.e. 1.5.2016.

## Solution:

## Calculation of Net Asset Value of a fund

|  |  | Rs. In Crores |
| :--- | :--- | :--- |
| Total Assets: | 5840.00 |  |
| Investment (6,000-60-100) |  |  |
| Add: Closing Cash Balance (Refer | 147.60 |  |
| W.N.) |  | 6084.93 |
| Add: Interest for two months due to | 97.33 |  |
| be received |  |  |
| $5840 \times 10 \% ~ 2 / 12$ |  | $(5.00)$ |
| Less: Outstanding Management |  | 6079.93 |

No. of units $=6000 / 1000=6 \mathrm{Cr}$ Units
NAV per unit $=6079.93$ crores $/ 6$ Crore $=$ Rs. 1013.32 per unit

## Working Note:

Calculation of year-end cash/bank balance of the fund

|  |  | Rs. In <br> Crores |
| :--- | :--- | :--- |
| Cash received during the year for the fund |  | 6,000 |
| Sale of units |  | 438 |
| Add: Interest for 3 quarters on investment |  | 6,438 |
| $5840 \times 10 \% \times 9 / 12$ | 60 |  |
| Less: Underwriting commission | 40 |  |
| Management expenses paid in cash | 5840 |  |
| Investment | 350.40 | $\frac{(6290.40)}{147.60}$ |

## Q80.

Ramesh Goyal has invested in three mutual funds. From the details given below, find out effective yield on per annum basis in respect of each of the schemes to Ramesh Goyal upto 31-03-2017.

| Mutual Fund | X | Y | Z |
| :--- | :--- | :--- | :--- |
| Date of Investment | $1-12-2016$ | $1-1-2017$ | $1-3-2017$ |
| Amount of Investment | $1,00,000$ | $2,00,000$ | $1,00,000$ |
| NAV at the date of Investment | 10.50 | 10.00 | 10.00 |
| Dividend Received upto 31.03.2017 | 1,900 | 3,000 | Nil |
| NAV | 10.40 | 10.10 | 9.80 |

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## Solution:

Calculation of effective yield on per annum basis in respect of three mutual fund schemes of Ramesh Goyal upto 31.03.2017

|  |  | $\mathbf{X}$ | $\mathbf{Y}$ | $\mathbf{Z}$ |
| :--- | :--- | :---: | :---: | :---: |
| $\mathbf{1}$ | Amount of Investment (Rs ) | $1,00,000$ | $2,00,000$ | $1,00,000$ |
| $\mathbf{2}$ | Date of investment | 1.12 .2016 | 1.1 .2017 | 1.3 .2017 |
| $\mathbf{3}$ | NAV at the date of investment (Rs) | 10.50 | 10.00 | 10.00 |
| $\mathbf{4}$ | No. of units on date of investment [1/3] | $9,523.809$ | 20,000 | 10,000 |
| $\mathbf{5}$ | NAV per unit on 31.03.2017 (Rs) | 10.40 | 10.10 | 9.80 |
| $\mathbf{6}$ | Total NAV of mutual fund |  |  |  |
|  | investments on 31.03.2017 [4 $\times 5]$ | $99,047.61$ | $2,02,000$ | 98,000 |
| $\mathbf{7}$ | Increase/ decrease of NAV [6-1] | $(952.39)$ | 2,000 | $(2,000)$ |
| $\mathbf{8}$ | Dividend received up to 31.3.2017 | 1,900 | 3,000 | Nil |
| $\mathbf{9}$ | Total yield [7+8] | 947.61 | 5,000 | $(2,000)$ |
| $\mathbf{1 0}$ | Yield \% [9/1] $\times 100$ | $0.95 \%$ | $2.5 \%$ | $(2 \%)$ |
| $\mathbf{1 1}$ | Number of days | 121 | 90 | 31 |
| $\mathbf{1 2}$ | Effective yield p.a. [10/11] $\times 365$ days | $2.87 \%$ | $10.14 \%$ | $(23.55 \%)$ |

## Important Notes:

## NON BANKING FINANCIAL COMPANIES

## Q81:

XYZ Finance Ltd. is a non-banking finance company. It makes available to you the costs and market price of various investments held by it:

| Investments | Cost | (Rs. in lakhs) <br> Market Price |
| :--- | :--- | ---: |
| Equity shares: |  |  |
| Scrip A | 40.00 | 40.80 |
| Scrip B | 21.00 | 16.00 |
| Scrip C | 40.00 | 24.00 |
| Scrip D | 40.00 | 80.00 |
| Scrip E | 60.00 | 70.00 |
| Scrip F | 50.00 | 60.00 |
| Scrip G | 20.00 | 4.00 |
|  | 271.00 | 294.80 |
| Mutual Funds: | 26.00 | 16.00 |
| MF1 | 20.00 | 14.00 |
| MF2 | 4.00 | 6.00 |
| MF3 | 50.00 | 36.00 |
|  |  |  |
| Government Securities: | 40.00 | 44.00 |
| GV1 | 50.00 | 48.00 |
| GV2 | 90.00 | 92.00 |

You are required to answer following questions:
(i) Can the company adjust depreciation of a particular item of investment within a category?
(ii) What should be the value of investments?
(iii) Is it possible to offset depreciation investment in mutual funds against appreciation of value of investments in Equity Shares and Government Securities.
(Ans.: (i) Yes, Costs and Market price of current investments should be aggregated under each group.
(ii) Equity Shares
Rs. 271.00
Mutual Funds
Rs. 36.00
Government Securities
Rs. 90.00
(iii) No)

## Q82:

Provider Ltd. is a non-banking finance company who accepts public deposits and also deal in hire purchase business. It provides you with the following information regarding major hire purchase deals as on 31.3.2009:
Few machines were sold on hire purchase basis. The hire purchase price was set as Rs. 100 lakhs as against the cash price of Rs. 80 lakhs. The amount was payable as: (I) Rs. 20 lakhs down payment and balance in 5 equal instalments. The hire vendor collected 1st instalment as on 31.3.2010 but could not collect the second instalment, which was due on 313.2011. The company was finalizing accounts for the year 31.3.2011. Till 15.5.2011, the date on which the Board of Directors signed the accounts, the second instalment was not collected. Presume I.R.R. to be $10.42 \%$. Required:
(i) What should be the principal outstanding as on 1.4.2010? Should the company recognise financial charge for the year 2010-11 as income?
(ii) What should be the net book value of assets as on 31.3.2011 so far as Provider Ltd. is concerned as per NBFC prudential norms requirement for provisioning?
(iii) What should be the amount of provision to be made as per prudential norms for NBFC laid down by RBI?
(Answer: 50.252; Yes - since it is PA; 48/-; Basic provision - 7.488, Additional Nil)

## Q83:

Peoples Financiers Ltd. is an NBFC providing Hire purchase solutions for acquiring consumer durables. The following information is extracted from its books for the year ended $31^{\text {st }}$ March, 2014:

| Assets Funded | Interest overdue but recog. In P\&L |  | Net Book Value of <br> Assets O/s |
| :--- | :--- | :--- | :--- |
|  | Period overdue | Interest Amount <br> (Rs. Cr.) | (Rs. Cr.) |
| LCD TV | Upto 12 months | 480.00 | 20123.00 |
| Washing Machine | For 24 months | 102.00 | 2410.00 |
| Refrigerators | For 30 months | 50.50 | 1280.00 |
| Air Conditioner | For 45 months | 26.75 | 647.00 |

(Answer: Additional Provision - 1205.90/-)

## Important Notes:

## SHARE BASED PAYMENT \& INDAS 102

## Q84 -Share-based payment - Purchase of goods (ICAI Module)

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

Pass the journal entries?
Solution

| 1 February, 20X1 | INR |  |
| :--- | :--- | ---: |
| Office Building Dr. | $2,00,000$ |  |
| To Share capital (995 $\times 100$ ) |  | 99,500 |
| To Securities premium (balance) |  | $1,00,500$ |
| (Recognition of equity option and cash settlement <br> option) |  |  |

## Q85 - Share-based payment - Services (ICAI Module)

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

## Solution

| Fair value of services | $1,00,000$ |
| :--- | :---: |
| No. of months | 3 |
| Monthly expense | $33,333.33$ |


| 30-Apr-20X1 | INR |  |
| :--- | :--- | :--- |
| Repair \& Maintenance Dr. |  | $33,333.33$ |
| To Share based payment reserve (equity) |  |  |
| (Recognition of Equity settled SBP using fair value of <br> services rendered) |  |  |
| 31-May-20X1 | $33,333.33$ |  |
| Repair \& Maintenance Dr. | $33,333.33$ |  |
| To Share based payment reserve (equity) |  |  |
| (Recognition of Equity settled SBP using fair value of <br> services rendered) |  |  |
| 30-Jun-20X1 | $33,333.33$ | $33,333.33$ |
| Repair \& Maintenance Dr. |  |  |
| To Share based payment reserve (equity) |  |  |
| (Recognition of Equity settled SBP using fair value of |  |  |

[^9]| services rendered) |  |  |
| :--- | :--- | :--- |
| 1 -Jul-20X1 | $1,00,000$ |  |
| Share based payment reserve (equity) Dr. |  | 10,000 |
| To Equity Shares $(1000 \times 10)$ |  | 90,000 |
| To Securities premium (balancing figure) |  |  |

## Q86 - Equity Settled Shared Based Payment- Service conditions (ICAI Module)

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

Solution

| Period | Proportion | Fair value | To be vested | Cumulative <br> expenses | Expenses |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathbf{a}$ | $\mathbf{b}$ | $\mathbf{c}$ | $\mathbf{d = b \times} \mathbf{c} \times \mathbf{a}$ | e = d-previous <br> period d |
| Period 1 | $1 / 3$ | $5,00,000$ | $91 \%$ | $1,51,667$ | $1,51,667$ |
| Period 2 | $2 / 3$ | $5,00,000$ | $89 \%$ | $2,96,667$ | $1,45,000$ |
| Period 3 | $3 / 3$ | $5,00,000$ | $82 \%$ | $4,10,000$ | $1,13,333$ |
|  |  |  |  |  | $\mathbf{4 , 1 0 , 0 0 0}$ |

## Journal Entries

| 30-Jun-20X1 |  |  |
| :---: | :---: | :---: |
| Employee benefits expenses Dr. | 1,51,667 |  |
| To Share based payment reserve (equity) |  | 1,51,667 |
| 30-Jun-20X2 |  |  |
|  |  |  |
| Employee benefits expenses Dr. | 1,45,000 |  |
| To Share based payment reserve (equity) |  | 1,45,000 |
| (2/3 of expected vested equity instruments value) |  |  |
| 30-Jun-20X3 |  |  |
| Employee benefits expenses Dr. | 1,13,333 |  |
| To Share based payment reserve (equity) |  | 1,13,333 |
| (Final vested equity instruments value) |  |  |
| Share based payment reserve (equity) Dr. | 4,10,000 |  |
| To Share Capital |  | 4,10,000 |
| (re-allocated and issued shares) |  |  |

Q87 - Cash Settled Shared Based Payment-Service conditions (ICAI Module)
XYZ issued 10,000 Share Appreciation Rights (SARs) that vest immediately to its employees on 1 April 20X0. The SARs will be settled in cash. At that date it is estimated,

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using an option pricing model, that the fair value of a SAR is INR 95. SAR can be exercised any time upto 31 March 20X3. At the end of period on 31 March 20X1 it is expected that $95 \%$ of total employees will exercise the option, $92 \%$ of total employees will exercise the option at the end of next year and finally $89 \%$ will be vested only at the end of the 3rd year. Fair Values at the end of each period have been given below:

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

## Solution

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

## Journal Entries

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

## Q88 - Share-based payment - Cash \& equity alternatives (ICAI Module)

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

| Option I | Period | INR |  |
| :--- | :---: | :---: | :---: |
| No of cash settled shares |  | 74,000 |  |
| Service condition | 3 years |  |  |
| Option II |  | 90,000 |  |
| No of equity settled shares |  |  |  |
| Conditions: | 3 years |  |  |
| Service | 2 years |  |  |
| Restriction to sell |  |  |  |
| Fair values |  | 115 |  |
| Equity price with a restriction of sale for 2 years |  | 135 |  |
| Fair value grant date |  | 138 |  |
| Fair value 20X0 |  | 140 |  |
| $20 \times 1$ |  | 147 |  |
| $20 \times 2$ |  |  |  |

Pass the Journal entries?

## Solution

| Fair value of Equity option components: |  |
| :--- | ---: |
| Fair value of a share with restrictive clause | INR 115 |
| No. of shares | 90,000 |
| Fair value $(90,000 \times 115)$ | A |
| Fair value of a share at the date of grant $1,03,50,000$ |  |
| No. of cash settled shares | INR 135 |
| Fair value $(74,000 \times 135)$ | 74,000 |
| Fair value of equity component in compound instrument (A-B) | INR 3,60,000 |

## Journal Entries

| $31 / 12 / 20 X 0$ | INR |  |
| :--- | :--- | :---: |
| Employee benefit expenses Dr. | $35,24,000$ |  |
| To Share based payment reserve (equity) $(3,60,000 / 3)$ |  | $1,20,000$ |
| To Share based payment liability $(138 \times 74,000) / 3$ |  | $34,04,000$ |
| (Recognition of equity option and cash settlement <br> option) |  |  |
| $31 / 12 / 20 \times 1$ | $36,22,667$ |  |
| Employee benefits expenses Dr. |  | $1,20,000$ |
| To Share based payment reserve (equity) $(3,60,000 / 3)$ | $35,02,667$ |  |
| To Share based payment liability $(140 \times 74,000) 2 / 3-$ <br> $34,04,000$ |  |  |
| (Recognition of equity option and cash settlement <br> option) |  |  |


| $31 / 12 / 20 X 2$ |  |  |
| :--- | :---: | :---: |
| Employee benefits expenses Dr. | $40,91,333$ |  |
| To Share based payment reserve (equity) $(3,60,000 / 3)$ |  | $1,20,000$ |
| To Share based payment liability |  | $39,71,333$ |
| $(147 \times 74,000) 3 / 3-(34,04,000+35,02,667)$ <br> (Recognition of equity option and cash settlement <br> option) |  |  |
| Upon cash alternative chosen | $1,08,78,000$ |  |
| Share based payment liability $(147 \times 74,000)$ Dr. |  | $1,08,78,000$ |
| To Bank/ Cash |  |  |
| (Being settlement made in cash) | $1,08,78,000$ |  |
| Upon equity alternative chosen |  | $1,08,78,000$ |
| Share based payment liability $(147 \times 74,000)$ Dr. |  |  |
| To Share capital |  |  |
| (Being settlement made in equity) |  |  |

## Q89. - Equity settled - Non market conditions (Reversals) (ICAI Module)

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

Fair value of the option at grant date was Cost reduction achieved-
Year 1
Year 2
Year 3
How the expenses would be recorded?

## Solution

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

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

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

## Q90 - Equity Settled - Market based conditions (ICAI Module)

Apple Limited has granted 10,000 share options to one of its directors for which he must work for next 3 years and the price of the share should increase by $20 \%$ over next 3 years.
The share price has moved as per below details -
Year 1
22\%

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## Year 2 19\%

Year 3 25\%
At the grant date, the fair value of the option was INR 120.
How should we recognize the transaction?

## Solution

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

Even if the required market condition as required is not fulfilled, there is no requirement to reverse the expense previously booked.

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

## MODIFICATIONS/REPRICING:

Repricing means decline in the exercise price of options, so as to make options more attractive. In such case:

1. Calculate fair value as on the date of Repricing before the effect of modification
2. Calculate fair value on the date of repricing after the effect of modification
3. Calculate incentive due to repricing ( $1-2$ )
4. Such incentive should be written off over the remaining vesting period.

Q91. At the beginning of year 1, an entity grants 100 share options to each of its 500 employees. Each grant is conditional upon the employee remaining in service over the next three years. The entity estimates that the fair value of each option is Rs. 15. On the basis of a weighted average probability, the entity estimates that 100 employees will leave during the three-year period and therefore forfeit their rights to the share options.

Suppose that 40 employees leave during year 1. Also suppose that by the end of year 1, the entity's share price has dropped, and the entity reprices its share options, and that the repriced share options vest at the end of year 3. The entity estimates that a further 70 employees will leave during years 2 and 3 , and hence the-total expected employee departures over the three-year vesting period is 110 employees. During year 2, a further

35 employees leave, and the entity estimates that a further 30 employees will leave during year 3, to bring the total expected employee departures over the three-year vesting period to 105 employees: During year 3, a total of 28 employees leave, and hence a total of 103 employees ceased employment during the vesting period. For the remaining 397 employees, the share options vested at the end of year 3.

The entity estimates that, at the date of repricing, the fair value of each of the original share options granted (ie before taking into account the repricing) is Rs. 5 and that the fair value of each repriced share option is Rs. 8. Calculate option expense.
(Answer: Rs. 195000, 259250 260350)

## Q92 - Cancellation- Equity Settled Share based payment (ICAI Module)

Anara Fertilizers Limited issued 2000 share options to its 10 directors for an exercise price of INR 100. The directors are required to stay with the company for next 3 years.

Fair value of the option estimated
Expected no of Directors to vest the option

INR 130
8

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

Fair value of option at the time of cancellation was INR 90
Market price of the share at the cancellation date was INR 99

There was a compensation which was paid to directors and only 9 directors were currently in employment. At the time of cancellation of such scheme, it was agreed to pay an amount of INR 95 per option to each of 9 directors.

How the cancellation would be recorded?
Solution

|  | Year 1 | Year 2 |  |  |
| :--- | :---: | :---: | :--- | :--- |
| A) |  |  |  |  |
| Expected directors to vest | 8 | 9 |  |  |
| Fair value of option | 130 | 130 |  |  |
| No. of options 2,000 | 2,000 | 2,000 |  |  |
| Total | $20,80,000$ | $23,40,000$ |  |  |
| Expense weightage | $1 / 3$ |  | Full, as it is cancelled |  |
| Expense for the year | $6,93,333$ | $16,46,667$ | Remaining amount since <br> cancelled |  |
| B) Cancellation compensation |  |  |  |  |
| No. of directors |  |  |  |  |

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| Amount agreed to pay | 95 |
| :--- | :---: |
| No. of options/ director | 2,000 |
| Compensation amount $(9 \times 95 \times 2,000)$ Also refer working notes 1 and | $217,10,000$ |

## Working Notes:

1. Amount to be deducted from Equity

| No. of directors | 9 |
| :--- | ---: |
| Fair value of option (at the date of cancellation) | 90 |
| No. of options/ director | 2,000 |
| Total | $16,20,000$ |

## 2. Amount transferred to Profit and Loss

| Total cancellation compensation | $17,10,000$ |
| :--- | ---: |
| Less: To deduct from Equity | $(16,20,000)$ |
| Balance transferred to Profit and Loss | 90,000 |

## EXTRA QUESTIONS

## GRADED VESTING

Q93. The following particulars in respect of stock options granted by a company are available:

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

Shares offered were put in three groups. Group I was for $20 \%$ of shares offered with vesting period one-year. Group II was for $40 \%$ of shares offered with vesting period twoyears. Group III was for $40 \%$ of shares offered with vesting period three-years. Fair value of option per share on grant date was Rs. 10 for Group 1, Rs. 12.50 for Group II and Rs. 14 for Group III

Position on 31/03/07
(a) Number of employees left $=40$
(b) Estimate of number of employees to leave in 2007-08 $=36$
(c) Estimate of number of employees to leave in 2008-09 $=34$

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(d) Number of employees exercising options in Group I $=350$

## Position on 31/03/08

(a) Number of employees left $=35$
(b) Estimate of number of employees to leave in 2008-09 $=30$
(c) Number of employees exercising options in Group II $=319$

## Position on 31/03/09

(a) Number of employees left $=28$
(b) Number of employees at the end of last vesting period $=297$
(c) Number of employees exercising options in Group III $=295$

Options not exercised immediately on vesting, were forfeited.
Compute expenses to recognise in each year and show important accounts in books of the company.
(Ans.: 123080; 80700 and 33040)

## Important Notes:

| AS-4 <br> Contingencies \& Events <br> occuring after the Balance <br> Sheet Date | IND AS - 10 <br> Events after the Reporting <br> Period |
| :---: | :---: |

## Some important Case Studies:

CASE 94: While preparing its Final accounts for the year ended $31^{15 t}$ March, 2011, a company made a provision for bad debts @ $5 \%$ of its total debtors. In the last week of feb, 2011 a debtor for Rs. 2 lakhs has suffered heavy losses due to earthquake; the loss was not covered by any insurance policy. In April 2011 the debtor became insolvent. Can the company provide for full loss arising out of insolvency of the debtor in the final accounts for the year ended $31^{\text {st }}$ March, 2011?
Answer: According to AS 4 "Adjustment to assets and liabilities are required for events occurring after the balance sheet date that provide additional information materially affecting the determination of the amounts relating to conditions existing at the balance sheet date.
In the above case, circumstances were existing on the balance sheet date and event of April (declaration of insolvency) only confirm the circumstances existing on the date of balance sheet i.e. 31.03.2011. In this case company should make full amount of provision for bad debts arising out of insolvency of the debtor for the year ended $31^{\text {st }}$ March, 2011.

CASE 95: A company deals in petroleum products. The sale price of petrol is fixed by the government. After the balance sheet date, but before the finalization of accounts of the company, the government unexpectedly increased the petrol prices retrospectively. Can the company account for additional revenue at the close of the year? Discuss.
Answer: Company cannot account for the revenue at the close of the year because it is not an adjusting event as per AS 4, since there were no circumstances of price increase was persisting on the date of balance sheet. Hence mere disclosure is needed in this case. Further it cannot also be treated as prior period item in subsequent year as per AS 5 because there was no error or omission in preparation of FS of any earlier year or years.

CASE 96: Amitabh Ltd. entered into an agreement to sell its immovable property included in the balance sheet at Rs. 10 lacs to another company for Rs. 20 lacs. The agreement to sell was concluded on $28^{\text {th }}$ Feb, 2011 and the sale deed was registered on $1^{\text {st }}$ May, 2011. FS of the company are approved on $30^{\text {th }}$ June,2011. Comment with reference to AS 4?
Answer: According to AS 4 "Adjustment to assets and liabilities are required for events occurring after the balance sheet date that provide additional information materially affecting the determination of the amounts relating to conditions existing at the balance sheet date.

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In this case, the sale of immovable property was carried out before the closure of the books of accounts. This is clearly an event occurring after the balance sheet date which requires an adjustment. Agreement to sell was effected before the balance sheet date and the registry was done after the balance sheet date but before the approval of accounts. So the adjustment for the sale of immovable property is necessary in the books of accounts for the year ended $31^{\text {st }}$ March, 2011.

## CASE: 97

In a company theft of cash of Rs. 1.80 lacs by the cashier in January 2011, was detected in May 2011. The accounts of the company were not yet approved by the Board of Directors of the company. Whether the theft of cash has to be adjusted in the accounts of the company for the year ended 31.03.2011. Decide.

## CASE: 98

A company has filled a legal suit against the debtor from whom Rs. 15 lakh is recoverable as on 31.03.2012. The chances of recovery by way of legal suit are not good as per the legal opinion by the counsel in April, 2012. Can the company provide for full amount of Rs. 15 lakh as provision for doubtful debts? Discuss in brief.

## CASE: 99

A major fire has damaged the assets in a factory of a Limited company on $5^{\text {th }}$ April - five days after the year end and closure of accounts. The loss is estimated at 10 crores out of which 7 crores will be recoverable from the insurers. Explain briefly how the loss should be treated in the final accounts for the previous year.

CASE: 100
Neel Limited has its corporate office in Mumbai and sells its products to its stockists all over India. On 31 ${ }^{\text {st }}$ March, 2013, the company wants to recognize receipts of cheques bearing date $31^{\text {st }}$ March, 2013 or before, as "Cheques in Hand" by reducing "Trade Receivables". The Cheques in Hand is shown in the Balance sheet as an item of Cash and Cash Equivalents. All the cheques are presented to the bank in the month of April 2013and are also realized in the same month in normal course. State with reasons, whether each of the following is an adjusting event and how this fact is to be disclosed by the company, with reference to the relevant accounting standard:
(a) Cheques collected by marketing personnel of the company from stockists on or before $31^{\text {st }}$ March, 2013.
(b) Cheques sent by the stockists through courier on or before $31^{\text {st }}$ March, 2013.

## Important Notes:

## ACCOUNTING STANDARD - 5

## "NET PROFIT OR LOSS FOR THE PERIOD, PRIOR PERIOD ITEMS AND CHANGE IN ACCOUNTING

 POLICIES"Some Important Case Studies:

## Q101

A limited company created a provision for bad and doubtful debts at $2.5 \%$ on debtors in preparing the financial statements for the year 2010-11.
Subsequently on a review of the credit period allowed and financial capacity of customers, the company decided to increase the provision to $8 \%$ on debtors as on 31.3.2011. The accounts of the company were not approved by the Board of Directors till the date of decision. While applying the relevant accounting standard can this revision be considered as an Extraordinary item or Prior Period Item?

## Q102

$X$ co. Ltd. signed an agreement with its employees union for revision of wages in june, 2012. The wage revision is with retrospective effect from 1.4.2008. The arrears of wages upto 31.03.12 amounts to Rs. 80/- Lacs. Arrears wages for the period from 1.4.12 to 30.6.12 amounts to Rs. 7/-Lacs.
Decide whether a separate disclosure of arrear of wages is required.

## Q103

Goods of Rs. 5,00,000/- were destroyed due to flood in September 2008. A claim was lodged with insurance company, but no entry was passed in the books for insurance claim.
In March, 2011, the claim was passed and the company received a payment of Rs. $3,50,000 /$ - against the claim. Explain the treatment of such receipt in final accounts for the year ended $31^{\text {st }}$ March, 2011.

## Q104

Cost of a machine acquired on 01.04 .09 was Rs. $5,00,000$. The machine is expected to realize Rs. 50,000 at the end of its working life of 10 years. Straight line depreciation of Rs. 45,000 per year has been charged upto 2011-12. For and from 2012-13, the company switched over to $15 \%$ pa reducing balance method of depreciation in respect of machine. The new rate of depreciation is based on revised uselife life of 15 years. The New rate shall apply with restrospective effect from 01/04/2009. State how would you deal with

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the above in the annual accounts of the company for the year ended $31^{\text {st }}$ march, 2013 in the light of AS 5?

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## AS - 7 CONSTRUCTION CONTRACTS

## Q105

MOHIT LTD. has undertaken bridge construction contract to be constructed in 3 years. Initial contract revenue Rs. 900 crores. Initial contract cost Rs. 800 crores.

| Particulars | Years |  |  |
| :--- | :---: | :---: | :---: |
|  | $\mathbf{1}^{\text {st }}$ | $2^{\text {nd }}$ | $3^{\text {rd }}$ |
| Estimated contract cost | 805 | --- | --- |
| Increase in contract revenue | --- | 20 | --- |
| Estimated additional increase | --- | 15 | --- |
| cost | 161 | 584 | 820 |
| Contract cost incurred upto |  |  |  |

At the end of $2^{\text {nd }}$ year cost incurred includes Rs. 10 crores, for material stored at the sites to be used in $3^{\text {rd }}$ year to complete the project.

Sol.: Amount of revenue, expenses and profit recognised in statement of P\&L $a / c$ in three years:

| Particulars | Up to <br> reporting <br> Date | Recognised in <br> earlier years | Recognised in <br> C. Year |
| :--- | :---: | :---: | :---: |
| Year I: | 180 | --- | 180 |
| Revenue (900×20\%) | 161 | --- | 161 |
| Expenses | 19 | --- | 19 |
| Profit |  | 180 | 464 |
| Year II: | 644 | 161 | 413 |
| Revenue (920X70\%) | 574 | 19 | 51 |
| Expenses (584-10) | 70 |  |  |
| Profit |  | 644 | 276 |
| Year III: | 920 | 574 | 246 |
| Revenue (920X100\%) | 820 | 70 | 30 |
| Expenses <br> Profit | 100 |  |  |

## WN:

| Initial revenue agreed | 900 | 900 | 900 |  |
| :--- | :--- | :---: | :---: | :---: |
| Variation | --- | 20 | 20 |  |
| Total contract value | 900 | 920 | 920 |  |
| Contract cost incurred upto the date of | 161 | $584[$ incl. 10 | 820 |  |
| reporting |  | 805 | crores mat) | 820 |
|  |  | $20 \%$ | $70 \%$ | $100 \%$ |
| Total estimated contract cost |  |  |  |  |

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| Stage of completion | $(161 / 805$ <br> $\times 100)$ | $(584-10 / 820$ | $(820 / 820$ |
| :--- | :---: | :---: | :---: |
| $\times 100]$ | $\times 100)$ |  |  |

## Q106

A firm of contractors obtained a contract for construction of bridges across river Krishna. The following details are available for the year ended 31.3.04

| Total Contract Price | 1,000 |
| :--- | :---: |
| Work Certified | 500 |
| Work not Certified | 105 |
| Estimated further Cost of Completion | 495 |

Sol.:

| Cost incurred up to the date | 605 |
| :---: | :---: |
| Cost incurred further cost | 495 |
| Total cost of contract | 1100 |

Degree of Completion $=55 \%(605 / 1100)$. Turnover $=1000 \times 55 \%=550$. Loss in C.Year $=550-$ $605=55$.

Provision to be created in current year for future loss:

| Total cost | 1100 |
| :--- | :---: |
| Less: Total revenue | 1000 |
| Total loss | 100 |
| Less: C.Y. loss | 55 |
| Future loss | 45 |

## Q107

Chitram Movies undertook construction contract to construct sub-way for Rs. 100 crores on 1.1.2004. It estimated construction cost initially at Rs. 70 crores. Contract was estimated to be completed in three years. However, when starting the work it was found that there were rocks underground at construction site and cost shall increase by Rs. 36 crores and the contract shall be completed in 3 years. The company wants to provide for expected loss of Rs. 2 crores per year.
a. Is the treatment correct?
b. If work has not yet started but by technical survey it was known on 25.2.2004 that there was rock underneath at construction site. Company did not want to provide for any losses of Rs. 6 crores for the year ended 31.3.2004, considering that when project work would start, the losses shall be provided for.
Sol.:
a. No, the stand of company is not correct. As per AS-7, when it is certain that total contract cost will exceed total contract revenue, the expected loss should be recognised as an expense immediately. Therefore expected loss of Rs.6crores, to be provided for the year ended 31.3.2004.

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b. No, the argument of the company is not correct. Irrespective of whether or not work has commenced, the loss is to be provided for the year ended 3 1.03.2004.

## GUIDANCE NOTE ON ACCOUNTING FOR REAL

## ESTATE TRANSACTIONS

## Q108

Facts Details
Total saleable area 20,000 sqft
Land cost Rs. 300 lacs
Estimated construction and development cost Rs. 300 lacs
Total area sold 5000 sqft
Total sale agreement value Rs. 200 lacs
Amount realized Rs. 50 lacs
Construction cost incurred including land cost Rs. 360 Lacs
Whether revenue to be recognised as threshold limit is achieved or not?

## Solution

Percentage of completion for threshold limit is 20\%
Area sold is $25 \%$ of total saleable area
Amount realized exceeds $10 \%$ of agreement value
Final answer - No revenue to be recognized as threshold limit not achieved

## Q109

Facts Details
Total saleable area 20,000 sqft
Land cost Rs. 300 lacs
Estimated construction and development cost Rs. 300 lacs
Total area sold 5,000 sqft
Total sale agreement value Rs. 200 lacs
Amount realized Rs. 50 lacs
Cost incurred including land cost Rs. 390 lacs
Compute profit.

## Solution

Percentage of completion for threshold limit is 30\%
Area sold is $25 \%$ of total saleable area
Amount realized exceeds $10 \%$ of agreement value
Revenue to be recognized at $65 \%$ of Rs. 200 lacs i.e. Rs. 130 lacs
Cost [5000/20,000 $\times 390$ ] Rs. 97.50 lacs
Work in progress $=$ Rs. 292.50 lacs
Profit = Rs. 32.50 lacs

## Important Notes:

## AS - 10 (R) PROPERTY, PLANT \& EQUIPMENT (PPE) <br> IND AS - 16 <br> PROPERTY, PLANT \& EQUIPMENT

## Q110: (Change in estimate of useful life)

Entity A purchased an asset on 1st January 2013 for ` 1,00,000 and the asset had an estimated useful life of 10 years and a residual value of nil.

On 1st January 2017, the directors review the estimated life and decide that the asset will probably be useful for a further 4 years.

Calculate the amount of depreciation for each year, if company charges depreciation on Straight Line basis.

## Solution

The entity has charged depreciation using the straight-line method at ` 10,000 per annum i.e ( $1,00,000 / 10$ years).

On 1st January 2017, the asset's net book value is [1,00,000-(10,000 $\times 4$ )] ' 60,000 . The remaining useful life is 4 years.

The company should amend the annual provision for depreciation to charge the unamortised cost over the revised remaining life of four years.

Consequently, it should charge depreciation for the next 4 years at ` 15,000 per annum i.e. ( $60,000 / 4$ years).

## Q111 - Replacement Cost

Sun Ltd has acquired a heavy road trailer at a cost of ` 100,000 (with no breakdown of component parts). The estimated useful life is 10 years. At the end of the sixth year, the engine requires replacement, as further maintenance is uneconomical due to the off-road time required. The remainder of the vehicle is perfectly road worthy and is expected to last for the next four years. The cost of the new engine is ' 45,000 . The discount rate assumed is $5 \%$.

Whether the cost of new engine can be recognised as the asset, and if so, what treatment should be followed?
(Hint Answer: Revised Cost $=(100,000-33,580+45,000)=111,420)$

## Q112 - Deferred Payment Credit

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

The property developer is offering a discount of 5 percent (i.e. ` 0.5 million) if payment is made in full at the time of completion of sale. Implicit interest rate of 5.36 percent p.a.

Show how the property will be recorded in accordance of Ind AS 16.

## Q113 - Exchange of Assets

Pluto Ltd owns land and building which are carried in its balance sheet at an aggregate carrying amount of `10 million. The fair value of such asset is` 15 million. It exchanges the land and building for a private jet, which has a fair value of ' 18 million, and pays additional 3 million in cash.

Show the necessary treatment as per Ind AS 16.
(Hint: Profit on Exchange - 5000; Private Jet recognize at 18000)

## Q114: Accumulated depreciation at the date of revaluation

Jupiter Ltd. has an item of plant with an initial cost of ' 100,000. At the date of revaluation accumulated depreciation amounted to `55,000 . The fair value of asset, by reference to transactions in similar assets, is assessed to be` 65,000.

Find out the entries to be passed?

## Solution

Method - I:

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

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

Method - II:

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| Carrying amount (100,000- | 45,000 |  |
| :--- | :--- | :--- |
| $55,000)=$ |  |  |
| Fair value (revalued amount) | 65,000 |  |
| Surplus | 20,000 |  |
| \% of surplus (20,000/45,000) | $44.44 \%$ |  |
|  |  |  |
|  |  |  |
| Entries to be Made: | Dr. | 44,44 |

To Accumulated Depreciation (55,000 $\times 44.44 \%$ )
24,444
To Surplus on Revaluation
20,000

## Q115: Utilisation of Revaluation Surplus

An item of PPE was purchased for $9,00,000$ on 1 April 20X1. It is estimated to have a useful life of 10 years and is depreciated on a straight line basis. On 1 April 20X3, the asset is revalued to` $9,60,000$. The useful life remains unchanged at ten years.

Show the necessary treatment as per Ind AS 16.

## Q116:

| List price of machine | $80,00,000$ |
| :--- | :---: |
| Import duty | $5,00,000$ |
| Delivery fees | $1,00,000$ |
| Electrical installation <br> costs | $10,00,000$ |
| Pre-production testing | $4,00,000$ |
| Purchase of a five-year <br> maintenance contract with <br> vendor | $7,00,000$ |

In addition to the above information XYZ Ltd. was granted a trade discount of $10 \%$ on the initial list price of the asset and a settlement discount of $5 \%$, if payment for the machine was received within one month of purchase. XYZ Ltd. paid for the plant on April 20, 20X1. At what cost the asset will be recognised?
(Hint: 92,00,000)

## Important Notes:

# ACCOUNTING STANDARD - 11(Revised) <br> "EFFECTS OF CHANGES IN FOREIGN EXCHANGE RATES" 

## Q117

Sunshine company Ltd. imported Raw Materials worth US Dollars 9,000 on $25^{\text {th }}$ Feb, 2011, when the exchange rate was 44/- per US Dollars. The Transaction was recorded in the books at the above mentioned rate. The payment for the transaction was made on $10^{\text {th }}$ April, 2011, when the exchange rate was 48/- per US Dollars. At the yearend $31^{\text {st }}$ March, 2011, the rate of exchange was 49/- per US Dollar.

The Chief Accountant of company passed an entry on $31^{\text {st }}$ March, 2011 adjusting the cost of raw material consumed for the difference between 48/- and 44/- per US Dollar. Discuss whether this treatment is justified as per the provisions of AS - 11 (Revised).

## Q118

Patidar Ltd. borrowed US \$ 5,00,000 on 31.12 .2010 which will be repaid (settled) as on 30.06.11. Patidar Ltd. prepares its financial statements ending on 31.3.11. Rate of exchange between reporting currency (rupees) and foreign currency (\$) on different dates are as under:
31.12.2010 1 US \$ = Rs. 44.00
31.03.2011 1 US \$ = Rs. 44.50
30.06.2011 1 US \$ = Rs. 44.75.
(i) Calculate borrowings in reporting currency to be recognized in the books on above mentioned dates \& also show journal entries for the same.
(ii) if borrowing was repaid on 28.02 .11 on which date exchange rate was 1 US $\$=$ Rs.
44.20 than what entry should be passed?

## Q119

S Ltd. purchased fixed assets costing Rs. 3,000 lacs on 01.01.2010 and the same was fully financed by foreign currency loan (\$) payable in three equal installments. Exchange rates were 1US $\$=$ Rs. 40.00 and 42.50 as on 01.01 .2010 and 31.12.2010. First installment was paid on 31.12.2010. The entire difference in foreign exchange has been capitalized. You are required to state, whether the treatment made by S Ltd. is correct or not?

## Q120

The following is the Trial Balance of TATA Ltd. as on $31^{\text {st }}$ March, 2011 before subsequent recognition:

| Particulars | Dr. Amt. | Cr. Amt. |
| :--- | :--- | :--- |
| Purchases | 80,000 | - |
| Debtors (Foreign currency) | 60,000 | - |
| $\$ 2,000$ |  |  |
|  | 25,000 | - |
| Debtors (Indian currency) |  |  |
| Loan (long term F.C.) for | - | $1,00,000$ |
| financing Machine \$ 3,000 |  |  |
| Loan (long term F.C.) others <br> $\$ 4,000$ | - | $1,40,000$ |
| Machine | $2,00,000$ | - |
| Sales | $3,65,000$ | $3,65,000$ |

Exchange rate as on 31.03 .2011 is Rs. 50/- per US \$. Apply Para 46 and Prepare Trial Balance thereafter.

## Q121

A Ltd. has following information

| Year | Exchange Diff on Short Term Foreign Currency Monetary Item | Exchange Diff on Long Term Foreign Currency <br> Monetary Item <br> Monetary Item (Dep <br> Assets) | Exchange Diff on Long Term Foreign Currency Monetary Item Monetary Item (Other Items) |
| :---: | :---: | :---: | :---: |
| 05-06 | 10,000 | 18,000 | 26,000 |
| 06-07 | 11,000 | 19,000 | 27,000 |
| 07-08 | 12,000 | 20,000 | 28,000 |
| 08-09 | 13,000 | 21,000 | 29,000 |
| 09-10 | 14,000 | 22,000 | 30,000 |
| 10-11 | 15,000 | 23,000 | 31,000 |
| 11-12 | 16,000 | 24,000 | 32,000 |
| 12-13 | 17,000 | 25,000 | 33,000 |

Apply Para 46. Depreciation rate 10\%. WDV of Asset on 01/04/2006 is Rs. 10,00,000.

## Important Notes:

## ACCOUNTING STANDARD - 12 ACCOUNTING FOR GOVERNMENT GRANTS

## CASE STUDIES:

Q122
AS-12 Govt. Grant (RTP Nov. 2012 and also in Practice Manual):
Gandhi Ltd. received a grant of 2,500/- lacs during the last accounting year (2010-11) from the govt. for walfare activities to be carried on by the company for its employees. The grant prescribed the conditions for its utilization. However, during the year 11-12, it was found that the conditions of grants were not complied with and the grant had to be refunded to the gov. in full. Elucidate the current accounting treatment, with reference to the provision of AS 12.

Q123
AS-12 Govt. Grant (Practice Manual):
Santosh Ltd. has received a grant of 8 Crores from the govt. for setting up a factory in backward area. Out of this grant, the company distributed 2 Crores as dividend. Also, Santosh Ltd. received land free of cost from the state govt. but it has not recorded the grant in its books as no money has been spent. In the light of AS 12 examine, whether the treatment of both the grants is correct.

## Q124

AS-12 Govt. Grant (Practice Manual):
A Ltd. purchased a machinery for 40/- lacs (useful life 4 years and residual value 8/- lacs). Govt .grant received is 16/- lacs. After 2 years grant of 12/- lacs is to be refunded. Show the journal entry to be passed at the time of refund of grant and also calculate the value of fixed asset, if:
(1) The grant is credited to the Machinery $a / c$
(2) The grant is credited to deferred grant $a / c$.

## ACCOUNTING STANDARD - 15 (REVISED)

## EMPLOYEE BENEFITS

## DIFFERENCE BETWEEN DEFINED BENEFIT PLANS AND DEFINED CONTRIBUTION PLANS

| Defined Contribution Plans <br> (DCP) | Basis of <br> Difference | Defined Benefit Plans (DBP) |
| :--- | :--- | :--- |
| Obligation is limited to the <br> amount that it agrees to <br> contribute | Entity's Legal or <br> Constructive <br> Obligation | Obligation is to provide <br> agreed benefits to current <br> and former employees <br> (Obligation is not limited) |
| Contributions and <br> Investment Returns | How Much Post <br> Employment <br> Benefit is to be <br> received by <br> employee | Agreed Benefits |
| Risk in substance on the <br> Employee | Actuarial Risk <br> (Benefits will be <br> more/less than <br> expected) | Risk in substance on the <br> entity. |
| Risk in substance on the <br> Employee. | Investment Risk | Risk in substance on the <br> entity. |

Q125. A lump sum gratuity, equal to $1 \%$ of final salary for each year of service, is payable on termination of service. The salary in year 1 is Rs. 10,000 and is assumed to increase at $7 \%$ (compound) each year resulting in Rs. 13,100 at the end of year 5. The discount rate used is $10 \%$ per annum. Shows how the obligation builds up for an employee who is expected to leave at the end of year 5, assuming that there are no changes in actuarial assumptions.

Ans.:

| Year | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | ---: | ---: | :--- | :--- |
| Benefit attributed to: |  |  |  |  |  |
| - prior year | 0 | 131 | 262 | 393 | 524 |
| - current year (1\% of final salary) | 131 | 131 | 131 | 131 | 131 |
| - current and prior years | 131 | 262 | 393 | 524 | 655 |
| Opening Obligation | - | 89 | 196 | 324 | 476 |
| Interest at 10\% | - | 9 | 20 | 33 | 48 |
| Current Service Cost (see note 2) | 89 | 98 | 108 | 119 | 131 |


| Closing Obligation (see note 1) | 89 | 196 | 324 | 476 | 655 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Note 1
Closing obligation

|  | Yr. 1 | Yr.2 | Yr 3 | Yr.4 | Yr. 5 |  |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| Gratuity attributable | 131 | 262 | 393 | 524 | 655 |  |
| Payable after (years) | 4 | 3 | 2 | 1 | 0 |  |
| Discounting factor | .683 | .751 | .826 | .909 | 1 |  |
| PV | 89 | 196 | 324 | 476 | 655 |  |

Note 2
Current Service Cost

|  | Yr. 5 | Yr. 2 | Yr. 3 | Yr. 4 |  |
| :--- | :--- | :--- | :--- | ---: | :--- |
| Yratuity of current year | 131 | 131 | 131 | 131 | 131 |
| Payable after (years) | 4 | 3 | 2 | 1 | 0 |
| Discounting factor | .683 | .751 | .826 | .909 | 1 |
| PV | 89 | 98 | 108 | 119 | 131 |

Q126. The following data apply to $X L+d$. defined benefit pension plan for the year ended 31.03.2009, calculate the actual return on Plan assets:

| Benefits Paid | $2,00,000$ |
| :--- | ---: |
| Employer contribution | $2,80,000$ |
| Fair market value of plan assets on 31.03 .2009 | $11,40,000$ |
| Fair market value of plan asset as on 31.03.2008 | $8,00,000$ |
| (Nov. 2009 New Course) |  |

## (Answer: Actual Return - 260000)

Q127. As on $1^{\text {st }}$ April, 2014, the fair value of planned assets was Rs. 1,00,000 in respect of a pension plan of Zeleous Ltd. On $30^{\text {th }}$ September, 2014, the plan paid out benefits of Rs. 19,000 and received contribution of Rs. 49,000. On $31^{\text {st }}$ March, 2015, the fair value of plan assets was Rs. 1,50,000 and present value of the defined benefit obligation was Rs.
1,47,920. Actuarial losses on obligation for the year 2014-15 were Rs. 600.
On $1^{\text {st }}$ April, 2014 the company made the following estimates, based on its market studies, understanding and prevailing prices:

| Particulars | $\%$ |
| :--- | :--- |
| Interest and Dividend Income after tax payable by | 9.25 |
| the fund | 2.00 |
| Realised and unrealised gains on plan assets (after | -1.00 |
| tax) | 10.25 |
| Fund administration costs |  |
| Expected rate of return |  |

You are required to find expected and actual return on plan assets.
(Nov. 2015- 5 Marks)
(Answer: Expected Return on planned Assets - 11750; Actual Return - 20000)
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Q128. An enterprise operates a pension plan that provides a pension of $2 \%$ on final salary for each year of service. The benefit will be vested after 5 years of service. On 1.1.2005, the enterprise improves the pension to $2.5 \%$ of the final salary for each year of service starting from 1.1.2001 at the date of improvement the Present Value of additional benefits for service from 1.1 .2001 to as follows:
Employees with more than 5 years of service at 1.1.2005
Rs. 2,00,000
Employees with less than 5 years of service
Rs.
1,20,000
(Average period until vesting $=3$ years)
Suggest the accounting treatment.

Q129. An enterprise discontinues a business segment and the employees of this segment will earn no further benefits. This is curtailment without a settlement. Immediately before the curtailment the details were.

## Before Curtailment

After Curtailment

| PV of obligation | 1,000 | 900 |
| :--- | :--- | ---: |
| FV of plan assets | 820 | 820 |
| Unrecognized past service cost | 50 | 45 |

The curtailment reduces the obligation to Rs. 900 and URPSC to Rs.45. Suggest the accounting treatment.

Q130. P Ltd. has three business segments which are FMCG, Batteries and Sports Equipment. The Battery segment has been consistently underperforming and P Ltd. after several discussions with Labour unions have finally decided on closure of this segment. Under the agreement the employees of the Battery segment will earn no further benefit as the arrangement is a curtailment without settlement wherein the employees of the discontinued segment will continue to receive benefits for services rendered when the segment was functioning. As a result of the curtailment, the company's obligation that were arrived on the basis of actuarial valuations before the curtailment have come down. The following information is also furnished:
(i) The value of gross obligations before the curtailment calculated on actuarial basis was Rs. 4000 lakhs.
(ii) The value of unamortized past service costs is Rs. 100 lakhs.
(iii) The curtailment will bring down the gross obligations by Rs. 500 lakhs and $P$ Ltd. anticipate a proportional decline in the value of unamortized past service costs also.
(iv) The fair value of the Plan Assets on date is estimated at Rs. 3250 lakhs. You are required to calculated the gain from curtailment and also show the liability to be recognized in the Balance Sheet of P Ltd. after the Curtailment.
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(Nov. 2013-5 Marks)
(Answer: Gain from Curtailment - 487.50 and Liability to be recognized in BS 162.50)

Q131. A company furnishes the following details for its defined benefit plan on 1.4.2004
PV of obligation $\quad 1,00,000$
FV of plan assets $\quad 1,00,000$

|  | $2004-05$ | $2005-06$ | $\mathbf{2 0 0 6 - 0 7}$ |
| :--- | :--- | ---: | ---: |
| Discount rate | 10 | 9 | 8 |
| Exp. Rate of return on Plan Assets | 12 | 11.1 | 10.3 |
| Current service cost | 13,000 | 14,000 | 15,000 |
| Benefits paid | 15,000 | 18,000 | 19,000 |
| Contributions paid | 9,000 | 10,000 | 11,000 |
| PV of Obligation on 31.03. | $1,14,100$ | $1,19,700$ | $1,29,500$ |
| FV of Plan Assets on 31.03. | $1,09,200$ | $1,10,900$ | $1,09,300$ |

Expected average remaining working life of the employees is 10 years. In 2005-06 the plan was amended and the PV of additional benefit vested was Rs.5,000 and unvested was Rs.3,000. The remaining period till vesting was 3 years.
(Answer: Act. Gain/Loss on PVDBO - 6100 (L), 8669 (G) \& 4224 (L)

## Important Note:

## ACCOUNTING STANDARD - 16 <br> BORROWING COSTS

Q132:
XYZ Ltd. has taken a loan of USD 10,000 on 1.04 .2003 for a specific project at an interest rate of 5\% p.a., payable annually. On 1 April, 2003, the exchange rate between the currencies was Rs. 45 per \$. The exchange rate, as at March, $31^{\text {st }}, 2004$ is Rs. 48 per \$. The Corresponding amount could have been borrowed by XYZ Ltd. in local currency at an interest rate of $11 \%$ p.a. as on 1 April, 2003.
(Answer: $24000+25500=49500 B C$ )

Q133:
Assume the same questiong 2 above except interest rate in local currency borrowing is $13 \%$ instead of $11 \%$.
(Answer: $24000+30000=54000 B C$ )

## Q134:

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

| Date | Nature of <br> borrowings | Amount <br> borrowed | Purpose of <br> Borrowings | Incidental <br> Expenses |
| :--- | :--- | :--- | :--- | :--- |
| $1 / 1 / 08$ | $15 \%$ Demand Loan | 60 Lakhs | Acquisition of Fixed <br> Assets | $8.33 \%$ |
| $1 / 7 / 08$ | $14.5 \%$ Term Loan | 40 Lakhs | Acquisition of Plant <br> \& Machinery | $5 \%$ |
| $1 / 10 / 08$ | $14 \%$ Bonds | 50 Lakhs | Acquisition of Fixed <br> Assets | $8 \%$ |

## Fixed assets considered as Qualified as Under:

| Sterling Manufacturing Shed | Rs. $10,00,000$ |
| :--- | :--- |
| Plant \& Machinery (Total) | Rs. $90,00,000$ |
| Other Fixed Assets | Rs. $10,00,000$ |

The project is completed on $1^{\text {st }}$ January 2009 and is ready for commercial production. Show the capitalization of the borrowing cost.

## Q135:

X Ltd. began Construction of a new building on $1^{\text {st }}$ January, 2007. It obtained Rs. 1 lakhs special loan to finance the construction of the building on $1^{\text {st }}$ January, 2007 at an interest rate of $10 \%$. The company's outstanding two non specific loans were:

| Amount | Rate |
| :--- | :--- |
| $5,00,000$ | $11 \%$ |
| $9,00,000$ | $13 \%$ |

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

| Janaury 2007 | Rs. $2,00,000$ |
| :--- | :--- |
| April, 2007 | Rs. $2,50,000$ |
| July, 2007 | Rs. $4,50,000$ |
| December, 2007 | Rs. $1,20,000$ |

Building was completed by $31^{\text {st }}$ December, 2007. Following the principles prescribed in AS 16 Borrowing Cost. Calculate the amount of interest to be capitalized and pass one Journal Entry for capitalization of Cost and borrowing cost in respect of the building.

WIP A/c Dr. 1020000
To Bank A/c 10.20

Bulding A/c Dr. 1020000
To WP a/c 10.20

Interest a/c Dr 182000
To Loans a/c 182000

Building A/c Dr. 74216
To Interest a/c 74216
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Profit and loss a/c dr. (182000-74216) $=107784$
To Interest a/c 107784

## Q136:

Calculate the amount of borrowing cost to be capitalized.

| Particulars | Amount |
| :--- | :--- |
| Expenditure incurred till 31.03.2011 | 700000 |
| Interest cost capitalised for FY 10-11 | 30000 |
| Amount borrowed till 31.03.11 @ 15\% | 400000 |
| Amount transferred to construction during 11-12 | 200000 |
| Cash payment during 11-12 out of above | 100000 |
| Progress payments received | 500000 |
| New borrowings until 11-12 @ 15\% | 300000 |

## EFFECTIVE INTEREST RATE METHOD:

Example: Martin Ltd. took a Loan of Rs. 10,00,000 on 01/04/2010 @ Interest rate of 10\% pa for 5 years to be repaid in equal principal amount along with interest. Stamp duty charges incurred initially was Rs. 15000. Processing fees of Rs. 5000 was deducted by Bank. After 3 years Bank charged Rs. 9500 as renewal fees \& on closure date bank charged Rs. 2500 for closure fees. Calculate Borrowing Cost for every year as per AS 16 and IND AS 23.

## Important Note:

## ACCOUNTING STANDARD - 17

## SEGMENT REPORTING

Q137. An enterprise operates through segments, namely, A. B, C, D, E, F. G and H. The relevant information about these segments is given in the following table:
(Amount in Rs. '000)

|  | A | B | C | D | E | F | G | $H$ | Total <br> (Seg.) | Total <br> (Entp.) |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Seg. Revn |  |  |  |  |  |  |  |  |  |  |
| (a) Ext |  | 255 | 15 | 10 | 15 | 50 | 20 | 35 | 400 |  |
| (b) Inter- <br> Seg | 100 | 60 | 30 | 5 | - | - | 5 | - | 200 |  |
| (c) Total | 100 | 315 | 45 | 15 | 15 | 50 | 25 | 35 | 600 | 400 |
| Seg. Result | 5 | -90 | 15 | -5 | 8 | -5 | 5 | 7 |  |  |
| Seg. Assets | 15 | 47 | 5 | 11 | 3 | 5 | 5 | 9 | 100 |  |

Identify Reportable Segments
Q138. M/s XYZ Ltd. has three segments namely $X, Y, Z$. The total Assets of the Company are Rs. 10.00 crs . Segment $X$ has Rs. 2.00 crs ., segment $Y$ has Rs. 3.00 crs . And segment $Z$ has Rs. 5.00 crs . Deferred tax Assets included in the assets of each segments are $X$-Rs. 0.50 ers., YRs. 0.40 crs . and Z-Rs. 0.30 crs . The accountant contends that all the three segments are reportable segments. Comment.

Q139. Prepare a segmental report for publication in Diversifiers Ltd. from the following details of the company's three divisions and the head office:

Rs.(000)

## Forging Shop Division

Sales to Bright Bar Division $\quad 4,575$
Other Domestic Sales 90
Export Sales 6,135
10,800
Bright Bar Division
Sales to Fitting Division 45
Export Sales to Rwanda 300 345

## Fitting Division

Export Sales to Maldives 270

|  | Head <br> Office | Divisions |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Forging | Bright Bar | Fitting |
| Operating Profit or Loss <br> before tax | - | 240 | 30 | -12 |
| Reallocated cost from Head <br> Office | 72 | 36 | 36 |  |
| Interest Costs | 75 | 300 | 80 | 2 |
| Fixed Assets | 72 | 180 | 60 | 180 |
| Net Current Assets | 57 | 30 | 15 | 180 |
| Long term Liabilities | 6 |  |  |  |

[Advanced Accounting, May 2005, 8 marks]
Ans.:
Diversifiers Ltd.

## Segment Report

|  | Divisions |  |  | Intersegment eliminations | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | Forging Shop | Bright <br> Bar | Fitting |  |  |
| Segment <br> Revenue <br> Domestic <br> Export <br> Total Ext. Sales <br> Inter Seg. Sales <br> Total Sales | $\begin{aligned} & 90 \\ & 6135 \\ & 6225 \\ & 4575 \\ & 10800 \end{aligned}$ | $\begin{aligned} & 300 \\ & 300 \\ & 45 \\ & 345 \end{aligned}$ | $\begin{aligned} & 270 \\ & 270 \\ & - \\ & 270 \end{aligned}$ | $4620$ $4620$ | $\begin{aligned} & 90 \\ & 6705 \\ & 6795 \\ & - \\ & 6795 \end{aligned}$ |
| Segment <br> Result <br> Head Office <br> Expenses | 240 | 30 | (12) | - | $\begin{aligned} & 258 \\ & (144) \end{aligned}$ |
| Operating <br> Profit <br> Interest <br> PBT |  |  |  |  | $114$ <br> (16) 98 |
| Assets \& Liabilities |  |  |  |  |  |
| Fixed Assets | 300 | 60 | 180 | - | 540 |
| Net Current Assets | 180 | 60 | 135 | - | 375 |
| Total Assets Unallocated | 480 | 120 | 315 |  | $\begin{array}{\|l\|} \hline 915 \\ 147 \\ \hline \end{array}$ |

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| Corporate <br> Assets |  |  |  |  | $(75+72)$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Total assets |  |  |  |  | 1062 |
| Segment <br> liabilities | 30 | 15 | 180 | - | 225 |
| Unallocated <br> corporate <br> liabilities |  |  |  | 57 |  |
| Total <br> liabilities |  |  |  | 282 |  |

Geographical Marketwise Segment Revenue

|  | Domestic | Export <br> (forging) | Export to <br> Rwanda | Export to <br> Maldives | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| External <br> Sales | 90 | 6135 | 300 | 270 | 6795 |

## ACCOUNTING STANDARD - 19

## LEASES

## FINANCE LEASE

Q140. Fair value of Machine is Rs. 70,000

| Years | Lease Rentals |
| :--- | :--- |
| 0 | 20,000 |
| 1 | 38,000 |
| 2 | 25,000 |
| 3 | 23,000 |
| 4 | 6,000 |

Guaranteed residual value on lease was 5,000, Rate of interest $10 \%$ Calculate value of Machine \& Finance charges.

Q141. AS Ltd. Leased a machine to SB Ltd. on the following terms:
Fair value of the Machine is $4,00,000$, Leas term is 5 years, Lease rental per annum would be Rs. 1,00,000, Guaranteed residual value is Rs. 20,000 , Expected Residual value is Rs. 40,000 and Internal rate of return is $15 \%$.
Depreciation is provided on straight line method at $10 \%$ pa. Ascertain unearned finance income. Necessary journal entries in the books of the Lessee in first year may be shown.
(November 2009, Old course)

Q142. S. Square P Ltd. has taken machinery on lease from S K Itd. The information is as under:

Lease term
Fair value at inception of lease
Lease rent
Guaranteed residual value
Expected residual value
Implicit interest rate

$$
=4 \text { years }
$$

= Rs. 20,00,000
$=$ Rs. 6,25,000 p.a. at the end of year
= Rs. 1,25,000
= Rs. 3,75,000
= $15 \%$

Discounted rates are $0.8696,07561,06575$, and 05718 respectively.
Calculate the value of the lease liability as per AS 19. (November 2010: 4 Marks)

Q143. Global Ltd. has initiated a lease for three years in respect of an equipment costing Rs. 1,50,000 with expected useful life of 4 years. The asset would revert to Global Ltd. under the leased agreement. The other information available in respect of lease agreement is:

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(1) The unguaranteed residual value of the equipment after the expiry of the lease term is estimated at Rs. 20,000
(2) The implicit rate of interest is $10 \%$
(3) The annual payments have been determined in such a way that the present value of the lease payment plus the residual value is equal to the cost of asset.
Ascertain in the hands of Global Ltd.
(i) The annual lease payments.
(ii) The unearned finance income
(iii) The segregation of finance income, and also
(iv) Show how necessary iterms will appear in its profit and loss account and balance sheet for the various years.
(May 2006, Marks 8)

## OPERATING LEASE

Q144. On April 1, 2002 ABC Ltd. leases equipment for 4 years to XYZ Ltd. The Cost of the equipment is Rs. 15,00,000 and has a useful life of 10 years (assume straight line method of depreciation). The lease payments to be made are as follows:

| Year | Amount |
| :--- | :--- |
| 1 | $1,00,000$ |
| 2 | $1,50,000$ |
| 3 | $1,75,000$ |
| 4 | $2,00,000$ |

The lease is classified as an operating lease. How would this lease be accounted for in the books of accounts of the Lessee and the Lessor?

## SALE AND LEASE BACK TRANCTIONS:

Q145. A transferred to Bank a machine on sale and lease back basis:
Fair value of Machine
Rs. 1,50,000
Book value of Machine
Rs. 1,00,000
Selling price to bank
Rs. 1,30,000
Implicit rate of Interest $10 \%$
Lease Rentals: 33,000; 21,000; 30,000; 28,000; 26,000; 24,000 and 22,000
Depreciation is on SLM basis and estimated life of machine is 7 years.
Consider sale and lease back was financial in nature.
Journalise for $A$

Q146. Journalise in each of the following cases assuming transaction is of sale and operating lease back:

| Cases | Fair Value | Book Value | Sale <br> Price |
| :--- | :--- | :--- | :--- |
| 1 | 100000 | 100000 | 100000 |
| 2 | 100000 | 80000 | 100000 |
| 3 | 100000 | 120000 | 100000 |
| 4 | 100000 | 100000 | 120000 |
| 5 | 100000 | 80000 | 120000 |
| 6 | 100000 | 120000 | 120000 |
| 7 | 100000 | 100000 | 90000 |
| 8 | 100000 | 90000 | 80000 |
| 9 | 100000 | 70000 | 80000 |
| 10 | 100000 | 110000 | 80000 |

## Important Notes:

# ACCOUNTING STANDARD - 20 <br> EARNINGS PER SHARE 

Q147. Calculate Basic earnings per share for 10-11:-
Earnings attributable for Equity shareholders (10-11)- Rs. 10,00,000/-
Equity Shares opening Balance 1/4/2010: 16,500 shares of Rs. 10 each 7 paid up Public Issue 1/7/2010: 10,000 shares of Rs. 10 each 6 paid up
Received calls on 1/10/2010: 16,400 shares Rs. 3 per share
Received calls on 1/11/2010: 10,000 shares Rs. 4 per share
(Answer: EPS - 49.56)
Q148. Calculate BEPS for the year 2005-06
Earnings attributable to Equity Shareholders for the year 2004-05- Rs10,00,000
Earnings attributable to Equity Shareholders for the year 2005-06- Rs. 12,00,000
Equity shares as on 1-4-04

- 10,000shares of Fv Rs. 10

Issued 5,000 and 3000 equity shares on 1-1-05 and 1-7-05 respectively and shares fully subscribed and paid up. 1:1 Bonus issue on 1-12-05
(Ans.: Rs. 88.89 \& Rs. 34.04 and restated 34.18)

Q149. Calculate BEPS for the year 2005-06
Earnings attributable to Equity Shareholders for the year 2004-05- Rs. 10,00,000
Earnings attributable to Equity Shareholders for the year 2005-06 - Rs. 12,00,000 Equity share as on 1.4-04 $-10,000$ shares of FV 10/-
On 1-10-04, fresh issue of 5000 equity shares of FV Rs. 10 and Rs. 6 paid up.
On 1-7-05, issued 5000 equity shares of FV Rs. 10 and received Rs. 4 per share.
On 1-11-05, issued 5000 bonus shares of face value Rs. 10
(Ans.: Rs. 8.70 per Re and Rs. 6.15)

Q150. X Co. Ltd. supplied the following information. You are required to compute the Basic EPS. (Accounting year 1.1.2002-31.12.2002)
Net Profit for the accounting years 2002 and 2003 is Rs. $20,00,000$ and Rs. $30,00,000$ No. of shares outstanding prior to Right Issue 10,00,000 shares
Rights Issue: One new share for each Shares outstanding i.e., 2,50,000 shares
Terms of Right Issue Price: Rs. 20. Last date for exercise of rights is 31.3.2013
Fair Rate of one Equity Share immediately prior to exercise of right on 31.3.13 Rs. 25
(November 2004 - Final - Accounts, 8 Marks)
Ans. : Basic EPS for the current year Rs. $30,00,000 \div 11,97,917=$ Rs. 2.50 .
EPS for the previous year as originally reported Rs. $20,00,000 \div 10,00,000=$ Rs. 2.00,
Adjusted EPS for the previous reporting period Rs. $20,00,000 \div(10,00.000 \times 1.042)=$ Rs.
1.92

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Q151. From the Following information Calculate
Basic Earning per share 10-11
Basic Earning per share 11-12
Restated Basic Earning per share 10-11

Profit after Tax (10-11) $\quad 15,00,000$
Profit after Tax (11-12) 20,00,000
1/4/2010 Opening Balance of $2,50,000$ shares
$1 / 7 / 2010$ Public issue of 50,000 of Rs 10 each 7 paid up (issue price Rs. 27/)
1/10/2010 Call received Rs. 3/-
1/8/2011 Bonus issue of 70,000 shares of Rs. $10 /$ - each 10/- paid up
1/9/2011 Right issue of 40,000 share of Rs. 10 each @ 70 each Fair Value before right Rs. 90/- each
On 1/4/2010 Company had $12 \%$ Preference share capital of Rs. 5,00,000 Dividend Distribution Tax 10\%

For company it is mandatory to transfer Rs. 2,00,000 to general reserve.
Profit after Taxes of both years are calculated before adjusting extraordinary loss of Rs. 30,000 (Tax Rate 30\%)
(Ans: Ex-Right Price $=88.05 /-$ : EPS $=4.98 /-$; 4.82/- and Restated EPS $=3.90 /-$ )

## AMALGAMATION IN NATURE OF PURCHASE

Q152. Calculate BEPS of $\operatorname{A} L+d$. from the following information:
Earnings attributable to Equity Shareholders for the year 2004-05 = Rs. $10,00,000$
Earnings attributable to Equity Shareholders for the year 2005-06 = Rs. 12,00,000
Equity shares as on 1-4-04 $=10,000$ shares of FV of Rs. 10
On 1-10-05 A Ltd. issued 10,000 shares as Purchase consideration for amalgamation in the nature of purchase to the shareholders of B Ltd. Earnings of B Ltd. for the year 2005-06 till 01.10.2005 are Rs. 3,60,000
(Ans.: Rs. 100 and Rs. 80)

## AMALGAMATION IN NATURE OF MERGER

Q153. On June 30 200I, B Limited merged into A Limited. The amalgamation was accounted for in accordance with the pooling of interests method described in Accounting Standard (AS) 14 on 'Accounting for Amalgamations'.
The following is the relevant information for the year ended 31st March, 2002:
Particulars A Limited B Limited

Net profit (Rs)
Until Merger
5,00,000 2,00,000
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After Marger to year end (March 31,2002\} 800,000

| Number of shares (Rs. 10 each) |  |  |
| :--- | ---: | ---: |
| At the start of the year | 6,000 | 4,000 |
| On the date of merger | 6,000 | 4,000 |
| At year end (March 31,2002) | 10,000 |  |

Compute the EPS of A Ltd. at the year end, i.e. March 31, 2002
Ans. Basic EPS for A Limited for the year ended March 31, $20 \times 2$ would be Rs. 150 (Rs.1,500,000/10,000)

## ABSOLUTE DIFFERENTIAL DIVIDEND RIGHTS

An enterprise should present basic and diluted earnings per share on the face of the statement of profit and loss for each class of equity shares.

Q154. Calculate BEPS
Earnings attributable to Equity Shareholders - 6,00,000
ESC I class $\quad-3,00,000(30,000$ shares of Face Value Rs 10$)$
ESC II class - 4,00,000 (50,000 shares of Face Value Rs. 8)
ESC I class is entitled to $3 \%$ extra dividend in comparison to ESC II class.
Ans.: 8.74 for ESC I, 6.75 ESC II.

## PROPORTIONATE DIFFERENTIAL DIVIDEND RIGHTS

Q155. XYZ Limited has the following different classes of equity shares of Rs. 10 each, outstanding as at March 31, 2002, having disproportionate rights with respect to voting and dividends:

| Number of shares <br> the extent of capital | Rights as to share in net profit to |
| :--- | :--- |
| 100,000 " $A$ " class equity shares | Proportionate to capital |
| 30,000 " $B$ " class equity shares | In proportion of $3: 2$ with respect to "A" class shares |
| 20,000 " $C$ " class equity shares | In the proportion of $5: 2$ with respect to " $A$ " class <br> shares |
| 40,000 "D" class equity shares | In the proportion of $3: 1$ with respect to " $A$ " class <br> shares |

Profit for the year ended March 31, 2002 was Rs. 8,00,000. As paragraph 8 of the Statement requires an enterprise to present basic and diluted earnings per share on the face of the statement of profit and loss for each class of equity shares that has a different right to share in the net profit for the period, the company calculates and discloses Basic EPS as follows:
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The Company believes that net profit is to be shared in the ratio of 2:3:5:6, as derived from their rights to share net profit.

| Class | Calculation | Net Profit <br> (Rs) | No. of <br> shares | Basic EPS |
| :--- | ---: | :--- | ---: | ---: |

Is the calculation of EPS by the company correct?

## DILUTED EARNINGS PER SHARE

## How to Calculated DEPS - Following calculation is required:

1. Identify Potential Equity Shares first. (Whether any security which is pending for conversion is outstanding and resources thereof have been used in the business)
2. In case of Vested ESOPs, potential equity shares will be calculated as under:

Total ESOP - \{Exer. Price $\times$ No. of Option / Avg. Fair Value) In case of Unvested ESOPs - Potential equity shares will be Zero
3. Identify Dilutive potential equity shares by applying following steps:
(a) Calculate Incremental EPS for every single potential equity share
(b) Arrange IEPS in Increasing Order
(c) Apply Test for Dilution. Test each potential equity share on BEPS from continuing ordinary operations. If ratio EPS declines from preceding calculation then it is called Diluted EPS and if ratio increases from previous calculation then it is called Anti - Diluted EPS

- Note: Anti Diluted EPS shall not be presented in the Statement of P\&L, in that case Diluted EPS shall be equal to BEPS

Q156. Test Potential Equity shares as dilutive or anti dilutive:
Earning for equity share holders $\quad 9,10,000$
Wt. Avg of Equity Shares before effect of Potential Equity Shares 32,913
Share warrant
10,000
Convertible Debentures convertible in 716 number shares
(Savings in earnings net of Tax Rs. 20,000 if Interest is saved)
(BEPS - 27.65/-: DEPS - 21.21/-: Debenture is Anti Dilutive)
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## Q157. Calculate Basic \& Diluted EPS

PBIT (10-11)
Equity Share 1/4/2010
Public issue 1/7/2010

Rs. $10,00,000$
80,000 shares of Rs. 10 each
5000 shares of Rs. 10 each

Bonus issue 1/8/2010 6000 shares of Rs. 10 each
Right share 1/9/2010:7000 shares of Rs. 10 each @ Rs. 40 each fair value before right 50 It also had following instruments:
(a) 1/4/2010: 7\% convertible debentures Rs.5,00,000 to be converted into 10,000 shares
(b) 1/7/2010: share warrant 15000 to be converted in to shares on $1 / 1 / 2011$ PBIT includes extra ordinary income of Rs. 1,00,000 and Profit from discontinuing operations Rs. 60000. Income Tax Rate 30\%.
(Answer: BEPS - 6.88 and BEPS - 5.09)

Q158. From the following information of Beta Ltd. calculate Earnings Per Share (EPS) in accordance with AS-20:

|  | 31.03 .08 | 31.03 .07 |
| :--- | ---: | ---: |
| 1. Net profit before tax | $3,00,000$ | $1,00,000$ |
| 2. Current tax | 40,000 | 30,000 |
| Tax relating to earlier years | 24,000 | $(13,000)$ |
| Deferred tax | 30,000 | 10,000 |
| 3. Profit after tax | $2,06,000$ | 73,000 |

4. Other information:
(a) Profit includes compensation from central Government towards loss on account of Earthquake in 2005 (non-taxable) 1,00,000
(b) 1,000 Outstanding convertible $6 \%$ Preference shares issued and paid on 30.9.06. Face value Rs. 100, Conversion ratio 15 equity shares for every preference share.
(c) $15 \%$ convertible debentures of Rs.1,000 each total face value Rs.1,00,000 to be converted into 10 Equity shares per debenture issued and paid on 30.6.06.
Total no. of Equity shares outstanding as on 31.3.08, 20,000 including bonus shares issued on 1.1.08 of 10,000 shares, face value Rs.100.
(November 2008, Marks 8)
(Ans: 06-07: EPS-7/- ; DEPS- 4.17/- and 07-08: EPS-10/-; DEPS-3.03/-; Restated BEPS and DEPS of 06-07: 3.50/- \& 2.65/-)

Q159. Net profit for the year 2005
W. Avg No. of equity shares outstanding during the year:

Average fair value of one equity share during the year 2005:
Weighted average number of shares under option during the year:
Exercise price for shares under option during the year 2005:
Compute Basic and Diluted Earnings per Share.
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Rs. $12,00,000$
5,00,000 shares
Rs. 20.00
1,00,000 shares
Rs. 15.00

Ans. Computation of earnings per share

Earnings/shares
Net profit for the year 2005 12,00,000
W.Avg no. of shares during year $5,00,000$

Basic earnings per share $\quad 2.40$
Number of shares under option $\quad 1,00,000$
No. of Shares that would have been issued at
fair value $(100,000 \times 15.00) .20 .00$
$(75,000)$
Diluted earnings per share
$12,00,000$
5,25,000
2.29

## Illustration 10

PQ Ltd. grants 100 stock options to each of its 1,000 employees on 1-4-2013, conditional upon the employee remaining in the company for 2 years. The fair value of the option is ₹ 18 on the grant date and the exercise price is ₹ 55 per share. The other information is given as under:
(i) The no. of employees expected to satisfy service condition are 930 in the $1^{\text {st }}$ year and 850 in the $2^{\text {nd }}$ year.
(ii) 40 employees left the company in the 1st year of service and 880 employees have actually completed 2 year vesting period.
(iii) The profit of the enterprise before amortization of the compensation cost on account of ESOPs is as follows:
(A) ₹ $18,50,000$
(B) ₹ $22,00,000$
(iv) The fair value of share for these years was ₹ 80 and ₹ 88 respectively.
(v) The company has 6 lakhs shares of $₹ 10$ each outstanding at the end of both years.

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

## Solution

## Calculation of Basic \& Diluted EPS

|  | $2013-14$ | $2014-15$ |
| :--- | ---: | ---: |
| Profit before amortization of ESOP cost | $18,50,000$ | $22,00,000$ |
| Less: ESOP cost amortised | $\underline{(8,37,000)}$ | $\underline{(7,47,000)}$ |
| Net profit for shareholders | $\underline{10,13,000}$ | $\underline{14,53,000}$ |
| No. of shares outstanding | $6,00,000$ | 60,000 |
| Basic EPS | 1.69 | 2.42 |
| Potential equity | 19,200 | 33,000 |
| Total no. of equity shares | $6,19,200$ | $6,33,000$ |
| Diluted EPS | 1.64 | 2.30 |

## Working Notes:

1. Calculation of Potential Equity

|  |  | 2013-2014 | 2014-2015 |
| :---: | :---: | :---: | :---: |
| a. | Actual no. of employees | 960 | 880 |
| b. | Options granted per employee | 100 | 100 |
| c. | No. of options outstanding | 96,000 | 88,000 |
| d. | Unamortised ESOP cost per option (₹) | (₹ 18-18/2) ${ }^{9}$ | 0 |
| e. | Exercise price (₹) | 55 | 55 |
| f. | Expected exercise price to be received (c e e) (₹) | 52,80,000 | 48,40,000 |
| g. | Unamortised ESOP cost ( $\mathrm{c} \times \mathrm{d}$ ) (₹) | 8,64,000 | 0 |
| h. | Total proceeds (₹) | 61,44,000 | 48,40,000 |
| i. | Fair value per share | 80 | 88 |
| j. | No. of shares issued for consideration (hi/) | 76,800 | 55,000 |
| k. | Potential Equity ( $c-1)$ | 19,200 | 33,000 |

2. Calculation of ESOP cost to be amortised

|  | $2013-2014$ | $2014-15$ |
| :--- | ---: | ---: |
| Fair value of options per share | $₹ 18$ | $₹ 18$ |
| No. of options expected to vest under | $(930 \times 100)$ | $(880 \times 100)$ |
| the scheme | 93,000 | 88,000 |
| Fair value of options | $16,74,000$ | $₹ 15,84,000$ |
| Value of options recognized as | $(₹ 16,74,000 / 2)$ | $(₹ 15,84,000-₹ 8,37,000)$ |
| expenses | $8,37,000$ | $7,47,000$ |

## Important Notes:

## ACCOUNTING STANDARD - 22

## ACCOUNTING FOR TAXES ON INCOME

Q161. Following information is of $X L+d$.

| Sale | $20,00,000$ |
| :--- | :--- |
| Cost of goods sold | $11,00,000$ |
| Income from other | $1,00,000$ |
| (Bank Interest) sources |  |
| Salary | $1,00,000$ |
| Provisions for Legal Damages | 40,000 |
| Interest to Bank (not yet paid) | 30,000 |
| Service Tax (not yet Paid)- | 50,000 |

X Ltd purchased during the year one Machine for Scientific Research for Rs. 120000 whose life is 3 years and is $100 \%$ tax deductible during the year
X Ltd also made contribution to national Laboratory Rs. 10000 on which weighted deduction of $125 \%$ is allowed.
Effective Rate of Tax 32.33\%
Prepare Profit and Loss Account.

Q162. Ram Ltd. started its operations in 2000-2001 and gave you the following details:

| Financial Year | AccountingIncome | Permanent Difference | Timing Difference | Tax Rate | Remarks |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2000- \\ & 2001 \end{aligned}$ | 80,000 | +10,000 | +9000 | 30\% | $\begin{aligned} & \text { Reversible } \\ & \text { in 2003- } \\ & 2004 \end{aligned}$ |
| $\begin{aligned} & 2001- \\ & 2002 \end{aligned}$ | 90,000 | +2,000 | +6000 | 35\% | $\begin{aligned} & \text { Reversible } \\ & \text { in 2002- } \\ & 2003 \end{aligned}$ |
| $\begin{aligned} & 2002- \\ & 2003 \end{aligned}$ | 1,10,000 | +6,000 | -2000 | 40\% | $\begin{aligned} & \text { Reversible } \\ & \text { in 2003- } \\ & 2004 \end{aligned}$ |
| $\begin{aligned} & 2003- \\ & 2004 \end{aligned}$ | 40,000 | +12,000 | Nil | 50\% | Nil |

Tax rate for the next year are known in current year itself. Plus represents disallowance of expense in Income Tax.

Prepare necessary parts of Profit and Loss account, Balance Sheet in accordance with AS22.

Q163. PQR Ltd.'s accounting ends on 31.03.2001. The company made a loss of Rs. 2,00,000 for the year ending 31.03.2001. For the year ending 31.03.2002 and 31.03.2003, it made profits of Rs. 1,00,000 and Rs. 1,20,000 respectively. It is assumed that the loss of a year can be carried forward for the eight years and tax rate is 40\%. By the end of 31.03.2001, the company feels that there will be sufficient taxable income in the future years against which carry forward loss can be setoff. There is no difference between taxable income and accounting income expect that the carry forward loss is allowed in the years ending 2002 and 2003 for the tax purposes. Prepared a statement of Profit and Loss for the years ending 2001, 2002 and 2003. (Nov. 2003)
(Ans.: Loss 1,20,000, Profit 60,000 and 72,000)

| Q164. Book Profit | Rs. $10,00,000$ |
| :--- | :--- |
| Accounting Income | Rs.2,00,000 |
| Regular Tax Rate | $30 \%$ |
| Taxable Income | Rs. $1,50,000$ |
| Difference between Accounting Income \& Taxable Income is due to timing Difference |  |
| Mat Rate | $18 \%$ |
| Prepare Extracts of Profit and Loss account and Balance Sheet. |  |

Q165. Y Ltd. is a full tax free enterprise for the first ten years of its existence and is in the second year of its operation. Depreciation timing difference resulting in a tax liability in year 1 and 2 is Rs. 200 lakhs and Rs. 400 lakhs respectively. From the third year it is expected that the timing difference would reverse each year by Rs. 10 lakhs. Assuming tax rate of $40 \%$, find out the deferred tax liability at the end of the second year and any charge to the Profit and Loss account.

4 Marks (May 2010 New Course)

## DEPRECIATION

Q166. ABC Ltd. prepares its accounts annually on 31st March. On 1st April' 2001, it purchases a machine at a cost of Rs. $1,50,000$. The machine has a useful life of three years and an expected scrap value of zero. Although it is eligible for a 100\% first year depreciation allowance for tax purposes, the straight-line method is considered appropriate for accounting purposes. ABC Ltd. has profits before depreciation and taxes of Rs. 2,00,000 each year and the corporate tax rate for 2002, 2003 and 2004 are 40\%, $35 \%$ and $38 \%$ respectively. Show the profit and loss account and pass the journal entries as per Accounting Standard-22.
Ans.: Deferred Tax Liability Rs. 40,000 , Rs. 17,500 and Rs. Nil.
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Q167. Company A has a block of assets with a written down value of Rs. 100,000 on April 1, 20X I for tax purposes. The book value of the assets for accounting purposes is also Rs. 100,000 . The assets are depreciated on written down value basis at 25 per cent per annum for both accounting and tax purposes. Of the entire block, assets costing Rs. 5,000 on April 1, 20XI, were sold for Rs. 10,000 on March 31, 20X3. Compute the deferred tax asset/liability assuming tax rate of 40 per cent.
(RTP Nov. 2014)
Ans.: Depreciation for income tax purposes is computed on block of assets, rather than for individual assets. Further, as per section 50 of the Income tax Act, 1961, the entire sale consideration received on sale of fixed assets be reduced from the written down value of the relevant block. For example, if the block had a written down value of $R s$. 10,000 and an asset costing Rs. 2,000 was sold for Rs. 3,000, the block would be reduced by Rs 3,000 rather than by Rs. 2,000. Conversely, if the asset had been sold for Rs. 1,000 the block would have been reduced by Rs. 1000 and not by Rs. 2,000.

It may be noted that Appendix 1 to AS 22 gives examples of timing differences. One of the examples is "Differences in method of calculation e.g. calculation of depreciation with reference to individual assets in the books but on block basis for tax purposes

In view of the above, in the case of Company $A$ in question, the following computations will be made:

## 20X1-X2

In this year, depreciation for both accounting and taxation purposes would be Rs. 25,000 (25 per cent of Rs. 100,000). Accordingly no timing difference arises on this account.

20X2-X3
Depreciation for the year would be Rs.18,750 ( 25 per cent of Rs. 75,000 ) as per the books of account, while for tax purposes it would be Rs. 16,250 as sale proceeds of Rs. 10,000 would be reduced from the block of assets prior to the computation of depreciation. Accordingly, the following timing differences arise:

Depreciation for tax purposes is Rs. 16,250 and for accounting purposes Rs. 18,750 giving rise to a timing difference of Rs. 2,500

Profit on sale of fixed asset amounting to Rs. 7,188 (Rs. 10000 - Rs. 2812 being the WDV of the asset as on 31st March 20X3) is recognised for accounting purposes. However, for tax purposes this income is not considered. This will result in a timing difference of Rs.7,188.

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The net timing difference would be Rs. 4,688 by which the accounting income would exceed the taxable income, thus requiring creation of a deferred tax liability of Rs. 1,875 (4,688-0.4).

The difference of 74,688 would reverse in future years when depreciation for accounting purposes would be higher as compared to depreciation for tax purposes because depreciation for accounting purposes would be computed on a higher carrying amount of fixed assets as compared to carrying amount of those assets for tax purposes. Rs. 4,688 is also the difference between the accounting and tax. written down values of the assets as on March 31, 20X3 (i.e., assets for accounting purposes of Rs. 53,438 (75,000-18,750$2,812)$ less assets for tax purposes of Rs. $48,750(75,000-10,000-16,250)$.

Q168. Ultra Ltd. has provided the following information:
Depreciation as per accounting records
Rs. 2,00,000
Depreciation as per tax records
Rs. 5,00,000
Unamortised preliminary expenses as per tax records
Rs. 30,000
There is adequate evidence of future profit sufficiency. How much deferred Tax asset/liability should be recognized as transition adjustment? Tax rate is 50\%.
Ans.: Calculation of difference between taxable income and accounting income

## Particulars

Excess depreciation as per $\operatorname{tax}(5,00,000-2,00,000)$
Less: Expenses provided in taxable income
Timing difference

Amount (Rs.)
3,00,000
30,000
2,70,000

Tax expense is more than the current tax due to timing difference. Therefore deferred tax liability $=50 \% * 2,70,000=$ Rs. 1,35,000

Q169. From the following information given below you are required to computed Deferred Tax Assets and Deferred Tax Liability for Ramanujam Ltd. as on $31^{\text {st }}$ March, 2014. The tax applicable is $35 \%$.
(1) The company has charged Rs. $7,42,900$ in the books of accounts while as per Income Tax Computation, the depreciation available for the company is Rs. $8,65,400$.
(2) The Company has made provision for doubtful debts for Rs. 54,300 during the year.
(3) The company has debited share issue expenses of Rs. $6,23,500$ which will be available for deduction under the income tax Act from the next year.
(4) The expenses of Rs. $7,84,500$ has been charged to profit and loss account which are disallowed under the income tax act.

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(5) The company has made donation of Rs. 2,00,000 which has been debited to Profit and loss account and only 50\% thereof will be allowed as deduction as per Income Tax law.
(November 2014, 5 Marks)

## Important Note:

## ACCOUNTING STANDARD - 25

## INTERIM FINANCIALREPORTING

Q170. ABC India Ltd. has Rs.1,02,000 net income for the quarter ended 31st December, 2003 including the following items:
(a) Rs. 60,000 extraordinary gain received on July 30 2003, was allocated equally to the second, third and fourth quarter of financial year 20032004.
(b) Rs. 16,000 cumulative effect loss resulting from change in method of inventory valuation method was recognized on November 2, 2003. Out of this loss ?10,000 relates to the previous quarters.

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

Ans.:

## ABC India Ltd.

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

10,000
Net profit for the period 92,000

Q171. Kaveri Ltd. shows the net profit of Rs. 5,40,000 for quarter III after incorporating the following:
(i) Bad debt of Rs.30,000 incurred during the quarter. $50 \%$ of the bad debts have been deferred to next quarter.
(ii) Extra ordinary loss of Rs 28,000 incurred during the quarter has been fully recognized in this quarter.
(iii) Additional depreciation of Rs.36,000 of third quarter resulting from the change in the method of depreciation.

Do you agree with the treatment adopted by the company? If not find out the correct quarterly income as per AS 25.

Ans: In the above case the quarterly income has not been correctly stated. As per AS 25 the quarterly income should be adjusted and restated as follow:

Bad debt of Rs.30,000 have been incurred during the current quarter. Out of this, the company has deferred 50\% i.e., Rs. 15,000 to next quarter. This is not correct. Rs. 15,000 therefore, should be deducted from Rs.5,40,000.

The treatment of extraordinary loss of Rs.28,000 being recognized in the same quarter and recognizing the additional depreciation of Rs. 36,000 in the same quarter is correct and in tune with AS 25. So, no adjustment required for these two items.

The company should report the quarterly income as Rs. 5,25,000 (i.e., Rs. 5,40,000 Rs. 15,000 ).

Q172. A Ltd. expects to receive dividend income of Rs. 100 crores on its investments in the quarter October to December, 2005. It proposes to recogniseRs. 25 crores dividend income in interim financial statement of each quarter. Is this justified.

## (RTR May 2006)

Ans.: As per para 36 of AS 25 revenues received seasonally/occasionally should be recognized as they occur and not be anticipated/deferred. Hence, entire 100 crores; to be recognized in October to December, 2005, quarterly statement.

Q173. On 30-6-2007, Asmitha Ltd. incurred Rs.2,00,000 net loss from disposal of a business segment. Also, on 30-7-2007, the company paid Rs.60,000 for property taxes assessed for the calendar year 2007. How the above transactions should be included in determination of net income of Asmitha Ltd. for the six months interim period ended on 30-9-2007. [Financial Reporting, Nov. 2008, 5 marks]

Ans.: As per AS 25, if an enterprise prepares and presents a complete set of financial statements in its interim financial report then, the form and content of those statements should conform to the requirements that are applicable to annual complete set of financial statements.

As on 30-9-2007, Asmitha Ltd., would report the entire Rs.2,00,000 loss an the disposal of its business segment since the loss was incurred during interim period. A cost charged as an expense in an annual period should be allocated to interim periods on accrual basis. Since Rs. 60,000 Property Tax payment relates to entire calendar year 2007, Rs. 30,000
would be reported as an expense for six months ended on 30th September, 2007 while remaining Rs. 30,000 would be reported as prepaid expenses.

## GUIDANCE NOTE ON MEASUREMENT OF INCOME TAX FOR INTERIM FINANCIAL REPORTING

1. Calculate Actual Income upto current IFR and estimated Income for remaining interim period of CY along with bifurcation of Regular Income and Special Income (such as Capital gain).
2. Calculate Tax Expenses (Special Tax, Deferred Tax, and Normal Tax) on above actual/estimated Taxable Income for the entire yearwise.
3. Calculate weighted avg tax rate for different taxes separately.

Regular W. Avg. Tax Rate $=$ Regular Tax $/$ Regular Income $\times 100$
Special W. Avg Tax Rate $=$ Special Tax / Total Special Income $\times 100$
(or we don't need to calculate Weighted avg. special tax, it is to be applied on specific basis)

Deferred Tax W. Avg Rate - Def. Tax/Regular Income $\times 100$
4. Calculate tax expense for IFR based on actual income and WA tax rates.
5. Distribute Special Tax in the ratio of Special Income Ratio, distribute deferred tax and Normal Tax in the ratio of Normal Income Ratio.

## QUESTIONS ON GUIDANCE NOTE

Q174. Calculate Tax Expense for Quarter 1 to 4 as per Guidance Note:

|  | Income | Base |
| :--- | ---: | ---: |
| Quarter-1 | 100,000 | Actual |
| Quarter -2 | 150,000 | Estimated |
| Quarter -3 | $1,90,000$ | Estimated |
| Quarter -4 | $2,10,000$ | Estimated |

Income in Quarter -1 includes 20,000 capital gains which is taxable @ 15\% Company estimates temporary Difference resulting in DTA of Rs. 50,000 at the end of year Rate of Tax:
upto 200,000
next 200,000 20\%
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## Balance 30\%

Timing Difference are expected to result in liability.

## ACCOUNTING STANDARD - 26 <br> "INTANGIBLE ASSETS"

## Q175:

M Ltd. launched a project for producing product A in Nov. 2008. The company incurred Rs. 30 Lacs towards research and development expense upto $31^{\text {st }}$ March, 2010. Due to unfavorable conditions the management feels that it is not possible to manufacture and sold the product in the market for so many years. The management hence wants to differ the expenditure written off to future years. Advice the management as per the applicable Accounting Standard.
(Hint:Charged to P\&L A/c)

## Q176:

Hera Ltd. has got the license to manufacture particular medicines for 10 years at a license fees of Rs. 200 lacs. Given below is the pattern of expected production and expected operation cash inflow:

| Year | Production (in lacs) | $\frac{\text { Net operating Cash }}{\text { Inflows (in Rs. Lacs) }}$ |
| :--- | :--- | :--- |
| 1 | 300 | 900 |
| 2 | 600 | 1800 |
| 3 | 650 | 2300 |
| 4 | 800 | 3200 |
| 5 | 800 | 3200 |
| 6 | 800 | 3200 |
| 7 | 800 | 3200 |
| 8 | 800 | 3200 |
| 9 | 800 | 3200 |
| 10 | 800 | 3200 |

Suggest the amortization method.
(Hint: Amortize in proportion of future economic benefits i.e. in proportion of Cash Inflows)

## Q177:

On Jan. 2009, A Ltd. bought a Trademark from B Ltd. for Rs. 10 lacs. A Ltd. hired an independent consultant, who estimated the trademark's life to be 20 years. Its unamortized cost on B Ltd's records was Rs. 5 lacs. A Ltd. decided to amortize the trademark over the maximum period allowed. In A Ltd's Balance sheet as on $31^{\text {st }}$ December 2009, what amount should be reported, as accumulated amortization?
(Hint: Intangibles are initially recognized at Cost)

## Q178:

Fortune Ltd. is developing a new Teaching and Learning process. During the FY ending $31^{\text {st }}$ march, 2009, the expenditure incurred was Rs. 50 lacs. This process made the criteria for recognition as an intangible asset on $1^{\text {st }}$ Dec, 2008, expenditure incurred till this date was Rs. 22 lacs. Further expenditure incurred on the process for the FY ending $31^{\text {st }}$ march, 2010 was Rs. 80 lacs. As at $31^{\text {st }}$ March, 2010, the recoverable amount of know-how is estimated to be Rs. 72 lacs. You are required to calculate:
(i) Amount to be charged to P\&L a/c for the year ending $31^{\text {st }}$ march, 2009 and the carrying value as on $31^{\text {st }}$ March, 2009.
(ii) Amount to be charged to P\&L $a / c$ and carrying value of intangible as on $31^{\text {st }}$ March, 2010.
(Hint: For year ending 2009 - Rs. 22 lacs transferred to p\&l and remaining capitalized as intangible. For year ending 2010 - impairment loss is Rs. 36 lacs and Carrying value is Rs. 72 lacs.)

## Q179:

An Enterprise acquired patent right for 400/- lakhs. The product life cycle has been estimated to be 5 years and the amortization was decided in the ratio of estimated future cash flows which are as under:

| Year | Estimate Future <br> Cash Flows <br> (Rs. In Lakhs) |
| :--- | :--- |
| 1 | 200 |
| 2 | 200 |
| 3 | 200 |
| 4 | 100 |
| 5 | 100 |

After $3^{\text {rd }}$ year it was ascertained that the patent would have an estimated balance future life of 3 years and the estimated cash flows after $5^{\text {th }}$ year is expected to be Rs. 50 lakhs each year. Determine the amortization under AS - 26.

## ACCOUNTING STANDARD - 28

## IMPAIRMENT OF ASSETS

Q180. From the following details of an asset:
(a) Find out impairment loss
(b) Treatment of impairment loss
(c) Subsequent depreciation

| Particulars of Assets |  |
| :--- | :--- |
| Cost of asset | Rs. 56 lakhs |
| Useful life | 10 years |
| Salvage value | Nil |
| Current carrying value | Rs. 27.30 lakhs |
| Useful life remaining | 3 years |
| Recoverable amount | Rs. 12 lakhs |
| Upward revaluation done in last year | Rs. 14 lakhs |

Q181. Ram Ltd. acquired plant on 1.4 .95 for Rs. 50 lakhs having 10 years useful life and provides depreciation on straight line basis with nil residual value. On 1.4.2000, Ram Ltd. revalued the plant at Rs. 29 lakhs against book value of Rs. 25 lakhs and credited Rs. 4 lakhs to revaluation reserve. On 31.03 .02 the plant was impaired and its recoverable amount on this date was Rs. 14 lakhs. Calculate the impairment loss and how this loss should be treated in accounts.
(Answer: CA as on 31.03.2002: Rs. 17.40/-; Imp Loss: 3.40/-; to be set off with RR of Rs. 2.40/-)

Q182. Fine Ltd. acquired a Machine on $1^{\text {st }}$ April, 2009 for Rs. 14 Crores that had an estimated useful life of 7 years. The machine is depreciated on straight line basis and does not carry any residual value. On $1^{\text {st }}$ April, 2013, carrying value of the machine was reassessed at Rs. 10.20 crore and the surplus arising out of the revaluation being credited to revaluation reserve. For the year ended $31^{\text {st }}$ March, 2015, conditions indicating an impairment of the machine existed and the amount recoverable ascertained to be only Rs. 140 lacs.
You are required to calculate the loss on impairment of the machine and show how this loss to be treated in the books of Fine Ltd.
Fine Ltd. had followed the policy of writing down the revaluation surplus by the increased charge of depreciation resulting from the revaluation.
(Nov. 2015-5 Marks)

## (Answer:

Q183. Mohan Ltd. gives the following estimates of cash inflows relating to fixed asset on 31.03.2000. The discount rate is $15 \%$.

| Year | Cash Flows (Rs. in <br> Lakhs) |
| :--- | :--- |
| 2001 | 2000 |
| 2002 | 3000 |
| 2003 | 3000 |
| 2004 | 4000 |
| 2005 | 2000 |
| Residual Value | 500 |

Fixed asset was purchased on 1.1 .98 for Rs. 20,000 lakhs. Useful life was 8 years. Residual value estimated Rs. 500 lakhs at the end of 8 years. Net selling price is Rs. 10,000 lakhs. Calculate on calendar year:
(a) Carrying amount at the end of 2000
(b) Value in use on 31.12 .2000
(c) Recoverable amount on 31.12 .2000
(d) Impairment loss to be recognized for the year ended 31.12.2000
(e) Revised carrying amount
(f) Depreciation for the calendar year 2001
(Answer: Value in use: Rs. 9513 lakhs, Carrying amount on 31.12.2000-Rs. 12687 lakhs, Net selling price as given Rs. 10,000 lakhs, Recoverable amount is higher of 9513 and 10000; impairment loss- Rs. 2687 lakhs and depreciation charge for $2001=10000-500 / 5=$ 1900)

Q184. A Ltd. gives following information

| Asset | Carrying Amount | Cash generating unit |
| :--- | :--- | :--- |
| A | $1,00,000$ | 1 |
| B | $2,00,000$ | 3 |
| C | $3,00,000$ | 2 |
| D | $3,50,000$ | 2 |
| E | 70,000 | 1 |
| F | $8,00,000$ | 3 |
| G | $2,20,000$ | 2 |
| H | $4,50,000$ | 1 |
| Goodwill X | 90,000 | Allocate in ratio 1:1:1 |
| Goodwill Y | 60,000 | Unallocable |
| Corporate: |  |  |
| Asset P | $1,50,000$ | Allocate in ratio |
| Asset Q | $2,00,000$ | $3: 2: 1$ |
|  |  | Unallocable |

Recoverable Amount of Cash generating Unit: 1-6,70,000; 2-8,40,000 and 3-10,30,000 Recoverable Amount of Entity: Case A - 25,50,000; Case B - 25,40,000. Calculate impairment loss.

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Q185. A Ltd. acquired S Ltd. business on 31.03 .2001 for Rs. 5000 lakhs. The details of acquisition are as under:
Fair value of identifiable assets 4000 lakhs
Goodwill (to be amortised in 5 years) 1000 lakhs
The anticipated useful life of acquired assets is 8 years. A Ltd. uses straight line method of depreciation with nil residual values is anticipated on 31.03.2003. A Ltd. estimated the significant decline in production due to changed government policies, the net selling price of identifiable asset is not determinable. The cash flow forecast based on recent financial budget for next 6 years after considering changed govt. policies are as follows, incremental financial cost is $10 \%$ which represent current market assessment of the time value of money.

| Year | Cash flow | Year | Cash flow |
| :--- | :--- | :--- | :--- |
| 2004 | 700 | 2007 | 500 |
| 2005 | 700 | 2008 | 500 |
| 2006 | 700 | 2009 | 500 |

Acquired business is a cash generating unit
Required:-
(a) Value in use
(b) Impairment loss
(c) Revised carrying amount assets on 31.03 .2003
(Ans: Impairment loss Rs. 925 (Goodwill-600 and 325 Other Assets); revised carrying amount Nil \& 2674)

Q186. On 31.03.1999 A Ltd. acquired B Ltd. for Rs. 600 lakhs. B Ltd. has three cash generating unit $X, Y$ and $Z$, net fair values of Rs. 240 lakhs. 160 lakhs and 80 lakhs respectively. A Ltd. recognize goodwill of Rs. 120 lakhs. For the accounting year ended 31.03.2003, $X$ Unit incurred substantial losses and its recoverable amount is estimated to be Rs. 270 lakhs. Carrying amount of different cash generating units are as under:

| X | 260 Lakhs |
| :--- | ---: |
| y | 240 Lakhs |
| Z | 160 Lakhs |
| Goodwill | 24 Lakhs |
| Total | 684 Lakhs |

Calculate the impairment loss to be recognized in the financial statement if goodwill can be allocated on reasonable and consistent basis to cash generating unit.
(Answer: Impairment loss - Rs. 2 lakhs (272-270)

Q187. A Ltd., which is in business of manufacturing and export of its product. sometimes, back in 2000, the Govt. put the restriction on export of goods exported by A Ltd. Due to that restriction A Ltd. impaired its asset. A Ltd acquired at the end of 1996 Rs. 4000 Lakhs identifiable assets and paid Rs. 6000 lakhs balance is treated as goodwill. The useful life of the identifiable assets are 15 years and depreciated on straight line basis. When Govt. put the restriction at the of 2000, the company recognized the impairment loss by determining the recoverable amount of assets of Rs. 2720 lakhs. In 2002 Govt. lift the restriction imposed on the export and due to this favourable change A Ltd, estimate recoverable amount, which was estimated of Rs. 3420 lakhs.
Required:
A. Calculation and allocation of impairment loss in 2000
B. Reversal of an impairment loss and its allocation as per AS-28 in 2002

Ans. Impairment loss Rs.614; Reversal of Loss Rs. 175.

Q188. Cost 1/4/2001
Depreciation SLM life 10 year
On 31/3/2005 Recoverable Amount 3,00,000
On 311/3/2007 Recoverable Amount 2,20,000
Calculate Impairment Loss and its Reversal.

Q189. Aakash Limited is the owner of CGU (Cash Generating Unit) block of assets whose current carrying cost is Rs. 1,000 lacs. Current carrying cost of CGU block of assets as per Accounting and Tax records are after charging depreciation of the current year. The company after the detailed study by its technical team, has assessed the present value recoverable amount of this CGU block of assets at Rs. 550 lacs. The value of block of assets as per the Income Tax records is Rs. 800 lacs. The approving authority of the company has issued a signed statement confirming that impairment in the value of CGU is only a temporary phenomenon which is reversible in subsequent periods and also assuring virtual certainty of taxable incomes in the foreseeable future. You are required to show Deferred Tax workings as per Accounting Standards in force, given the tax rate of 30\% plus $10 \%$ surcharge thereon. The depreciation rate for tax purpose is $15 \%$ and that as per books is $13.91 \%$.
(Nov. 2015-4 Marks)
(Answer: DTL Reversed - 72.73 and DTA Created - 82.50)

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## Important Notes:

## AS 18 - RELATED PARTY DISCLOSURES

## Q190. (ICAI MODULE)

Identify the related parties in the following cases as per AS-18
A Ltd. holds $51 \%$ of B Ltd.
B Ltd holds 51\% of O Ltd.
ZLtd holds 49\% of O Ltd.

## Solution

Reporting entity- A Ltd.

- B Ltd. (subsidiary) is a related party

O Ltd. (subsidiary) is a related party
Reporting entity- B Ltd.

- A Ltd. (holding company) is a related party
- O Ltd. (subsidiary) is a related party

Reporting entity- O Ltd.

- A Ltd. (holding company) is a related party
- B Ltd. (holding company) is a related party
- Z Ltd. (investor/ investing party) is a related party

Reporting entity- Z Ltd.

- O Ltd. (associate) is a related party

Q191.
Mr. X has a $100 \%$ investment in A Limited. He is also a member of the key management personnel (KMP) of C Limited. B Limited has a $100 \%$ investment in C Limited.
Required
(a) Examine related party relationships from the perspective of $C$ Limited for $A$ Limited.
(b) Examine related party relationships from the perspective of $C$ Limited for $A$ Limited if $M r$. $X$ is a KMP of $B$ Limited and not $C$ Limited.

## Solution

(a) A Limited is related to $C$ Limited because Mr. $X$ controls $A$ Limited and is a member of KMP of $C$ Limited.

(b) A Limited will not be related to C Limited, since Mr. X is not KMP in CLtd. there is no relation of $A \operatorname{Ltd}$ with C Ltd.
(But A Ltd. and BLtd. are related parties by virtue of Mr. X)


## Q192. (ICAI MODULE)

Narmada Ltd. sold goods for Rs 90 lakhs to Ganga Ltd. during financial year ended 31-32017. The Managing Director of Narmada Ltd. own 100\% of Ganga Ltd. The sales were made to Ganga Ltd. at normal selling prices followed by Narmada Ltd. The Chief accountant of Narmada Ltd contends that these sales need not require a different treatment from the other sales made by the company and hence no disclosure is necessary as per the accounting standard. Is the Chief Accountant correct?

## Solution

As per AS 18 'Related Party Disclosures', Enterprises over which a key management personnel is able to exercise significant influence are related parties. This includes enterprises owned by directors or major shareholders of the reporting enterprise and enterprise that have a member of key management in common with the reporting enterprise.

In the given case, Narmada Ltd. and Ganga Ltd are related parties and hence disclosure of transaction between them is required irrespective of whether the transaction was done at normal selling price.

Hence the contention of Chief Accountant of Narmada Ltd is wrong.

## Q193.

Power Limited is a producer of electricity. Transmission Limited regularly purchases electricity from Power Limited. Power Limited whose financial year ends on March 31, 20X2, acquired 100\% shareholding of Transmission Limited on July 15, 20X1. However, the entire shareholding is disposed of on March 21, 20X2. Power Limited and Transmission Limited had transactions when Transmission Limited was a subsidiary of Power Limited and also in the period when it was not a subsidiary of Power Limited.
Required
For which period, related party disclosure should Power Limited make in its financial statements for the year ended March 31, 20X2 with respect to transactions with Transmission Limited?

## Solution

Power Limited should in its financial statements for the year ended March 31, 20X2 make related party disclosures for the period from July 15, 20X1 to March 21, 20X2 when Transmission Limited was its subsidiary.

## ITEMS WHICH ARE SPECIFICALLY REQUIRED TO BE TRANSFER TO OTHER COMPREHENSIVE INCOME (OCI) as per INDAS:

## Selective List:

| RELEVANT INDAS | PARTICULARS OF ITEMS |
| :--- | :--- |
| INDAS 16-PPE | Revaluation Profit of PPE - known as <br> Revaluation Reserve |
| INDAS 19- EMPLOYEE BENEFITS | Actuarial Gains and Losses on DBP and PLAN <br> ASSETS |
| INDAS 21- EFFECTS OF CHANGES IN <br> FOREIGN EXCHANGE RATES | Exchange Difference on translation of <br> Functional Currency To Presentation <br> Currency - also called FCTR |
| INDAS 109 - FINANCIAL INSTRUMENTS | Financial Assets categorized under FVTOCI |
| INDAS 109-FINANCIAL INSTRUMENTS | FV Gain/Losses under Cash Flow Hedge |
| INDAS 109-FINANCIAL INSTRUMENTS | Equity Shares not Held For Trading - <br> Option to designate as FVTOCI Parmanently |
| INDAS 109 - FINANCIAL INSTRUMENTS | Fair Value Gain or Loss on Net Investment <br> in Foreign Operation and Derivative <br> Instrument thereof |
| INDAS 103 - BUSINESS COMBINATIONS | NET ASSETS acquired less PURCHASE <br> CONSIDERATION = OCI (CR) |
| INDAS 12 - INCOME TAXES | Current Tax \& Deferred Tax is to be <br> recognized in OCI or directly in Equity if <br> the items on which CT \& DT is calculated <br> belongs to OCI |


[^0]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

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[^2]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

[^3]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

[^4]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

[^5]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

[^6]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

[^7]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

[^8]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

[^9]:    D-Fortune Classes \& Vsmart Academy - CA. Jai Chawla

