UNIT-2
FINANCIAL DECISIONS

1. Explain the long-term sources of business finance.

Ans. On the basis of requirements of finance for various purposes and uses at different periods of time it may be classified as long term, medium term & short term finance.
Long Term Finances are required for invest in fixed assets such as building, machinery, furniture and financing for extension programme etc. Funds which are required to be invested in a business for a long period of time, generally more than 5 years are known as long term finance.

The main sources of such finance are equity shares, preference shares, debentures, retained earnings & finance from financial institutions.

These sources of finance discussed below:

(i)Equity shares: These shares are also known as ordinary shares represent the owner's capital in a company. The holders of these shares are the real owners of a company. Equity shareholders are paid dividend after paying it to the preference shareholders. The rate of dividend of these shares depends on the amount of profit of the company. Equity share capital cannot be redeemed during the life of the company.

(ii)Preference shares: These shares have certain preference as compared to other types of shares. These shares are given two preferences:
(a) Preferential right to receive dividend before they are paid to equity shareholders.
(b) Preferential right has to return of capital in the event of liquidation of the company.

(iii)Retained Earnings: It constitute most economical source of long term financing. It does not give any obligation on the company and be used for stabilizing the rate of dividend. It is a self-financing method of business enterprise.

(iv) Debentures: A debenture is a debt certificate issued by the company to its holders. It is an acknowledgement of a debt. It is a very important long term source to the company because of lower rate of interest, certainty of finance, tax benefit, freedom in management etc.

(v)Long term Loan: Long term loan from govt., special financial institutions and international agencies are an important source of long term finance available to the corporate sectors or companies.

(vi)Public Deposit: Another source of raising funds by the company is through public deposits. These funds are generally available for medium term & long term periods. The companies pay a fixed rate of interest on these deposits. The interest rates are however higher for deposits of long term periods.

2. What is cost of capital? Explain the importance of cost of capital.

Ans. The cost of capital of a firm is the minimum rate of return expected by its investors. It is the weighted average cost of various sources of finance used by a firm. Cost of capital for a firm may be defined as the cost of obtaining funds, i.e., the average rate of return that the investors in a firm would expect for supplying funds to the firm.

In the words of Hunt, William and Donaldson, "Cost of capital may be defined as the rate that must be earned on the net proceeds to provide the cost elements of the burden at the time they are due"

Significance of Cost of Capital: The concept of cost of capital plays a vital role in decision-making process of financial management. The financial leverage, capital structure, dividend policy, working capital management, financial decision, appraisal of financial performance of top management etc. are greatly influenced by the cost of capital.
The significance or importance of cost of capital may be stated in the following ways:

(i)Maximisation of the Value of the Firm: For the purpose of maximisation of value of the firm, a firm tries to minimise the average cost of capital. There should be judicious mix of debt and equity in the capital structure of a firm so that the business does not to bear undue financial risk.

(ii)Capital Budgeting Decisions: Proper estimate of cost of capital is important for a firm in taking capital budgeting decisions. Generally cost of capital is the discount rate used in evaluating the desirability of the investment project. In the internal rate of return method, the project will be accepted if it has a rate of return greater than the cost of capital.
In calculating the net present value of the expected future cash flows from the project, the cost of capital is used as the rate of discounting. Therefore, cost of capital acts as a standard for allocating the firm's investible funds in the most optimum manner. For this reason, cost of capital is also referred to as cut-off rate, target rate, hurdle rate, minimum required rate of return etc.

(iii)Decisions Regarding Leasing: Estimation of cost of capital is necessary in taking leasing decisions of business concern.

(iv)Management of Working Capital: In management of working capital the cost of capital may be used to calculate the cost of carrying investment in receivables and to evaluate alternative policies regarding receivables. It is also used in inventory management also.

(v)Dividend Decisions: Cost of capital is significant factor in taking dividend decisions. The dividend policy of a firm should be formulated according to the nature of the firm— whether it is a growth firm, normal firm or declining firm. However, the nature of the firm is determined by comparing the internal rate of return (r) and the cost of capital (k) i.e., $r > k$, $r = k$, or $r < k$ which indicate growth firm, normal firm and decline firm, respectively.

(vi)Determination of Capital Structure: Cost of capital influences the capital structure of a firm. In designing optimum capital structure that is the proportion of debt and equity, due importance is

given to the overall or weighted average cost of capital of the firm. The objective of the firm should be to choose such a mix of debt and equity so that the overall cost of capital is minimised.

(vii)Evaluation of Financial Performance: The concept of cost of capital can be used to evaluate the financial performance of top management. This can be done by comparing the actual profitability of the investment project undertaken by the firm with the overall cost of capital.

3. Explain the Problem in Determination of Cost of Capital.

Ans. The Problems in Determination of Cost of Capital are:

1. Conceptual Controversies Regarding the Relationship between the Cost of Capital and the Capital Structure: Different theories have been propounded by different authors explaining the relationship between capital structure, cost of capital and the value of the firm.
This has resulted into various conceptual difficulties. According to the Net Income Approach and the traditional theories both the cost of capital as well the value of the firm have a direct relationship with the method and level of financing. In their opinion, a firm can minimise the weighted average cost of capital and increase the value of the firm by using debt financing.

On the other hand, Net Operating Income and Modigliani and Miller Approach prove that the cost of capital is not affected by changes in the capital structure or say that debt equity mix is irrelevant in determination of cost of capital and the value of a firm.

2. Historic Cost and Future Cost: Another problem in the determination of cost of capital arises on account of the difference of opinion as regards the concept of cost itself. It is argued that historic costs are book costs which are related to the past and are irrelevant in the decision-making process. In their opinion, future estimated costs are more relevant for decision-making. In the same manner, arguments are given in favour of specific cost and composite cost as well as explicit cost and implicit cost and the marginal cost.

3. Problems in Computation of Cost of Equity: The computation of cost of equity capital depends upon the expected rate of return by its investors. But the quantification of the expectations of equity shareholders is a very difficult task because there are many factors which influence their valuation about a firm.

4. Problems in Computation of Cost of Retained Earnings: It is sometimes argued that retained earnings do not involve any cost. But in reality, it is the opportunity cost of dividends foregone by its shareholders. Since different shareholders may have different opportunities for investing their dividends, it becomes very difficult to compute the cost of retained earnings.

5. Problems in Assigning Weights: For determining the weighted average cost of capital, weights have to be assigned to the specific cost of individual sources of finance. The choice of using the book value of the source or the market value of the source poses another problem in the determination of cost of capital.

4. Name and explain the methods of computation of cost of capital.

Ans. Computation of overall cost of capital of a firm involves:

A. Computation of cost of specific source of finance, and

B. Computation of Weighted Average Cost of Capital.

A. Computation of cost of specific source of finance:

1. Cost of Debt, Bonds and Debentures: Debt may be classified as:

(i) Cost Perpetual or Irredeemable Debt: The cost of debt is the rate of interest payable on debt. The cost of irredeemable debt may be calculated as follows:

(a) Before Tax Cost of Debt:

$$K_{db} = \frac{I}{NP}$$

Where, K_{db} = Before tax cost of debt

I = Interest

NP = Net Proceeds

(b) After Tax Cost of Debt:

$$K_{da} = \frac{I}{NP}(1-t)$$

Where, K_{da} = After tax cost of debt

I = Interest

NP = Net Proceeds

t = Rate of tax

(ii) Cost Redeemable Debt: Usually, the debt is issued to be redeemed after a certain period during the life time of a firm. Such a debt is known as redeemable debt. The cost of redeemable debt capital may be computed by using yield to maturity, also called internal rate of return or trial and error method. The approximate cost of redeemable debt can also be computed by using the following formula:

(a) Before Tax Cost of Debt:

$$K_{db} = \frac{I+\frac{1}{n}(RV-NP)}{\frac{1}{2}(RV+NP)}$$

Where, K_{db} = Before tax cost of debt

I = Interest

n = No. of Years in which debt is to be redeemed.

NP = Net Proceeds

RV = Redeemable Value of Debt

(a) After Tax Cost of Debt:

$$K_{da} = \frac{I(1-t)+\frac{1}{n}(RV-NP)}{\frac{1}{2}(RV+NP)}$$

Where, K_{db} = After tax cost of debt

I = Interest

n = No. of Years in which debt is to be redeemed.

t = Rate of tax

NP = Net Proceeds

RV = Redeemable Value of Debt.

2. Cost of Preference Capital: Cost of preference share capital is that part of cost of capital in which we calculate the amount which is payable to preference shareholders in the form of dividend with fixed rate.

(i)Cost of Irredeemable Preference Shares: The preference share may be treated as a perpetual security if it is irredeemable. Thus, its cost is given by the following equation:

$$K_p = \frac{D}{NP}$$

Where, K_p = Cost of Preference Capital

D = Dividend

NP = Net Proceeds

(ii)Cost of Redeemable Preference Shares: Sometimes Redeemable Preference Shares are issued which can be redeemed or cancelled on maturity.

$$K_{pr} = \frac{D+\frac{1}{n}(RV-NP)}{\frac{1}{2}(RV+NP)}$$

Where, K_{pr} = Cost of Redeemable Preference Capital

D = Dividend

n = No. of Years in which Preference Shares is to be redeemed.

NP = Net Proceeds

RV = Redeemable Value of Preference Shares.

3. Cost of Equity Capital: Cost of equity refers to a shareholder's required rate of return for their various equity investments. In other words, it's the compensation they expect from the risk they took in investing in the company.

The cost of equity share capital can be computed in the following ways:

(i)Dividend Yield Method or Dividend/Price Ratio Method: According to this method, the cost of equity capital is the discount rate that equates the present value of expected future dividends per share with the net proceeds (or current market price) of a share. Symbolically,

$$K_e = \frac{D}{NP} \text{ or } \frac{D}{MP}$$

Where,

Ke = Cost of Equity Capital

D = Expected dividend per share

NP = Net proceeds per share

MP = Market Price per share.

(b) Dividend Yield Plus Growth in Dividend Method: When the dividends of the firm are expected to grow at a constant rate and the dividend-pay-out ratio is constant this method may be used to compute the cost of equity capital. According to this method the cost of equity capital is based on the dividends and the growth rate.

$$K_e = \frac{D_1}{NP/MP} + G$$

$$= \frac{D_0\,(1+G)}{NP/MP} + G$$

Where,

K_e = Cost of equity capital

D_1 = Expected Dividend per share at the end of the year

D_0 = Previous year's dividend.

NP = Net proceeds per share

G= Rate of growth in dividends

MP = Market Price per share.

(iii)Earning Yield Method/Earning Price Ratio: According to this method, the cost of equity capital is the discount rate that equates the present values of expected future earnings per share with the net proceeds (or, current market price) of a share. Symbolically:

$$K_e = \frac{EPS}{NP/MP}$$

Where,

K_e = Cost of equity capital

EPS = Earnings per share

NP = Net proceeds per share

MP = Market Price per share.

4. Cost of retained earnings: It is sometimes argued that retained earnings do not involve any cost because a firm is not required to pay dividends on retained earnings. The cost of retained earnings may be considered as the rate of return which the existing shareholders can obtain by investing the after-tax dividends in alternative opportunity of equal qualities. It is, thus, the opportunity cost of dividends foregone by the shareholders.

Cost of retained earnings can be computed with the help of following formula:

$$K_e = \frac{D_1}{NP/MP} + G$$

Where,

K_e = Cost of equity capital

D_1 = Expected Dividend per share at the end of the year

NP = Net proceeds per share

G= Rate of growth in dividends

MP = Market Price per share.

B. Computation of weighted average cost of capital or overall cost of capital: Weighted average cost of capital is the average cost of the costs of various sources of financing, Weighted average cost of capital is also known as composite cost of capital, overall cost of capital or average cost of capital. Once the specific cost of individual sources of finance is determined, we can compute the weighted average cost of capital by putting weights to the specific costs of capital in proportion of the various sources of funds to the total.

However, the market value weights suffer from the following limitations:

(i) It is very difficult to determine the market values because of frequent fluctuations.

(ii) With the use of market value weights, equity capital gets greater importance.

5. What is marginal cost of capital?

Ans. Sometimes, we may be required to calculate the cost of additional funds to be raised, called the marginal cost of capital. The marginal cost of capital is the weighted average cost of new capital calculated by using the marginal weights. The marginal weights represent the proportion of various sources of funds to be employed in raising additional funds. In case, a firm employs the existing proportion of capital structure and the component costs remain the same the marginal cost of capital shall be equal to the weighted average cost of capital.

6. What is Capital Structure? Explain factors determining the capital structure.

Ans. Capital Structure is referred to as the ratio of different kinds of securities raised by a firm as long-term finance. It refers to the specific mix of debt and equity used to finance a company's assets and operations.

According to Gerestenbeg, "Capital structure of a company refers to the composition or make-up of its capitalisation and it includes all long-term capital resources viz. loans, reserves, shares and bonds."

Factors Determining Capital Structure

(i) Trading on Equity: The word "equity" denotes the ownership of the company. Trading on equity means taking advantage of equity share capital to borrowed funds on reasonable basis. It refers to additional profits that equity shareholders earn because of issuance of debentures and preference shares. It is based on the thought that if the rate of dividend on preference capital and the rate of interest on borrowed capital is lower than the general rate of company's earnings, equity shareholders are at advantage which means a company should go for a judicious blend of preference shares, equity shares as well as debentures. Trading on equity becomes more important when expectations of shareholders are high.

(ii)Degree of control: The consideration of retaining control of the business is an important factor in capital structure decisions. If the existing equity shareholders do not like to dilute the control, they may prefer debt capital to equity capital, as former has no voting rights.

(iii)Flexibility of financial plan: Capital structure of the firm should be flexible. It should adjust itself with the changing condition. A firm should arrange its capital structure in such a way that it can substitute one form of financing by other. Redeemable preference share capital and convertible debentures may be preferred on account of flexibility.

(iv)Choice of investors: The company's policy generally is to have different categories of investors for securities. Therefore, a capital structure should give enough choice to all kind of investors to invest. Bold and adventurous investors generally go for equity shares and loans and debentures are generally raised keeping into mind conscious investors.

(v)Capital market condition- In the lifetime of the company, the market price of the shares has got an important influence. During the depression period, the company's capital structure generally consists of debentures and loans. While in period of boons and inflation, the company's capital should consist of share capital generally equity shares.

(vi)Period of financing- When company wants to raise finance for short period, it goes for loans from banks and other institutions; while for long period it goes for issue of shares and debentures.

(vii)Cost of Capital: Cost of capital means cost of raising the capital from different sources of funds. It is the price paid for using the capital. A business enterprise should generate enough revenue to meet its cost of capital and finance its future growth. The finance manager should consider the cost of each source of fund while designing the capital structure of a company.

(viii)Sizes of a company- Small size business firms capital structure generally consists of loans from banks and retained profits. While on the other hand, big companies having goodwill, stability and an established profit can easily go for issuance of shares and debentures as well as loans and borrowings from financial institutions. The bigger the size, the wider is total capitalization.

(ix)Competition: If a company operates in a business environment with more competition, it should have more equity shares in its capital structure. Their earnings are prone to more fluctuation compared to businesses facing lesser competition.

7. Name the Theories of capital structure

Ans. Different kinds of theories have been propounded by different authors to explain the relationship between capital structure, cost of capital and value of the firm. The main contributors to the theories are Durand, Ezra, Solomon, Modigliani and Miller.

The important theories are:

1. Net Income Approach.

2. Net Operating Income Approach.

3. The Traditional Approach.

4. Modigliani and Miller Approach.

8. Explain the Net Income Approach of Capital Structure.

Ans. According to this approach, a firm can minimise the weighted average cost of capital and increase the value of the firm as well as market price of equity shares by using debt financing to the maximum possible extent. The theory propounds that a company can increase its value and decrease the overall cost of capital by increasing the proportion of debt in its capital structure.

This approach is based upon the following assumptions:
(i) The cost of debt is less than the cost of equity.
(ii) There are no taxes.
(iii) The risk perception of investors is not changed by the use of debt.

The line of argument in favour of net income approach is that as the proportion of debt financing in capital structure increase, the proportion of a less expensive source of funds increases. This results in the decrease in overall (weighted average) cost of capital leading to an increase in the value of the firm. The reasons for assuming cost of debt to be less than the cost of equity are that interest rates are usually lower than dividend rates due to element of risk and the benefit of tax as the interest is deductible expense.

On the other hand, if the proportion of debt financing in the capital structure is reduced or say when the financial leverage is reduced, the weighted average cost of capital of the firm will increase and the total value of the firm will decrease.

The total market value of a firm on the basis of Net Income Approach can be ascertained as below:

V = S+D Where,

V = Total market value of a firm

S = Market value of equity shares

$$= \frac{\text{Earnings Available to Equity Shareholder(NI)}}{\text{Equity capitalisation Rate}}$$

D = Market value of debt.

$$= \frac{EBIT}{V}$$

and, Overall Cost of Capital or Weighted Average Cost of Capital can be calculated as:

$K_e = \frac{EBIT}{V}$

Limitations of net income approach are as follows:

(i)Corporate taxes are not considered.

(ii)It has constant cost of debt (interest rate depends on fund providers).

(iii)Financial risk increases with increase debt.

(iv)Financial leverage increases with increase in equity capitalisation.

9. Explain the Net Operating Approach of Capital Structure.

Ans. This theory as suggested by Durand is another extreme of the effect of leverage on the value of the firm. It is diametrically opposite to the net income approach. According to this approach, change in the capital structure of a company does not affect the market value of the firm and the overall cost of capital remains constant irrespective of the method of financing. It implies that the overall cost of capital remains the same whether the debt-equity mix is 50: 50 or 20:80 or 0:100. Thus, there is nothing as an optimal capital structure and every capital structure is the optimum capital structure

This theory presumes that:

(i) the market capitalises the value of the firm as a whole;

(ii) the business risk remains constant at every level of debt equity mix,

(iii) there are no corporate taxes.

The reasons propounded for such assumptions are that the increased use of debt increases the financial risk of the equity shareholders and hence the cost of equity increases. On the other hand, the cost of debt remains constant with the increasing proportion of debt as the financial risk of the lenders is not affected. Thus, the advantage of using the cheaper source of funds, ie, debt is exactly offset by the increased cost of equity.

According to the Net Operating Income (NOI) Approach, the financing mix is irrelevant and it does not affect the value of the firm.

The value of a firm on the basis of Net Operating Income Approach can be determined as below:

$$V = \frac{EBIT}{K_0}$$

Where,

V = Value of a firm

EBIT = Net operating income or Earnings before interest and tax

K = Overall cost of capital.

The market value of equity, according to this approach is the residual value which is determined by deducting the market value of debentures from the total market value of the firm.

$$S = V - D$$

Where,

S = Market Value of Equity Shares

V = Total Market Value of a firm

D = Market Value of Debt.

Limitations of NOI are as follows:

(i)No corporate tax.

(ii)If cost of debt increases, then financial leverage also increases which also, increases the capital cost.

(iii)Investors will have different view of firm's having high debt in their capital structure.

10. Explain the Traditional Approach of Capital Structure.

Ans. The traditional approach to capital structure suggests that there exists an optimal debt to equity ratio where the overall cost of capital is the minimum and the market value of the firm is the maximum. On either side of this point, changes in the financing mix can bring positive change to the value of the firm. Before this point, the marginal cost of debt is less than the cost of equity and after this point vice-versa.

Assumptions under Traditional Approach:

(i)The rate of interest on debt remains constant for a certain period and thereafter with an increase in leverage, it increases.
(ii)The expected rate by equity shareholders remains constant or increase gradually. After that, the equity shareholders start perceiving a financial risk and then from the optimal point and the expected rate increases speedily.
(iii)As a result of the activity of rate of interest and expected rate of return, the WACC first decreases and then increases. The lowest point on the curve is optimal capital structure.

11. Explain the Modigliani and Miller Approach of Capital Structure.

Ans. Modigliani and Miller (M&M) hypothesis is identical with the Net Operating Income approach if taxes are ignored. However, when corporate taxes are assumed to exist, their hypothesis is similar to the Net Income Approach

(a) In the absence of taxes (Theory of Irrelevance)

The theory proves that the costs of capital is not affected by changes in the capital structure or say that the debt-equity mix is irrelevant in the determination of the total value of a firm. The reason argued is that though debt is cheaper to equity, with increased use of debt as a source of finance, the cost of equity increases. This increase in cost of equity offsets the advantage of the low cost of debt. Thus, although the financial leverage affects the cost of equity, the overall cost of capital remains constant. The theory emphasises the fact that a firm's operating income is a determinant of its total value. The theory further propounds that beyond a certain limit of debt, the cost of debt increases (due to increased financial risk) but the cost of equity falls thereby again balancing the two costs. In the opinion of Modigliani & Miller, two identical firms in all respects except their capital structure cannot have different market values or cost of capital because of arbitrage process. In case two identical firms except for their capital structure have different market values or cost of capital, arbitrage will take place and the investors will engage in 'personal leverage' (i.e. they will buy equity of the other company in preference to the company having lesser value) as against the 'corporate leverage'; and this will again render the two firms to have the same total value.

The M&M approach is based upon the following assumptions:

(i) There are no corporate taxes.

(ii) There is a perfect market.

(iii) Investors act rationally.

(iv) The expected earnings of all the firms have identical risk characteristics.

(v) The cut-off point of investment in a firm is capitalisation rate.

(vi) Risk to investors depends upon the random fluctuations of expected earnings and the possibility that the actual value of the variables may turn out to be different from their best estimates.

(vii) All earnings are distributed to the shareholders.

Basic Propositions of MM Approach

There are three basic propositions of the MM approach:

(i) The overall cost of capital (K) and the total value of the firm (V) are independent of its capital structure. The overall cost of capital and the value of the firm are not affected by the changes in capital structure and it remains constant.

(ii) The cost of equity (Ke) is equal to the pure equity stream plus a premium for financial risk. The financial risk arises on account of the use of debt or fixed interest bearing securities in its capital

(iii) The cut-off rate for investment purposes is totally independent of the way in which an investment is financed.

(b) When the corporate taxes are assumed to exist (Theory of Relevance)

Modigliani and Miller, in their article of 1963 have recognised that the value of the firm will increase or the cost of capital will decrease with the use of debt on account of deductibility of interest charges for tax purpose. Thus, the optimum capital structure can be achieved by maximising the debt mix in the equity of a firm.

Limitations of MM Approach

The MM theory, based upon certain assumptions, proves that there is no relationship between the debt-equity mix (leverage) and the value of the firm. However, most of these assumptions are not true in real practice. The arbitrage process fails to bring equilibrium in the value of the firm in real practice due to the following limitations:

(i) No Perfect Markets: There are no perfect markets and perfect competition never exists.

(ii)Transactions Costs: There are transactions costs involved in switching over the securities. For example, brokerage cost reduces the net amount received by an investor who sells the securities of a levered firm to buy the securities of an unlevered firm. Hence, the arbitrage process may not bring equilibrium in practice.

(iii)Risk Characteristics: The risk characteristics of an individual investor and the firm are not the same. The risk perceptions of personal and corporate leverage are different.

(iv)Costs of Borrowing: The MM theory (arbitrage process) assumes that an individual investor can borrow funds at the same rate of interest at which the levered firm can borrow. However, in real practice the interest rates for individual persons and corporate firms are different. The corporate firms usually borrow at a lower rate of interest as compared to individual investors because of different risk perceptions.

(v)Restrictions on Institutional Investors: There are usually restrictions on institutions investors such as mutual funds, insurance companies, banks etc. to engage in personal leverage. These institutional

investors are not allowed to create personal leverage to buy the shares of unlevered firms. Hence, personal leverage is not a perfect substitute of corporate leverage.

(vi) Corporate Taxes: In real practice, corporate taxes do exist and these affect the value of the firm. As interest on debt is a deductible expense, the effective cost of debt is reduced and the value of the levered firm is more than that of an unlevered firm.

12. What Is Leverage? Explain the different types leverage.

Ans. Leverage results from using borrowed capital as a funding source when investing to expand the firm's asset base and generate returns on risk capital. Leverage is an investment strategy of using borrowed money—specifically, the use of various financial instruments or borrowed capital—to increase the potential return of an investment.
Leverage can also refer to the amount of debt a firm uses to finance assets.

There are three commonly used measures of leverages in financial analysis. These are:
(i) Operating leverage,
(ii) Financial leverage, and
(iii) Combined leverage.

(i) Operating Leverage: Operating Leverage is defined as "the firm's ability to use fixed operating costs to magnify effects of changes in sales on its earnings before interest and taxes". In other words operating leverage is the tendency of the operating profit to vary disproportionately with sales. It is said to exist when a firm has to pay fixed cost regardless of volume of output or sales.
The operating leverage shows the relationship between the changes in sales and the changes in fixed operating income. Thus, the operating leverage has an impact mainly on fixed costs and also on variable costs and contribution. Of course, there will be no operating leverage if there are no fixed operating costs.

The operating leverage can be calculated by adopting the following formula:

$$\text{Operating Leverage} = \frac{\%\ Change\ in\ EBIT}{\%\ Change\ in\ Sales}$$

Or

$$\text{Operating Leverage} = \frac{Contribution}{EBIT}$$

(ii) Financial Leverage: The financial leverage is defined as the ability of a firm to use fixed financial charges to magnify the effects of changes in operating profits, on the firm's earning per share. In other words, the financial leverage is the tendency of a residual net income to vary disproportionately with operating profit. It indicates the change that takes place in the taxable income as a result of change in the operating income.
The financial leverage can be computed by adopting the following formula:

Financial Leverage = $\frac{\%\ Change\ in\ EPS}{\%\ Change\ in\ EBIT}$

Or

Financial Leverage = $\frac{EBIT}{EBT}$

(iii) Combined Leverage: The operating leverage explains the operating risk and financial leverage explains the financial risk of the firm. However, a firm has to look into overall risk or total risk of the firm i.e., operating risk as well as financial risk. Hence, if we combine the operating risk and financial risk, the result is combined leverage. Combined leverage thus expresses the relationship between revenue on account of sales and the taxable income.

The combined leverage can be computed by adopting following formula:

Combined Leverage = $\frac{\%\ Change\ in\ EPS}{\%\ Change\ in\ Sales}$

Or

Combined Leverage = Operating Leverage × Financial Leverage