

Paper 20 – Financial Analysis & Business Valuation

Full Marks: 100 Time allowed: 3 hours

Question No. 1 which is compulsory and carries 20 marks and answer any five questions from Question No. 2 to Question No. 8

1.(a) State whether the following statements are true or false:

[1×8=81

- (i) Market saturation of the product is an external factor responsible for corporate distress.
- (ii) If the NPV of a project is positive, the Profitability Index will be less than one and then the project should be rejected.
- (iii) Off-Balance Sheet financing is used to finance a company without showing debt on the face of the Balance Sheet.
- (iv) Horizontal financial statement analysis is useful in inter-firm comparison.
- (v) A brand is nothing but a glorified product name; hence it has no value.
- (vi) Higher Debt/Equity ratio implies higher valuation of a company.
- (vii) Tobin's Q compares the market value of a company with the book value of its assets.
- (viii) Economic Value Added represents the difference between profit and the cost of capital.

Answer:

- (i) True
- (ii) False
- (iii) True
- (iv) False
- (v) False
- (vi) False
- (vii) False
- (viii) True
- 1.(b) The operating and cost data of ABC Ltd., are:

Sales ₹ 20,00,000

Variable Costs ₹ 14.00.000

Fixed Costs (including 15% interest on ₹ 10,00,000) ₹ 4,00,000

You are required to calculate — (i) Operating Leverage (ii) Financial Leverage and (iii) Combined Leverage.

Answer:

| Variable Cost | =₹ | 14,00,000 |
|------------------|-------|-----------|
| Sales | = ₹ : | 20,00,000 |
| Contribution | =₹ | 6,00,000 |
| Less: Fixed Cost | =₹ | 2,50,000 |
| EBIT | =₹ | 3,50,000 |
| Less: Interest | = ₹ | 1,50,000 |
| EBT | =₹ | 2,00,000 |

- (i) Operating Leverage= Contribution/EBIT = ₹ 6,00,000/₹ 3,50,000 = 1.71428
- (ii) Financial Leverage = EBIT/EBT= ₹ 3,50,000/₹ 2,00,000 = 1.75
- (iii) Combined Leverage = Operating Leverage x Financial Leverage = 1.75 x 1.71428 = 2.99999 = say 3.

1.(c) Calculate the following:

- (i) Beta of a security is 0.5; Expected rate of return on portfolio is 15% p.a.; Risk free rate of return is 6% p.a. Calculate the expected rate of return of the security.
- (ii) If another security has an expected rate of return of 18% p.a.; what would be its Beta? [3+3]

Answer:

- i) Calculation of expected rate of return of the security = 6 + 0.5 (15 6) = 6 + 4.5 = 10.5%
- ii) Calculation of Beta of another security whose expected rate of return is 18% 18 = 6+ Beta (15 6) Beta.9 = 18 6 Beta = 12/9 = 1.33
- 2.(a) Vedika Ltd. finds on 31st December, 2016 that it is short of funds with which to implement its branch expansion programme. On 1st January, 2016, it had a bank balance of ₹ 1,80,000 in its current account. From the following information, prepare a statement for the Board of Directors to show how the overdraft of ₹ 68,750 at 31st December, 2016 have arisen:

Figures as per Balance Sheet (as on 31st December)

| | (₹) 2015 | (₹) 2016 |
|--|----------|-----------|
| Fixed Assets | 7,50,000 | 11,20,000 |
| Stock and stores | 1,90,000 | 3,00,000 |
| Debtors | 3,80,000 | 3,65,000 |
| Bank Balance/(Overdraft) | 1,80,000 | (68,750) |
| Trade Creditors | 2,70,000 | 3,50,000 |
| Share Capital (in shares of ₹ 10 each) | 2,50,000 | 3,00,000 |
| Bills Receivable | 87,500 | 95,000 |

The profit for the year ended 31st December, 2016 before charging depreciation and taxation amounted to $\stackrel{?}{_{\sim}}$ 2,40,000. The 5,000 shares were issued on 1st January, 2016 at a premium of $\stackrel{?}{_{\sim}}$ 5 per share. $\stackrel{?}{_{\sim}}$ 1,37,500 was paid in March 2016 by way of income tax including tax on distribution of dividend. Dividend was paid as follows: for 2015 (final) on the capital on 31-12-2015 @ 10% less tax 25% and for 2016 (interim) 5% on capital on 31st March, 2016 free of tax. [10]

Answer:

Vedika Ltd. Cash Flow Statement

For the period 1st January 2016 to 31st December 2016

| | ₹ | ₹ |
|--|------------|------------|
| 1. Cash Flows from Operating Activities: | | |
| Operating profit before depreciation and tax | 2,40,000 | |
| Adjustment for: | | |
| Increase in creditors | 80,000 | |
| Decrease in debtors | 15,000 | |
| Increase in stock | (1,10,000) | |
| Increase in Bills Receivable | (7,500) | |
| Income tax paid | (1,37,500) | |
| Net Cash from Operating Activities (1) | | 80,000 |
| 2. Cash Flow from Investing Activities: | | |
| Purchase of fixed assets | (3,70,000) | |
| Net Cash used in Investing Activities (2) | | (3,70,000) |
| 3. Cash Flows from Financing Activities: | | |
| Issue of shares at premium | 75,000 | |
| Payment of final dividend (2015) | (18,750) | |

| Payment of interim dividend (2016) | (15,000) | |
|--|----------|------------|
| Net Cash from Financing Activities (3) | | 41,250 |
| Net increase in Cash and Cash Equivalents | | (2,48,750) |
| Cash and Cash Equivalents at the beginning | | 1,80,000 |
| Cash and Cash Equivalents at the end | | (68,750) |

Thus although there is opening bank balance and positive cash flow from operating activities and financing activates the substantial funds used in purchase of fixed assets has resulted in bank overdraft at year end.

2.(b) What are the internal factors responsible for corporate distress?

[4]

Answer:

Internal factors responsible for corporate distress are primarily as follows:-

- Outdated production process,
- high material cost,
- poor labour productivity,
- lack of efficient personnel/skilled labour,
- high wastage in production process,
- excessive manpower,
- high labour turnover,
- lack of quality leadership,
- labour agitation,
- improper staff recruitment policy,
- huge overhead costs,
- wrong site selection,
- wrong estimation of demand,
- production of goods without market survey,
- improper sales strategy,
- poor customer service,
- defective cash.
- inventory and receivables management.

2.(c) A firm's current assets and current liabilities are ₹ 16,000 and ₹ 10,000 respectively. How much can it borrow on a short term basis to purchase inventories without reducing the Current Ratio below 1.25?

Answer:

Let the maximum short term borrowing be B. The current ratio with this borrowing should be 1.25

$$(16,000 + B)/(10,000 + B) = 1.25 \text{ or } 0.25 B = 16,000 - 12,500$$

Or $B = \frac{3,500}{0.25} = 14,000$

Maximum permissible short term borrowing is ₹14,000

3.(a) The following financial statements have been extracted from the Annual Report 2016-17 of METCALF TEXTILES Ltd. a largest Textile Company, having a strong presence in over 80 countries in the world.

The company wants to keep its shareholders happy by giving them a fair rate of return. The company is using return on equity (ROE) as one of the metrics of performance evaluation for determining the return for shareholders. Due to intense competition, in recent years, its ROE is under pressure and to maintain the level of ROE, the company is to change its business Model-in that, it is varying its, margin, assets utilization and leverage.

You are required to:

- carryout the DuPont Analysis considering the financial parameters given below and show how the return on equity (ROE) of the company (Metcalf Textiles Ltd.) is changing due to change in its Margins, Assets utilization and Leverage over the period of four years.
- (ii) Give your comments on the trend of the said parameters.

| Statement of Profit & Loss for year ended 31st March, | | (Amount in | unt in ₹ crore) | |
|---|------|------------|-----------------|-------|
| | 2014 | 2015 | 2016 | 2017 |
| Total revenue | 7998 | 8992 | 9976 | 11804 |
| Profit before tax | 1855 | 1612 | 1990 | 2817 |
| Profit after tax | 1514 | 1345 | 1574 | 2110 |
| Dividend | 225 | 315 | 225 | 225 |
| Tax on dividend | 37 | 51 | 36 | 38 |
| Retained earnings | 1252 | 979 | 1313 | 1847 |

Balance Sheet as at 31st March. (Amount in ₹ crore)

| | | 2014 | 2015 | 2016 | 2017 |
|-----|---------------------------|------|-------|-------|-------|
| Equ | uity and Liabilities | | | | |
| 1. | Shareholders' fund | | | | |
| | a. Share capital | 225 | 225 | 225 | 225 |
| | b. Reserves and Surplus | 8055 | 9034 | 10347 | 12194 |
| 2. | Non-current liabilities: | | | | |
| | Loan Funds | 7 | 617 | 17 | 1352 |
| 3. | Current liabilities | 251 | 296 | 324 | 392 |
| | Deferred Tax | | | | |
| | | 8538 | 10172 | 10913 | 14163 |
| Ass | sets | | | | |
| 1. | Non - Current assets: | | | | |
| | Fixed Assets | 3774 | 4369 | 4685 | 5276 |
| 2. | Non - Current investments | | | | |
| | Investments | 371 | 799 | 1449 | 3642 |
| 3. | Current assets | 4393 | 5004 | 4779 | 5245 |
| | | 8538 | 10172 | 10913 | 14163 |

[8+2]

Answer:

Extended DuPont provides the drivers of ROE in terms of margins, assets utilization and leverage thereby provides important information in understanding business model of a company. Extended DuPont Analysis decomposes ROE into three components as given below:-

 $ROE = (PAT/Sales) \times (Sales/Assets) \times (Assets/Equity)$

The above equation shows that ROE is driven by profit Margin (PAT/Sales), Assets Utilization or Assets Turnover (Sales/Assets) and how much of the assets are financed by equity and debt, i.e. a measure of leverage (Assets/Equity)

Using the above decomposition, we obtain various decomposed components of ROE over a period of four years which are given below:

| Year ended 31st march | 2014 | 2015 | 2016 | 2017 |
|-----------------------------|---------|---------|---------|---------|
| ROE | 18.287% | 14.532% | 14.883% | 16.974% |
| PAT/Sales | 18.930% | 14.958% | 15.778% | 17.875% |
| Sales to Assets | 0.937 | 0.884 | 0.914 | 0.833 |
| Assets to Equity(Net Worth) | 1.031 | 1.099 | 1.032 | 1.140 |

The company saw a sharp decline in ROE in year 2014-15 which was primarily due to reduction in Profit Margins (from 18.930% to 14.958%) as well as reduction in the assets utilization, which may hint that the company (or perhaps the industry) might be having a tough time in pushing sales; situation improved in 2015-16 and 2016-17 and the main driver was Profit Margin. The big increase in ROE 2016-17 came primarily from Profit Margin and Leverage; had the company increased its assets utilization ROE would have increased further; seeing this, it is clear that the biggest challenge before Metcalf Ltd. is to increase Asset utilization.

Working notes:

(Amount in ₹ crore)

| Year ending 31st March | 2014 | 2015 | 2016 | 2017 |
|------------------------|-------|--------|--------|--------|
| PAT | 1,514 | 1,345 | 1,574 | 2,110 |
| Sales | 7,998 | 8,992 | 9,976 | 11,804 |
| Assets | 8,538 | 10,172 | 10,913 | 14,163 |
| Equity (Net Worth) | 8,280 | 9,259 | 10,572 | 12,419 |

3.(b) The following information has been extracted from the records of Siteraze Ltd. as on 31st March, 2017: (Amount in ₹ lakhs)

| March, 2017. | (Amount in viakits) |
|---|---------------------|
| Equity share capital (of ₹10 each) | 800 |
| Sales (net) | 4,000 |
| Market value of Equity Share (₹ 8 each) | 640 |
| Working Capital | (400) |
| Total Assets | 2,800 |
| Retained Earnings | 200 |
| EBIT | 472 |
| Book Value of Total Debt | 1,800 |

You are required to calculate the Z- Score of Siteraze Ltd. using ALTMAN's (1968) MODEL and comment on it.

Answer

As per Altman's Model (1968) of Corporate Distress Prediction $Z = 1.2X_1 + 1.4X_2 + 3.3X_3 + 0.6X_4 + 1.0X_5$

Here, the five variables are as follows:

 X_1 = Working Capital to Total Assets = (400) ÷ 2800 = (0.1429)

 X_2 = Retained Earnings to Total Assets = 200 ÷ 2800 = 0.0714

 $X_3 = EBIT \text{ to Total Assets} = 472 \div 2800 = 0.1686$

 X_4 = Market Value of Equity to book value of Total Debt = 640 ÷ 1800 = 0.3556

 X_5 = Sales to Total Assets = $4000 \div 2800 = 1.4286$

Therefore,

Z-Score =
$$(1.2 \times (-) 0.1429) + (1.4 \times 0.0714) + (3.3 \times 0.1686) + (0.6 \times 0.3556) + (1 \times 1.4286)$$

= $(-) 0.1715 + 0.1000 + 0.5564 + 0.2134 + 1.4286 = 2.1269$

Comments: As the calculated value of Z-Score lies between 1.81 and 2.99, it is predicted that the company is consists of both bankrupt and non-bankrupt elements (i.e. mixture of failed and non-failed elements) and therefore requires further investigation to determine its conclusive solvency status.

4.(a) The following data relate to some important items of a company disclosing its developments during the last five years:

| Particulars | 2011 (₹) | 2016 (₹) |
|---------------------|----------|-----------|
| Working capital | 9,34,120 | 15,30,040 |
| Plant and Machinery | 3,99,140 | 9,67,080 |

| Long-term borrowings | 2,80,000 | 5,60,000 |
|----------------------|-----------|-----------|
| Net Tangible assets | 11,23,200 | 19,95,040 |

You are required to evaluate the changes in financial position (soundness/weakness) of the company by following the trend percentage. [8]

Answer:

Computation of Trend Percentage

| Particulars | Absolute Changes | Tren | nd % |
|----------------------|------------------|------|-------|
| | | 2011 | 2016 |
| Working capital | 5,95,920 | 100 | 163.8 |
| Plant & Machinery | 5,67,940 | 100 | 242.3 |
| Long-term borrowings | 2,80,000 | 100 | 200 |
| Net Tangible assets | 8,71,840 | 100 | 177.6 |

Interpretation of changes:

Trend percentage depicts that there is an increase of 142.3% in plant and machinery while an increase in working capital is 63.79%. These trend percentages show that there is rapid increase in fixed assets. But if we see the changes in absolute figures of above said both items then just opposite result comes before us.

Working capital is increased by ₹ 5,95,920 and plant and machinery is increased by ₹ 5,67,940. On the basis of trend percentage it can be said that finance has been provided from long term borrowing and working capital for purchasing plant and machinery.

There is an increase of 100% and 77.6% respectively in long term debt and net tangible assets which is undesirable because more increase in long term debts in comparison to net tangible assets is the indicator of increasing debt burden.

4.(b) Ms. Nisha is an avid investor in fixed income securities. Her portfolio of Bond does not have bonds from AAA rated companies. She is considering purchase of an AAA rated Bond. Two such bonds of AAA rated companies, Bond-A and Bond-B are available in the market that have following features:

| | Bond-A | Bond-B |
|-----------------------------|-------------|-------------|
| Face value (₹) | 100 | 100 |
| Coupon rate per annum | 15% | 12% |
| Periodicity of coupon | Semi-annual | Semi-annual |
| Time remaining for maturity | 3 years | 4 years |
| Current Market Price (₹) | 110 | 120 |

Her expectation of return from the investment in AAA rated bonds is 10% p.a. which is slightly above the yields in the government securities. Ms. Nisha is indifferent to the investment horizon of 3 or 4 years.

Required: Which of the Bonds should she (Ms. Nisha) buy and why?

[Given: PVIFA (5%, 6 periods) = present value of annuity of ₹ 1 received for 6 periods discounted at the rate of 5% per period = 5.0757, PVF (5%, 6 periods) = present value of ₹ 1 received at the end of 6 periods discounted at the rate of 5% per period = 0.7462.

PVIFA (5%, 8 periods) = present value of annuity of $\stackrel{?}{_{\sim}}$ 1 received for 8 periods discounted at the rate of 5% per period = 6.4632, PVF (5%, 8 periods) = present value of $\stackrel{?}{_{\sim}}$ 1 received at the end of 8 periods discounted at the rate of 5% per period = 0.6768.]

Answer:

Fair value of the bond must be compared with the current market price to make a choice of investment:

Computation of Fair value of Bond A and Bond B:

| Comporation of tall value of Botta A and Bott | J D. | |
|---|---|--|
| Bond-A | Bond - B | |
| Face Value =₹ 100 | Face value = ₹ 100 | |
| The number of half yearly period = 6 | The number of half yearly period = 8 | |
| Half yearly interest payment = 7.5% | Half yearly interest payment = 6% | |
| Discount rate applicable to half yearly period = 5% | Discount rate applicable to half yearly period = 5% | |
| V = PVIFA (5%, 6 period) × 7.50 + 100 × PVF (5%, 6 periods) | V = PVIFA (5%, 8 periods) × 6 + 100 × PVF (5%, 8 periods) | |
| = 7.50 × 5.0757 +100 × 0.7462 | = 6.00 × 6.4632 +100 × 0.6768 | |
| = ₹112.69 | = 38.78 + 67.68 | |
| Fair Value = ₹112.69 | Fair Value = ₹106.46 | |
| Market price: ₹ 110.00 | Market price: ₹ 120.00 | |

Decision: Bond A is undervalued by ₹ 2.69 and should therefore, be bought.

But, Bond B being overvalued is not worth the purchase.

- 5.(a) M Ltd. has been following a dividend payout of only 20% so that the funds needed for the growth of the firm targeted at 10% is retained. The expectation of return is 12%.
 - (i) At what rate the market is discounting the current and future earnings of M Ltd.?
 - (ii) If the current level of earnings is ₹ 10 per share, at what price the shares of the firm are being traded? [4+4]

Answer:

(i) The dividend discount model in terms of earnings and retention ratio is:

Price (P₀) =
$$\frac{D_1}{(r-g)} = \frac{E_1 \times (1-b)}{r-g}$$

Or P/E Multiple
$$\frac{P_0}{E_1} = \frac{(1-b)}{r-g}$$

P/E ratio based on current earnings, E₀ 11.00

Market is discounting the current and future earnings of the firms at 10 and 11 times respectively.

(ii) Current earnings, E₀ ₹ 10.00 Growth Rate, r 10.00%

Required Return, r 12.00%

Expected earnings, E₁ ₹ 11.00

Retention Ratio, b 80.00%

Price = 10 × (1 + 0.1) x
$$\frac{1-0.8}{0.12-0.1}$$
 = ₹ 110.00

5.(b) What are the myths of valuation?

[8]

Answer:

The following are some of the myths of valuation:

- 1. Valuation is an objective search for true value;
- 2. Since valuation models are quantitative, valuation is subjective;

- 3. A well researched and well done valuation is timeless;
- 4. A good valuation provides a precise estimate of value;
- 5. The more quantitative a model the better is valuation;
- 6. To make money on valuation, you have to assume that markets are inefficient;
- 7. The product of valuation, (i.e. value) matters, and not the valuation;
- 8. How much a business is worth depends on what the valuation is used for.
- 6. A Limited and B Limited are in negotiations in which A Limited has expressed the desire to acquire B Limited and it is decided that A Limited will acquire B Limited. For this purpose, the following information has been extracted from the books of both the companies for F.Y. 2016-17.

(₹ in lakhs)

| Particulars | A Limited | B Limited |
|---|-----------|-----------|
| Statement of Profit and Loss | | |
| Revenue from Operations | 1,200 | 630 |
| Less: | | |
| Cost of materials consumed, net of expenses capitalized | 634 | 280 |
| Other Operation Expenses | 62 | 32 |
| Interest | 10 | 5 |
| Depreciation and Amortization | 64 | 75 |
| Operating Profit | 430 | 238 |
| Net Non-Operating Income | 42 | 27 |
| Profit Before Tax | 472 | 265 |
| Tax | 160 | 90 |
| Profit After Tax | 312 | 175 |
| Balance Sheet: | | |
| Share Capital (Face value of Shares of both the Companies ₹10) | 300 | 200 |
| Reserves and surplus | 3,210 | 1,356 |
| Non-Current Liabilities | 440 | 104 |
| Current Liabilities | 1,235 | 750 |
| Total Liabilities | 5,185 | 2,410 |
| Net Fixed Assets | 2,985 | 1,850 |
| Non-Current Investments & Other Non- Current Assets | 575 | 355 |
| Current Assets | 1,625 | 205 |
| Total Assets | 5,185 | 2,410 |
| Additional Information: | | |
| Promoters holding in the Company | 40% | 30% |
| Free Float Market Capitalization (Assuming that promoters shares are not available for trading in the market) | ₹3,150 | ₹1,400 |

In a joint meeting of the directors of both companies, the following decisions are taken:

- (i) The swap ratio will be decided by considering the following parameters with the weights as given below:
 - (a) Book Value 25%
 - (b) Market Price 40%
 - (c) EPS 25%
 - (d) Net Profit Ratio 10%
- (ii) All assets and liabilities will be taken over by A Limited at book values.
- (iii) The combined profit will increase by 10% due to synergy gains arising because of higher scale of operations.
- (iv) It is expected that the market will look this decision of A Limited as 'a value creator' decision and consequently, it is expected that A Limited's P/E Ratio will increase by 10% from its existing level after the acquisition of B Limited.

You are required to compute assuming that the acquisition will be completed as per the terms given.

- 1. The Swap Ratio
- 2. Book Value per share of A Limited after acquisition
- 3. Earnings per share of A Limited after acquisition
- 4. Market Price of A Limited's share after acquisition.

[7+3+3+3]

Answer:

(₹ in lakhs)

| | | (till lakins) |
|--|-----------|----------------|
| | A Limited | B Limited |
| Net Worth (Share Capital + Reserves and Surplus) | ₹3,510.00 | ₹1,556.00 |
| No. of Shares (Share Capital/Face Value) (in lakhs) | 30 | 20 |
| Book Value per share | ₹117.00 | ₹77.80 |
| Free float Market Capitalization | ₹3,150.00 | ₹1,400.00 |
| Free float in the Market = No. of shares X (1- Promoters | | |
| holding) | 18 | 14 |
| Market Price | ₹175.00 | ₹100.00 |
| Net Profit (PAT) | ₹312.00 | 175.00 |
| No. of Shares (in lakhs) | 30 | 20 |
| Earnings per Share (EPS) | ₹10.40 | ₹8.75 |
| PAT | ₹312.00 | ₹175.00 |
| Revenue from Operations | ₹1,200.00 | ₹630.00 |
| Net Profit Ratio | 26.00% | 27.78% |

| | A Limited | B Limited | Swap Ratio | Weight | Swap |
|--------------------------|-----------|-----------|------------|--------|---------|
| | | | | | Ratio x |
| | | | | | Weight |
| Book Value per share | 117.00 | 77.80 | 1: 0.665 | 25% | 0.1663 |
| Market Price | 175.00 | 100.00 | 1: 0.571 | 40% | 0.2284 |
| Earnings Per Share (EPS) | 10.40 | 8.75 | 1: 0.841 | 25% | 0.2103 |
| Net Profit Ratio | 26.00% | 27.78% | 1: 1.068 | 10% | 0.1068 |
| | | | | 100% | 0.7118 |

Say 0.712

(i) It means that the Swap Ratio is - 0.712 shares of A Limited for every share of B Limited.

| Therefore, total no. of shares to be issued by A Limited (20×0.712) (in lakhs) Net Worth of A Limited after acquisition: | 14.24 |
|---|------------|
| Share Capital (30+14.24) × 10 (₹ in lakhs) | ₹ 442.40 |
| Reserves and Surplus (3210+1356) (₹ in lakhs) | ₹ 4,566.00 |
| Net Worth of A Limited after acquisition (₹ in lakhs) | ₹ 5,008.40 |
| Book Value per share | ₹113.21 |
| | |
| (ii) Net Profit of A Limited after acquisition | |
| Considering 10% synergy gain = (312 + 175) × 1.1 (₹ in lakhs) | ₹ 535.70 |
| (iii) EPS | ₹ 12.11 |
| P/E ratio of A Limited before acquisition (175 ÷10.40) = | 16.83 |
| New P/E Ratio of A Limited after acquisition (10% synergy impact) | 18.51 |
| | |
| (iv) Therefore, Market Price (18.51 × ₹ 12.11) | ₹ 224.16 |

Note: Capital Reserve of ₹ 57.60 lakhs arising on takeover of all assets and liabilities by A Ltd. at book value is not considered as it is not a part of distributable surplus. If the same is included Net worth is ₹ 5,066 lakhs & book value is ₹ 114.51.

7.(a) Hall Corporation paid ₹ 600 million for the outstanding share of Triple C Corporation. At the acquisition date, Triple C reported the following Condensed Balance Sheet.

Triple C Corporation — Condensed Balance Sheet

| | Book Value (₹ in millions) |
|--------------------------|-------------------------------|
| Current Assets | 80 |
| Plant and equipment, net | 760 |
| Goodwill | 30 |
| Liabilities | 400 |
| Shareholders' equity | 470 |

The fair value of the plant and equipment was ₹ 120 million more than its recorded book value. The fair values of all other identifiable assets and liabilities were equal to their recorded book values. Calculate the amount of Goodwill that Hall Corporation should report on its Consolidated Balance Sheet. The Goodwill reported on Triple C Corporation's Balance Sheet is an unidentifiable asset and is thus ignored in the calculation of Hall Corporation's Goodwill.

Answer:

Hall Corporation's Value of Goodwill

| | Fair Value (₹ in millions) |
|--------------------------------|-------------------------------|
| Current Assets | 80 |
| Plant and equipment | 880 |
| Liabilities | (400) |
| Fair value of net assets | 560 |
| Purchase Price | 600 |
| Less: Fair value of net assets | (560) |
| Acquisition of Goodwill | 40 |

Note: Goodwill is equal to the excess of purchase price over the fair value of identifiable assets and liabilities acquired. The Plant and equipment was "written-up" by ₹ 120 million to reflect fair value.

The Goodwill reported on Triple C Corporation's Balance sheet is an unidentifiable asset and is thus ignored in the calculation of Hall Corporation's Goodwill.

7.(b) Dayal Ltd. furnishes the following information relating to the previous three years, and request you to compute the value of the brand of the company:

(₹ in lakhs)

| Particulars | 2014 | 2015 | 2016 |
|--------------------------------|-------|-------|--------|
| Profit before interest and tax | 75.00 | 85.25 | 150.00 |
| Loss in Sale of Assets | 3.00 | l | 18.00 |
| Non-operating income | 12.00 | 7.25 | 8.00 |

Inflation was 9% for 2015 and 15% for 2016. If the capitalization factor considering internal and external value drivers to the brand is 14, determine the brand value. Assume an all inclusive future tax rate of 35%.

Answer:

Valuation of Brand of Dayal Ltd. as at 31-3-2016 (₹ in lakhs)

| Particulars | 2014 | 2015 | 2016 |
|--------------------------------|-------|-------|--------|
| Profit Before Interest and Tax | 75.00 | 85.25 | 150.00 |
| Add: Loss on Sale Assets | 3.00 | - | 18.00 |

| Less: Non Operating Income | (12.00) | (7.25) | (8.00) |
|--|----------------|----------------|---------|
| Branded Earnings | 66.00 | 78.00 | 160.00 |
| | | | |
| Inflation Adjustment Factor | 1.09×1.15=1.25 | 1.15 | 1.00 |
| Inflation Adjusted Earning as at 31.03.2016 (₹ | 82.50 | 89.70 | 160.00 |
| in lakhs) | | | |
| Weight | 1 | 2 | 3 |
| Product | 82.50 | 179.40 | 480.00 |
| Weighted Average Earnings Before Tax | | | 123.65 |
| [(82.50+179.40+480)÷(1+2+3)] (₹ in lakhs) | | | |
| Less: Taxes at 35% | | | (43.28) |
| Weighted Average Brand Earnings After Tax (₹ in lakhs) | | | 80.37 |
| Capitalization Factor | | | 14 |
| Brand Value | | ₹1125.18 Lakhs | |

Note: Most recent year is given higher weight.

8. Write Short Notes on any four out of the following:

[4×4]

- (i) Financial Analysis
- (ii) Financial Leverage
- (iii) Off Balance Sheet
- (iv) Shareholder Value Analysis
- (v) Valuing Synergy

Answer:

(i) Financial Analysis: The Finance Analysis of companies is usually undertaken so that investors, creditors and other stakeholders can make decisions about those companies.

Finance Analysis is the selection, evaluation and interpretation of financial data, along with other pertinent information, to assist in investment and financial decision-making. Finance Analysis may be used internally to evaluate issues like employee performance, operating efficiency, credit policies and extremely to evaluate potential investments and credit-worthiness of borrowers, among other things.

The goal of Financial Analysis is to assess the performance of a firm in the context of its stated goals and strategy. There are two principal tools of Financial Analysis: Ratio-Analysis and Cash-Flow Analysis. Ratio-Analysis involves assessing how various line items in a firm's financial statements relate to one another. Cash-Flow Analysis allows the analyst to examine the firm's liquidity and how the firm is managing its operating costs and financing cash flows.

Financial Analysis is used in a variety of contexts. Ratio Analysis of a company's present and past performance provides the foundation for making forecasts of future performance.

Financial Analysis is useful in company valuation, Credit evaluation, financial distress prediction, security analysis, mergers and acquisition analysis and corporate financial policy analysis.

(ii) Financial Leverage: Financial Leverage is the ability of a firm to use fixed financial charges to magnify the effects of changes in EBIT on the earnings per share. These fixed charges do not vary with the EBIT or operating profit. It refers to the use of debt fund in the capital structure. It indicates the use of earnings in making payments for fixed interest and fixed dividend bearing securities. Favourable or positive leverage occurs when the firm earns more on the assets purchased with the funds, than the fixed cost of their use.

A high ratio is risky but a low ratio indicates a low interest outflow and consequently lower borrowings.

Financial Leverage = EBIT/EBT.

Financial Leverage is sometimes called as 'trading on equity'. The purpose behind this principle is to give the equity shareholders a high rate of return than the general rate of earning on the capital employed in the company with an objective to compensate them for the risk which they have to bear.

(iii) Off Balance Sheet (OBS): Off Balance Sheet is one where an asset or debt that does not appear on a company's Balance Sheet. Items that are considered off balance sheet are generally ones in which the company does not have legal claim or responsibility for. For example-Loans issued by a bank are typically kept on the bank's books. If those loans are securitized and sold off as investments, however, the securitized debt is not kept on the bank's books. One of the most common off-balance sheet items is an operating lease.OBS usually means an asset or debt or financial activity which is not on the company's balance sheet. It could involve a lease or a separate subsidiary or a contingent liability such as a letter of credit. It also involves loan commitments, futures, forwards and other derivatives, when -issued securities and loans are sold.

Some companies may have significant amounts of off-balance sheet assets and liabilities. For example-Financial institutions often offer asset management or brokerage services to their clients. The assets in question (often securities) usually belong to the individual clients directly or in trust, while the company may provide management, depository or other services to the client. The company itself has no direct claim to the assets and usually has some basic fiduciary duties with respect to the client. Financial institutions may report off-balance sheet items in their accounting statements formally and may also refer to "assets under management", a figure that may include on and off balance sheet items.

(iv) Shareholder value analysis:

Shareholder Value Analysis (SVA) focuses on the creation of economic value for Shareholders, as measured by share price performance and flow of funds.

Shareholders Value is used to link management strategy and decision to the creating of value for shareholders.

Value Drivers: Factors or value Drivers which influence the Shareholder's Value are identified.

Example: Growth in Sales, Profit Margin, Capital Investments Decisions, etc.

Management Responsibilities: Management should pay attention to Value drivers, while taking investment and finance decisions.

Benefit:

- 1. SVA helps the management to concentrate on activities which create value to the shareholders rather than on short-term profitability.
- 2. SVA and EVA together helps to strengthen the competitive position at the Firm, by focusing on wealth creation.
- 3. They provide an objective and consistent framework of evaluation and decision making across all functions, departments and units of the Company.

(v) Valuing synergy:

The most general definition of synergy is a whole that is greater than the sum of its parts. In the context of takeovers, the additional value from synergy can come from a variety of

sources, either operational or financial. The key to the existence of synergy is that the target firm controls a specialized resource that becomes more valuable when combined with bidding firm's resources. The specialized resource will vary depending on the type of merger. In case of horizontal merger (it occurs when two firms in the same line of business merge), the synergy must come from some form of economies of scale, which reduces costs, or from increased market power, which increases profit margin and sales. Valuing synergy requires assumptions about future cash flows and growth. The lack of precision in the process does not mean that an unbiased estimate of value cannot be made. Thus, we maintain that synergy can be valued by answering two fundamental questions:

- 1. What form is the synergy expected to take? Will it reduce costs as a percentage of sales and increase profit margins? Will it increase future growth?
- 2. When can the synergy be expected to start affecting cash flows instantaneously.

Once these questions are answered, the value of synergy can be estimated using an extension of discounted cash-flow techniques, first, the firms involved in the merger are valued independently by discounting expected cash flows to each firm at the weighted average cost of capital for that firm. Second, the value of the combined firm, with no synergy, is obtained by adding the values obtained for each firm in the first step. Third, the effects of synergy are built into the expected growth rates and cash flows, and the combined firms revalued with synergy. The difference between the values of the combined firm with synergy and the value of the combined firm without synergy provides a value for synergy.