K.S.R. COLLEGE OF ENGINEERING (Autonomous) **R 2018**

SEMESTER - II

BA18213	**FINANCIAL MANAGEMENT**	L	T	P	C
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Objective(s):

1. *Explain fundamentals of financial management*
2. *Explore investment decision tools used by finance managers*
3. *Illustrate various tools adopted to take organizational finance decisions*
4. *Explain about dividend policy and decisions to the students*
5. *Describe about capital management to students.*

UNIT - I FOUNDATION OF FINANCE **[12 Hrs]**

Financial Management: scope, objectives, functions, Role of Financial Management – Time Value of Money – Introduction to the concept of risk and return of a single asset and a portfolio.

UNIT - II INVESTMENT DECISION **[12 Hrs]**

Capital Budgeting: Nature of capital budgeting – Identifying relevant cash flows – Evaluation Techniques : Pay back, Accounting rate of return, Net present value , Internal rate of return, Profitability Index- (Problems) – Comparison of DCF techniques – Project selection under capital rationing - Case study.

UNIT - III FINANCING DECISION & LEVERAGES **[16 Hrs]**

Cost of Capital: concept, importance - Measurement of specific cost – Computation of overall cost of capital – Problems.

Capital Structure: Theories - Designing capital structure – Valuation-simple problems.

Leverage: Meaning, Types : Financial leverage, Operating leverage and Combined leverages – Problems.

UNIT - IV DIVIDEND DECISION **[08 Hrs]**

Dividend policy– Aspects of dividend policy - Practical consideration – Forms of dividend policy – Forms of dividends – Share splits

UNIT - V ASSET MANAGEMENT **[12 Hrs]**

Working Capital Management: Concepts, Needs, Determinants, Issues and Estimation of working capital (Problems) – Accounts Receivables Management – Inventory Management – Cash Management – Short Term and Long Term Sources of Finance – Indian capital market – New issue market – secondary market – Long term finance : Shares – debentures - hire purchase - venture capital financing - private equity.

Total (L: 50 T: 10) = 60 Periods

Course Outcomes: **On completion of this course, the student will be able to:**

1. *Summarize the fundamentals of financial management*
2. *Explore investment decision tools used by finance managers*
3. *Illustrate various tools adopted to take organizational finance decisions*
4. *Explain about dividend policy and decisions to the students*
5. *Describe about capital management to students.*

Reference Books :

1. M. Y. Khan and P.K. Jain Financial Management, Text, problems and cases Tata McGraw Hill, 7th edition, 2017.
2. Dr. S. N. Maheswari Financial Management, Principles and Practices, Sultan chand and sons, 14th edition 2014.
3. I.M. Pandey, Financial Management, 11th Edition, Vikas Publishing House,2014.
4. Brighman, Ehrhardt, financial Mangement Theory and Practice , 15th Edition, Cengage 2015.
5. Prasanna Chandra, Financial Management, 9th Edition, Tat Mcgraw Hill, 2017.

Chairman (BoS)

Head Of The Department
Department Of MBA
K.S.R College Of Engineering (AU)
Tiruchengode - 637 215

K.S.R. COLLEGE OF ENGINEERING (AUTONOMOUS), TIRUCHENGODE – 637 215
DEPARTMENT OF BUSINESS ADMINISTRATION (MBA)

NAME : Dr. T. VIJAYALAKSHMI
CLASS : I MBA
SUBJECT : BA18213 - FINANCIAL MANAGEMENT

UNIT - I

2 Mark Questions:

1. Define Financial Management and its Function.

Financial Management is the operational activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient operations-Joseph and massie

Financial Management is an area of financial decision making, harmonizing individual motives and enterprise goals –by Weston and Brigham.

Managerial Functions

Investment or long-term asset mix decision: It involves the decision of allocation of capital or commitment of funds to long term assets that would yield benefits in the future.

Financing or capital mix decision: It refers to the proportion of debt and equity capital. A capital structure with a reasonable proportion of debt and equity capital is called the optimum capital structure.

Dividend decision: The financial manager must decide whether the firm should distribute all profits, or retain them, or distribute a portion and retain the balance. The optimum dividend policy is the one that maximize the market value of the firm's share.

Liquidity decision: Current assets should be managed efficiently for safeguarding the firm against the changes of illiquidity and insolvency. Investment in current assets affects the firm's profitability, liquidity and risk.

2. Explain the Function of Financial Manager.

Financial Planning
Raising of Necessary Funds
Controlling the use of Funds
Disposition of Profit
Analysis and interpretation of financial performance
Capital Budgeting
Working capital Management
Efforts to maximize value
Profit allocation and dividend decision
Legal Obligation
Responsibility to employees
Wealth Maximization
Liquidity decision

3. Discuss the different between Equity share and Preference shares.

The following are the features of Preference and ordinary shares

Claims Preference shareholders have a claim on assets and income prior to ordinary shareholders. Equity (ordinary) shareholders have a residual claim on a company's income and assets, They are the legal owners of the company

Dividend The dividend rate is fixed in the case of preference shares. Preference shares may be issued with cumulative rights, i.e dividend will accumulate until paid off. In the case of equity share neither the dividend rate is known nor does dividend accumulate.

Redemption Both redeemable and irredeemable preference shares can be issued Redeemable preference shares have a maturity date while irredeemable preference shares are perpetual. Equity shares have no maturity date.

Conversion A company issue convertible preference shares. That is after a stated period such shares can be converted into ordinary shares.

4. Define Profit Maximization.

Earning profits by a corporate or a company is a social obligation. Profit is the only means through which an efficiency of organization can be measured.

As the business units are exploiting the resource of the country namely, Land, Capital, and resources has an obligation to make use of these resources to achieve profits. It is an economic obligation to cover the cost of funds and offer surplus funds to expansion and growth. Accumulated profits reduce the risks of an enterprise. It should serve as the base for all type of decisions. Profit maximization achieved by an organization regarded as a primary measure of its success. The survival of the firm depends upon its ability to earn profits.

5. Define Wealth Maximization.

The concept of Wealth maximization refers to the gradual growth of the value of assets of the firm in terms of benefits it can produce. Any Financial action can be judged in terms of the benefits it produces less cost of action. The wealth maximization attained by a company is reflected in the market value of shares. In other words, it is nothing but the process of creating wealth of an organization. This maximizes the wealth of shareholders.

Wealth maximization concept has been explained differently by practical financial executives " when the company profits are more he advices the management to keep certain amount of profit for future expansion, through which increased the production and market share, the benefit gained will be passed on not only to the equity shareholders but also uses such additional profits to maintain good relations with the creditors, better payment of wages to workers, develop infrastructure and earn good reputation in the market, which will be reflected by market value of the shares in the stock exchange. This is a situation where investors can maximize their value of investments. Symbolically, it is expressed as Wo=NPo

WO=Wealth of the firm, N=Number of shares, P=price per share in the market

6. What is Traditional approach in Financial Management? What are its contents?

The traditional role of financial management limited the role of the financial manager in the initial stages. The scope of financial management and the role of the financial manager were considered confined to the raising of funds. He was called upon to raise funds during the major events, such as promotion reorganization, expansion etc, His only significant duty was to see that the firm has enough cash to meet its obligations.

Basic contents of the traditional approach:

Raising Funds

Episodic Function
Long term problem
Problem of Non corporate enterprises

Limitation of Traditional Approach

Information of control and regulations
Wrong treatment of various problems
The outsider point of view
Conceptual omission

7. What is called as Bond or Debentures and its features?

A bond is a long term debt instrument or security, Bond issued by the government do not have any risk of default. The government will always honour obligation on its bonds. Bonds of the public sector companies in India are generally secured, but they are not free from the risk of default. The private sector companies also issue bonds, which are also called Debentures in India.

The main features of a bond or debenture are discussed below.

Face value Face value is called par value, A bond (debenture) is generally issued at a par value of Rs 100 or Rs 1000 and interest is paid on face value.

Interest Rate Interest rate is fixed and known to bondholders (debenture-holders) interest paid on a bond\ debenture is tax deductible.

Maturity A bond is generally issued for a specified period of time, it is repaid on maturity

Redemption value The value that a bondholder (debenture-holder) will get on maturity is called redemption. Or maturity value. A bond may be redeemed at par or at premium (more than par value) or at discount (less than par value)

Market value A bond (debenture) may be traded in a stock exchange. The price at which it is currently sold or bought is called the market value of the bond (debenture).

8. Discuss the type of risk in portfolio.

In portfolio risk has two parts, Diversifiable (unsystematic) and Non-diversifiable (systematic)

Systematic Risk arises on account of the economy wide uncertainties and the tendency of individual securities to move together with changes in the market. This part of risk cannot be reduced through diversification. It is also known as Market risk. Investor are exposed to market risk even when they hold well diversified portfolio of securities.

Eg: The government resorts to massive deficit financing, The government changes the interest rate policy.

Unsystematic Risk arises from the unique uncertainties of individual securities. It is also called Unique risk. These uncertainities are diversifiable if a large number of securities are combined to form well diversified portfolios. Uncertainties of individual securities in a portfolio cancel out each other. Thus unsystematic risk can be totally reduced through diversification.

Eg: The company workers declare strike, The company loses a big contract in a bid

9. Define the CAPM and its assumption.

The capital Assets Pricing Model (CAPM) is a model that provides a framework to determine the required rate of return on an asset and indicates the relationship between return

and risk of the assets. The required rate of return specified by CAPM helps in valuing an asset.

Assumption:

Market efficiency- The capital market efficiency implies that share prices reflect all available information. Also, individual investors are not able to affect the prices of securities. This means that there are large numbers of investor holding small amount of wealth

Risk aversion Investors are risk averse. They evaluate a security's return and risk in terms of the expected return and variance or standard deviation respectively.

Homogeneous expectations- All investor have the same expectation about the expected return and risks of securities

Single time period- All investors decision are based on a single time period

Risk free rate All investor can lend and borrow at a risk free rate of interest.

10. Define Efficient portfolio.

A portfolio is a bundle or combination of individual assets or securities. The risk-return relationship can be depicted on the basis of correlation between securities. A risk averse investor will prefer a portfolio with a highest expected return for a given level of risk or prefer a portfolio with the highest expected return. In the portfolio theory, this is referred to as the principle of dominance, and the portfolio which has the highest expected returns for a given level of risk is called an efficient portfolio.

The frontier formed by the set of efficient portfolios is called the efficient frontier i.e. a frontier which represents the locus of all portfolios which have the highest return for a given level of risk. All other portfolios which lie outside the efficient frontier are inefficient portfolios. The portfolios lies on the efficient frontier will yield maximum possible returns for the investors.

12 Mark Questions:

1. If I have no intention of becoming a financial manger, why do I need to understand financial management?
2. Explain the Nature of Financial Management.
3. What are the new challenges presently facing Finance managers?
4. Explain the concept of 'Financial System'.
5. Explain the objectives of financial management.
6. The objective of wealth maximization is superior to profit maximization?- Do you agree?
7. What are the basic financial decisions? How do they involve risk-return trade off?
8. "Investment, financing and dividend decision are inter related "-comment.
9. Explain the approaches to financial management.
10. Discuss the functions of financial management.
11. Describe the functions of treasurer and controller.
12. Discuss the techniques of compounding and discounting.
13. Explain the following a) Annuity b) Annuity due c) Multi period compounding d) Effective rate of interest d) Rule of 69 e) Rule of 72.
14. Explain the method of valuation of preference shares.
15. What do you understand by earning capitalization model? In what circumstances it is relevant?

PROBLEMS

Time value of money

1. Sree Ganesh invests Rs 10000 at an interest rate of 10%. The interest is compounded annually. Calculate the compound value after 3 years.
2. Calculate the future value of Rs. 15000 invested now for a period of 5 years at a time preference rate of 9%.
3. Mr. Manoj invests rs.100000 in a bank at 10% for 5 years calculate the maturity value if interest is compounded annually. Will be get more if interest is compounded half yearly?
4. Mr. Krishnan invested Rs.20000 at 12% p.a.for 2 years, if interest is compounded a) half yearly b) Quarterly C) Monthly which is most beneficial to Krishnan?
5. Sri Vignesh industries ltd offers 12% interest on fixed deposits. What is the effective rate of interest if compounding in done a) half yearly b) quarterly C) monthly?
6. Mohan wants to double his investment. How long will it take if the interest rate is a) 9% b)8%? Give your answer, using rule of 72.

Valuation of shares and bonds

1. Mr.Kannan has perpetual bond of Rs. 1000. He receives an interest of Rs.90 annually. What is the value of the bond, if the required rate of return is 10%?
2. Baskar purchased 9% bonds of the face value of Rs1000 for Rs 900. After one year, he sold the bonds at Rs840. You are required to find out the holding period return.
3. Gjendra ltd has issued 7% debentures of Rs.1000 each, redeemable at par. The maturity period is 5 years. What is the yield to maturity if the current market price is Rs 826?
4. Sharda Industries Ltd.has issued 10% preference shares of Rs1000each. The maturity period is 10 years. If the required rate of return is 15%. Find the value of preference shares.
5. Mr. Krishna wants to buy an equity share of X ltd, hold it for one year and then sell it. The dividend expected at the end of the year is Rs 7 and the expected sale price is Rs 407. Find out the value of the equity shares, assuming a discount rate of return
6. The following information relates to Bright star ltd. EPS = Rs 5, Retention b = 0.4, Capitalization rate ($k_{e)=}$ 0.10, Internal rate of return (r) 0.10 Calculate the value of share under a) Dividend capitalization model b) Earning capitalization model

UNIT - II

INVESTMENT DECISION

2 Mark Questions:

1. Define Capital Budgeting.

A capital budgeting decision may be defined as the firm's decision to invest its current funds most efficiently in the long-term assets in anticipation of an expected flow of benefits over

a series of years. The long-term assets are those which affect the firm's operations beyond the one year period.

In other words, the system of capital budgeting is employed to evaluate expenditure decisions which involve current outlays but are likely to produce benefits over a period of time longer than one year. These benefits may be either in the form of increased revenue or reduced costs. Capital expenditure management therefore includes expansions, acquisition , modernization and replacement of fixed assets. The following are the features of investment decisions.

1. The exchange of current funds for future benefits.
2. The funds are invested in long-term assets.
3. The future benefits will occur to the firm over a series of years.

2. Explain the importance of investment decisions.

a. Investment decisions influence the firm's growth in the long run:

The effects of investment decisions extend into the future and have to be endured for a longer period than the consequences of the current operating expenditure. A firm's Decision to invest in long term assets has a decisive influence on the rate and discretion of its growth.

b. Investment decisions affect the risk of the firm:

A long term commitment of funds may also change the risk complexity of the firm. If the adoption of investment increases average gain but causes frequent fluctuations in its earnings, the firm will become more risky.

c. They involve commitment of large amount of funds:

It is imperative for the firm to plan its investment programmes very carefully and make an advance arrangement for procuring finances internally or externally.

d . They are irreversible, or reversible at substantial loss.

e. Investment decisions are among the firm's most difficult decisions.

3. List out Investment evaluation criteria.

A number of investment criteria (or capital budgeting techniques) are in use in practice. They may be grouped in the following two categories:

1. Discounted cash flow (DCF) criteria
   - Net Present value (NPV)
   - Internal Rate of return (IRR)
   - Profitability Index (PI)
2. Non discounted cash flow criteria
   - Payback period
   - Discounted Payback period
   - Accounting rate of return (ARR)

4. Define Net Present Value.

The net present value (NPV) method is the classic economic methd of evaluating the investment proposals. It correctly postulates that cash flow arising at different time period differ in value and are comparable only when their equivalents- present value – are found out. The following steps are involved in the calculating of NPV

Cash flow of the investment project should be forecasted based on realistic assumption

Appropriate discount rate should be identified to discount the forecasted cash flows. The appropriate discount rate is the project's opportunity cost of capital.

Present value of cash flow should be calculated using the opportunity cost of capital as the discounted rate.

NPV should be found out by subtracting present value of cash outflow from present value of cash inflow.

The NPV acceptance rules are:

Accept the project when NPV is Positive

Reject the project when NPV is negative

May accept the project when NPV is Zero

5. Define IRR and ARR.

Internal rate of return: The internal rate of return method is another discounted cash flow techniques, which takes account of the magnitude and timing of cash flows. Other terms used to describe the IRR method are yield on an investment, marginal efficiency of capital, rate of return over cost, time adjusted rate of internal return and so on. The internal rate of return (IRR) is the rate that equates the investment outlay with the present value of cash inflow received after one period.

Accounting rate of return: The accounting rate of return (ARR) also known as the return on investment (ROI) uses accounting information, as revealed by financial statements, to measure the profitability of an investment. The accounting rate of return is the ratio of the average after tax profit divided by the average investment. The average investment would be equal to half of the original investment if it were depreciated constantly. Alternatively, it can be found out by dividing the total of the investment book values after depreciation by the life of the project

ARR= Average income / Average investment

Acceptance rule:

Accept if ARR > minimum rate

Reject if ARR< minimum rate

6. Define payback Period.

Payback period is the number of years required to recover the original cash outlay invested in a project. If the project generates constant annual cash inflows, the payback period can be computed by dividing cash outlay by the annual cash inflow. That is:

Payback = initial investment \ Annual cash inflow

Acceptance Rule:

Accept if PB < standard payback

Reject if PB > standard payback

7. Discuss the merit and Demerit of Discounted cash flow techniques.

Merit	Demerit
Considers all cash flows	Requires estimates of cash flows which is a tedious task
True measure of profitability	Requires computation of the opportunity cost of capital which poses practical difficulties
Based on the concept of the time	Sensitive to discount rates value of money

Satisfies the value additively principles Consistent with the share holders wealth maximization principles	

8. Discuss the profitability index and discounted payback method.

Profitability index is the ration of the present value of cash inflows, at the required rate of return, to the initial cash outflow of the investment. The formula for calculating benefit-cost ratio or profitability index is as follow

PI= PV of cash inflows / initial cash outlay

Discounted Payback Method: The discounted payback method is the number of periods taken in recovering the investment outlay on the present value basis. The discounted payback period still fails to consider the cash flows occurring after the payback period.

12 Mark Questions:

1. How you as an individual will make an investment decision & how will you evaluate it?
2. What do you think should be the characteristics of a Sound Investment Evaluation Criterion?
3. Discuss the long term techniques of evaluation.
4. What are the factors which influence capital expenditure decisions?
5. What is pay-back period? What are its merits and demerits?
6. What is accounting rate of return? What are its merits and demerits?
7. What is discounted cash flow method? What are its merits and demerits?
8. What is cut-off rate?
9. Write short note on capital rationing.

PROBLEMS

1. A project costs Rs.1,00,000 and yield an annual cash inflow of Rs 20000 for 7 years. Calculate payback period
2. Calculate pay back period for a project which requires a cash outlay of Rs 10000 and generates cashoutlay of Rs10000 and generates cash inflows of Rs 2000 Rs.4000 Rs3000 and Rs.2000 in the first second third and fourth year respectively.

   There are two project A and B. The cost of the project of Rs 30000 in each case the cash inflows are as under. Calculate pay back period

   Cash inflows

Year	**project a**	**project B**
1	10000	2000
2	10000	4000
3	10000	24000

3. An Organisation has a cut off pay back period of 3years and 6 months. Advise the company with regard to the following exclusive investments.

Project	**Total investment**	**AnnualCash inflows**	**Period of inflows**
A	50,000	15000	4 YEARS
B	80000	24000	5 YEARS
C	80000	20000	6 YEARS
D	40000	12000	5 YEARS
E	10000	1800	7 YEARS

NPV

4. Project x initially costs Rs 25000. It generates the following cash inflows. Taking the cutoff rate as 10% suggest whether the project should be accepted or not.

Project	**Cash inflows**	**Present value of Rs.1 of 10%**
A	9000	0.909
B	8000	0.826
C	7000	0.751
D	6000	0.683
E	5000	0.621

6. Consider the following proposed investment with the indicated cash inflows Rank the investments deriving the NPT using a discount rate of 10% and state your views

		Year end cash inflows			
Project	**Cashinflows (Rs.000)**	**Year 1 (Rs.000)**	**Year 2 (Rs.000)**	**Year 3 (Rs.000)**	**Present value of Rs.1 of 10%**
A	200	200	nil	Nil	0.909(1^{st} year)
B	200	100	100	100	0.826(2^{st} year)
C	200	20	100	300	0.751 (1^{st} year)
D	200	200	20	20	
E	200	140	60	100	
F	200	160	160	80	

7. A Choice is to be made between two competing proposals which require an equal investment of Rs 50000 and are expected to generate net cash flows as under

Year	**Project I**	**Project II**
End of the year 1	25000	10000
End of the year 2	15000	12000
End of the year 3	10000	18000
End of the year 4	Nil	25000
End of the year 5	12000	8000
End of the year 6	6000	4000

The cost of capital of the company is 10% present value factors at 10% per annum.Which project proposal should be chosen and why? Evaluate the project proposals under

a) Pay back period
b) Discounted cash flow method
c) Excess present value index

8. Calculate the average rate of return for project A and B from the following

	PROJECT A	PROJECT B
Investments	Rs.20000	Rs.30000
Expected Life (No salvage value)	4 yrs	5 yrs

Projected Net income (after interest, depreciation and taxes.

years	Project A	Project B
1	2000	3000
2	1500	3000
3	1500	2000

4	1000	1000
5	-	1000
Total	6000	10000

If the required rate of return is 12%, which project should be undertaken?

9. A limited company is considering investing in a project requiring a capital outlay of Rs20000. Forecast of annual income after depreciation but before rax is as follows

Year	Rs
1	100000
2	100000
3	80000
4	80000
5	40000

Depreciation may be taken as 20% on original cost and taxation at 50% of net income calculate:

a) Pay-back method
b) Rate of return on original investment
c) Rate of return on average investment
d) Discounted cash flow method taking cost of capital at 10%
e) Excess resent value index

UNIT - III
FINANCING DECISION (Cost of Capital)

2 Mark Questions:

1. Define Cost of Capital.

The concept of cost of capital has been used in capital budgeting as the discount rate or the minimum required rate of return. In the NPV and PI techniques, the cash flows have been discounted at this cost of capital to find out the desirability of the proposal. In the IRR method, although this cost of capital is not directly used, still it was required to make the accept-reject decisions. If a project's IRR is more than the cost of capital of the firm then the proposal is considered to be acceptable, otherwise it should be rejected.

The cost of capital is the minimum required rate of return; a project must earn in order to cover the cost of raising funds being used by the firm in financing of the proposal.

The minimum rate of return that a firm must earn in order to satisfy the expectations of its investor is called the cost of capital of the firm. In other words, the cost of capital is the rate of return; a firm must earn in order to attract the supplier of funds to make available the funds to the firm.

2. Discuss the importance and Significance of the COC.

The importance and significance of the concept of cost of capital can be stated in terms of the contribution it makes towards the achievement of the objective of maximization of the wealth of the shareholders. If a firm's actual rate of return exceeds its cost of capital and if this return is earned without of course, increasing the risk characteristics of the firm, then the wealth maximization goal will be achieved. The reason for this is obvious. If the firm's return is more

than its cost of capital, then the investor will no doubt be receiving their expected rate of return from the firm.

It is a concept of vital importance in the financial decision making. It is useful as a standard for:

[1] Evaluating investment decisions

[2] Designing a firms debt policy

[3] Appraising the financial performance of top management

3. What are the impact in cost of Capital?

a. Riskiness of earnings

B. The debt to equity mix of the firm

C. Financial soundness of the firm

D. Interest rate levels in the market

4. Discuss the Type of Cost.

Explicit cost & Implicit cost

Explicit cost: Capital of a particular source may be defined in terms of the interest or dividend that the firm has to pay to the suppliers of funds. There is an explicit flow of return payable by the firm to the supplier of fund. For example, the firm has to pay interest on debentures, dividend at fixed rate on preference share capital and also some expected dividend on equity shares. These payments refer to the explicit cost of capital.

Implicit Cost: There is one source of funds, which does not involve any payment or flow i.e., the retained earnings of the firm. The profits earned by the firm but not distributed along the equity shareholders are ploughed back and reinvested within the firm. These profits gradually result in a substantial source of funds to the firm. Had these profits been distributed to equity shareholders, they could have invested these funds (return for them) elsewhere and would have earned some return. The investors forego this return when the profits are ploughed back. Therefore, the firm has an implicit cost of these retained earnings and this implicit cost is the opportunity cost of investors. Thus, the, implicit cost of retained earning is the return which could have been earned by the investor, had the profit been distributed to them. This is also called opportunity cost of capital.

Except the retained earnings, all other sources of funds have explicit cost of capital.

Specific Cost and Weighted Average Cost

The cost of capital of each source differs because of the risk differences and the contractual agreements. The cost of capital of each, source of capital is known as component or specific cost of capital.

When we take combined cost of all the components it is called overall cost of capital. The components are assigned certain weights & then the weighted average cost of capital is determined

The overall cost of capital of a firm is a proportionate average of the costs of the various components of firm's financing. The cost of equity capital is the most difficult to measure. Our concern will be with the marginal or specific cost of capital. We will determine specific costs first & then will move our attention to overall cost of capital.

5. Discuss measurement of cost of capital.

Measuring firm's overall cost of capital specific cost of capital need to be determined component wise.

Component of Cost of capital

A. Specified Cost

I. Cost of Debt (K_D)

II. Cost of Preferred Capital (K_p)

III. Cost of Equity (K_E)

IV. Cost of Retained Earnings (K_R)

B. Combined Cost or Overall Cost

I. Weighted Average Cost of Capital

6. Define Cost of Debt (Kd).

Debt may be in the form of Debentures, Bonds; Term Loans form Financial Institutions and Banks etc. The debt is carried a fixed rate of interest payable to them, irrespective of the profitability of the company since the coupon rate is fixed. The firm increases its earnings through debt financing. Then after payment of fixed interest charges more surpluses is available for equity shareholders, and hence EPS will increase. An important point to be remembered that dividends payable to equity shareholders and preference shareholders is an appropriation of profit, whereas the **interest payable on debt it is a charge against profit,** Therefore, any payment towards interest will reduce the profit and ultimately the company's tax liability would decrease. This phenomenon is called "**Tax shield**". The tax shield is viewed as a benefit accruing to the company, which is geared.

7. Define Cost of Equity (Ke).

Equity capital is that capital, which we generate from the owners of the company. These funds are not repaid during the lifetime of the organization; hence are also called permanent source of funds. The equity shareholders are the owners of the company and we know it very well that the main objective of the firm is maximization of wealth of the equity shareholders.
Equity share capital is treated as the risk capital of the company. Because of the following reasons:

1. If the company is doing well then the ultimate beneficiaries are the equity shareholders who will get the return in the form of dividends from the company and the capital appreciation for their investment

2. If the company is liquidated due to losses, the ultimate and worst sufferers are the equity shareholders.

3. Sometimes they may not even get their investment back during the liquidation process.

8. Explain the Dividend Discount Model and Its criticism.

Dividend discount models are designed to compute the intrinsic value of a share of common stock under specific assumption as to the expected growth pattern of future dividends and the appropriate discount rate to employ. Merrill Lynch, CS First Boston, and a number of other investment banks routinely make such calculations based on their own particular models and estimates. What follows is an examination of such models, beginning with the simplest one.

The value of a share of common stock can be viewed as the discounted value of all expected cash dividends provided by the issuing firm until the end of the time.

Criticism of dividend discount models

The dividend growth model is criticized on the following reason:

- The future growth pattern is impossible to predict because it will be inconsistent and uneven.
- Due to uncertainty of future and imperfect information, only historic growth is to be used for prediction for future growth.
- Calculating only cost of equity capital, and ignoring the cost of other forms of capital may not be valid
- The dividend growth depends on retained earnings of the company, and the growth is difficult to assume

9. Define Price Earning Method.

This method takes into consideration the earnings per share (EPS) and the market price of the share. It is based on the assumption that the investors the stream of future earning of the share and the earnings of the share need not be in the form of dividend and also it need not be disbursed to the shareholders. It based on the argument that even if the earnings are not disbursed as dividends, it is kept in the retained earnings and its causes future growth in the earnings of the company as well as the increase in the market price of the share. In calculation of cost equity share capital, the earnings per share are divided by the current market price.

$$Ke = \frac{E}{M}$$

10. Define Weighted Average Cost of Capital.

Cost of capital is the overall composite cost of capital and may be defined as the average of the cost of its specific fund. Weighted average cost of capital (WACC) is define as the weighted average of the cost of various sources of finance, weight being the market value of each source of finance outstanding. Cost of various sources of finance refers to the returns expected by the respective investor.

The CIMA defines the weighted average cost of capital " as the average cost of company's finance (equity, debentures, bank loans) weighted according to the proportion each elements bears to the total pool of capital, weighting is usually based on market valuation current yields and costs after tax.

This overall cost of capital of the firm is of utmost importance as this rate is to be used as the discount rate or the cut-off rate evaluating the capital budgeting proposals. The overall cost of capital may be defined as the rate of return that must be earned by the firm in order to satisfy the requirements of the different investors. The overall cost of capital is thus, the minimum required rate of return on the assets of the firm.

This overall cost of capital should take care of the relative proportion of different sources in the capital structure of the firm. Therefore, this overall cost of capital should be calculated as the weighted average rather than simple average of different specific cost of capital.

WACC = (Cost of equity X % equity) + (cost of debt X % debt) + (Cost of equity X % equity)

11. Define Cost of Retain Earnings (Kr).

This is one of the major sources of finance available for the well-established companies to finance its expansion and diversification programmes. These are the funds accumulated over

years of the company by keeping part of the funds generated without distribution. The equity shareholders of the company are entitled to these funds and sometimes; these funds are also taken into account while calculating the cost of equity. But so long as the retained profits are not distributed to the shareholders, the company can use these funds within the company for further profitable investment opportunities.

Hence, you can say that cost of equity includes retained earning. But in practice, retained earnings are a slightly cheaper source of capital as compared to the cost of equity capital. That is why, we deal the cost of retained earnings separately form the cost of equity capital.

To be very clear the cost of retained earnings to the shareholders is basically an opportunity cost of such funds to them. It is basically equal to the income that they would otherwise obtain by placing these funds in alternative investment.

12. How CAPM Used in Cost of Equity?

Another technique that can be used to estimate the cost of equity is the capital asset pricing model (CAPM) approach. The CAPM explains the behavior of security prices and provides a mechanism whereby investors could assess the impact of proposed security investment on their overall portfolio risk and return. In other words, it formally describes the risk-return trade-off for securities. It is based on certain assumptions.

The basic assumptions of CAPM relates to

(a) The efficiency of the security markets and **

(b) Investor preferences. **

**(a) The efficient market assumption implies that

(i) All investors have common (homogeneous) expectations regarding the expected returns, variances and correlation of returns among all securities;

(ii) All investors have the same information about securities;

(iii) There are no restrictions on investments;

(iv)There are no taxes;

(v) T here are no transaction costs; and

(vi)No single investor can affect market price significantly.

**(b)The implication of investors' preference assumption is that all investors prefer the security that provides the highest return for a given level of risk or the lowest amount of risk for a given level of return, that is, the investors are risk averse

Formula :

Cost of Debt / Debenture

Before Tax : Ki=I / SV

After Tax : Kd=I / NP (1-T)

Cost of Redeemable Debt

Kd [Before Tax]= I+(P-NP)/N /(P+NP)/2

Kd [After Tax]= kd[BT] x (1-T)

Cost of Preference Shares

Non Floating Kp=DP/NP

Floating Without Tax Kp=D/ P0(1-F)

Floating with Tax Kp=D(1+Dt) / P0(1-F)

Cost of Equity Shares

Ke=Div / P

Ke=Div / MP

Ke=Div/ P +g

Cost of Retain Earnings

Kr=E(1-TR/2) /P **Or** Kr=E/P+g

CAPITAL STRUCTURE

2 Mark Questions:

1. Define Capital Structure.

Capital Structure The debt-equity mix of a firm is called its capital structure. The capital structure decision is a significant financial decision since it affects the shareholders' return and risk, and consequently, the market value of shares.

"Capital structure of a company refers to the composition of its capitalization and it includes all long term capital capital sources viz., Loans, reserves, shares and bonds"

In simple words capitalization refers to the combination of different types of securities of a business concern.

Financial Structure The term financial structure, on the other hand, is used in a broader sense and it includes equity and all liabilities of the firm.

2. Define Optimum Capital Structure.

A firm should select a financing mix which will maximize the shareholder's wealth. Such a capital structure is referred to as an optimum capital structure. Thus optimum capital structure may be defined as the capital structure or combination of debt and equity that leads to the maximum value of the firm.

3. Define Leverage.

Leverage has been defined as "the action of a lever, and mechanical advantage gained b it", A lever is a rigid piece that transmits and modifies force or motion where forces are applies at two points and turns around a third. In simple words, it is a force applied at a particular point to get the desired result.

In business point of view, Leverage is the means which a business firm can increase the profits. The force will be applies on debt, the benefit of this is reflected in the form of higher returns to equity shareholders. It is termed as "Trading on Equity"

In According to James Horne, "Leverage is the employment of an asset or funds for which the firm pays a fixed cost to get fixed returns" Leverage helps the management in controlling the fixed costs relating to sales. Thus leverage is a cost depicting tool.

4. Define Financial Leverage and Degree of Financial Leverage.

Leverage refers to the employment of asset or source of funds for which the firm has to pay a fixed cost or fixed return.

The use of the fixed charges sources of funds, such as debt and preference capital along with the owner's equity in the capital structure, it is described as **financial Leverage or gearing or trading on equity**

Financial leverage is concerned with the effects of changes in EBIT on the earnings available to equity shareholders. It is defined as the ability of a firm to use fixed financial charges to magnify the effects of changes in EBIT on the earnings per share.

Financial Leverage = EBIT / EBT

The **Degree of Financial leverage** (DFL) is defined as the percentage change in EPS due to a given percentage change in EBIT

Degree of financial leverage = % changes in EPS / % change in EBIT

5. What are the characteristics of capital structure?

1. Simplicity
2. Minimum cost
3. Maximum Return
4. Minimum Risk
5. Flexibility
6. Proper Liquidity
7. Conservations
8. Balanced capital
9. Maximum Control
10. Balanced Leverage

6. Explain the difference between Financial Leverage and Operating Leverage.

Operating Leverage	Financial Leverage
1.Operating Leverage is related to the investment activities (Capital expenditure decision)	Financial Leverage is more concerned with financial matters (Mixed of debt equity in capital structure
2.The fluctuation in the EBIT can be predicated with the help of OL	The change of EPS due to debt & Equity is predicted by Financial Leverage
3.Financial Manager uses the operating leverage to identify the items of assets side of balance sheet	The uses financial Leverage to make decisions in liability side of the balance sheet
4.Operating leverage is used to predict business risk	Financial Leverage is used to analyze the financial risk

7. List out the factor affecting capital structure.

Internal Factors	External Factors
Financial Leverage	Size of the company
Risk	Nature of company
Growth and stability	Investors
Retaining control	Cost of Floatation
Cost of Capital	Legal Requirement
Cash flow	Period of finance
Flexibility	Level of interest rate
Purpose of Finance	Level of Business activity
Asset structure	Availability of funds

8. Explain the Capital structure design.

Only through Equity

Equity and Debenture

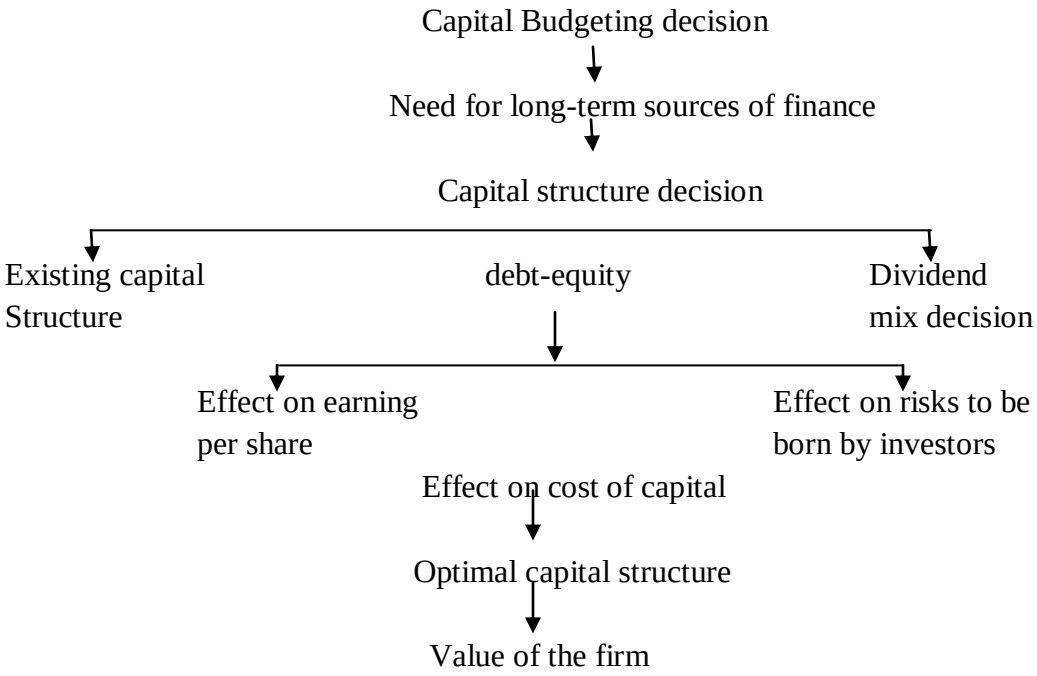
Equity , Debenture and preference shares

Equity, Debenture, Preference shares, Fixed Deposit and Term Loans

9. Discuss the Importance of Capital structure decision.

The objective of any company is to mix the permanent sources of funds used by it in a manner that will maximize the company's market price. In other words companies seek to minimize their cost of capital. This proper mix of funds is referred to as the optimal capital structure.

The capital structure decision is a significant managerial decision, which influences the risk and return of the investors. The company will have to plan its capital structure at the time of promotion itself and also subsequently whenever it has to raise additional funds for various new projects. Whenever the company needs to raise finance, it involves a capital structure decision because it has to decide the amount of finance to be raised as well as the source from which it is to be raised



10. Explain in details practical consideration in determining capital structure.

The most important considerations are

- Concern for dilution of control
- Desire to maintain operating flexibility
- Ease of marketing capital inexpensively
- Capacity for economics of scale
- Agency costs

11. Discuss about the capital structure policy.

There are Four main capital structure approach try to explain the policy

Net income approach: Under the net income (NI) approach, the cost of debt and cost of equity are assumed to be independent to the capital structure. The weighted average cost of capital de-clines and the total value of the firm rises with increased use of leverage.

Net operating income approach: Under the net operating income (NOI) approach, the cost of equity is assumed to increase linearly with leverage. As a result, the weighted average cost of capital remains constant and the total value of the firm also remains constant as leverage is changed.

Traditional approach: According to this approach, the cost of capital declines and the value of the firm increases with leverage up to a prudent debt level and after reaching the optimum point (minimum cost of capital or maximum value of the firm), coverage causes the cost of capital to increase and the value of the firm to decline.

Thus, if NI approach is valid, leverage is a significant variable and financing decisions have an important effect on the value of the firm. On the other hand, if the NOI approach is correct, then the financing decision should not be of great concern to the financing manager, as it-does not matter in the valuation of the firm.

Modigliani and Miller (MM) support: The NOI approach by providing basically consistent behavioral justifications is in its favor. They deny the existence of an optimum capital structure. Between the two extreme views, we have the middle position or intermediate version advocated by the traditional writers. Thus, there exists an optimum capital structure at which the cost of capital is minimum. The logic of this view is not very sound. The MM position changes when corporate taxes are assumed. The interest tax shield resulting from the use of debt adds to the value of the firm. This advantage reduces when personal income taxes are considered.

12. Discuss the component of cash flow.

Three components of cash flows can be identified:

(1) Initial investment, (2) Annual cash flows, and (3) Terminal cash flows.

Initial Investment : Initial investment will comprise the original cost (including freight and installation charges) of the project, plus any increase in working capital. In the case of replacement decision, the after-tax salvage value of the old asset should also be adjusted to compute the initial investment.

Annual cash Flow (or) Net Cash Flow : Annual net cash flow is the difference between cash inflows and cash outflows including taxes. Tax computations are based on accounting profits.
Care should be taken in properly adjusting depreciation while computing net
cash flows.

Terminal cash Flow : are those, which occur in the project's last year in addition to annual cash flows. They would consist of the after-tax salvage value of the project and working capital released (if any). In case of replacement decision, the foregone salvage value of old asset should also be taken into account.

13. How Miller Theory incorporating both Corporate and Personal Income Taxes?

In practice, we do not find all firms using high amounts of debt. One explanation for this behaviour could be personal income taxes. Miller has propounded a theory incorporating both corporate and personal income taxes. According to him, the advantage of interest tax shield is offset by the personal taxes paid by debt-holders on interest income. Interest income is tax-exempt at corporate level while dividend income is not. Interest income is taxed at personal level while dividend income may largely escape personal taxes. Thus companies can induce tax paying investors to buy debt securities if they are offered high rate of interest. But after a stage it will not be possible to attract investors in the high-tax brackets. This point establishes the optimum debt ratio for the individual firms

14.Define Indifference point.

The EBIT level at which the EPS is the same for two financial plans is referred to as the indifference point. It may be defined as the level of EBIT beyond which the benefits of financial

leverage begin to operate with respect to earnings per share (EPS). In operational terms, if the expected level is to exceed the indifference level of EBIT, the use of fixed charge source of funds would be advantageous from the view point of EPS. If however, the expected level of the EBIT is less than the indifference point, the advantage of EPS would be available from the use of equity capital

Formula

Financial Leverage =EBIT (operating Profit) / EBT (earning before tax)

Operating Leverage = Contribution / EBIT

Combined Leverage = FL x OP

EPS= Earning available to equity shareholders / No.of equity shareholders

[No.of Equity shareholders = Total equity capital / Face value of share]

Overall capitalization Rate = Ke= EBIT / Vaqlue of the firm

Return on Equity capital = Net profit – Preference capital / equity share capital x 100

Return on Capital Employed = Net profit + Interest+Taxes / Average capital employed

Return on Investment =Net Profit after Interest and tax / Net worth

Price Earning ratio = Market price Per share / Earning Per share

12 Mark Questions:

1 What is cost of capital? Explain its significance.

2. Distinguish between a) Specific cost and composite cost b) Avereage cost and marginal cost c) Explicit cost and implicit cost.

3.Cost prefernce capital is generally lower than the cost of equty state the reasons.

4. Explain the different methods of calculating the cost of equity capita.l

5. What is weightere average cost of capital ? how is it dertmined?

6.How is the cost of zero coupon bonds determined?

7. Write notes on a) Floating rate debt b) Inflation adjusted cost of debt c) Marginal cost of capital.

8.Define capital struture and explain its significance.

9. Write notes on a) point of indifference b) capitalisation c) Financial structure.

10.Discuss the Net Income and Net operating Income approaches to capital structure.

11. Explain the traditional approach to capital structure.

12.”There is nothing like an optimum capital structure for a firm” Critically examine this statement.

13.Explain the EBIT-EPS Approach with suitable example.

14. Explain the arbitrage process under MM approach.

PROBLEMS:

1.Sri ganesh industries Ltd, Issued 5,000 12 % debentures of Rs 100 each at par. The tax rate is 40%. Calculate before tax and after tax cost of debt. (Issued at a par).

2.Victory ltd issued Rs 2,00,000 9 % debentures at a premium of 10 %. The floatation costs (issue expenses) were 2%. The tax rate is 40%. Compute the cost of debt before tax and after tax. (Issued at a premium)

3. Jayasurya ltd, issued Rs 60,000 10 % debentures at a discount of 5%. The issue expenses were Rs 2,000. Assuming a tax rate of 40%, compute the before tax and after tax cost of debt. (Issued at a discount)

4. Weighted Average cost of capital (WACC)

The capital structure and after tax cost of different sources of funds are given below.

Sources of Funds	**Amount**	**Proportion**	**After tax cost (%)**
Equity share capital	7,20,000	.30	15
Retained earnings	6,00,000	.25	14
Preference share capital	4,80,000	.20	10
Debentures	6,00,000	.25	08

5. A firm finances all its investment by 60 percentage equity and 40 % debt. The estimate return on equity is 18 % after tax. Cost of debt is 8 % after taxes. The firm is considering an investment proposal costing Rs 4,00,000 with an expected return that will continue for ever. What amount (in rupee) must the proposal yield per year so that the market price of the share does not change?

6.Assuming that a firm pays tax at a 50% rate, compute in the following cases:

(a) 8.5 % of preference share sold at par.

(b) Perpetual bond sold at par, coupon rate of interest being 7 %

(c) A two year 8% Rs 1000 par bond sold at Rs 950 less at 4 % underwriting commission.

(d) A preference share sold at Rs 100 with a 9% dividend and a redemption price of Rs 110 if the company redeems at 5 years.

(e) An ordinary share selling at a current market price of Rs 120, and paying a current dividend of Rs 9 per share. Which is expected to grow at the rate of 8%.

7. From the following particulars, Calculate the overall cost of capital using book value weights.

Sources of funds	Book value	After tax cost
Equity share capital	4,00,000	14
Retained earnings	2,00,000	13
Preferences share capital	1,00,000	10
Debentures	3,00,000	6

8. Is there a similarity between the MM hypothesis and the net operating income approach? Explain

9. List the most critical factors of the determination of the capital structure.

10. Explain in detail about any two debts which affect the computation of cost of capital.

UNIT - IV

DIVIDEND POLICY

2 Mark Questions:

1. Define Dividend.

The portion of profit distributed to its shareholders is called dividend. A firm has to choose between distributing profits to the shareholders and ploughing back into the business. When deciding how much cash to distribute to stock holders, financial managers must keep in mind that the firm's objective is to **maximize shareholders value**. Consequently, **the dividend payout ratio** – (defined as the percentage of net income to be paid out as cash dividends) - should be based on investor's preferences for dividends versus capital gains.

Thus a dividend policy that strikes a balance between current dividends and future growth and maximizes the firm's stock price is called **optimum dividend policy**.

2. Explain the Types of dividend.

Cash Dividend : Most companies pay dividend in cash. A company should have enough cash in its bank account when cash dividends are declared. If it does not have enough balance, arrangement should be made to borrow funds. The cash account and the reserve account will be reduced when cash dividend is paid. Then the market price of the share will be dropped.

1. Regular cash dividend – cash payments made directly to stockholders, usually each quarter
2. Extra cash dividend – indication that the "extra" amount may not be repeated in the future
3. Special cash dividend – similar to extra dividend, but definitely won't be repeated
4. Liquidating dividend – some or all of the business has been sold

Stock Dividend : It represents distribution of shares in addition to cash dividend to the existing shareholders. This has the effect of increasing the number of outstanding shares of the company and the additional shares will be distributed proportionately. Thus, shareholder retains his proportionate ownership of the company. Bonus issue represents a recapitalization of the owner's equity portion, i.e. the reserves and surplus.

1. Pay additional shares of stock instead of cash.
2. Increases the number of outstanding shares.
3. Small stock dividend
    a. Less than 20 to 25%
    b. If you own 100 shares and the company declared a 10% stock dividend, you would receive an additional 10 shares
4. Large stock dividend – more than 20 to 25%

3. Explain the stability of dividends / types of dividends policy.

Stability means regularity in paying some dividend annually, even though the amount of dividend may fluctuate over years, and may not be related with earnings. More precisely, stability of dividends refers to the amount paid out regularly. Other things being the same, stable dividend may have a positive impact on the market price of the share.

Forms of stability / Types of dividend policy

Constant dividend per share or dividend rate: Paying fixed amount per share or fixed rate on paid-up capital as dividend every year.

Constant pay-out: Paying a fixed percentage of earnings every year. With this policy the amount of dividend will fluctuate in direct proportion to earnings.

Constant dividend per share plus extra dividend: Paying an interim dividend followed by a regular, final dividend in periods of prosperity.

4. List out the factors influencing dividend policy.

Stability of earnings
Financing policy of the company
Liquidity of funds
Dividend policy of competitive concerns
Past dividend rates
Debt obligation
Ability to borrow

Growth needs of the company
Profit rates
Legal requirements
Policy of control
Corporate taxation policy
Effect of trade policy
Attitude of interested group

5. Discuss the James Walter Model toward Dividend policy.

Prof. James E. Walter argues that the choice of dividend policies almost always affect the value of the firm. His model is based on the following assumptions:

1. **Internal financing**: The firm finances all investment through retained earnings; i.e. debt or new equity is not issued.
2. **Constant return and cost of capital:** the firm's rate of return, r , and its cost of capital, k , are constant.
3. **100% payout or retention:** All earnings are either distributed as dividends or reinvested internally immediately**.**
4. **Infinite time:** the firm has infinite life

Valuation Formula: Based on the above assumptions, Walter put forward the following formula:

$$P = \frac{DIV + (EPS-DIV)\, r/k}{k}$$

P = market price per share
DIV= dividend per share
EPS = earnings per share
DIV-EPS= retained earnings per share
r = firm's average rate of return
k= firm's cost o capital or capitalization rate

6. Discuss the Gordon's Model.

Gordon proposed a model of stock valuation using the dividend capitalization approach. His model is based on the following assumptions:

1. **All-equity firm**: The firm is an all-equity firm, and it has no debt
2. **No external financing:** Retained earnings would be used to finance any expansion.
3. **Constant return:** The internal rate of return, r, of the firm's investment is constant.
4. **Constant cost of capital:** The appropriate discount rate k for the firm remains constant and is greater than the growth rate.
5. **No taxes**: Corporate taxes do not exist.
6. **Constant retention**: The retention ratio, b, once decided upon, is constant.

Valuation Formula: Based on the above assumptions, Gordon put forward the following formula:

$$P0 = \frac{EPS1\ (1-b)}{k-br}$$

P_0 = price per share at the end of year 0

EPS_1= earnings per share at the end of year 1

(1-b) = fraction of earnings the firm distributes by way of earnings

b= fraction of earnings the firms ploughs back

k= rate of return required by the shareholders

r = rate of return earned on investments made by the firm

br = growth rate of earnings and dividends

7. How Modigliani-Miller (MM) supports irrelevance in dividend?

According to M-M, under a perfect market situation, the dividend policy of a firm is irrelevant, as it does not affect the value of the firm. They argue that the value of the firm depends on the firm's earnings, which results from its investment policy. Thus, when investment decision of the firm is given, dividend decision –the split of earnings between dividends and retained earnings- is of no significance in determining the value of the firm

M-M constructed their arguments on the following assumptions:

• **Perfect capital markets**: The firm operates in perfect capital markets where investors behave rationally, information is freely available to all and transactions and flotation costs do no exist. Perfect capita; markets also imply that no investor is large enough to affect the market price of a share.

• **No taxes**: taxes do no exist or there are no differences in the tax rates applicable to capital gains and dividends. This means that investors value a rupee of dividend as much as a rupee of capital gains.

• **Investment opportunities are known**: the firm is certain with its investment opportunities and future profits.

• **No risk**: Risk of uncertainty does not exist i.e. investors are able to forecast future prices and dividends with certainty, and one discount rate is appropriate for all securities and all time periods. Thus, r=k for all t

According to M-M, r should be equal for all shares. If it is not so, the low return yielding return shares will be sold by the investors who will purchase the high- return yielding shares. This process will tend to reduce the price of the low-return shares and increase the prices of the high-return shares. This switching or arbitrage will continue until the differentials in rates of return are eliminated. The discount rate will also be equal for all firms under M-M assumptions since there are no risk differences.

Thus the rate of return for a share held for one year may be calculated as follows:

$$r = \frac{\text{Dividends+ Capital gains (or loss)}}{\text{Share price}}$$

8. Explain the share split.

A share split is a method to increase the number of outstanding shares through a proportional reduction in the par value of the share. A share split affects only the par value and the number of outstanding shares, the share holder's total fund remains unaltered. In other words, an action taken by a firm to increase the number of shares outstanding, such as doubling the number of shares outstanding by giving each stock holder two new shares for each one formerly held.

Reasons for stock split:

To make trading in share attractive

To signal the possibility of higher profits in the future

To give higher dividends to shareholders.

9. What Is Called As Buy Back of Shares?

This was not permitted under Indian law until 1999

A program by which a company buys back its own shares from the marketplace, reducing the number of outstanding shares. This is usually an indication that the company's management thinks the shares are undervalued, in other words a share repurchase reduces the number of shares outstanding (i.e. supply), it increases earnings per share and tends to elevate the market value of the remaining shares. When a company does repurchase shares, it will usually say something along the lines of, "We find no better investment than our own company

In india the following conditions apply in case of the buy back of shares

1. A company buying back its shares will not issue fresh capital, except bouns issue, for the next 12 months
2. The company will state the amount to be used for the buyback of shares and seek prior approval of shareholders
3. The buyback of shares can be affected only utilizing the free reserves
4. The company will not borrow funds to buy back shares
5. The shares bought under the buyback schemes will be extinguished and they cannot be reissued

10. Discuss the Bird-in-the-hands Argument.

Bird-in-the-hands Argument Investors are risk averters. They consider distant dividends as less certain than near dividends. Rate at which an investor discounts his dividend stream from a given firm increases with the futurity of dividend stream and hence lowering share prices.

11. Explain the Target payout ratio used in dividend.

Target Payout Ratio Companies generally prefer to pay cash dividends. They finance their expansion and growth by issuing new shares or borrowing. This behaviour is based on the belief that shareholders are entitled to some return on their investment. Most companies have long-term payment ratio targets. But they do not apply target payout ratios to each year's earnings. They try to stabilize dividend payments by moving slowly towards the target payout each year. Also, they consider past dividends and current as well as future earnings in determining dividend payment. Investors recognize this. Any extreme changes are read as signals of management's expectations about the company's performance in future. Thus dividends have information contents.

12 Mark Questions:

1. Explain the nature of the factors which influence the dividend policy of a firm.
2. Explain the essence of walter model.
3. Explain the forms of dividend policy.
4. Explain the various factors affecting dividend decision.
5. What are the factors which influence the dividend policy of a firm?
6. Explain the term leverage what are its types and there significance.
7. Expalin the impact of various combinations of operating and financial leverage? Which combination is considered to be an ideal siuations for a company?

8. Discuss waltere views on optimum divident payout.
9. Explain modigliani-Miller's divident irrelevance Hypothesis.
10. Discuss the determinant of divident policy of corporate enterprises.
11. What are the different forms of dividends?
12. Distinguish between bonus issue and stock split.

PROBLEMS:

1. Calculate the operating financial and combined leverage from the following information.

Sales Rs 50,000
Variable cost Rs 25,000
Fixed cost Rs 15,000
Interest Rs 5,000

2. The operating and cost data of Ashok ltd, are as follows:
Sales 40,000 units at a Rs 10 per unit
Variable cost at Rs 7.50 per unit.
Fixed cost Rs. 80,000 (Including 15 % interest on Rs 2,00,000)
Calculate the operating, financial and combined leverage.

3. Calculate operating and financial leverages from the following particulars:
Units sold 5,000 Selling price Per unit Rs 30
Variable cost Per unit : Rs 20 EBIT Rs 30,000
10% public debt Rs 1,00,000.

4. The following projections have been given in respect of companies X and Y

Particular	Company X	Y
Volume of Output & sales	80,000	1,00,000 Units
Variable cost per unit	Rs 4	Rs 3
Fixed cost	2,40,000	2,50,000
Interest burden on debt	1,20,000	50,000
Selling price per unit	Rs 10	Rs 8

On the basis of above information calculate (a) operating leverage (b) Financial leverage (c) Combined leverage (d) Operating breakeven point (e) Financial break even point.

5. Income statement of PNR ltd is given below.

Sales	10,50,000
Variable cost	7,67,000
Fixed cost	75,000
EBIT	2,08,000
Interest	1,10,000
Tax	29,400
Net Income	68,600
No.of equity share	4,000

UNIT – V

WORKING CAPITAL MANAGEMENT

2 Mark Questions:

1. Define Working Capital And Its Type.

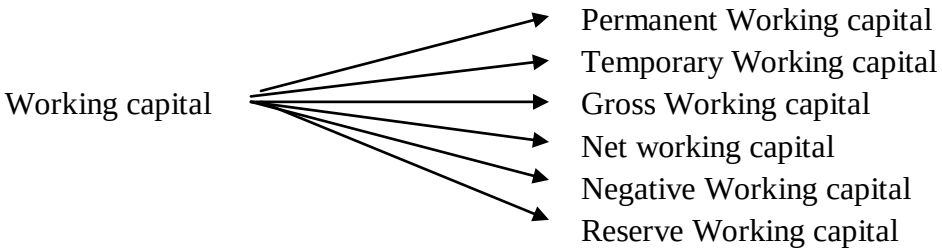
Capital required for a business can be classified under two main heads:

i. Fixed Capital

ii. Working Capital

Fixed capital / Long term funds is required to meet long term obligations namely purchase of fixed assets such as plant & machinery, land, building, furniture etc. Any business requires funds to meet short-term purposes such as purchase of raw materials, payment of wages and other day-to-day expenses. These funds are called Working capital. In short, Working Capital is the funds required to meet day-to-day operations of a business firm. And hence study of Working capital is considered to be very significant. An inefficient management of working capital leads to not only loss of profits but also to the closure of the business firm.

Working capital can be classified into



2. Define Gross Working Capital And Net Working Capital.

There are two concepts of Working capital namely,

1. Gross Working Capital (GWC)

2. Net Working Capital

Gross working capital represents funds invested in total current assets of the firm. GWC=Current assets

This concept has the following advantages

1.Finance managers are mainly concerned with management of current assets

2.It enables a firm to release the greatest returns on its investment

3.It enables a firm to plan and control the funds at its disposal

4.It helps in the fixations of various areas of financial responsibility

5.It helps the finance manager to plan for sources of finance

Net Working Capital is often referred to as circulating capital and represents the excess of current assets over current liabilities. Current liabilities are short-term obligations which are to be paid in the ordinary course of the business within a short period of one accounting year.

NWC=Current Assets-Current Liabilities

Net working capital is positive when current assets exceed current liabilities.

It is negative when current liabilities exceed current assets.

The concept net working capital enables a firm to determine the exact amount available at its disposal for operational requirements. It reflects the company’s liquidity position

3. Define Cash Conversion Cycle Or Operating Cycle.

The most liquid asset is cash in hand and cash at bank. The time required to complete the following cycle of events in case of a manufacturing firm is called the cash conversion cycle or the operating cycle.

1 .Conversion of cash into raw materials

2. Conversion of raw materials into work in process

3. Conversion of work in process into finished goods

4. Conversion of finished goods into debtors and bills receivables through sales

5. Conversion of debtors and bills receivables into cash

Operating cycle in case of a trading firm consists of following events

1. Cash into inventories

2. Inventories into accounts receivable

3. Accounts receivable into cash

Service and financial firms has the operating cycle consisting of

1. Conversion of cash into debtors

2. Conversion of debtors into cash

4. List Out Factors Affecting Working Capital.

Nature of Business
Size of Business
Credit terms
Credit policy
Credit periods
Collections policy
Collection procedure
Seasonality of production
Seasonality in supply or raw material
Seasonality of demand for finished goods
Trade cycle
Inflation
Level of trading
Length of manufacturing process
System of production process

5. Explain the dangers of excess of working capital.

1. It results in unnecessary accumulation of inventories. Thus the chances of inventory mishandling, waste, theft and losses increase

2. It is an indication of defective credit policy and slack collection period. Consequently, higher incidence of bad debts adversely affects profits

3. Excessive working capital makes management complacent which degenerates into managerial inefficiency

4. Tendencies of accumulating inventories to make speculative profit grow. This may tend to make dividend policy liberal and difficult to cope with in future when the firm is unable to make speculative profits

5. Excess availability of cash tempts the executives to spend more.

6. Explain Different Type Of Working Capital Policy In Current Assets.

The level of investment in current assets determines the working capital policy. A business firm can adapt any of the following working capital policies:

1. Conservative working capital policy
2. Aggressive working capital policy
3. Moderate working capital policy

Under Conservative approach, the firm carries high investment in current assets such as cash, marketable securities and carries large amount of inventories and grants generous terms of credit to customers resulting in a high level of debtors. The consequences of conservative working capital policy are quick deliveries to customers and more sales due to generous credit terms.

Under Aggressive working capital policy, investment in current assets is very low. The firm keeps less amount of cash and marketable securities, manages with less inventories and tight credit terms resulting in low level of debtors

Under Moderate working capital policy A trade off between two costs namely carrying cost and shortage cost determines the optimal level of current assets. Costs that rise with current assets i.e. that cost of financing a higher level of current assets form carrying costs.

7. What is Working Capital Management?

Working capital management involves two main processes:

(a) Determining the size of the amount of working capital

(b) Arranging the sources of working capital

Determining the size of the amount of working capital: It is one of the important function of the finance manger. He has to look into the details of the factors that affect the working capital. It is determined on the basic of size, nature and length of the manufacturing cycle.

Arranging the source of working capital : Once the size of the working capital is determined, it is the duty of financial manager to select the right sources of working capital. This mainly depends on the availability of the sources for funds. The investment of funds on current assets also facilitates the financial manager to arrange for working capital requirements.

Working capital management in practiced by taking into account the following aspect they are: Management of cash, Accounts receivable Management, Inventory Management

8. Explain The Motives For Holding Cash.

The firm need to hold cash may be attributed to the following three motives

(a) The transaction Motive

(b) The precautionary motive

(c) The speculative motive

The Transaction motive required a firm to hold cash to conduct its business in the ordinary course. The firm needs cash primarily to make payment for purchase, wages and salaries, other operating expenses, taxes, dividend etc.,

The precautionary motive is the need to hold cash to meet contingencies in the future. It provide a cushion or buffer to withstand some unexpected emergency. The precautionary amount of cash depends upon the predictability of cash flows. If cash flow can be predicted with

accuracy, less cash will be maintained for an emergency. the Famount of precautionary cash is also influenced by the firms ability to borrow at short notice when the need arises.

Speculative Motive relates to the holding of cash for investing in profit making opportunities as and when they arise. The opportunity to make profit may arise when the security prices change. The firm will hold cash, when it is expected that interest rates will rise and security prices will fall. Securities can be purchased within the interest rate is expected to fall

9. Define Cash Forecasting And Budgeting.

Cash budget is the most significant device to plan for and control cash receipts and payments. A cash budget is a summary statement of the firms expected cash inflows and outflows over a projected time period. It gives information on the timing and magnitude of expected cash flows and cash balance over the projected period. This information helps the financial manager to determine the future cash needs of the firms.

The time horizon of a cash budget may differ from firm to firm. A firm whose business is affected by seasonal variations may prepare monthly cash budgets. Daily or weekly cash budgets should be prepared for determining cash requirement if cash flows show extreme fluctuations.

Cash forecasting are needed to prepare cash budget, cash forecasting may be done on short or long term basis. Generally, forecasts covering periods of one year or less are considered short term, those extending beyond one year are considered long term

10. Discuss The Short Term Forecasting Methods.

Two most commonly used methods of short term cash forecasting are

The receipt and disbursements method

The adjusted net income method

The receipt and disbursement method-cash flows in and out in most companies on a continuous basis. The prime aim of receipts and disbursements forecasts is to summaries these flows during a predetermined period. In case of those companies where each item of income and expense involves flow of cash, this method is favored to keep a close control over cash.

Three broad sources of cash inflows can be identified

(1) operating-cash sales and collections from customers form the most important part of the operating cash inflows.

(2) Non-operating- cash inflows include sale of old assets and dividend and interest income

(3) financial-difference between receipt and payment

The adjusted net income method-this method of cash forecasting involves the tracing of working capital flows. It is sometimes called the sources and uses approach. Two objectives of the adjusted net income approach are (i) to project the company need for cash at a future date and (ii) to show whether the company can generate the required funds internally and if not how much will have to be borrowed or raised in the capital market.

11. Define Miller Orr Model.

This model was developed in 1966 by miller, and orr.D. The model is an improvement over the Boumel model. Boumel model assumes that cash payments are fixed and steady. The variation in cash payment (increase due to expansion and decrease due to reduction in investment) are not considered. Miller-orr model fixes the maximum and minimum limits or

upper and lower limits of the cash balances. The optimum balance lies in between upper and lower limits

When the cash balance reaches the upper limit, it indicates that differences between upper limit and optimum balances can be invested in marketable. Similarly, when cash balance reaches the lower limit, it indicates the securities be converted into cash to reach the optimum balance level. The developers of this model have given a formula to assess the optimum level of cash

$$Z = 3\sqrt{3bv2}/4\ i$$

Where

Z	stands for optimum cash balance
B	stands for fixed cost per conversion
V^2	stands for variance of daily net cash flows
I	stands for interest per day on readily convertible scripts

The model is superior to Baumol model as it fixed a range in which the cash balance fluctuates and facilitates attaining economic of scale in cash operations. Minimization of opportunity cost and conversion cost can be achieved.

12. Define Accounts Receivable.

Accounts receivable is defined as "Debt owed to the firm by customers arising from sale goods or services in the ordinary course of businesses". When the firm sells its products or services on credit, and it does not receive cash for it immediately, but would be collected in near future. Till collection they form as current assets.

13. List The Characteristics Of Receivables.

a. Risk involvement: Receivable involves risk, since payment takes back in future, and future is uncertain so they should carefully analyze.

b. Based on economic value: It is based on economic value. The economic value in goods or services passes to the buyer currently in return the seller expects an equivalent value from the buyer latter.

c. Implies futurity: Buyer will make cash payment of the goods or services received by him in a future period.

14. Explain the factors influencing the size of investment in receivables.

Volume of credit sales: An increase in credit sales increases the level of receivables and vice versa.

Credit policy of the firm: A firm that following liberal credit policy will have large size of receivable while those having stringent credit policy will have low size of receivable.

Trade terms: If the credit period is more, then the investment in receivables will be more. Cash discount reduces the investment in receivables because it encourages early payments.

Seasonality of business: A firm doing seasonal business has to provide credit sales in the other seasons.

Collection policy: A firm's liberal credit policy will not be able to reduce investment in receivables on the other hand , a firm that follow stringent collection policy will definitely reduce receivables.

Bill discounting and endorsement: It will reduce the size of investment in receivables.

15. List out The Advantages And Limitations Of Lenient Credit Policy.

Advantages of liberal credit policy:

Increase in sales: because of liberal credit terms and favorable incentives.

Higher profits: higher level of production and sales reduces per unit cost

Limitations:

Bad debt loss: It arises due to the non payment of credit sales.

Liquidity problem: When the firm is not able receive the payment at a due date, it may became difficult to pay currently maturing obligations

16. Explain The Advantages And Disadvantages Of Stringent Credit Policy.

Advantages:

Less bad debt losses: because it had granted credit only the creditors who are credit worthy.

Sound liquidity position: the firm can receive all payments on due date.

Disadvantages:

Less sales: Because it is not extending credit to average credit worthiness customers.

Less profit: Less sales automatically reduce s profits.

17. List Out The Credit Policy Variables.

Credit standards: are criteria to decide the types of customers to whom goods could be sold on credit If a firm has more slow paying customers, its investment in accounts receivables will increase. The firm will also be exposed to higher risk of default.

Credit terms: Specify duration of credit and terms of payment by customers. Investment in accounts receivable will be high if customers are allowed extended time period for making payments.

Collection efforts: It determine the actual collection period. The lower the collection period, the lower the investment in accounts receivable and vice -versa.

18. Define Factoring and List Out The Factoring Services.

Factoring may be defined as a continuing legal relationship between a financial institution (the factor) and a business concern (the client) selling goods or services to trade customers (the customers) whereby the factor purchases the clients book debts (accounts receivables) either with or without recourse to the client and in relation thereto control the credit extended to the customers and administers the sales ledger.

The Factoring Services :

The factor provides the following basic services to clients:

Sales ledger administration and credit management.

Credit collection and protection against default and bad debt losses.

Financial accommodation against the assigned book debts.

Other services:

Providing information on prospective buyers.

Providing financial counseling

Assisting the client in managing its liquidity and preventing sickness.

Financing acquisition of inventories.

Providing facilities for operating letters of credit by the client.

19. How Credit Analysis Is Obtaining Credit Information?

There are two types of information (i) internal (II) external

Internal- Firms require their customers to fill various forms and documents giving details about financial operations. They are also required to furnish trade references with whom the firm can have contacts to judge the suitability of the customer for credit. This type of information is obtained from internal sources of credit information. Another internal source of credit information is derived from the records of the firms contemplating an extension of credit.

External – the availability of information from external sources to assess the credit worthiness of customers depends upon the development of institutional facilities and industry practices.

There are no. of sources available to analysis the external creditworthiness, (i) Financial Statements (ii) bank references (iii) Trade references (iv) credit bureau reports

20.Why Do Companies in India Grant Credit?

Companies in practice feel the necessity of granting credit for several reasons:

- Competition
- Companys bargaining power
- Buyer's requirement
- Buyer's status
- Relationship with dealers
- Marketing too
- Industry practices
- Transit delays

21.Explain Various Method to Analyses Creditworthiness Of Customer Or Credit Standards.

Numerical credit scoring: A variety of factors influence a customer creditworthiness. This makes credit investigation difficult task. A firm can use numerical credit scoring to appraise credit applications when it is dealing with a large number of small customers. The firm based in its past experience or empirical study, may identify both financial and non financial attributes that measure the credit standing of a customer. The numerical credit model may include:

Ad hoc approach: The attributes identified by the firm may be assigned weights depending on their importance and be combined to create an overall score or index.

Simple discriminant analysis: A firm can use more objective methods of differentiating between good and bad customer.

Multiple discriminant analysis: The technique of multiple discriminant analysis combines many factors according to importance (weight) to be given to each factor and factor and determines a composite score to differentiate good customer from bad customers.

22. Explain the Nature of Inventories.

Inventories are stock of the product a company is manufacturing for sale and components that make up the product. The various forms in which inventories exist in a manufacturing company are raw material, work in process and finished goods

Raw material: are those basic input that are convert into finished product through the manufacturing process. Raw material inventories are those units which have been purchased and stored for future production

Work in process: inventories are semi manufactured products, they represent products that need more work before they become finished product for sale.

Finished goods: Inventories are those completely manufactured products which are ready for sales.

The level of three kind of inventories for a firm depend in the nature of its business.A manufacturing firm will have substantially high level of all three kinds of inventories.

23.Explain the ABC Inventory Control System

Large number of firms have to maintain several type of inventories. It is not desirable to keep the same degree of control on all the items. The firm should pay maximum attention to those items whose value is the highest. The firm should, therefore classify inventories to identify which item should receive the most effort in controlling.The firm should be selective in its approach to control investment in various types of inventories. This analytical approach is called the ABC analysis

The high value items are classified as "A item" would be under the tightest control. "C item" represent relatively least value and would be under simple control, "B item" fall in between these two categories and require reasonable attention of management.

24. Explain the Computerized Inventory Control System.

A computerized inventory control system enables a company to easily track large items of inventories. It is an automatic system of counting inventories, recording withdrawals and revising the balance. There is an in built system of placing order as the computer notices that the reorder point has been reached. The computerized inventory system is inevitable for large retail stores, which carry thousand of items. The computer information systems of the buyers and suppliers are linked to each other. As soon as the suppliers computer receives an order from the buyer's system the supply process is activated.

$$\text{Optimal Order Quantity} = \sqrt{\frac{2 \times \text{Annual Demand in Units} \times \text{Ordering Cost per Order}}{\text{Carrying Cost per Unit}}}$$

25. How to Determined Optimal Inventory Level?

Determining an Optimal Inventory

The tradeoff on inventory is fairly clear. On the one hand, having too high an investment in inventory results in large carrying costs, which will drag down the value of the firm. On the other hand, having too small an inventory results in either lost sales or higher ordering costs, for the firm has to replenish its inventory on a more frequent basis. One model used to estimate economic order quantities, and consequently inventory levels, minimizes the sum of the carrying and the ordering costs. This model yields an estimate similar to the Baumol model:

where the carrying cost per unit includes both the interest foregone and the storage and administrative costs per unit stored, and the ordering cost is the cost associated with filling an order on short notice

26. Explain The Sources Of Working Capital.

Sources of Working Capital

(i) Permanent or Fixed	(ii) Temporary or variable	Spontaneous
Long Term	Short Term	
1.Shares	1.Commercial banks	Trade Creditors
2.Debentures	2.Indigeneous bankers	Accrued -

3.Public deposits	3.Trade Creditors	Expenses
4.Ploughing back of profits	4.Instalment Credit	
5.Loans from Financial Institutions	5.Advances	
6.Accounts Receivable-Credit/Factoring		
7.Accrued Expenses		
8.Commercial Paper		

27. Explain The Sources Of Permanent Or Fixed Or Long Term Working Capital.

1. Shares and Debentures

A firm can issue various types of shares such as equity shares, preference shares and deferred shares. According to Companies Act 1956, a public company cannot issue deferred shares. Equity shares do not have any fixed commitment charge. Dividend to equity shareholders is paid after fixed rate of interest to debentures holders and dividend at fixed rate to preference shareholders are met. Repayment of capital at the time of winding up of the company is done in the same priority and hence equity shareholders are eligible to residual income

2. Debentures

A debenture is an instrument issued by the company acknowledging its debt to its holder. It is a long term borrowing and the debenture holders are the creditors of the company. Interest on debentures is a charge against profit and loss account.

Debentures may be of different kinds such as secured, unsecured, redeemable, irredeemable, convertible and non convertible. Interest on debentures is a tax deductible expense.

3.Public Deposits

Public deposits are the fixed deposits accepted by a business enterprise directly from the public. Non-banking concerns cannot borrow by way of public deposits more than 25% of its paid up capital and free reserves.

4.Ploughing Back of Profits

It refers to the reinvestments by concern of its surplus earnings in its business. And is an internal source of finance. It is the cost free source of finance, gains confidence of the public and there is no dilution of control. But excessive resort to ploughing back of profits may lead to monopolies, misuse of funds, over capitalization and speculation etc.

5.Loans from Financial Institutions

Financial institutions such as Commercial banks, Life Insurance Corporation, Industrial Finance Corporation of India, State Financial Corporation(LIC), State Industrial Development Corporation(SIDC), Industrial Development Bank of India

(IDBI)etc. provide short term medium term and long term loans. This source of finance is more suitable t meet the medium term demands of working capital. Interest is charged on such loans at a fixed rate and the amount of the loan is to be repaid by way of instalments in a number of years.

28. Explain Sources Of Short Term Working Capital (Temporary Or Variable).

1.Indigenous Bankers

Private money lenders were the major source of finance prior to the establishment of commercial banks. They used to charge very high rates of interest. Even today some business houses depend upon indigenous bankers for their working capital requirement.

2.Trade Credit

Trade credit refers to the credit extended by the suppliers of goods in the normal course of business. The credit worthiness of a firm and the confidence of its suppliers are the main basis of securing trade credit.

The main advantages of trade credit as a source of short term finance are

i. It is an easy and convenient method of finance

ii. It is flexible as the credit increases with the growth of the firm

iii. It is informal and spontaneous source of finance Major disadvantage of this method is charging of higher prices by the suppliers and loss of cash discount.

3.Instalment credit

In this method, the assets are purchased and the possession of goods is taken immediately but the payment is made in instalments over a pre determined period of time. Normally, interest is charged on the unpaid price or it may be adjusted in the price.

4.Advances

Generally firms manufacturing industrial products having long production cycle prefer to take advances from their customers against their orders. It is the cheapest short term source of finance , thus enables firms to minimize their investment in working capital .

5.Factoring or Accounts Receivable Credit

A commercial bank may provide finance by discounting the bills or invoices of its customers. Thus a firm gets immediate payment for sales made on credit. A factor is a financial institution which offers services relating to management and financing of debts arising out of credit sales. Factor render various services including maintenance of sales ledger, collection of accounts receivables, credit control and protection from bad debts, provision of finance and rendering of advisory services to their clients. Factoring may be on a recourse basis, where the risk of bad debts is borne by the client or on a non-recourse basis, where the risk of credit is borne by the factor.

Major disadvantages of factoring are:

i. The high cost of factoring as compared to other sources of short term finance

ii. The perception of financial weakness about the firm availing factoring services

iii. Adverse impact of tough stance taken by factor, against a defaulting buyer, upon the borrower resulting into reduces future sales

6.Accrued Expenses

Accrued expenses are the expenses which have been incurred but not yet due and hence not yet paid also. It represents a liability that a firm has to pay for the services already received by it. It includes wages and salaries, interest and taxes. It is a cost free source of financing.

Wages and salaries are usually paid on monthly, fortnightly or weekly basis for the services already rendered by employees. Income tax is paid periodically much after the profits have been earned. Interest is paid periodically while the funds are used continuously by the firm.

The amount of accruals varies with the change in the level of activity of a firm. When the activity level expands, accruals also increase and hence they provide a spontaneous source of financing.

7.Deferred Incomes

Deferred incomes are incomes received in advance before supplying goods or services. These funds increase the liquidity of a firm .Firms having good demand for its products and services can demand deferred incomes.

8.Commercial Paper

Commercial Paper represents unsecured promissory notes issued firms to raise short term funds. Only large companies enjoying high credit rating and sound financial health can issue commercial paper to raise short term funds. RBI has laid a number of conditions to determine eligibility of a company for the issue of a commercial paper. Only a company which is listed on the stock exchange has a net worth of at least Rs.10 crores and a maximum permissible bank finance of Rs.25 crores can issue commercial paper not exceeding 30 percent of its working capital limit. It is sold at a discount from its face value and redeemed at face value on its maturity. Hence the cost of raising funds in this way, is a function of the amount of discount and the period of maturity and no interest rate is provided by the RBI for this purpose. Commercial papers are normally bought by investors including banks, insurance companies, unit trusts and firms to invest surplus funds for a short period.

12 Mark Questions:

1. Explain the factors that determine the working capital needs of a firm.
2. Explain Sources Of Short Term Working Capital (Temporary Or Variable).
3. Explain in detail about the liquidity versus profitability in managing working capital.
4. Explain Various Method to Analyses Creditworthiness Of Customer Or Credit Standards.
5. In the present economic scenario, which source of financing is more advantageous/ why?
6. How to estimate working capital requirement?
7. What are advantages of cash management?
8. List out the situation for holding cash in the business.
9. Explain the dangers of a) Excess working capital and inadequate working capital
10. Explain how working capital management policies affects the profitability,liquidity and Structural health of the organizations.
11. State the different sources of working capital available to the firm.
12. Discuss the various approaches to determine an appropriate financial mix of working capital.
13. What are the different methods of forecasting working capital requirements of business?

PROBLEMS:

1. From the following balance sheet compute (a) Gross working capital (b) Net working capital

Liabilities		**Assets**	
Share capital	6,00,000	Land and Building	3,00,000
Reserves	1,00,000	Plant and Machinery	4,00,000
Debentures	3,00,000	**Current Assets:**	

Current Liabilities:		Cash	60,000
Bank loan	1,00,000	Investment	1,00,000
Creditors	60,000	Debtors	1,40,000
Bills Payable	40,000	Inventory	2,00,000

2. From the following estimate, calculate the average amount of working capital required.

1. Average amount locked up in a stock		Per annum (Rs)
Stock of finished goods and work in progress		10,000
Stock of stores, material, etc		8,000
2. Average credit given:		
Local sales 2 weeks credit		1,04,000
Outside the state 6 weeks credit		3,12,000
3. Time available for payments:		
For purchase	4 weeks	78,000
For wages	2 weeks	2,60,000

3.Peerless Ltd, is engaged in customer retailing. You are required to forecast their working capital requirements from the following information

Projected annual sales	Rs 6,50,000
% of N.P to cost of sales	25%
Average credit allowed to debtors	10 weeks
Average credit allowed by creditors	4 weeks
Average stock carrying (in terms of sales Requirements)	8 weeks

Add 20% to allow for contingencies

4. Murphy ltd sells its product on a gross profit of 20% on sales. The following information is extracted from its annual accounts for the year ended 31.03.2006.

Sales at 3 month credit	Rs 4,00,000
Raw materials	1,20,000
Wages paid - 15 days in arrears	96,000

Manufacturing expenses paid – 1 month in arrears – Rs 1,20,000

Administrative expenses paid – 1 month in arrear – Rs 48,000

Sales promotion expenses – payable half yearly in advance = 20,000

The company enjoy 1 month credit from the suppliers of raw materials and maintains 2 month's stock of raw material and 1.5 months stock of finished goods. The cash balance is required to be maintained at Rs 10,000. Assuming a 10% margin, find out the working capital requirement.

FORMULAS

Unit I
VALUATION OF SHARES AND DIVIDEND

- Valuation of Asset = Annual cash inflow x Annuity discount factor at an appropriate interest rate.
- Valuation of Debenture or Valuation of pre. shares

= Interest payable on the bond(Annuity discount factor)+face value (Present value discount factor)

- Valuation of debenture (never mature or perpetual) = Annual Interest

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  Expected Rate of interest

- Yield on Debenture = Annual Interest

  Market Price of debenture

- Yield till maturity on Debenture =

  Annual interest payment +(Face value of deb.- present value of deb)/ period of debenture to maturity

  .

  (Face value of deb.+ present value of deb.)/ 2

- Value of preference share(irredeemable)= Dividend on a preference share

  Yield on pre.share

SINGLE YEAR

- Current price of equity share =

  Dividend per share at the end of first year + Expected Market price of the share end of the year

  1+ Required rate of return 1+ Required rate of return

MULTIPLE YEAR

- Current value of equity share = Expected annual dividend per equity share

  capitalize rate of return

- Growth in Dividend = Dividend in 2nd year- Dividend in 1st year

  Dividend in 1st year

EARNING CAPITALIZATION APPROACH

- Current Market price of an equity share = (capitalization rate – growth rate of dividend)

  Dividend at the end of the year

DIVIDEND CAPITALIZATION APPROACH

Current Market price of an equity share= Expected earning per share

Capitalization rate

RETURN

Rate of return = $\frac{\text{Income + (Sale/Current price – Purchase price)}}{\text{Purchase price}}$ X 100

Current yield = $\frac{\text{Income}}{\text{Current price}}$ X 100

Capital gains yield = $\frac{\text{Current price – Purchase price}}{\text{Purchase price}}$ X 100

TIME VALUE OF MONEY

SIMPLE INTEREST

FVn =PV + PV (k) (n)OR Present value of money(interest rate)(no of yrs)

COMPOUND INTEREST:

FVn = PV (1+k)n

FUTURE VALUE OF SINGLE CASH FLOW:

FVn = PV (1+k)n

FUTURE VALUE OF MULTIPLE CASH FLOW:

FVn = PV1 (1+k)n-1+ PV2 (1+k)n-2+…….+ PVn (1+k)n

PRESENT VALUE OF MULTIPLE CASH FLOW:

PVAn = $\frac{A}{(1+k)} + \frac{A}{(1+k)2} + \frac{A}{(1+k)3} + \frac{A}{(1+k)n}$

PRESENT VALUE OF ANNUITY:

PVA = $\frac{Ax[(1+k)n-1]}{[k(1+k)n]}$

Unit – II

CAPITAL BUDGETING

Pay back period = $\frac{\text{Initial Investment}}{\text{Net Annual cash flow}}$

Accounting Rate of Return = $\frac{\text{Average Annual Profit}}{\text{Original investment}}$

Average Rate of return = $\frac{\text{Average Annual Profit}}{\text{Original investment- Scrap Value /2}}$

Net present Value = Total present value of cash inflows – Net present Value

Excess Present Value Index = $\frac{\text{Total present value of cash inflows}}{\text{Total Present value of cash outflows}}$ x 100

COST OF CAPITAL

Perpetual

Cost of Debentures = Interest / Sale proceed of the bond or I/sv (1-t)
Or Kd

Cost of Debenture before before tax adjusted = Interest / Sale proceed of the bond or I/SV

Cost of Redeemable Debenture

Cost of Debentures Or Kd = I (1-t) + (flotation cost + discount+ premium-premium on redemption)/ no of Year / RV +SV/2

Debt Issued at premium or Discount

Kd = Interest x (1-t) / NP

Cost of Equity

Ke = D1 X g / P0

Cost of Preference Kp = Preference Dividend / Market price

Weighted average = Eq.sh x Ke + pre.sh x Kp+Deb x Kd / Eq.sh + Pre.sh+ Debt

LEVERAGE

Operating Leverage = Contribution / Operating Profit or C / EBIT

Financial Leverage = EBIT / EBT OR OP / PBT

Combined Leverage = Contribution / Operating Profit X EBIT / EBT OR Operating Leverage x Financial Leverage

WORKING CAPITAL

RAW MATERIALS INVENTORY

Budgeted production in units x Cost of rawmaterials per unit x Average inventory holding period (months/days) / 12 months /365 days

WORK IN PROCESS INVENTORY (W/P)

Budgeted production in units	x	Estimated Work-in-process cost per unit	x	Average time span of work-in- progress inventory(months/days)
12 months /365 days				

FINISHED GOODS INVENTORY

Budgeted production (in units)	x	Cost of goods produced per unit (excluding depreciation)	x	Finished goods holding period (months/days)
12 months /365 days				

DEBTORS

Budgeted credit sales (in units)	x	Cost of sales per unit (excluding depreciation)	x	Average debt collection period(months/days)
12 months /365 days				

CURRENT LIABILITIES
TRADE CREDITORS

Budgeted yearly production (in units)	x	Raw material requirement per unit	x	Credit period allowed by creditors(months/days)
12 months /365 days				

DIRECT WAGES

Budgeted yearly production (in units)	x	Direct labout cost per unit	x	Average time-lag in payment of wages(months/days)
12 months /365 days				

OVERHEADS(OTHER THAN DEPRECIATION AND AMORTISATION)

Budgeted yearly production (in units)	x	Overhead cost per unit	x	Average time-lag in payment of Overheads (months/days)
12 months /365 days				

CASE STUDY

1. What are the new challenges presently facing Finance managers?
2. What do you understand by earning capitalization model? In what circumstances it is relevant?
3. Discuss the functions of financial management.
4. A Choice is to be made between two competing proposals which require an equal investment of Rs 50000 and are expected to generate net cash flows as under

Year	**Project I**	**Project II**
End of the year 1	25000	10000
End of the year 2	15000	12000
End of the year 3	10000	18000
End of the year 4	Nil	25000
End of the year 5	12000	8000
End of the year 6	6000	4000

The cost of capital of the company is 10% present value factors at 10% per annum.Which project proposal should be chosen and why? Evaluate the project proposals under

d) Pay back period
e) Discounted cash flow method
f) Excess present value index

5. A limited company is considering investing in a project requiring a capital outlay of Rs40000. Forecast of annual income after depreciation but before Tax is as follows

Year	Rs
6	200000
7	200000
8	160000
9	160000
10	80000

Depreciation may be taken as 40% on original cost and taxation at 50% of net income calculate:

f) Pay-back method
g) Rate of return on original investment
h) Rate of return on average investment
i) Discounted cash flow method taking cost of capital at 10%
j) Excess resent value index