PAPER – 20: Financial Analysis and Business Valuation

Paper – 20: Financial Analysis and Business Valuation

Time Allowed: 3 Hours

Full Marks: 100

Section – A

Answer Question No. 1 which is compulsory

1. (a) (i)

| Particulars | 2011 | 2012 | Charges |
|----------------------------|----------|----------|--------------|
| Sales value (₹) | 5,00,000 | 8,40,000 | (+) 3,40,000 |
| Sales Units | 10,000 | 14,000 | (+) 4,000 |
| Selling price per unit (₹) | 50 | 60 | (+) 10 |

Statement showing Account for charges in sales

| | | え |
|----|---|----------|
| 1. | Increase in sales due to Increase in sales quantity = [Change in sales quantity base years unit selling price] = [14,000 – 10,000] × ₹50 | 2,00,000 |
| 2. | Increase in sales due to Increase in selling price [Change in unit selling price × Base years sale quantity] = (₹60 – ₹50) × 10,000 | 1,00,000 |
| 3. | Increase in sales due to increase in price and Quantity [Changes in unit selling price × Change in sales] = (₹60 – ₹50) × (14,000 – 10,000) | 40,000 |
| | Increase in sales | 3,40,000 |

Note: Here Base year is 2011

- (ii) Effective Interest of AB in EF = $60\% \times 60\% = 36\%$
- (iii) Weighted average Number of shares outstanding for 2012 = 10,50,000 Basic Earnings per share = $\frac{₹10,00,000}{10,50,000}$ = ₹0.95.

(iv)Dividend discount Model Value of store = Dividendper share Discount Rate – Dividend growth Rate

$$20 = \frac{1}{K_e - 0.12}$$

K_e = 17%

 \therefore required return on equity = 17%.

- (v) Annual Amt. to be withdrawn = $\frac{\text{Deposit Amt.}}{\text{Present Value Annuity Factor at 10\% for 15 years}}$ $= \frac{2,00,000}{7.6061} = 26,295$
 - ∴ Annually to be withdrawn = ₹26,295
- (vi) Current Assets should be reduced by ₹500; by repayment, then Current Assets will be ₹1,500 and Current Liabilities will be ₹500

Current ratio =
$$\frac{CA}{CL} = \frac{1,500}{500} = \frac{3}{1} = 3:1$$

(b) State whether the following statements are true or false

- (i) True
- (ii) True
- (iii) False
- (iv) False
- (v) False
- (vi) False
- (vii) True
- (viii) False

Sec- B Answer Any 5 Question from the following

2. (a) The following are the income statements of A Ltd. for the years ended 31.03.2012 and 31.03.2013.

| 01.00.2010. | | | | |
|-------------------------------|-------------------|-------------------|---------------------------|----------------------------|
| Particulars | 31-03-2012 (₹) | 31-03-2013 (₹) | Amount of Increase (+) | Percentage Increase (+) |
| | | | or decrease | or decrease |
| | | | (-) (₹) | (-) (₹) |
| Net Sales | 1,70,000 | 1,90,400 | (+) 20,400 | (+) 12.0 |
| Less: Cost of Goods Sold | 1,05,000 | 1,20,000 | (+) 15,000 | (+) 14.3 |
| Gross Profit (P) | 65,000 | 70,400 | (+) 5,400 | (+) 8.3 |
| Administrative Expenses (A) | 13,200 | 14,960 | (+) 1,760 | (+) 13.3 |
| Selling Expenses: | | | | |
| Advertisement Expenses | 3,000 | 4,000 | (+) 1,000 | (+) 33.3 |
| Other Selling Expenses | 40,800 | 41,800 | (+) 1,000 | (+) 2.5 |
| Total selling expenses [B] | 43,800 | 45,800 | (+) 2,000 | (+) 4.6 |
| Operating Expenses [A +B] | 57,000 | 60,760 | (+) 3,760 | (+) 6.6 |
| Operating Profit (D) [D = P – | | | | |
| (A+B)] | 8,000 | 9,640 | (+) 1,640 | (+) 20.5 |
| Other incomes [E] | 6,400 | 9,200 | (+) 2,800 | (+) 43.8 |
| Others Expenses [F] | 6,800 | 4,800 | (-) 2,000 | (-) 29.4 |
| Profit Before tax (PBT) | | | | |
| [PBT = D + E - F] | 7,600 | 14,040 | (+) 16,440 | 84.7 |
| Income Tax (T) | 3,800 | 6,200 | (+) 2,400 | (+) 63.2 |
| Profit After Tax (PAT) | | | | |
| [PAT = PBT - T] | 3,800 | 7,840 | (+) 4,040 | (+) 106.3 |

Notes: calculation for percentages Increase (+) (or) decrease (-):

- (i) ₹20,400 × 100 ₹1,70,000 = 12%
- (ii) ₹15,000 = 14.3% and so on

Comparative Income statement shows the Income & expenses of two periods of some company absolute changes of each items for the year ended 31.03.2013 over 31.03.2012 and also shows percentage changes. The following comments can be made on the performance of A Ltd.

- (i) Sales of A Ltd. has been increased by ₹20,400 during the year 2012 2013 over 2011 2012. But cost of goods sold has also increased by rs.15,000 in the same period i. e., sales has Improved by 12% and cost of goods sold has Increased by 14.3%. So gross profit has not improved markedly. Cost of goods sold may increase due to higher quantity of sales (or) due to high Input cost As sale value has increased so it is clear cost of goods sold has increased due to higher quantity of sales. If such quantity has been sold at previous price then sales value has been increased with higher Amount. But here sales value has not increased significantly. It indicates that the addition in sales has been due to lowering sale price. It is also clear from advertisement expenses. The Increase in net sales (12%). It indicates there was tough selling market where mass advertisement was necessary and reduction of selling price was necessary in order to higher quantity of sales, such situation may also arise due to new product launching where huge advertisement is necessary & reduction of sale price is necessary.
- (ii) There has been a substantial Improvement in other incomes, both in relative term (43.8%) and it absolute term (₹2,800), similarly, there has been a considerable reduction in other expenses in relative term (₹2,800) as well as in absolute term (₹ 2,000). These items have been responsible for the increase in profit before tax for the period under study by 84.7%. It Implies that more emphasis has been given by management of the company on caring non- operating profits as compared to the operating profits.

| | | Amount i | n₹ Lakhs |
|---|--------|----------|----------|
| | ₹ | ₹ | ₹ |
| I. Cash flows from operating Activities | | | |
| Net profit | | | |
| Net profit for 2013 – 14 | 240.00 | | |
| Less: Net profit for 2012 – 13 | 225.00 | 15.00 | |
| Add: Non operating expenses | | | |
| Depreciation on plant & Machinery | 17.50 | | |
| Debenture Interest | 4.50 | | |
| Provision for Taxation | 38.00 | | |
| Proposed Dividend | 23.25 | 83.25 | |
| | | 98.25 | |
| Less: Non – operating Income | | Nil | |
| | | 98.25 | |
| Add: Decrease in current Assets (or) Increase in current | | | |
| liabilities | | Nil | |
| | | 98.25 | |
| Less: Increase in current Assets (or) decrease in current | | | |
| liabilities | | | |
| Increase in stock | 22.5 | | |

3. (a) In the Books of Ignu Ltd.

Cash flow statement for the year ended 31.03.2014

Answer to MTP_Final_Syllabus 2012_Jun2016_Set 1

| Increase in Debtor | 30.00 | 52.50 | |
|--|-------|-------|-----------|
| | | 45.75 | |
| Less: Income tax paid | | 21.50 | 24.25 |
| Net cash flow for operating Activities | | | |
| II. Cash flow from Investing activities: | | | |
| Purchase of plant Ex. Machinery | 47.50 | | |
| Purchase of Free hold property | 15.00 | | |
| Net cash flow from Investing Activities | | | (-) 62.5 |
| III. Cash flows from Financial Activities: | | | |
| Repayment of mortgage Loan | 12.75 | | |
| Payment of Interest | 4.50 | | |
| Payment of Dividend | 22.50 | | |
| Net cash flows from financial activities | | | (-) 39.75 |
| Net Decrease in cash (or) cash equivalent | | | (-) 78.00 |
| Add: cash & cash Equivalent at the beginning | | | |
| (₹10.5 lakhs – ₹15.00 lakhs) | | | (-) 4.5 |
| Cash (or) cash equivalent at the end | | | (-) 82.5 |

| Dr. | Plant and Machinery Account | | (₹ In lakhs) Cr. |
|------------------|-----------------------------|-----------------|------------------|
| Particulars | ₹ | Particulars | ₹ |
| To balance b/d | 135.00 | By Depreciation | 17.05 |
| To bank Purchase | 47.05 | By balance c/d | 165.00 |
| | 182.50 | | 182.50 |

| Dr. | Provision for taxation Account | | (₹ In lakhs) Cr. |
|----------------|--------------------------------|----------------------|------------------|
| Particulars | ₹ | Particulars | ₹ |
| To Bank A/c | 21.50 | By Balance b/d | 21.00 |
| To Balance c/d | 37.50 | By P & L a/c/reserve | 38.00 |
| | 59.00 | | 59.00 |

Note:

As per AS -3, Interest on Debentures should be considered under financing Activities. But Interest on mortgage loan is treated as an item of operating activities as such loan is issued to be used for working capital purposes (Rate of interest on such loan is not given) Comments and Interpretation: -

From the above cash flow statement it becomes clear that the amount of bank overdraft has been taken as a result of the following: capital expenditure ₹62.50 lakhs + repayment of loan ₹12.75 lakhs and payment of interest and dividend over operating cash flow (₹24.25 lakhs – ₹4.5 lakhs – ₹22.50 lakhs) ₹2.75 lakhs = ₹78 lakhs. Since the bank overdraft is costly of finance it is not advisable to Expand the firm depending on such sources – more over a conservation policy should be adopted for using long term debts which is evident from debt – equity ratio (i. e.) $\frac{₹89.25 \text{ lakhs} \times 100}{₹540.00 \text{ lakhs}} = 16.53\%$. It is

suggested that the firm may have raised funds for capital expenditure purposes from long term debts. Thus bank overdraft could be reduced by 50% by raising the proceeds from long- term debts.

In order to avoid the liquidity arises in future, the firm may have to Improve its quality of earning by the proper utilization of current assets.

3. (b) Macro-Economic Financial Model:

The macroeconomic Financial Models are usually econometric analysis based, built by government departments, universities or economic consulting firms, and used to forecast the economy of a country. Macroeconomic models are used to analyze the like effect of government policy decisions on variables such as foreign exchange rates, interest rates, disposable income and the gross national product (GNP).

4. (a) Before making any comment on the Rations, the Rations should computed first along with their components which are:

1. Long –term Debts:

| | ₹ |
|------------|----------|
| Debentures | 5,00,000 |
| | 500,000 |

2. Shareholders (or) Proprietors Fund

| | ₹ |
|--------------------|-----------|
| Share capital | 15,00,000 |
| Reserves & surplus | 6,00,000 |
| | 21,00,000 |

3. Current Assets

| | ₹ |
|------------------------------|-----------|
| Stock | 9,10,000 |
| Book Debts | 12,40,000 |
| Investment (short term cash) | 1,60,000 |
| cash | 40,000 |
| | 23,50,000 |

4. Current Liabilities

| | ₹ |
|------------------|-----------|
| Bank overdraft | 12,00,000 |
| Sundry Creditors | 2,00,000 |
| | 14,0,000 |

5. Total Assets

| | ₹ |
|----------------|-----------|
| Fixed Assets | 16,50,000 |
| Current Assets | 23,50,000 |
| | 40,00,000 |

6. Cost of Goods sold

Sales – gross profit ₹74,40,000 – ₹7,44,000 ₹66,96,000 Computation of ratios & comment on Them (A) Debt – Equity ratio Debt Equity ratio = $\frac{\text{Long term Debts}}{\text{Pr oprietors Funds}} = \frac{₹5,00,000}{₹21,00,000} = 0.24:1$

This ratio expresses the claims of long -term creditors and debenture holders against the assets of the company. Since it is very low it is favorable from the standpoint of long -term creditors which supplies maximum safety for them, i. e., they are highly secured.

(B) Current ratio

Current Ratio = $\frac{\text{Current Assets}}{\text{Current Liabilities}} = \frac{₹23,50,000}{14,00,000} = 1.68:1$

Since this ratio is less than the normal current ratio of 2: 1 it reveals that the liquidity position is not at all satisfactory i. e., the company is able to pay its maturing obligations as soon as it becomes due as only ₹1.68 of current assets are available against each rupee of current liability.

(C) Proprietary ratio:

Proprietary Ratio = $\frac{\text{Proprietarys Funds}}{\text{Total Assets}} = \frac{₹21,00,000}{₹40,00,000} = 0.53:1$

This ratio Indicates that the company is not so dependent on outsiders fund (or) external equities, as more than 50% is being contributed by the shareholders.

(D) G. P. Ratio

G. P. Ratio = $\frac{\text{Gross Profit} \times 100}{\text{Sales}} = \frac{₹7,44,000 \times 100}{74,40,000} = 10\%$

This ratio is very low and, as such, not at all satisfactory since it is less than the normal ratio of 25%. This low ratio indicates that there are unfavorable conditions like increase in cost of production (or) sales and decrease in management efficiency and so on.

(E) Debtors Turnover Ratio:

Debtors Turnover Ratio = $\frac{\text{Debtors} \times 365}{\text{Sales}} = \frac{\text{₹12,40,000} \times 365}{74,40,000} = 61 \text{ days.}$

This ratio indicates that the collection policy of the company is faulty since it exceeds its normal level.

(F) Stock – Turnover ratio = $\frac{\text{Cost of Goods sold}}{(\text{Avg.}) \text{ Stock}} = \frac{\text{₹66,96,000}}{\text{₹9,10,000}} = 7.36 \text{ times}$

Since this ratio satisfies normal ratio of 5th times on an average and hence the efficiency of the management is found to be good.

Beta (B)

(b) Computations of operating leverage

 $DOI = \frac{\% \text{ change in EBIT}}{2}$

| % changein Sales | | |
|------------------|--|--|
| Firm DOL | | |
| | | |

| PQR Ltd. | $\frac{25}{27} = 0.93$ | 1 |
|----------|------------------------|------|
| RST Ltd. | $\frac{32}{25} = 1.28$ | 1.15 |

| TUV Ltd. | $\frac{36}{23} = 1.57$ | 1.3 |
|----------|------------------------|-----|
| WYZ Ltd. | $\frac{40}{21} = 1.9$ | 1.4 |

5. (a) Net Assets Method

| Assets | ₹ (in lakhs) |
|---------------------|--------------|
| Land and building | 96 |
| Plant and machinery | 100 |
| Investments | 10 |
| Stock | 20 |
| Debtors | 15 |
| Cash at – bank | 5 |
| Total Assets | 246 |
| Less: Creditors | 30 |
| Net Assets | 216 |

Value per share

Numbers of shares = $\frac{100 \text{ lakhs}}{10}$ = 10 lakhs

Value per share = net Assets/ No. of shares = ₹216 lakhs 10 lakhs = ₹21.60

Profit Earning capacity method

| | ₹ (in lakhs) |
|--|--------------|
| Profit before tax | 64 |
| Less: Extra ordinary Income | 4 |
| Less: investment income not likely to recur | 1 |
| Less: Additional expenses for forth coming years | |
| Advertisement | 5 |
| Less: Depreciation on revaluation | 6 |
| Expected earning before taxes | 48 |
| Less: Income taxes @ 30% | 14.4 |
| Future maintainable profit | 33.6 |

Value of Business = $\frac{\text{Future Maintainable Profit}}{\text{Capitalization factor}} = \frac{33.6}{0.16} = ₹210 \text{ lakhs}$ Subtracting external liabilities we get net value of business. Value of share would be net value of business divided by number of shares = $\frac{₹210 \text{ lakhs} - ₹30 \text{ lakhs}}{10 \text{ lakhs}} = ₹18.00$

Computation of fair price of share:

| | え |
|---|-----------------|
| Value as per net Assets method | 21.6 |
| Value as per profit earning capacity (capitalization) Method | 18.0 |
| Fair price = Average of the above two = $\frac{21.60+18.00}{2}$ | 19.80 per share |

 (b) (i) Long terms loan funds = Total long term funds less equity funds = 320 - 210 = ₹110 lakhs.

Interest + 18% there on ₹110 lakhs × 18% = ₹19.80 lakhs

(ii) Computation of Future maintainable profit (₹ Lakhs)

| Particulars | Owners funds | Total funds |
|---------------------------------------|--------------|-------------|
| Profit before interest and tax | 125.00 | 125.00 |
| Less: interest on Long Loans | 19.80 | NA. |
| Future maintainable profit before tax | 105.20 | 125.00 |
| Less: tax expense at 30% | 31.56 | 37.50 |
| Future maintainable profit after tax | 73.64 | 87.50 |

(iii) Computation of Goodwill under different approaches (₹ Lakhs)

| Particulars | Owner funds | Total funds |
|--|-------------|-------------|
| (a) Future maintainable profits after tax | 73.64 | 87.50 |
| (b) Normal rate of return | 24% | 19% |
| (c) Normal capital employed = $(a \div b)$ | 306.83 | 460.52 |
| (d) Actual capital employed (given) | 210.00 | 320.00 |
| (e) Goodwill = (c - d) | 96.83 | 140.52 |

Hence, Leverage effect on goodwill = ₹140.52 - ₹96.83 = ₹43.69 lakhs

6. (a) Share holders fund

| Particulars | Fortune Ltd. | Fortune Pharma Ltd. | Fortune India Ltd. (FMCG) ltd. |
|---------------------|--------------|------------------------|-----------------------------------|
| Assets | 70,000 | 25,100 | 44,900 |
| Outside liabilities | 25,000 | 4,100 | 20,900 |
| Net worth | 45,000 | 21,000 | 24,000 |

(1) Calculation of shares of Fortune Pharma Ltd. to be issued to shareholders of Fortune India Ltd.

| | Fortune Pharma Itd. |
|------------------------------------|---------------------|
| Estimated profit (₹ In lakhs) | 1470 |
| Estimated market price (₹) | 24.50 |
| Estimated P/E | 25 |
| Estimated EPS (₹) (24.50 ÷ 25) | 0.98 |
| No of shares (lakhs) (1470 ÷ 0.98) | 1500 |

Hence, ratio is share of Fortune Pharma Ltd. for 2 shares of fortune India Ltd. (2) Expected market Price of Fortune India Itd.:

| | Fortune India(FMCG) Itd. |
|---------------------------------|--------------------------|
| Estimated profit (₹ In lakhs) | 11,400 |
| No. of equity shares (in lakhs) | 3,000 |
| Estimated EPS (₹) | 3.8 |
| Estimated P/E | 42 |
| Estimated market price (₹) | 159.6 |

(3) Book value per share

| Particulars | Fortune Pharma Ltd | Fortune India (FMCG) Ltd. |
|--------------------------|--------------------|---------------------------|
| Net worth (₹ In lakhs) | 21,000 | 24,000 |
| No. of shares (in lakhs) | 1,500 | 3,000 |
| Book value of shares (₹) | 14 | 8 |

6. (b) (i) Value of equity =
$$\left(\frac{3.5}{14\%}\right) \times 25,000 = 6,25,000$$

(ii) value of equity = $\left(\frac{3.5(1+0.08)}{0.14-0.08}\right) \times 25,000 = 15,75,000$

7. (a) Alternative -1. If brand value is Ignored

| | (₹ in lakhs) |
|---------------------------------------|--------------|
| Purchase consideration | 2,000 |
| Less: Net Assets acquired (500 + 380) | 880 |
| Goodwill | 1,120 |

Alternative – 2 If brand value is considered

| Purchase consideration | 2,000 |
|---------------------------|-------|
| Less: Net Assets acquired | 1,000 |
| Goodwill | 1,000 |

In India no company has so far attempted to recognize brand value separately from goodwill on acquisition. This is because of two reasons:

- (a) Difficulty in measuring brand; and
- (b) Absence of statutory (or) regulatory requirements to recognize brand separately from goodwill. But with growing importance of brand both nationally and internationally, many multinational companies started recognizing brand separately.

(b) (i) Discounted Value of Future PAT and CEAT (₹ Lakhs)

| Year | PVIF at 10% | ΡΑΤ | Discounted PAT | CFAT | Discounted CFAT |
|-------|----------------------|----------------------|-------------------|----------------------|--------------------|
| 1 | 0.9091 | 100.00 + 8% = 108.00 | 98.18 | 125.00 + 7% = 133.75 | 212.59 |
| 2 | 0.8264 | 108.00 + 8% = 116.64 | 96.39 | 133.75 + 7% = 143.11 | 118.27 |
| 3 | 0.7513 | 116.64 + 8% = 125.97 | 94.64 | 143.11 + 7% = 153.13 | 115.04 |
| 4 | 0.6830 | 125.97 + 8% = 136.05 | 92.92 | 153.13 + 7% = 163.85 | 111.91 |
| 5 | 0.6209 | 136.05 + 8% = 146.93 | 91.23 | 163.85 + 7% = 175.32 | 108.86 |
| 6 | 0.5645 | 146.93 + 8% = 158.69 | 89.58 | 175.32 + 7% = 187.59 | 105.90 |
| 7 | 0.5132 | 158.69 + 8% = 171.38 | 87.95 | 187.59 + 7% = 200.72 | 103.01 |
| 8 | 0.4665 | 171.38 + 8% = 185.09 | 86.34 | 200.72 + 7% = 214.78 | 100.09 |
| Total | Value of Business | | 737.23 | | 884.77 |

(ii) Capitalisation of current PAT/CFAT (₹ Lakhs)

| Particulars | PAT | CFAT |
|------------------------------|---------------|---------------|
| (a) PAT /CFAT for the period | ₹100.00 lakhs | ₹125.00 lakhs |

Answer to MTP_Final_Syllabus 2012_Jun2016_Set 1

| (b) Earnings per share = PAT ÷ Number of equity shares | ₹100.00 per share | ₹100 per share |
|--|-------------------|-----------------|
| (c) Market price per share | ₹900 per share | ₹900 per shares |
| (d) P/E ratio = MPS/EPS | 9 | 9 |
| (e) Capitalization rate = 1 ÷ PE ratio | 11.11% | 11.11% |
| (f) Value of Business = PAT (or) CFAT ÷ Capitalization Rate | ₹900.09 lakhs | ₹1,125.11 lakhs |

(iii). Summary of Value of Business under Different Methods

| Particulars | ₹ In Lakhs |
|--|-----------------|
| (a) Discounted Value of Future PAT of 8 years | ₹737.23 lakhs |
| (b) Discounted Value of Future CFAT of 8 years | ₹884.77 lakhs |
| (c) Capitalisation of current PAT at 8.33% | ₹900.09 lakhs |
| (d) Capitalization of current CFAT at 8.33% | ₹1,125.11 lakhs |
| (e) Simple Average of all the above = $(a + b + c + d) \div 4$ | ₹911.80 lakhs |

(c) As per Altman's Model (1968) of corporate distress Prediction

 $Z = 1.2 x_1 + 1.4 x_2 + 3.3 x_3 + 0.6 x_4 + 1.0 x_5$

Here, the five variables are as follows:

 X_1 = Working capital to Total Assets = 0.45

 X_2 = retained Earnings to total Assets = 0.25

 $X_3 = EBIT$ to total Assets = 0.30

X₄ = market value of equity shares to Book value of Total debt = 2.50

 X_5 = Sales to Total Assets = 3 times

Hence, $Z - \text{score} = (1.2 \times 0.45) + (1.4 \times 0.25) + (3.3 \times 0.30) + (0.6 \times 2.50) + 1 \times 3$

= 0.54 + 0.35 + 0.99 + 1.50 + 3 = 6.38

As calculated value of Z – score is much higher than 2.99, it can be strongly predicted that the company is a non- bankrupt company (i. e.) Non- failed company)

8. (a) Write a short note any four of the following

(i) **Du-Pont analysis**

Du Pont Analysis is a method of performance measurement that was started by the DuPont Corporation. The Du Pont analysis breaks down Return on Equity (that is, the returns that investors receive from the firm) into three distinct elements. This analysis enables the analyst to understand the source of superior (or inferior) return by comparison with companies in similar industries (or between industries). The Du Pont identity is less useful for industries, such as investment banking, in which the underlying elements are not meaningful. The company's return on assets, ROA (= net income/assets), can be expressed as:

ROA = (Net Income/Revenue) × (Revenue/Assets) = Profit Margin x Asset Turnover And the company's return on equity, ROE (=net income/equity), can be expressed as

Academics Department, The Institute of Cost Accountants of India (Statutory Body under an Act of Parliament) Page 11

ROE = (Net Income/Revenue) × (Revenue/Assets) × (Assets/Equity) = ROA × Equity Multiplier

Both the company's profitability (as measured in terms of profit margin) and efficiency (as measured in terms of asset turnover) determine its ROA. This ROA, along with the company's financial leverage (as measured in terms of its equity multiplier), contributes to its ROE. The changes in the company's ROE are to be noted and explained through its profit margin, asset turnover, and equity multiplier over time. The objective is to identify the company's strong area that can be capitalized upon and/or its weak area that must be improved upon.

(ii) Hostile Takeover Bids

The acquiring firm, without the knowledge and consent of the management of the target firm, may unilaterally pursue the efforts to gain a controlling interest in the target firm, by purchasing shares of the later firm at the stock exchanges. Such case of merger/acquisition is popularity known as 'raid'. The Caparo group of the U.K. made a hostile takeover bid to takeover DCM Ltd. and Escorts Ltd. Similarly, some other NRI's have also made hostile bid to takeover some other Indian companies. The new takeover code, as announced by SEBI deals with the hostile bids.

(iii) Principles of Valuation

- (a) Principles of Substitution
- (b) Principle of Alternative
- (c) Principle of Time Value of Money
- (d) Principle of Expectation
- (e) Principle of Risk & Return
- (f) Principle of Reasonableness and Reconciliation of value.

(iv) Limitation of DCF Valuation

This technique requires lot of information. The inputs and information are difficult to estimate and can be valuer. This technique cannot differentiate between over and undervalued stocks. It is difficult to apply this technique in the following scenarios:

- **Negative earnings firms:** For such firms, estimating future cash flows is difficult to do, since there is a strong probability of insolvency and failure. DCF does not work well since under this technique the firm is valued as a going concern which provides positive cash flows to its investors.
- **Cyclical Firms:** For such firms earnings follow cyclical trends. Discounting smoothes the cash flows. It is very difficult to predict the timing and duration of the economic situation. The effect of cyclical situation on these firms is neither avoidable nor separable. Therefore, there are economic biases in valuations of these firms.
- Firms with un/under utilized assets: DCF valuation reflects the value of all assets that produce cash flows. If a firm has assets that are un/under utilized that do not produce any cash flows, the values of these assets will not be reflected in the value obtained from discounting expected future cash flows. But, the values of these assets can always be obtained externally, and added on to the value obtained from discounted cash flow valuation.
- Firms with patents or product options: Firms often have unutilized patents or license that

do not produce any current cash flows and are not expected to produce cash flows in the near future, but, nevertheless, these are valuable. If values of such patents are ignored then value obtained from discounting expected cash flows to the firm will understate the true value of the firm.

- Firms in the process of restructuring: Firms in the process of restructuring often sell, acquire other assets, and change their capital structure and sometimes dividend policy. Some of them also change their status from private to public. Each of these changes makes estimating of future cash flows more difficult and affects the riskiness of the firm. Using historical data for such firms can give a misleading picture of the firm's value. In case of acquisitions if there is synergy then its value is to be estimated. This will require assumptions about the synergy and its effect on cash flows.
- **Private Firms:** The measurement of risk to be use in estimating discount rates is the problem since securities in private firms are not traded, this is not possible. One solution is to look at the riskiness of comparable firms, which are publicly traded. The other is to relate the measure of risk to accounting variables, which are available for the private firm.

(v) Financial Forecasting

Financial forecasting is useful in company valuation, credit evaluation, financial distress prediction, security analysis, mergers and acquisitions analysis, and corporate financial policy analysis.

Forecasting requires a willingness to make assumptions, which are the basic input in any forecast. An unwillingness to make assumptions about the future is the equivalent of an unwillingness to forecast. Any time a forecast is made, assumptions are made as well, whether or not the forecaster realizes it. A good financial forecast should have two attributes:

(I) It should include a list of all the relevant and significant assumptions that were used in making it. An assumption is relevant if it is likely to occur and to have a direct impact on the financial variable being forecasted. An assumption is significant if it is likely to occur and if the magnitude of its impact on the financial variable under study will be too large.

In summary, assumptions underlying a forecast should be relevant and significant, and they should be identified clearly. It should be internally consistent – that is, it should flow directly from the assumptions made. A forecast is internally consistent when it follows in a direct, logical manner from the assumptions stated.

(II) Sensitivity Analysis – It is a process by which each assumption is adjusted and the impact of the adjustment on the forecast is examined.