	MEASI INSTITUTE OF MANAGEMENT **CHENNAI-14** **Approved by All India Council of Technical Education and Affiliated to the University of Madras, ISO 9001:2015 Certified Institute**

FINANCIAL MANAGAEMENT COURSE MATERIAL

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VISION & MISSION STATEMENTS

VISION:

- To emerge as the most preferred Business School with Global recognition by producing most competent ethical managers, entrepreneurs and researchers through quality education.

MISSION:

- Knowledge through quality teaching learning process; To enable the students to meet the challenges of the fast challenging global business environment through quality teaching learning process.
- Managerial Competencies with Industry institute interface; To impart conceptual and practical skills for meeting managerial competencies required in competitive environment with the help of effective industry institute interface.
- Continuous Improvement with the state of art infrastructure facilities; To aid the students in achieving their full potential by enhancing their learning experience with the state of art infrastructure and facilities.
- Values and Ethics; To inculcate value based education through professional ethics, human values and societal responsibilities.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEO 1: Placement: To equip the students with requisite knowledge skills and right attitude necessary to get placed as efficient managers in corporate companies.
PEO 2: Entrepreneur: To create effective entrepreneurs by enhancing their critical thinking, problem solving and decision-making skill.
PEO 3: Research and Development: To make sustained efforts for holistic development of the students by encouraging them towards research and development.
PEO4: Contribution to Society: To produce proficient professionals with strong integrity to contribute to society.

Program Outcome;

PO1: Problem Solving Skill: Apply knowledge of management theories and practices to solve business problems.

PO2: Decision Making Skill: Foster analytical and critical thinking abilities for data-based decision making.

PO3: Ethical Value: Ability to develop value based leadership ability.

PO4: Communication Skill: Ability to understand, analyze and communicate global, economic, legal and ethical aspects of business.

PO5: Individual and Leadership Skill: Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

PO6: Employability Skill: Foster and enhance employability skills through subject knowledge.

PO7: Entrepreneurial Skill: Equipped with skills and competencies to become an entrepreneur.

PO8: Contribution to community: Succeed in career endeavors and contribute significantly to the community.

CORE COURSE – XI

Subject Code	Subject Name	L	T	P	S	C
PMF2K	FINANCIAL MANAGEMENT	3	1	0	1	4
Course Objectives						
C1	To create an understanding and familiarize the students to the fundamentals of financial management and create awareness on the various sources of finance.					
C2	To create awareness on the various investment techniques on the investment decision					

	making.	
C3	To throw light on the concept of cost of capital and familiarize on the technique of identifying the right source of capital.	
C4	To educate on the concept of capital structure and the create understanding on the concept of dividend.	
C5	To create an understanding on the concept of working capital, its need, importance, factors and forecasting technique.	
SYLLABUS		
Unit. No.	Details	Hours
Unit I	INTRODUCTION: Financial management; Definition and scope – objectives of Financial Management – Profit Maximization - wealth maximization - functions and role of finance manager. Sources of finance – short term – Bank Sources – Long term – Shares – Debentures – Preferred stock – Debt; Hire purchase, Leasing, Venture Capital – Private equity.	12
Unit II	INVESTING DECISION - Capital Budgeting Process – Techniques of Investment Appraisal; Pay Back Period; Accounting Rate of Return, Time Value of Money- DCF Techniques –Net Present Value, Profitability Index and Internal Rate of Return- Problems - Risk analysis in Capital Budgeting.	12
Unit III	COST OF CAPITAL - Cost of specific sources of capital – Cost of equity capital – Cost of debt – Cost of preference – Cost of retained earnings - weighted average cost of capital. EBIT -EPS Analysis - Operating Leverage - Financial Leverage - problems.	12
Unit IV	CAPITAL STRUCTURE - Factors influencing capital structure – optimal capital structure -capital structure theories – Net Income Approach – Net Operating Income (NOI) Approach – Modigliani-Miller (MM) Approach – Traditional Approach – Practical Problems. DIVIDEND AND DIVIDEND POLICY; Meaning, classification - sources available for dividends -Dividend policy general, determinants of dividend policy.	12
Unit V	WORKING CAPITAL MANAGEMENT - Definition and Objectives - Working Capital Policies - Factors affecting Working Capital	12

	requirements - Forecasting Working Capital requirements (problems) - Cash Management - Receivables Management and - Inventory Management - Working Capital Financing - Sources of Working Capital and Implications of various Committee Reports.	
Total Hours		60
Reference Books		
1.	S.N.Maheswari, Financial Management	
2.	I.M. Pandey Financial Management, Vikas Publishing House Pvt. Ltd., 10th edition, 2012.	
3.	Van Horne, J.C., Financial Management and Policy, 12th Edition, Pearson, 2012.	
4.	Prasanna Chandra, Financial Management, 9th edition, Tata McGraw Hill, 2012.	
5.	Periasamy, P., Financial Management, 3rd Edition, Tata McGraw-Hill Education Pvt. Ltd., 2012.	
6.	Brigham, E.F. and Ehrhardt, M.C., Financial Management; Theory and Practice, 12th Edition, Cengage Learning India, 2011.	
E-Sources		
1.	http://www.finance4nonfinancemanagers.com/finance-management/introduction-to-financial-management/	
2.	https://www.docsity.com/en/financial-management-risk-analysis-in-capital-budgeting-notes-finance-1/51428/	
3.	https://accountingexplained.com/managerial/capital-budgeting/	
4.	https://corporatefinanceinstitute.com/resources/knowledge/finance/cost-of-capital/	
5.	http://www.yourarticlelibrary.com/theories/theories-of-dividend-walters-model-gordons-model-and-modigliani-and-millers-hypothesis/29462	
6.	http://www.studyfinance.com/lessons/workcap/	

Assessment Tools Used			
1.	Assignments	6.	Group Discussion
2.	Internal Assessment Tests	7.	Videos
3.	Model Exam	8.	Role Play
4.	Seminars	9.	Synetics
5.	Case studies	10.	Quiz

Content Beyond Syllabus		
1.	Point of Indifference– Meaning –process	
2.	Major financial decisions – Time value of money.	
3.	Valuation of shares and Bonds	
Additional Reference Books		
1.	M.Y. Khan and P.K.Jain Financial management, Text, Problems and cases Tata McGraw Hill, 6th edition, 2011.	
2.	AswatDamodaran, Corporate Finance Theory and practice, John Wiley & Sons, 2011.	
3.	G.Sudersena Reddy, Financial Management- Principles & Practices, Himalaya Publishing House, 2nd Edition, 2010 7	
4.	Srivatsava, Mishra, Financial Management, Oxford University Press, 2011	
5.	Parasuraman.N.R, Financial Management, Cengage, 2014.	
Course Outcomes		
CO No.	On completion of this course successfully, the students will;	Program Outcomes (PO)
C206.1	Be aware of the basic concepts of financial management and understand the various sources of finance.	PO4, PO6, PO7
C206.2	Possess knowledge on investment decision making.	PO1, PO2, PO6, PO7
C206.3	Have insights on the cost of capital and would have familiarized themselves with the technique of calculating the cost of capital.	PO2, PO7
C206.4	Have learnt the concept of capital structure and dividend.	PO6, PO7
C206.5	Have good understanding on the concept of working capital, its need, importance, factors and the methods of forecasting it.	PO1, PO2, PO4, PO7

Unit-I

INTRODUCTION:

In our present day economy, Finance is defined as the provision of money at the time when it is required. Every enterprise, whether big, medium or small needs finance to carry on its operations and to achieve its targets. In fact, finance is so indispensable today that it is rightly said to be the life blood of an enterprise.

MEANING OF FINANCE

Finance may be defined as the art and science of managing money. It includes financial service and financial instruments. Finance also is referred as the provision of money at the time when it is needed. Finance function is the procurement of funds and their effective utilization in business concerns. The concept of finance includes capital, funds, money, and amount. But each word is having unique meaning. Studying and understanding the concept of finance become an important part of the business concern.

TYPES OF FINANCE

Finance is one of the important and integral part of business concerns, hence, it plays a major role in every part of the business activities. It is used in all the area of the activities under the different names. Finance can be classified as follows :

1. Business Finance: The term, 'business' can be categorized into three groups: commerce, industry and service. It is a process of raising, providing and managing of all the money to be used in connection with business activities. It encompasses finance of sole proprietary organizations, partnership firms and corporate organizations.

2. Direct Finance:The term 'direct', as applied to the financial organisation, signifies that savings are affected directly from the saving-surplus units without the intervention of financial institutions such as investment companies, insurance companies, unit trusts, and so on.

3. Indirect Finance: The term 'indirect finance' refers to the flow of savings from the savers to the entrepreneurs through intermediary financial institutions such as investment companies, unit trusts and insurance companies, and so on.

4. Public Finance: It is the study of principles and practices pertaining to acquisition of funds for meeting the requirements of government bodies and administration of these funds by the government.

5. Private Finance: It is concerned with procuring money for private organization and management of the money by individuals, voluntary associations and corporations. It seeks to analyse the principles and practices of managing one's own daily affairs. The finance of non-profit organization deals with the practices, procedures and problems involved in the financial management of educational chartable and religions and the like organizations.

6. Corporation Finance: Corporation finance deals with the financial problems of a corporate enterprise. These problems include the financial aspects of the promotion of new enterprises and their administration during their early period ; the accounting problems connected with the distinction between capital and income, the administrative problems arising out of growth and expansion, and, finally, the financial' adjustments which are necessary to bolster up to rehabilitate a corporation which has run into financial difficulties.

NATURE OF FINANCE FUNCTION:

The finance function is the process of acquiring and utilizing funds of a business. Finance functions are related to overall management of an organization. Finance function is concerned with the policy decisions such as line of business, size of firm, type of equipment used, use of debt, liquidity position. These policy decisions determine the size of the profitability and riskiness of the business of the firm.

The nature of finance functions as follows:

i) In most of the organizations, financial operations are centralized. This results in economies.

ii) Finance functions are performed in all business firms, irrespective of their sizes / Legal forms of organization.

iii) They contribute to the survival and growth of the firm.

iv) Finance function is primarily involved with the data analysis for use in decision making.

v) Finance functions are concerned with the basic business activities of a firm, in addition to external environmental factors which affect basic business activities, namely, production and marketing.

vi) Finance functions comprise control functions also.

vii) The central focus of finance function is valuation of the firm.

Finance is something different from Accounting as well as Economics but it uses information of accounting for making effective decisions. Accounting deals with recording, reporting and evaluating the business transactions, whereas Finance is termed as managerial or decision making process. Economics deals with evaluating the allocation of resources in economy and also related to costs and profits, demand and supply and production and consumption. Economics also consider those transactions which involve goods and services either in return of cash or not.

Economics is easy to understand when divided into two parts.

1.Micro Economics: It is also known as price theory or theory of the firm. Micro economics explains the behaviour of rational persons in making decisions related to pricing and production.

2. Macro Economics: Macro Economics is a broad concept as it takes into consideration overall economic situation of a nation. It uses gross national product (GNP) and useful in forecasting.

In order to manage problems related to money principles developed by financial managers, economics, accounting are used. Hence, finance makes use of economic tools.

From Micro economics it uses theories and assumptions. From Macroeconomics it uses forecasting models. Even though finance is concerned with individual firm and economics is concerned with forecasting of an industry.

SCOPE OF FINANCIAL MANAGEMENT:

The main objective of financial management is to arrange sufficient finance for meeting short term and long term needs. A financial manager will have to concentrate on the following areas of finance function.

1. Estimating financial requirements: The first task of a financial manager is to estimate short term and long term financial requirements of his business. For that, he will prepare a financial plan for present as well as for future. The amount required for purchasing fixed assets as well as need for working capital will have to be ascertained.

2. Deciding capital structure: Capital structure refers to kind and proportion of different securities for raising funds. After deciding the quantum of funds required it should be decided which type of securities should be raised. It may be wise to finance fixed assets through long term debts. Even here if gestation period is longer than share capital may be the most suitable. Long term funds should be employed to finance working capital also, if not wholly then partially. Entirely depending on overdrafts and cash credits for meeting working capital needs may not be suitable. A decision about various sources for funds should be linked to the cost of raising funds.

3. Selecting a source of finance: An appropriate source of finance is selected after preparing a capital structure which includes share capital, debentures, financial institutions, public deposits etc. If finance is needed for short term periods then banks, public deposits and financial institutions may be the appropriate. On the other hand, if long term finance is required then share capital and debentures may be the useful.

4. Selecting a pattern of investment: When funds have been procured then a decision about investment pattern is to be taken. The selection of an investment pattern is related to the use of funds. A decision will have to be taken as to which assets are to be purchased? The funds will have to be spent first on fixed assets and then an appropriate portion will be retained for working capital and for other requirements.

5. Proper cash management: Cash management is an important task of finance manager. He has to assess various cash needs at different times and then make arrangements for arranging cash. Cash may be required to purchase of raw materials, make payments to creditors, meet wage bills and meet day to day expenses. The idle cash with the business will mean that it is not properly used.
6. Implementing financial controls: An efficient system of financial management necessitates the use of various control devices. They are ROI, break even analysis, cost control, ratio analysis, cost and internal audit. ROI is the best control device in order to evaluate the performance of various financial policies.
7. Proper use of surpluses: The utilization of profits or surpluses is also an important factor in financial management. A judicious use of surpluses is essential for expansion and diversification plans and also in protecting the interests of shareholders. The ploughing back of profits is the best policy of further financing but it clashes with the interests of shareholders. A balance should be struck in using funds for paying dividend and retaining earnings for financing expansion plans.

FINANCE FUNCTION – AIM

The objective of finance function is to arrange as much funds for the business as are required from time to time. This function has the following objectives.
1. Assessing the Financial requirements. The main objective of finance function is to assess the financial needs of an organization and then finding out suitable sources for raising them. The sources should be commensurate with the needs of the business. If funds are needed for longer periods then long-term sources like share capital, debentures, term loans may be explored.
2. Proper Utilization of Funds: Though raising of funds is important but theireffective utilisation is more important. The funds should be used in such a way that maximum benefit is derived from them. The returns from their use should be more than their cost. It should be ensured that funds do not remain idle at any point of time. The funds committed to various operations should be effectively utilised. Those projects should be preferred which are beneficial to the business.
3. Increasing Profitability. The planning and control of finance function aims atincreasing profitability of the concern. It is true that money generates money.

To increase profitability, sufficient funds will have to be invested. Finance Function should be so planned that the concern neither suffers from inadequacy of funds nor wastes more funds than required. A proper control should also be exercised so that scarce resources are not frittered away on uneconomical operations. The cost of acquiring funds also influences profitability of the business.

4. Maximizing Value of Firm. Finance function also aims at maximizing the value of the firm. It is generally said that a concern's value is linked with its profitability.

EVOLUTION OF FINANCE FUNCTION:

Financial management came into existence as a separate field of study from finance function in the early stages of 20th century. The evolution of financial management can be separated into three stages:

1. Traditional stage (Finance up to 1940):The traditional stage of financial management continued till four decades. Some of the important characteristics of this stage are:

i) In this stage, financial management mainly focuses on specific events like formation expansion, merger and liquidation of the firm.

ii) The techniques and methods used in financial management are mainly illustrated and in an organized manner.

iii) The essence of financial management was based on principles and policies used in capital market, equipment‘s of financing and lawful matters of financial events.

iv) Financial management was observed mainly from the prospective of investment bankers, lenders and others.

2. Transactional stage (After 1940):The transactional stage started in the beginning years of 1940‘s and continued till the beginning of 1950‘s. The features of

this stage were similar to the traditional stage. But this stage mainly focused on the routine problems of financial managers in the field of funds analysis, planning and control. In this stage, the essence of financial management was transferred to working capital management.

3. Modern stage (After 1950):The modern stage started in the middle of 1950's andobserved tremendous change in the development of financial management with the ideas from economic theory and implementation of quantitative methods of analysis. Some unique characteristics of modern stage are: i) The main focus of financial management was on proper utilization of funds so that wealth of current shareholders can be maximized. ii) The techniques and methods used in modern stage of financial management were analytical and quantitative. Since the starting of modern stage of financial management many important developments took place. Some of them are in the fields of capital budgeting, valuation models, dividend policy, option pricing theory, behavioural finance etc.

GOALS OF FINANCE FUNCTION:

Effective procurement and efficient use of finance lead to proper utilization of the finance by the business concern. It is the essential part of the financial manager. Hence, the financial manager must determine the basic objectives of the financial management.

Objectives of Financial Management may be broadly divided into two parts such as:
1. Profit maximization

2. Wealth maximization.

Profit Maximization:

Main aim of any kind of economic activity is earning profit. A business concern is also functioning mainly for the purpose of earning profit. Profit is the measuring techniques

To understand the business efficiency of the concern. Profit maximization is also the traditional and narrow approach, which aims at, maximizes the profit of the concern. Profit maximization consists of the following important features.

1. Profit maximization is also called as cashing per share maximization. It leads to maximize the business operation for profit maximization.

2. Ultimate aim of the business concern is earning profit, hence, it considers all the possible ways to increase the profitability of the concern.
3. Profit is the parameter of measuring the efficiency of the business concern. So it shows the entire position of the business concern.
4. Profit maximization objectives help to reduce the risk of the business.

Favourable Arguments for Profit Maximization

The following important points are in support of the profit maximization objectives of the business concern:

(i) Main aim is earning profit. (ii) Profit is the parameter of the business operation. (iii) Profit reduces risk of the business concern. (iv) Profit is the main source of finance. (v) Profitability meets the social needs also.

Unfavourable Arguments for Profit Maximization:

The following important points are against the objectives of profit maximization: (i) Profit maximization leads to exploiting workers and consumers. (ii) Profit maximization creates immoral practices such as corrupt practice, unfair trade practice, etc. (iii) Profit maximization objectives leads to inequalities among the stake holders such as customers, suppliers, public shareholders, etc.

Drawbacks of Profit Maximization:

Profit maximization objective consists of certain drawback also: (i) It is vague: In this objective, profit is not defined precisely or correctly. It creates some unnecessary opinion regarding earning habits of the business concern. (ii) It ignores the time value of money: Profit maximization does not consider the time value of money or the net present value of the cash inflow. It leads certain differences between the actual cash inflow and net present cash flow during a particular period. (iii) It ignores risk: Profit maximization does not consider risk of the business concern. Risks may be internal or external which will affect the overall operation of the business concern.

2. Wealth Maximization:

Wealth maximization is one of the modern approaches, which involves latest innovations and improvements in the field of the business concern. The term wealth means shareholder wealth or the wealth of the persons those who are involved in the business concern. Wealth maximization is also known as value maximization or net present worth maximization. This objective is a universally accepted concept in the field of business

Favourable Arguments for Wealth Maximization

(i) Wealth maximization is superior to the profit maximization because the main aim of the business concern under this concept is to improve the value or wealth of the shareholders.
(ii) Wealth maximization considers the comparison of the value to cost associated with
the business concern. Total value detected from the total cost incurred for the business
operation. It provides extract value of the business concern.
(iii) Wealth maximization considers both time and risk of the business concern.
(iv) Wealth maximization provides efficient allocation of resources.
(v) It ensures the economic interest of the society.

Unfavourable Arguments for Wealth Maximization:

(i) Wealth maximization leads to prescriptive idea of the business concern but it may not be suitable to present day business activities.

(ii) Wealth maximization is nothing, it is also profit maximization, and it is the indirect name of the profit maximization.
(iii) Wealth maximization creates ownership-management controversy.
(iv) Management alone enjoy

SOURCES OF FINANCE:

(a) LONG TERM FINANCE:

Financing means providing money for investment in the form of fixed assets and also in the form of working capital needed for day to day operations. Funds can be secured from various sources. While the availability of finance is of vital importance to any firm, securing it from proper sources is of prime concern to the finance manager. There are various sources as explained below.

EXTERNAL SOURCES:

1. Owned capital (Preference and Equity Capital)\

2. Debentures

3. Public Deposit

4. Lease Financing

5. Hire Purchase\

6. Institutional Assistance

7. Government subsidies

8. Mortgage Bonds

INTERNAL SOURCES:

1. Retained earnings

2. Provision of depreciation

EXTERNAL SOURCES:

1. Preference Shares: Preference shares have two preferential rights. One, at the time of payment of dividend and second, repayment of capital at the time of liquidation of the company. A fixed rate is paid and they do not have voting rights, so they have no say in the management of company. There are many kinds of preference shares. Investors who

do not like to risk their investment prefer these shares. The preference shares are issued in various types and each of them having change by its nature. They are Participating preference shares, nonparticipating preference shares, cumulative preference shares. Non-cumulative preference shares, redeemable preference shares, irredeemable preference shares, convertible preference shares and non-convertible preference shares.

2. Equity Shares: The equity shares are the main sources of finance and the owners of the company contribute it. It is the source of permanent capital since it does not have a maturity date. The holders of equity shares have a control over the working of the company. The rate of dividend on them depends upon the profits of the company. These shares are issued without creating any charge over the assets of the company.
3. Debentures:
Debentures are certificates issued by the company acknowledging the debt due by to its holders with or without a charge on the assets of the company. It is payable at some specified
time mentioned in the instrument. A fixed interest has to be paid regularly till the principal
has been fully repaid by the company. Debentures provide an opportunity for trading on equity. They do not entitle to participate in the management of the company. Cautious investors prefer them. Companies such as transport, electricity etc. may get more benefits from debentures.

4. Institutional Assistance: The Government has set up certain special financial corporation with the object of stimulating industrial development in the country. These include IFC, SFC, ICICI, IDBI etc. Such corporations provide both long term and medium term loans on easy instalments to big industrial houses. The assistance of these institutions are help in promotion of new companies, expansion and developments of existing companies. They exist in direct subscription to company securities, under writing of shares and meeting the financial requirements of companies during economic depression.

5. Public Deposits: Public deposits are the important source for the firms. Companies prefer public deposits because: These deposits carry lower rate of interest These are unsecured deposits Less formalities are needed and These deposits are comparatively for a long period in comparison with the sources of working capital.

6. Lease Finance: Lease financing involves the acquisition of the economic use of an asset

through a contractual commitment to make periodic payments called lease rentals to the person who owns the asset. Thus this is a mode of financing to acquire the use of assets. Through the ownership of the asset is not with the business enterprise, the right to use the asset is vested with the business Unit. Leasing allows flexibility for the funds in the hands of the business firms and the cost of obtaining long-term finance is reduced to a large extent.

7. Hire Purchase: Hire purchase is also a form of acquiring the assets. Assets involving huge amounts if other sources of long-term finance are too costly may be acquired through hire purchase. The terms of hire purchase are set out at the time of entering into the contact itself. As per the contractual agreement, the business firm will pay a hire purchase charge for a fixed duration till the hire purchase price of the equipment is fully paid. Hire purchase formalities are lesser and are easier and less costly mode of financing long-term needs.

8. Government Assistance: Government subsidies and concessions are other modes of financing long-term requirement. Subject to the government regulations, subsidies and concessions are granted to business enterprises. This relieves to a large extent to obligations which otherwise the company would have to incur. Though there are procedural delays in obtaining this form of finance, this is the cheapest and most beneficial source of long-term finance for the business firms.
9. Mortgage Bonds: Mortgage bonds are secured by a lien on fixed assets of the company. It is a written promise given by the company to the investor to repay a specified sum of money at a specified rate of interest at a specified time. If the company defaults in any of the provisions of bond agreement, the trustee on behalf of the bondholders, has the power to take over and sell it, using the amount to pay the bond. If the sale proceed is less than the amount of the issue outstanding the bondholders become unsecured creditors for the balance amount.

(II) INTERNAL SOURCES

1. Retained Earnings: A company out of its profits, a certain percentage is retained ad that amount is re-invested into the business for its development. This is also known ploughing back of profits. According to this device, a part of total profits is transferred to various reserves. These

reserves can help the units to come over depression. These methods are cheaper and best source of internal financing. This method adds credit worthiness of the company and increases public confidence in the solvency of the company. A Company with adequate surplus can follow stable dividend policy. It is an ideal source of finance for expansion and modernisation.

2. DEPRECIATION: Depreciation means decrease in the value of the asset due to wear and tear, lapse of time and accident. This is also considered as one of the source of financing to business. Depreciation does not generate funds but it definitely saves funds. The firm can get the benefit of reducing its income by deducting this non-cash expense in its profit and loss account. So that the income tax liability for the period is reduced.

REVIEW QUESTIONS

1. Explain fully the concept of finance.
2. Bring out the importance of finance.
3. It is often said that financial activities hinge on the money management. Do you agree with this point of view?
4. “Financial accounting is essentially of a stewardship nature” - Comment.
5. What is business finance? Explain its significance.
6. . How can you classify finance? How is finance related to other disciplines?
7. What is finance function?
8. State the objectives of finance function.
9. Explain the significance of finance function.
10. Analyse the various approaches to finance function.
11. Explain the nature and scope of financial management.
12. Describe the evolution of financial management.
13. Explain the objectives or goals of financial management.
14. The wealth maximization objective provides an operationally appropriate decision criterion” – Analyse the statement.
15. In what respect is the objective of wealth maximization superior to the profit maximization objective?
16. Discuss the sources of finance

UNIT-II

CAPITAL BUDGETING:

MEANING OF CAPITAL BUDGETING:

The process through which different projects are evaluated is known as capital budgeting. Capital budgeting is defined ―as the firm‘s formal process for the acquisition and investment of capital. It involves firm‘s decisions to invest its current funds for addition, disposition, modification and replacement of fixed assets‖.

DEFINITION OF CAPITAL BUDGETING:

―Capital budgeting consists in planning development of available capital for the purpose Of maximizing the long term profitability of the concern‖ – Lynch

NEED AND IMPORTANCE OF CAPITAL BUDGETING:

1. Huge investments: Capital budgeting requires huge investments of funds, but the available funds are limited, therefore the firm before investing projects, plan are control its capital expenditure.

2. Long-term: Capital expenditure is long-term in nature or permanent in nature. Therefore financial risks involved in the investment decision are more. If higher risks are involved, it needs careful planning of capital budgeting.

3. Irreversible: The capital investment decisions are irreversible, are not changed back. Once the decision is taken for purchasing a permanent asset, it is very difficult to dispose of those assets without involving huge losses.

4. Long-term effect: Capital budgeting not only reduces the cost but also increases the revenue in long-term and will bring significant changes in the profit of the company by avoiding over or more investment or under investment. Over investments leads to be unutilization of assets or over utilization of fixed assets. Therefore before making the investment, it is required carefully planning and analysis of the project thoroughly.

CAPITAL BUDGETING PROCESS:

Capital budgeting is a complex process as it involves decisions relating to the investment of current funds for the benefit to the achieved in future and the future is always uncertain. However the following procedure may be adopted in the process of capital budgeting:

1. Identification of Investment Proposals: The capital budgeting process begins with the identification of investment proposals. The proposal or the idea about potential investment opportunities may originate from the top management or may come from the rank and file worker of any department or from any officer of the organization. The departmental head analyses the various proposals in the light of the corporate strategies and submits the suitable proposals to the capital expenditure planning committee in case of large organizations or to the officers concerned with the process of long-term decisions.

2. Screening the Proposals: The expenditure planning committee screens the various proposals received from different departments. The committee views these proposals from various angels to ensure that these are in accordance with the corporate strategies or a selection criterion's of the firm and also do not lead to departmental imbalances.

3. Evaluation of Various Proposals: The next step in the capital budgeting process is to evaluate the profitability of various proposals. There are many methods which may be used for this purpose such as payback period method, rate of return method, net present value method, internal rate of return method etc. All these methods of evaluating profitability of capital investment proposals have been discussed in detail separately in the following pages of this chapter. It should, however, be noted that the various proposals to the evaluated may be classified as: (I) Independent proposals (ii) Contingent or dependent proposals and (iii) Mutually exclusive proposals. Independent proposals are those which do not compete with one another and the same may be either accepted or rejected on the basis of a minimum return on investment required. The contingent proposals are those whose acceptance depends upon the acceptance of one or more other proposals, eg., further investment in building or machineries may have to be undertaken as a result of expansion programmed. Mutually exclusive proposals are those which compete with each other and one of those may have to be selected at the cost of the other.

4. Fixing Priorities: After evaluating various proposals, the unprofitable or uneconomic proposals may be rejected straight ways. But it may not be possible for the firm to invest immediately in all the acceptable proposals due to limitation of funds. Hence, it is very essential to rank the various proposals and to establish priorities after considering urgency, risk and profitability involved therein.

5. Final Approval and Preparation of Capital Expenditure Budget: Proposals meeting the evaluation and other criteria are finally approved to be included in the Capital expenditure budget. However, proposals involving smaller investment may be decided at the lower levels for expeditious action. The capital expenditure budget lays down the amount of estimated expenditure to be incurred on fixed assets during the budget period.

6. Implementing Proposal: Preparation of a capital expenditure budgeting and incorporation of a particular proposal in the budget does not itself authorize to go ahead with the implementation of the project. A request for authority to spend the amount should further be made to the Capital Expenditure Committee which may like to review the profitability of the project

in the changed circumstances. Further, while implementing the project, it is better to assign responsibilities for completing the project within the given time frame and cost limit so as to avoid unnecessary delays and cost over runs. Network techniques used in the project management such as PERT and CPM can also be applied to control and monitor the implementation of the projects.

7. Performance Review: The last stage in the process of capital budgeting is the evaluation of the performance of the project. The evaluation is made through post completion audit by way of comparison of actual expenditure of the project with the budgeted one, and also by comparing the actual return from the investment with the anticipated return.

PROJECT EVALUATION TECHNIQUES (OR) CAPITAL BUDGETING TECHNIQUES At each point of time a business firm has a number of proposals regarding various projects in which it can invest funds. But the funds available with the firm are always limited and it is not possible to invest funds in all the proposals at a time. Hence, it is very essential to select from amongst the various competing proposals, those which give the highest benefits. The crux of the capital budgeting is the allocation of available resources to various proposals. There are many methods of evaluating profitability of capital investment proposals. The various commonly used methods are as follows:
(A) Traditional methods: (1) Pay-back Period Method or Pay out or Pay off Method.
(2) Improvement of Traditional Approach to pay back Period Method.(post payback method)

(3) Accounting or Average Rate of Return Method.

(B) Time-adjusted method or discounted methods:

(4) Net Present Value Method.

(5) Internal Rate of Return Method.(6) Profitability Index Method.

(A) TRADITIONAL METHODS:

1. PAY-BACK PERIOD METHOD The _pay back‘ sometimes called as pay out or pay off period method represents the period in which the total investment in permanent assets pays back itself. This method is based on the principle that every capital expenditure pays itself back within a certain period out of the additional earnings generated from the capital assets. Under this method, various investments are ranked according to the length of their payback period in such a

manner that the investment within shorter payback period is preferred to the one which has longer pay back period. (It is one of the non-discounted cash flow methods of capital budgeting).

ACCEPT /REJECT CRITERIA:

If the actual pay-back period is less than the predetermined pay-back period, the project would be accepted. If not, it would be rejected.

2. POST PAY-BACK PROFITABILITY METHOD: One of the serious limitations of Pay-back period method is that it does not take into account the cash inflows earned after pay-back period and hence the true profitability of the project cannot be assessed. Hence, an, improvement over this method can be made by taking into account the return receivable beyond the pay-back period. Post pay-back profitability =Cash inflow (Estimated life – Pay-back period) Post pay-back profitability index= Post pay-back profitability/original investment.

3. AVERAGE RATE OF RETURN: This method takes into account the earnings expected from the investment over their whole life. It is known as accounting rate of return method for the reason that under this method, the Accounting concept of profit (net profit after tax and depreciation) is used rather than cash inflows. According to this method, various projects are ranked in order of the rate of earnings or rate of return. The project with the higher rate of return is selected as compared to the one with lower rate of return. This method can also be used to make decision as to accepting or rejecting a proposal. Average rate of return means the average rate of return or profit taken for considering

(a) Average Rate of Return Method (ARR): Under this method average profit after tax and depreciation is calculated and then it is divided by the total capital outlay or total investment in the project. This method is one of the traditional methods for evaluating The project proposals ARR = (Total profits (after dep & taxes))/ (Net Investment in the project X No. of years of profits) x 100 OR ARR = (Average Annual profits)/ (Net investment in the project) x 100

(b) Average Return on Average Investment Method: This is the most appropriate method of rate of return on investment Under this method, average profit after depreciation and taxes is divided by the average amount of investment; thus: Average Return on Average Investment = (Average Annual Profit after depreciation and taxes)/ (Average Investment)

Accept/Reject criteria:

If the actual accounting rate of return is more than the predetermined required rate of return, the project would be accepted. If not it would be rejected.

(B) TIME – ADJUSTED OR DISCOUNTED CASH FLOW METHODS: or MODERN METHOD The traditional methods of capital budgeting i.e. pay-back method as well as accounting rate of return method, suffer from the serious limitations that give equal weight to present and future flow of incomes. These methods do not take into consideration the time value of money, the fact that a rupee earned today has more value than a rupee earned after five years.

1. NET PRESENT VALUE Net present value method is one of the modern methods for evaluating the project proposals. In this method cash inflows are considered with the time value of the money. Net present value describes as the summation of the present value of cash inflow and present value of cash outflow. Net present value is the difference between the total present values of future cash inflows and the total present value of future cash outflows. NPV = Total Present value of cash inflows – Net Investment

Accept/Reject criteria

If the present value of cash inflows is more than the present value of cash outflows, it would be accepted. If not, it would be rejected.

2. PROFITABILITY INDEX METHOD: The *profitability index* (PI) is the ratio of the present value of change in operating cash inflows to the present value of investment cash outflows

3. INTERNAL RATE OF RETURN METHOD: This method is popularly known as time adjusted rate of return method/discounted rate of return method also. The internal rate of return is defined as the interest rate that equates the present value of expected future receipts to the cost of the investment outlay. This internal rate of return is found by trial and error. First we compute the present value of the cash-flows from an investment, using an arbitrarily elected interest rate. Then we compare the present value so obtained with the investment cost. If the present value is higher than the cost figure, we try a higher rate of interest and go through the procedure again. Conversely, if the present value is lower than the cost, lower the interest rate and repeat the process. The interest rate that brings about this equality is defined as the internal rate of return. This rate of return is compared to the cost of capital and the project having higher difference, if they are mutually exclusive, is adopted and other one is rejected. As the determination of internal rate of return involves a number of attempts

to make the present value of earnings equal to the investment, this approach is also called the Trial and Error Method. Internal rate of return is time adjusted technique and covers the disadvantages of the Traditional techniques. In other words it is a rate at which discount cash flows to zero.

Accept/Reject criteria

If the present value of the sum total of the compounded reinvested cash flows is greater than the present value of the outflows, the proposed project is accepted. If not it would be rejected.

RISK RETURN TRADE-OFF:

The Risk-Return Trade-Off is an essential concept in finance theory. Risk implies the changes in expected return like sales, profits or cash flow and it also includes probability that problem. Risk analysis is a procedure of calculating and examining the risk which is related to financial and investment decision of the company. Finance managers must focus on expected rate of return by comparing the level of risks involved in investment decision. When it is expected that rate of return will be high then it involves high level of risk and vice versa.. The decisions which involve risk-return trade-off are explained below:

1) Capital Budgeting Decisions: Capital budgeting decision is important, as it involvesproper allocation of funds. These decisions are made considerably for long period of time in order to get benefits in future. While taking capital budgeting decision, finance manager needs to evaluate the cost of capital and risk involved in it. Finance manager must have complete knowledge about the techniques used for evaluating such as Net Present Value (NPV), IRR, discounted cash flow, etc. Finance manager must have the capability of combining risk with returns in order to evaluate the potential of investment appropriately

2) Capital Structure Decisions: Capital structure decisions play an important role indesigning the capital structure which is suitable for the company. It is the duty of finance manager to develop an optimum capital structure which involves less amount of cost of capital, less amount of risk but which can generate huge amount of returns. While developing capital structure, finance managers must also consider the financial

and operating leverages of the firm.

3) Dividend Decisions: Dividend decision is also important for organization to designthe dividend policy. Dividend policy involves the amount of profits to pay as dividend to shareholders or reinvested in the organizations. Shareholders emphasize on getting higher amount of dividend, whereas management of company tries to maintain profits to face uncertainties in future. The dividend policy of the firm mainly depends of profitability.

4) Working Capital Decisions: Working capital management is an addition of fixed capital investment. Working capital management is an important element of every organization, as it helps in continuing the business processes. Decisions related to working capital are known as working capital decisions. The essential elements of working capital are cash, accounts receivable and inventory. Each element of working capital involves some kind of risk in it. Hence, it is clear that each every decision related to finance involves risk-return trade-off. So, it is the responsibility of finance managers to consider both risk and return, while making these decisions.

Capital Rationing – Meaning Capital rationing refers to a situation where a firm is not in a position to invest in all profitable projects due to the constraints on availability of funds. Capital rationing is a situation where a firm has more investment proposals than it can finance. It may be defined as "a situation where a constraint is placed on the total size of capital investment during a particular period". In such an event the firm has to select combination of investment proposals that provide the highest net present value subject to the budget constraint for the period.

Meaning of Risk and Uncertainty:

Risk and uncertainty are quite inherent in capital budgeting decisions. Future is uncertain and involves risk. Risk involves situations in which the probabilities of an event occurring are known and these probabilities are objectively determinable. Uncertainty is a subjective phenomenon. In such situation, no observation can be drawn from frequency distribution.

According to Luce R.D and H. Raiffa in their book, 'Games and Decision' (1957), the decision situations with reference to risk analysis in capital budgeting decisions can be broken into three types.1. Uncertainty 2. Risk and 3. Certainty. The risk situation is one in which the probabilities of a particular event occurring are known. The difference between risk and uncertainty lies in the fact that the variability is less in risk than in the uncertainty.

Types of Uncertainties:

Several types of uncertainties are important to the producer, as he formulates plans and designs courses of actions for procuring resources at the present time for a product forthcoming at a future date. The types of uncertainties can be classified as (i) Price uncertainty (ii) Production uncertainty (iii) Production technology uncertainty (iv) Political uncertainty (v) Personal uncertainty; and (vi) Peoples' uncertainty.

RISK ANALYSIS IN CAPITAL BUDGETING:

(a) Conservative methods: These methods include risk-adjusted discount rate, and conservative forecasts or certainty equivalents etc., and

b) Modern methods:

They include sensitivity analysis, probability analysis, decision tree analysis etc.

1. *Risk Adjusted Discount Rate (RADR)*

Risk Adjusted Discount Rate is based on the same logic as the net present value method. Under this method, discount rate is adjusted in accordance with the degree of risk. That is, a risk discount factor (known as risk-premium rate) is determined and added to the discount factor (risk free rate) otherwise used for calculating net present value. Normally, risk discount factor would vary from project to project depending upon the quantum of risk. It is estimated on the basis of judgment and intention on the part of management, which in turn are subject to risk attitude of management. It may be noted that the higher the risk, the higher the risk adjusted discount rate, and the lower the discounted present value. The Risk Adjusted Discount Rate is composite of discount rate which combines .both time and risk factors.

2. Certainty-Equivalent Coefficient Approach: The risk level of the project under this method is taken into account by adjusting the expected cash inflows and the discount rate. Thus the expected cash inflows are reduced to a conservative level by a risk-adjustment factor (also called correction factor). This factor is expressed in terms of Certainty - Equivalent Co-efficient which is the ratio of risk less cash flows to risky cash lows. This co-efficient is calculated for cash flows of each year. The value of the co-efficient may vary-between 0 and 1, there is inverse relationship between the degree of risk, and the value of co-efficient computed.

3. *Sensitivity Analysis:* This provides information about cash flows under three assumptions: i) pessimistic, ii) most likely and iii) optimistic outcomes associated with the project. It is superior to one figure forecast as it gives a more precise idea about the variability of the return. This explains how sensitive the cash flows or under the above mentioned different situations. The larger is the difference between the pessimistic and optimistic cash flows, the more risky is the project.

4. *Decision Tree Analysis* Decision tree analysis is another technique which is helpful in tackling risky capital investment proposals. Decision tree is a graphic display of relationship between a present decision and possible future events, future decisions and their consequence. The sequence of event is mapped out over time in a format resembling branches of a tree. In other words, it is pictorial representation in tree from which indicates the magnitude probability and inter-relationship of all possible outcomes.

REVIEW QUESTIONS:

1)Explain the nature and features of capital budgeting.
2) How do you calculate the accounting rate of return? What are its limitations?
3) Under what circumstances do the net present value and internal rate of return methods differ? Which method would you prefer and why?
4) What are the mutually exclusive projects? Explain the conditions when conflicting ranking would be given by the internal rate of return and net present value methods to such projects.

5) What is profitability index? Which is a superior ranking criterion, profitability index or the net present value?
6) Under what conditions would the internal rate of return be a reciprocal of the payback period?
7) Explain the investment criteria.
8) Discuss the various methods of appraisal of investment proposals.
9) Differential between NPV and IRR method
10) Write short note on
a) Time adjusted rate of return
b) Profitability index
11) Do the NPV and Profitability index always lead to the same investment decision? Discuss.
12) Discuss the techniques of various investment appraisal methods in capital budgeting.
13) Mention the features required by investment evaluation criteria.
14) What are the various kinds of capital budgeting decisions?
15) Explain the steps involved in capital budgeting process?
16) Describe the Factors Influencing Investment Decisions.
17) Discuss risk return trade off.
18)Write a note on capital rationing.
19)What is risk? Differentiate it from uncertainty.
20) What is risk analysis in capital budgeting?

UNIT-III

COST OF CAPITAL

Meaning of Cost of Capital

Cost of capital is one rate of return the capital funds used should produce to justify their use within the firm.

Definition of Cost of Capital:

According to Solomon Ezra, the cost of capital is the minimum required rate of earnings of the cut off rate for capital expenditure.

In the words of Haley and Schall, in a general sense, cost of capital is any discount rate used to value cash streams.

According to James C. Vanhorne, the cost of capital represents a cut off rate for the allocation of capital investment of projects. It is the rate of return on a project that will have unchanged the market price of the stock.

MEASUREMENT OF COST OF CAPITAL

The term cost of capital is an overall cost. This is the combination cost of the specific cost associated with specific source of financing. The computation of cost capital therefore, involves two steps: The computation of the different elements of the cost in term of the cost of the different source of finance. The calculation of the overall cost by combining the specific cost into a composite cost. From the view point of capital budgeting decisions the long-term sources of fund are relevant as the constitute the major source of financing of fixed cost. In calculating the cost of capital, therefore, the focus is to be on the long-term funds.

In other words the specific cost has to be calculated for: 1) Long term debt 2) Preference Shares 3) Equity Shares 4) Retained earnings

COST OF DEBT

The cost of debt is the rate of interest payable on debt. For example, a company issues Rs.1, 00,000 10%debentures at par; the before-tax cost of this debt issue will also be 10%. In case the debt is raised at premium or discount, we should consider P as the amount of net proceeds received from the issue and not the face value of securities. Further, when debt is used as a source of finance, the firm saves a considerable amount in payment of tax as interest is allowed as a deductible expense in computation of tax. Hence, the effective cost of debt is reduced.

COST OF PREFERENCE CAPITAL

A fixed rate of dividend is payable on preference shares. Though dividend is payable at the discretion of the Board of directors and there is no legal binding to pay dividend, yet it does not mean that preference capital is cost free. The cost of preference capital is a function of dividend expected by its investors, i.e., its stated dividend. In case dividend share not paid to preference shareholders, it will affect the fund raising capacity of the firm. Hence, dividends are usually paid regularly of preference shares expect when there are no profits to pay dividends. Where, = Cost of preference Capital D = Annual Preference Dividend P = Preference Share Capital (Proceeds.) Further, if preference shares are issued at Premium or Discount or when costs of floatation are incurred to issue preference shares, the nominal or par value or preference share capital has to be adjusted to find out the net proceeds from the issue of preference shares.

COST OF EQUITY SHARE CAPITAL

The cost of equity is the „maximum rate of return that the company must earn of equity financed portion of its investments in order to leave unchanged the market price of its stock‟. The cost of equity capital is a function of the expected return by its investors. The cost of equity is not the out-of-pocket cost of using equity capital as the equity shareholders are not paid dividend at a fixed rate every year. Moreover, payment of dividend is not a legal binding. It may or may not be paid. But is does not mean that equity share capital is a cost free capital. Shareholders invest money in equity shares on the expectation of getting dividend and the company must earn this minimum rate so that the market price of the shares remains unchanged. Whenever a company wants to raise additional funds by the issue of new equity shares, the expectations of the shareholders have to evaluate. The cost of equity share capital can be computed in the following ways:

Dividend Yield Method or Dividend/Price Ratio method:

According to this method, the cost of equity capital is the "discount rate that equates the present value of expected future dividends per share with the new proceeds (or current market price) of a share‟.

(b)Dividend Yield plus Growth in Dividend Method:

When the dividends of the firm are expected to grow at a constant rate and the dividend-pay-out ratio is constant this method may be used to compute the cost of equity capital. According to this method the cost of equity capital is based on the dividends and the growth rate. Further, in case cost of existing equity share capital is to be calculated, the NP should be changed with MP (market price per share)

WEIGHTED AVERAGE COST OF CAPITAL

Weighted average cost of capital is the average cost of the costs of various sources of Financing. Weighted average cost of capital is also known as composite cost of capital, overall cost of capital or average cost of capital. Once the specific cost of individual sources of finance is determined, we can compute the weighted average cost of capital by putting weights to the specific costs of capital in proportion of the various sources of funds to the total. The weights may be given either by using the book value of the source or market value of the source. The market value weights suffer from the following limitations: It is very difficult to determine the market values because of frequent fluctuations. With the use of market value weights, equity capital gets greater importance. For the above limitations, it is better to use book value which is readily available. Weighted average cost of capital can be computed as follows:

$= \Sigma X / \Sigma W$

X = Cost of specific source of finance

W = Weight, proportion of specific source of finance

MARGINAL COST OF CAPITAL

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

USES OF COST OF CAPITAL IN FINANCIAL DECISION MAKING:

1. CAPITAL BUDGETING DECISION: Cost of capital may be used as the measuring tool for adopting an investment proposal. In various methods of capital budgeting, cost of capital is the key factor in deciding the project out of various proposals pending before the management. NPV or profitability index uses the cost of capital to discount the future cash inflows. Under IRR method, IRR is compared with the cost of capital. Thus in capital budgetary the cost of capital provides the criterion of accepts or reject of the proposals.

2. DESIGNING OF CAPITAL MIX: The cost of capital is significant factor in designing the firm's capital structure. The mix of debt and equity increased the rate of return on equity capital, other things remaining the same. But use of debt increases, the financial risks also. When the financial risk increases, the firm finds it difficult to raise additional funds at existing cost of capital. It has to offer higher, interest rate or to sell new shares on discount. The situation results in a higher cost of capital for the firm. Thus cost of capital affects the capital structure.

3. DECIDING ABOUT THE METHOD OF FINANCING: A capable finance manager must have knowledge of the fluctuation in the capital market and should analyse interest rate and dividend rates in the market from time to time. Whenever additional finance requires, he may have a better choice of the source of finance, which bears he minimum cost of capital.

4. PERFORMANCE OF TOP MANAGEMENT: The performance of top management should be evaluated by comparing actual profitability of projects, with (a) the projected overall cost of capital and (b) the actual costs of funds raised to finance the projects.

5. OTHER AREAS: The concept of cost of capital is also important in many other areas o decision making, such as dividend decision and working capital policy.

LEVERAGES

Definition of Leverages:

James Horne has defined leverage as ―the employment of funds which the firm has to pay a fixed cost or fixed return‖. If a firm is not required to pay fixed cost or fixed return there will be no leverage.

Generally leverage is used to increase the return to equity shareholders. In other words increasing leverage increases the size of the return and increases the risk. The risk refers to the degree of uncertainty associated with the firm‘s ability to pay its fixed payments obligation. Thus leverage calculations are greatly related with the change in the sales volume of the levels of operating income.

OPERATING LEVERAGE: Operating leverage arises from the existence of fixed operating expenses. So the degree of operating leverage depends upon the amount of fixed costs. If fixed costs are high even a small decline in sales can lead to a large decline in operating income. If the firm employs more fixed cost ; greater will be the change in degree of operating leverage. A high degree of operating leverage implies that a small change in sales results in large change in operating income. Operating leverage can be determined by means of cost volume analysis.

OPERATING LEVERAGE = Contribution / Operating profit

Operating leverage also be defined as % of change in profits resulting from % change in sales.

Degree of Operating leverage = % change in profits / % change in sales

Characteristics of Operating Leverage:

(1) This concept cannot applied at breakeven point level because at that level the operating profit
is zero.
(2) It is a number and if the activity increased by a stated percentage the operating profit will be
increased by product of that % and the operating leverage.
(3) Near Breakeven sales, a small increase in the level of activity give more profits. For activity
below breakeven level the operating leverage is negative.

FINANCIAL LEVERAGE: Financial leverage refers to the use of funds obtained by fixed cost or fixed return securities (preference and debentures) in the hope of increasing the return to equity shareholders. It may be defined as % return on equity to the percentage on capitalisation. It is also defines as the process of magnifying the shareholders return through debt is called financial leverage. The role of financial leverage in magnifying the return to shareholders is based on the assumption that fixed charges securities can be attained at lower cost than the firms return on assets (net profit). Thus the difference between the earnings generated by assets and cost of asset is distributed to shareholders hence the EPS to equity shareholders will increase. Financial leverage exists only when fixed financial charges exist.

EFFECT OF OPERATING AND FINANCIAL LEVERAGE ON EPS: (Significance of operating and financial leverage.) :

The operating leverage and financial leverage are the two quantitative tools used by financial experts to measure the return to the owners and the market price of the equity shares. The financial leverage is considered to be superior of these two tools, since it focuses the attention on the market price of the shares which the management always tries to increasing the net worth of the firm. The management for this purpose resorts to trading on equity because when there is increase in EBIT then there is corresponding increase in the price of shares. If the firm employs greater debt, the marginal cost of debt will also go on increasing because of demand of higher rate of interest. Moreover, a firm with widely fluctuating income can't offered to employ a high degree of financial leverage. A company should have a balance between these two leverages because of acceleration or declaration on EBIT and EPS. A proper combination of these two leverages is a blessing for the firm's growth while an improper combination may prove to be curse. A high degree of both leverage makes the position of a firm very risky because of employing excessive assets for which it has to pay fixed cost and also using a large amount of debt capital. It brings a greater risk to the firm. In case the earnings full the firm may not meet its fixed costs. Moreover, greater fluctuations in earnings are likely to occur on account of the existence of a high degree of operating leverage. EPS will also fluctuate widely on account of existence of a high degree of financial leverage. The existence of high degree of operating leverage will result in a more than proportionate change in operating profits even on account of small change in sales. Thus a firm having high degree of both leverage has to face the problem of liquidity in one of are the other year. A firm should therefore, make all possible efforts to combine the operating and financial a leverage in a way that suits the risk-bearing capacity of the firm.

It may be observed that a firm with high operating leverage should not have a high financial leverage. Similarly a firm having a low operating leverage will stand to gain by having a high financial leverage provided it has enough profitable opportunities for the employment Borrowed funds. However, low operating leverage and a high financial leverage is considered to be an ideal situation for the maximization for the profits with minimum of risk.

COMPOSITE LEVERAGE or COMBINED LEVERAGE:

Combined leverage thus expresses the relationship between revenue on account of sales and the taxable income. It helps in finding out the resulting percentage change in taxable income on account of percentage change in sales. This can be computed as follows:

Composite leverage = Operating leverage X Financial leverage

Or

Contribution / Operating Profit x Operating Profit / Profit before tax

Review Questions:

1. What is cost of capital?
2. How is cost of capital determined?
3. How do you calculate cost of debt?
4. What are the various concepts of cost of capital? Why should they be distinguished in financial management?
5. How is the cost of debt computed? How does it differ from the cost of preference capital?
6. The equity capital is cost free.' Do you agree? Give reasons.
7. 'Debt is the cheapest source of funds.' Explain.
8. What is weighted average cost of capital?
9. How is the weighted average cost of capital calculated?
10. Examine the importance of cost of capital.
11. What are the problems involved in determination of cost of capital?
12. How will you calculate cost of preference share capital?
13. How will calculate cost of retained earnings?
14. Explain different types of leverages.
15. Differentiate operating leverage and financial leverage.

UNIT-IV

CAPITAL STRUCTURE

Capital structure refers to the makeup of firm's capitalization. In other words, it represents the mix of different sources of long term funds such as equity shares, preference shares and long term loan, retained earnings etc. The company should select a capital structure, which will help in attaining the objectives of maximization of the shareholders wealth.

The term capital structure differs from financial structure. Financial structure refers to the way the firm's assets are financed. It includes both, long term and short term sources of funds. The term capital structure refers to the permanent financing of the company. It includes long term debts and shareholder's funds but excluding all short term credit. Thus, capital structure is only a part of its financial structure.

PATTERNS OF CAPTIAL STRUCTURE

The capital structure of a company may be of any one of the following four patterns:

- issuing only equity shares
- issuing equity and preference shares
- issuing equity and debentures
- issuing equity, preference and debentures

Which of the above patters would be most suited to the firm is dependent upon internal and external factors with in which the firm operators but the main idea behind the decision is maximization of shareholders wealth.

OPTIMUM CAPITAL STUCTURE:
Optimum capital structure is defined as that relationship of debt and equity shares which maximize the value of the company's share in the market. In case it borrows, which helps in increasing the value of the company's shares in the market, it can be said that borrowing has helped the company in moving towards its optimum capital structure. In case borrowing results in fall in the market value of equity shares, it can be said that the borrowing has moved the company away from its optimum capital structure. The following considerations will help the concern in achieving its goal of optimum capital structure.

-- It should take advantage of favourable financial leverage.

-- It should take advantage of the leverage offered by the corporate taxes. The higher cost of equity finance can be avoided by use of debt which in effect provides a form of income-tax leverage to equity share-holders.

-- It should avoid a perceived high risk capital structure. This is because if the equity Shareholders perceive an excessive amount of debt in the capital structure, the price of equity shares will drop.

The optimum capital structure exists in the following situations:

- The total value of the firm V is maximum when its equity is at the maximum value. Normally, the debt and preferred stock are not affected by fluctuations in market values because they offer a fixed return and their values, therefore, fluctuate with the level of interest rates and preferred stock yields. The value of equity shares, however, fluctuates with the profits of a firm. Thus, in an optimum capital structure, the total value of the firm as well as the value of equity stock should be maximum.
- Generally, the equity stick value shall be maximised on a per-share basis so as to ensure an optimum capital structure. The issue of additional shares may increase the total value of equity stock. This may lead to a decline in the per share value of equity stock, and the firm may move away from its optimum capital structure. It is necessary, therefore, to have a maximum value of the equity shares for an optimum capital structure.

- The optimum capital structure depends on cost of capital. The optimum capital structure occurs when a firm's overall cost of capital is at its lowest point. There is, thus, a link between the cost of capital and the optimum capital structure.

FACTORS AFFECTING DETERMINANTS /INFLUENCING) CAPITAL STRUCTURE:

INTERNAL FACTORS:

- COST OF CAPITAL:
  The current and future cost of each potential source of capital should be estimated and compared.
- RISK:
  Ordinarily, debt securities increase risk, while equity securities reduce it. Risk can be measured to some extent by the use of ratio, measuring gearing and times-interest earned.
- DILUTION OF VALUE:
  A Company should not issue any issue shares that will have the effect of removing or diluting the value of the shares by the existing shareholders.
- ACCEPTABILITY:
  A Company can borrow only if investors are willing to lend. Few companies can afford the luxury of the capital structure, which is unacceptable to financial institution.
- TRANSFERABILITY:
  Many companies put their securities for quotation on the stock exchange quotations and improve transferability of shares.
- INCREASING OWNR'S PROFITS:
  Relying more and more on debt financing can increase profits of the owners.
- OPERATIONAL CONTROL
  Equity stock may result in a possible increase of operational control in an enterprise.

EXTERNAL FACTORS:

- GENERAL LEVEL OF BUSINESS ACTIVITY :
  Where the overall business activity is rising, a firm would want to expand its operations.

- LEVEL OF INTEREST RATES:
  If interest rates becomes excessive, firms will delay debt financing.
- AVAILABILITY OF FUNDS:
  The availability of funds in the money market affects a firm's ability to offer debt and equity shares.
- TAX POLICY ON INTEREST AND DIVIDENDS
  Although each management makes its own decisions on its capital sources, there are certain general factors, which seem to influence the overall capital structure.

GENERAL FACTORS:

- NATURE OF BUSINESS:
  Public utilities having assured market and freedom from competition and stability of income may find debentures as suitable medium of financing. Manufacturing concerns do not enjoy these advantages and therefore, they have to rely on equity share capital. Service and merchandising concern having fewer fixed assets can't afford to raise funds by debentures because of their inability to offer their assets in mortgage for the loans.
- GROWTH AGE AND SIZE OF FIRM:
  Small concerns may have to depend on equity shares because of instability of income. Large concerns may be mostly stable and can generate more debts or debentures. And also as per the stages of the business cycle, the required amount and the choice of sources will also vary.
- PURPOSE OF FINANCING:
  The funds may be required either for issue of shares may do betterment expenditure. Funds required for expansion, purchase of new fixed assets etc. might be raised through debentures, if assets contribute to the earning capacity of the company.
- TRADING ON EQUITY:
  Trading on equity means taking advantage if equity share capital to borrowed funds on reasonable basis. It prefers to the additional profits that equity shares earn because of issuing preference shares and debentures. It is based on the theory that if the rate of the company's earning, the equity shareholders will get additional profits.
- NEED OF INVESTORS:
  An ideal capital structure is one, which suits the needs of different types of investors. Some of them prefer stability of income usually go in for debentures. Those who want

higher and stable income with safety of investment will prefer preference shares. Risk investors will take up equity shares. Those who want to acquire control over the business like equity shares.

- COST OF FINANCING:

  The cost of various financing should be estimated to decide which of the alternatives is the cheapest interest, dividends, underwriting commission, brokerage, stamp duty, listing charges etc. constitute the cost of financing. These securities which involves minimum costs of financing. These securities which involve minimum costs should be preferred. The company incurs lowest expense in selling debentures and highest in raising equity capital. The capital structure therefore, should be diversified with suitable mix so as to minimise the aggregate costs of financing.
- LEGAL REQUIREMENTS:

  The company has to follow the guidelines issued for the issue of preference shares and debentures. It can't exceed such prescribed limit. Some companies are not allowed to issue debentures or bonds. (Banking companies).
- MARKET CONDITIONS:

  The prevailing market sentiments play a vital role in deciding the capital structure. In times of depression, investors will look more for safety than to income and will be willing to invest in debentures and not in shares. During boom period, equity can have a better market.
- PERIOD OF FINANCE:

  When funds are required for permanent investment, equity shares should be issued. But for expansion program and it feels that it will be able to redeem the funds within the lifetime. It may issue redeemable preference shares or debentures or obtain long term loans.
- PROVISION FOR FUTURE:

  While planning a capital structure the provision for future should also be kept in view. It would be safe to keep the best security to be issued in the last instead of issuing all these of securities in one instalment.

CAPITAL STRUCTURE THEORIES

- Net Income Approach (NI)

- Net operating income Approach (NOI)
- Traditional Approach
- Modi Giliaini - Miller Approach (Modi-Miller Approach or MM Approach)

ASSUMPTIONS TO ALL THE APPROACHES:

- There are only two sources of financing (only equity and debentures)
- No taxes.
- The total financing remains constant. I.e. one source can be substituted for the other but there is no additional financing.
- The total assets of the organization remain constant.
- All money available to equity shareholders will be distributed as dividends i.e. there are no retained earnings.

NET INCOME APPROACH

Assumptions:

- There is no corporate taxes
- The cost of debt is less than equity
- The debt content does not change the risk perception of the investors.

Value of the Firm:

Value of the firm (V) = S + B

S = Market value of the equity shares
B = Markets value of the debts

NET OPERATING INCOME THEORY:

The NOI approach believes that changes in capital structure has no effect on the overall cost of capital and the value of the firm. Hence there is no optimum capital structure. Every capital structure is optional. The substance of the theory is that the shareholders perceive risk as debt increased and therefore hey demand more returns which pushes the cost of equity.

Assumptions:

- There are no corporate taxes.
- The cost of debt remains constant.
- The overall cost of capital remains constant.
- Debt increases, leverage increases.

TRADITONAL THEORY (approach) :

Net income and Net operating income theories are two extremes in the area of Capital structure theories. Net income approach says that debt is always preferable and there is optimum capital structure. Net operating income theory says that including debt is irrelevant because it has no effect either on overall cost of capital or over the value of the firm. Traditional theory takes the middle of the road position between NI and NOI.

MODI GILIANI AND MILLER APPROACH (MM APPROACH) :

Changes in capital structure will not affect the value of the firm.

Perfect Market Conditions:

ASSUMPTIONS:

- All investors are rational
- All securities are in infinitely diminishable
- Complete information is available to all investors
- There is no transaction cost (brokerage)
- There is no flotation cost.

HOME MADE LEVERAGE:

An investor may like to shift from one firm to the other firm due to economic benefits. In case the investor wants to maintain secured ownership but runs with short of funds, it is assumed that the investor would borrow money and invest in the company which is more secured and beneficial.

ASSUMPTIONS:

The company and the individual investor can borrow money at the same rate.
The expected net income of a firm is constant.
No corporate taxes.
The dividend pay-out ratio is 100%

An investor may like to shift from one firm to the other firm due to economic benefits. In case the investor wants to maintain secured ownership but runs with short of funds, it is assumed that the investor would borrow money and invest in the company which is more secured and beneficial.

DIVIDEND

MEANING OF DIVIDEND:

Dividend refers to the business concerns net profits distributed among the shareholders. It may also be termed as the part of the profit of a business concern, which is distributed among its shareholders. According to the Institute of Chartered Accountant of India, dividend is defined as —a distribution to shareholders out of profits or reserves available for this purpose.

TYPES OF DIVIDEND/FORM OF DIVIDEND

(A) Cash dividend: A cash dividend is a usual method of paying dividends. Payment of ividend is cash results in the reduction out flow of funds and reduces the net worth of the company. The shareholders get an opportunity to invest the cash in any manner, they desire. Hence, the ordinary shareholders prefer to receive dividends in cash. In case of companies having cash dividends, the firm must have adequate liquid resources, so that its liquidity position is not adversely affected on account of cash dividend.

(B) Scrip (or) Bond dividend: A scrip dividend promises to pay the shareholders at a future specific date. In case a company does not have sufficient funds to pay dividends in cash, it may issue notes or bonds for amounts due to the shareholders. The objective of scrip dividends is to postpone the immediate payment of cash. A scrip dividend bears interest and is accepted as collateral security.

(c) Property Dividend: Property dividends are paid in the form of some assets other than cash. They are distributed under exceptional circumstances and are not popular in India.

(d) Stock Dividend: Stocks dividend means the issue and the bonus shares to the existing shareholders. If a company does not have liquid resources, it is better to declare stock dividends. Stock dividend amounts to capitalization of earnings and distribution of profits among the existing shareholders without affecting the cash position of the firm.

BONUS SHARE: A company can pay bonus to its shareholders either in cash or in the form of shares. Many a times a company need not in a position to pay bonus in cash, in spite of sufficient profits, because of unsatisfactory cash position or because of its adverse effects on the working capital of the company. In such cases, if the Articles of Association provide any conditions, then it can pay bonus to its shareholders in the form of cash. The dictionary meaning of bonus shares is a premium or gift, usually a stock, by a corporation to shareholders. A Bonus share is neither dividend nor a gift.

FACTORS DETERMINING DIVIDEND POLICY

1. Profitable Position of the Firm

Dividend decision depends on the profitable position of the business concern. When the firm earns more profit, they can distribute more dividends to the shareholders.

2. Uncertainty of Future Income

Future income is a very important factor, which affects the dividend policy. When the shareholder needs regular income, the firm should maintain regular dividend policy.

3. Contractual constraints

Often, the firm‘s ability to pay cash dividends is constrained by restrictive provisions in a loan agreement. Generally, these constraints prohibit the payment of cash dividends until a certain level of earnings have been achieved, or they may limit dividends to a certain amount or a percentage of earnings. Constraints on dividends help to protect creditors from losses due to the firm‘s insolvency. The violation of a contractual constraint is generally grounds for a demand of immediate payment by the funds supplier.

4. Internal constraints

The firm‘s ability to pay cash dividends is generally constrained by the amount of excess cash available rather than the level of retained earnings against which to charge them. Although it is possible for a firm to borrow funds to pay dividends, lenders are generally reluctant to make such loans because they produce no tangible or operating benefits that will help the firm repay the loan. Although the firm may have high earnings, its ability to pay dividends may be constrained by a low level of liquid assets.

16. Growth prospects

The firm‘s financial requirements are directly related to the anticipated degree of basset expansion. If the firm is in a growth stage, it may need all its funds to finance capital expenditures. Firms exhibiting little or no growth may never need replace or renew assets. A growth firm is likely to have to depend heavily on internal financing through retained earnings instead of distributing current income as dividends.

6. Owner considerations

In establishing a dividend policy, the firm‘s primary concern normally would be to maximize shareholder‘s wealth. One such consideration is then tax status of a firm‘s owners. Suppose that if a firm has a large percentage of wealthy shareholders who are in a high tax bracket, it may decide to pay out a lower percentage of its earnings to allow the owners to delay the payments of taxes until they sell the stock. Of course, when the equity share is sold, the proceeds are in excess of the original purchase price, the capital gain will be taxed, possible at a more favourable rate than the one applied to ordinary income. Lower-income shareholders, however who need dividend income will prefer a higher pay out of earnings. As of now, the dividend income is not taxed in the hands of the shareholders in India. Instead, for paying out such dividends to its shareholders, the company bears the dividend distribution tax.

7. Market Considerations

The risk-return concept also applies to the firm‘s dividend policy. A firm where the dividends fluctuate from period to period will be viewed as risky, and investors will require a high rate of return, which will increase the firm‘s cost of capital. So, the firm‘s dividend policy also depends on the market‘s probable response to certain types of policies. Shareholders are believed to value a fixed or increasing level of dividends as opposed to a fluctuating pattern of dividends.

8. Legal Constrains

The Companies Act 1956 has put several restrictions regarding payments and declaration of dividends. Similarly, Income Tax Act, 1961 also lays down certain restrictions on payment of dividends.

9. Liquidity Position

Liquidity position of the firms leads to easy payments of dividend. If the firms have high liquidity, the firms can provide cash dividend otherwise, they have to pay stock dividend.

10. Sources of Finance

If the firm has finance sources, it will be easy to mobilize large finance. The firm shall not go for retained earnings.

11. Growth Rate of the Firm

High growth rate implies that the firm can distribute more dividends to its shareholders.

12. Tax Policy

Tax policy of the government also affects the dividend policy of the firm. When the government gives tax incentives, the company pays more dividends.

13. Capital Market Conditions
Due to the capital market conditions, dividend policy may be affected. If the capital market is prefect, it leads to improve the higher dividend.

TYPES OF DIVIDEND POLICY

Dividend policy depends upon the nature of the firm, type of shareholder and profitable position. On the basis of the dividend declaration by the firm, the dividend policy may be classified under the following types:

- Regular dividend policy
- Stable dividend policy
- Irregular dividend policy
- No dividend policy.

- Regular Dividend Policy- Dividend payable at the usual rate is called as regular dividend policy. This type of policy is suitable to the small investors, retired persons and others.

- Stable Dividend Policy - Stable dividend policy means payment of certain minimum amount of dividend regularly. This dividend policy consists of the following three important forms:

    - Constant dividend per share
    - Constant pay-out ratio
    - Stable rupee dividend plus extra dividend.

- Irregular Dividend Policy When the companies are facing constraints of earnings and unsuccessful business operation, they may follow irregular dividend policy. It is one of the temporary arrangements to meet the financial problems. These types are having adequate profit. For others no dividend is distributed.

- No Dividend Policy: Sometimes the company may follow no dividend policy because of its unfavourable working capital position of the amount required for future growth of the concerns .

THEORIES OF DIVIDEND:

Walter's Model:

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 = DIV/k + [(EPS-DIV) r/k]/k, where

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 capitalisation rate

Criticisms of Walters Model:

1. No External Financing: Walter's model of share valuation mixes dividend policy with investment policy of the firm. The model assumes that retained earnings finance the investment opportunities of the firm only and no external financing-debt or equity-is used for the purpose. When such a situation exists, either the firm's investment or its dividend policy or both will be suboptimum.

2. Constant rate of return: Walter's model is based on the assumption that r is constant. In fact, r decreases as more and more investment is made. This reflects the assumption that the most profitable investments are made and then the poorer investments are made. The firm should stop at a point where r = k.

3. Constant opportunity Cost of Capital, k: A firm's cost of capital or discount rate, *k,* does not remain. constant; it changes directly with the risk. Thus the present value of the firm's income moves inversely with the cost of capital. By assuming that the discount rate, *k,* is constant, Walter's model abstracts from the effect of risk on the value of the firm.

Gordon's model and its relevance:

Gordon, Myron, J's model explicitly relates the market value of the firm to its dividend policy. It is based on the following hypotheses:

An all equity firm:

A firm is an all equity firm and it has no debt.

No external financing

A firm has no external finance available for it. Therefore retained earnings would be used to fund or finance any expansion. Gordon's model also supports dividend and investment policies.

Constant return

The firm's internal rate of return, r, is constant.

Constant cost of capital

The discount rate, k, is constant as in Walter's model. Gordon's model also overlooks and ignores the effect of a change in the firm's riskclass and its effect on the discount rate, k.

Permanent earnings

It is assumed the firm and its stream of earnings are perpetual

No taxes

It is also assumed that the firm does not pay tax on the premise that corporate taxes do not exist

Constant retention

The retention ratio (b) once decided is taken as constant. Thus, the growth rate is constant forever as the internal rate of return is also assumed to be constant

Cost of capital greater than growth rate

The discount rate, k, is greater than the above growth rate (g = br).

Valuation Formula

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

P
0 = EPS1 (1 – b) / (k – b)

P
0 = market price per share

EPS
1 = expected earnings per share

b = retention ratio

r = firm's internal profitability

k= firm's cost of capital or capitalisation rate

Review Questions:

1. To study the relationship between capital structure and company value, what are the assumptions normally made?
2. What is the relationship between leverage and cost of capital as per the net income approach?
3. Discuss the relationship between leverage and cost of capital as per the net operating income approach.
4. What are the important propositions of the traditional approach?
5. Define and discuss Modigliani – Miller proposition I and proposition
6. Comment on capital structure policies in practice
7. Explain the factors determining dividend decisions.
8. Explain the different type of Dividend?
9. What are the types of dividend decisions?
10. Explain theories of dividend.

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UNIT-V

WORKING CAPITAL

1.Fixed Assets: A major portion of the capital funds used for investing in purchase of fixed assets for permanent or long-term purposes, for the purpose of diversification, expansion of business, renovation or modernization of plant and machinery and research and development and
2.Current Assets: Rest of the portion of funds needed for short-term purposes like investing into assets for current operations of business is called working capital. For example, one who is managing a trading business has to arrange funds regularly for, purchase of finished stock and keeping it in storeroom, and also find suitable customer to go for sales. On the other hand if it is a manufacturing firm he has to arrange for funds continuously for, buying raw materials, keeping it for some time in store, then taking it for the process of converting into finished goods, and ultimately selling it to consumers.

Fixed Asset Investments Vs Current Asset Investments: Out of the two types of investments, investing in the current operations of the business is more difficult and is a continuous process with more components of assets rather than the first case where the investment is one time or long-term in the business process. Further, purchase of fixed assets can only be by long-term sources of funds. But both long-term as well as short-term sources of funds are used to finance current assets. If so, what is the ratio of both long-term and short-term sources? Even if we decide the ratio, is it a fixed one? The answer is no. It is flexible on the basis of season like operational cycle, production policy, credit term, growth and expansion, price level changes, etc. Improper working capital management can lead to business failure. Many profitable companies fail because their management team fails to manage the working capital properly. They may be profitable, but they are not able to pay the bills. Therefore management of working capital is not very easy and the financial manager takes very important role in it.

Hence, the following guidelines regarding concepts, components, types and determinants will be very useful to a financial manager.

Concepts of Working Capital

There are two concepts of working capital namely Gross concepts and Net concepts:

Gross Working Capital : According to this concept, whatever funds are invested are only in the current assets. This concept expresses that working capital is an aggregate of current assets. The amount of current liabilities is not deducted from the total current assets. This concept is also referred to as "Current Capital" or "Circulating Capital".

Net Working Capital: What is net working capital? The term net working capital can be defined in two ways: (1) The most common definition of net working capital is the capital required for running day-to-day operations of a business.

It may be expressed as excess of current assets over current liabilities. 2) Net working capital can alternatively be defined as a part of the current assets, which are financed with long-term funds.

Net Working Capital = Current assets – Current liabilities.

DIFFERENCE BETWEEN GROSS WORKING CAPITAL AND NET WORKING CAPITAL:

Gross concept of working capital	**Net concept of working capital**
1. Meaning Gross concept of working capital refers to the sum of the current assets employed in the business for day-to day operations and for utilizing the fxed assets at the optimum level. In this concept the total of the current liabilities is not deducted from the total of current assets.	Net concept of working capital refers to the difference between current assets and current liabilities. Excess of current assets over current liabilities is net working capital. Current assets – Current liabilities = Net Working Capita

2. Components Components of current assets 1. Cash and bank balances, 2. Sundry debtors and Bills receivables, 3. Raw materials, 4. Work-in-progress, 5. Finished Goods, 6. Consumables stores, 7. Prepaid expenses, 8. Advances given to suppliers of raw materials.	Total current assets said in the opposite side minus 1. Creditors for raw materials and consumable stores, 2. Bills payable, 3. Advance payment – received from customers, 4. Deferred installments payable within a year, 5. Indirect and other charges payable, 6. Deposits payable within a year, 7. Term loan and debenture payable within a year, 8. Salary, wages, sales tax, Excise duty, PPF, ESI outstanding, 9. Dividend and tax payable.
3. Financing Generally, current assets are fnanced by both long-term sources and short-term sources of funds. Long-term funds Current Assets Short-term funds E.g. Long-term sources: Share capital, Debentures Term loans. Short-term sources: Bank O.D., Cash Credit, Sundry creditors etc.,	Net working capital is fnanced only by long-term sources. E.g. Share capital, Debtors, term loans.
4. Sign Convention Gross concept of working capital is always a positive fgure. It never comes as a negative fgure. In other words, without current assets a company cannot run. Hence, gross	Net working capital maybe positive or negative. Positive fgure gives the company's positive attitude. Negative fgure gives the company's poor fnancial position. **Positive**

concept is nothing but the sum of all current assets.	Current Assets > Current Liabilities **Negative** Current Liabilities > Current Assets
5. Nature of Information It emphasizes only on quantitative nature. It never discloses the liquidity positions. Gross working capital concept results in mismanagement of current assets.	The net working capital concept emphasizes on both the quantitative as well as qualitative nature, which are more relevant for managerial decision-making. Current Ratio = Current Assets Current Liabilities Liquidity ratio = Liquid Assets Current Liabilities

What are Current Assets?

Assets, which can normally be converted into cash within a year or within the operating cycle, are grouped as current assets. In other words, current assets are resources that are in cash or will soon be converted into cash in 'the ordinary course of businesses. The current asset components are assets like cash, temporary investments, raw materials, work in progress, accounts receivables (sundry debtors/ trade receivables/ bills receivables) and prepaid expenses.

What are Current Liabilities?

Liabilities, which are due for payment in the short-run, are classified as current liabilities. In other words, these liabilities are due within the accounting period or the operating cycle of the business. Most of such liabilities are incurred in the acquisition of materials or services forming part of the current assets. Current liabilities are commitments, which will soon require cash settlement in 'the ordinary course of business'. The current liability components are liabilities like accounts payable (sundry creditors/ bills payables/ trade payables), accrued liabilities (wages, salary, and rents), and estimated liabilities (income tax payable and dividend payable).

Types of working capital : Working capital can be divided into two categories on the basis of time:

1. Permanent, fixed or regular working capital,

2.Temporary, variable, fluctuating, seasonal or specified working capital.

Permanent working capital: This refers to minimum amount of investment required in all current assets at all times to carryout minimum level of activity. In other words, it represents the current assets required over the entire life of the business. Tandon committee has referred to this type of working capital as 'Core current assets' or 'Hard-core working capital' The need for investment in current assets may increase or decrease over a period of time according to the level of production. Some amount of permanent working capital remains in the business in one form or another. This is particularly important from the point of view of financing. Tandon Committee has pointed out that this type of core current assets should be financed through long-term sources like capital, reserves and surplus, preference share capital, term loans, debentures, etc.

Temporary Working Capital: Depending upon the production and sales, the need for working capital over and above permanent working capital will change. The changing working capital may also vary on account of seasonal changes or price level changes or unanticipated conditions. For example, raising the prices of materials, labour rate and other expenses may lead to an increase in the amount of funds invested in the stock of raw materials, work-in-progress as well as in finished goods. Sometimes additional working capital may be required to face the cut-throat competition in the market. Sometimes when the company is planning for special advertisement campaigns organised for promotional activities or increasing the sales, additional working capital may have to be financed. All these extra capital needed to support the changing business activities are called temporary, fluctuating or variable working capital.

Determination of working capital requirements

1. **Nature of business:**

The working capital requirements of an organization are basically influenced by the nature of its business. The trading and financial institutions require more working capital rather than fixed assets because these firms usually keep more varieties of stock to satisfy the varied demands of their customers. The public utility service organisations require more fixed assets rather than working capital because they have cash sales only and they supply only services and not products. Thus, the amounts tied up with stock and debtors are almost zero. Generally, manufacturing business needs, more fixed assets rather than working capital. Further, the working capital requirements also depend on the seasonal products.

2. **Size of the business**

Another important factor is the size of the business. Size of the business means scale of operation. If the operation is on a large scale, it will need more working capital than a firm that has a small-scale operation.

3. **Operating cycle**
The term "production cycle" or "manufacturing cycle" refers to the time involvement from cash to purchase of raw materials and completion of finished goods and receipt of cash from sales. If the operating cycle requires a longer time span between cash to cash, the requirement of working capital will be more because of larger tie up of funds in all the processes. If there is any delay in a particular process of sales or collection there will be further increase in the working capital requirements.

4. Production policy The requirements of working capital are also determined by production policy. When the demand for the product is seasonal, inventory must be accumulated during the off-season period and this leads to more cost and risks. These firms, which manufacture variety of goods, will have advantages of keeping low working capital by adjusting the production according to season

5. **Turnover of Working capital** The speed of working capital is also influenced by the requirements
of working capital. If the turnover is high, the requirement of working capital is low and vice versa.

Working Capital Turnover =	Cost of goods sold Working capital

6. **Credit Terms** The level of working capital is also determined by credit terms, which is granted to customers as well as available from its creditors. More credit period allowed to debtors will result in high book debts, which leads to high working capital and more bad debts. On the other hand liberal credit terms available from creditors will lead to less working capital.

7. **Growth and Expansion** As a company grows and expands logically, it requires a larger amount of working capital. Other things remaining same, growing industries need more working capital than those that are static.

8. **Price level changes -** Rising prices would necessitate the organization to have more funds for maintaining the same level of activities. Raising the prices in material, labour and expenses without proportionate changes in selling price will require more working capital. When a company raises its selling prices proportionally there will be no serious problem in the working capital.

9. **Operating efficiency -** Though the company cannot control the rising price in material,
labour and expenses, it can make use of the assets at a maximum utilisation with reduced wastage and better coordination so that the requirement of working capital is minimised.

10. Other factors

- **Level of taxes:** In this respect the management has no option. If the government increases the tax liability very often, taxes have to be paid in advance on the basis of the profit on the current year and this will need more working capital.

- **Dividend policy:** Availability of working capital will decrease if it has a high dividend payout ratio. Conversely, if the firm retains all the profits without dividend, the availability of working capital will increase.

CONCEPT OF OPERATING CYCLE:

The time gap between purchase of inventory and converting the material into cash is known as operating cycle. The management attempts to decrease the duration of operating cycle during inflation.
The operating cycle is the length of time for a company to acquire materials, produce the products, sell the products, and collect the proceeds from customers. The normal operating cycle is the average length of time for a company to acquire materials, produce the products and collect the proceeds from customers. From the above it is very clear that the working capital is required to meet the **time-gap** between the raw materials and actual realisation of stocks. This time gap is technically termed as operating cycle or working capital cycle. It is classified into Trading Cycle and Manufacturing Cycle

Trading Cycle:

Trading business does not involve any manufacturing activities. Their activities are limited to buying finished goods and selling the same to consumers. In the case of trading firm the operating cycle includes time required to convert
(1) Cash into inventories
(2) Inventories into debtors
(3) Debtors into cash.

In the case of financing firm, the operating cycle is still less when compared to trading business. Its operating cycle includes time taken for

(1) Conversion of cash into suitable borrowers

and
(2) Borrowers into cash.

Importance of operating cycle

If a company can shorten the operating cycle, cash can accumulate more quickly, and due to the time value of money, there should be a positive impact on the share value. Holding everything else constant, an investor would prefer a company with a short operating cycle to a similar company with a longer operational cycle.

The formula to calculate operating cycle

Operating cycle = Age of inventory + collection period

Net operating cycle =
Age of inventory + collection period–deferred payments

For calculating net operating cycle, various conversion periods may be calculated as follows:
Raw material cycle period (RMCP)=
(Average Raw material stock/Total raw material Consumable) x 365

Working progress cycle period (WPCP) =
(Average work in progress/ Total cost of Production) x 365

Finished goods cycle period (FGCP) =
(Average finished goods/Total cost of goods Sold) x 365

Accounts receivable cycle period (ARCP) =
(Average Account receivable/Total of sales) x 365

Accounts payable cycle period (APCP) =
(Average account payable/ Total credit purchase) x 365

where,

Total credit purchase = cost of goods sold + ending inventory – beginning of inventory

For above calculations, the following points are essential

1. The average value is the average of opening balance and closing balance of the respective items. In case the opening balance is not available, only the closing balance is taken as the average.
2. The figure 365 represents number of days in a year. Sometimes even 360 days are considered.

3. The calculation of RMCP, WPCP and FGCP the denomination is taken as the total cost raw material consumable, total cost of production total, cost of goods sold respectively since they form respective end products.

On the basis of the above, the operating cycle period:

Total operating cycle period (TOCP)= RMCP + WPCP + FGCP + ARCP

Net operating cycle period(NOCP)= TOCP-DP(deferred payment) (APCP)

The operating cycle for individual components are not constant in the growth of the business. They keep on changing from time to time, particularly the Receivable Cycle Period and the Deferred Payment. But the company tries to retain the Net Operating Cycle Period as constant or even less by applying some requirements such as inventory control and latest technology in production. Therefore regular attention on the firm's operating cycle for a period with the previous period and with that of the industrial average cycle period may help in maintaining and controlling the length of the operating cycle.

Manufacturing Cycle

In the case of manufacturing company the operating cycle refers to the time involvement from cash through the following events and again leading to collection of cash.

Cash	Purchase of raw materials	Work-in-progress	Finished goods	Bills receivable	Debtors	Cash

Operating cycle of a manufacturing concern starts from cash to purchase of raw materials, conversion of work in progress into finished goods, conversion of finished goods into Bills Receivable and conversion of Bills Receivable into cash. In the other words the operating cycle is the number of days from cash to inventory to accounts receivable back to cash. The operating cycle denotes how long cash is tied up in inventories and receivables. If the operating cycle requires a longer time span between cash to cash, the requirement of working capital will be more because of the huge funds required in all the process. If there is any delay in a particular process there will be further increase in the working capital requirement. A long operating cycle means that less cash is available to meet short-term allegations.

Forecasting/estimate of working capital requirement:

"Working capital is the life-blood and the controlling nerve centre of a business". No business can run successfully without an adequate amount of working capital. To avoid the shortage in working capital, an estimate of working capital requirements should be made in advance so that arrangements can be made to procure adequate working capital.

Suggested proforma for estimation of working capital requirements are given below:

Statement of working capital requirements

	Amount(`)	Amount(`)
Current Assets		
Stock of Raw materials		
Work-in-progress (for … months)		
a) Raw materials	-	
b) Direct labour		
c) Overheads		
Stock of finished goods		
Debtors		

Less: Current liabilities i. Creditors ii. Lag in payment of expenses iii. Others (if any) **Working capital** (C.A.- C.L.) **Add:** Provision/Margin for contingencies **Net working capital required =**		

Notes:

- Profits should be ignored while calculating working capital requirements for the following reasons:
- Profits may or may not be used as working capital.
- Even if profits are to be used for working capital it has to be reduced by the amount of income tax, drawings, dividends paid etc.
- Calculation of work-in progress depends upon its degree of completion as regards to material, labour and overheads.
- However, if nothing is given in a question as regards to the degree of completion, we suggest the students to take 100% cost of material, labour and overheads.
- Calculation for stocks of finished goods and debtors should be made at cost unless otherwise asked in the question.

BANKING COMMITTES IN WORKING CAPITAL:

The bank credit working capital has been subjected to various rules, regulations and controls. The RBI has appointed different study groups from time to time to suggest ways and means of making the bank credit an effective instrument for economic growth, industrialization as well as to improve the profit of the banking sectors. The current chapter discusses the various committees constituted by the RBI for the purpose of providing working capital finance. Reports submitted by the following committees are significant in this

respect:
1. Dehejia Committee Report 1969.
2. Tandon Committee Report 1974.
3. Chore Committee Report 1980
4. Marathe Committee Report 1982.

1. Dehejia Committee: A study group under the chairmanship of V.T. Dehejia was constituted in 1968 in order to determine "the extent to which credit needs of industry and trade were inflated and to suggest ways and means of curbing this phenomenon". The committee submitted its reports in September 1969.

Findings:

The important findings of the committee are given below.

1. Higher growth rate of bank credit to industry than the rise in industrial output.
2. Banks in general sanctioned working capital loans to the industry without properly assessing their needs based on projected financial statements.
3. There was also a tendency on the part of industry to divert short term bank credit to some extent for acquiring fixed assets and for other purposes.
4. The present lending system facilitated industrial units to rely on short-term bank credit to finance for fixed assets.

Recommendations

On the basis of the above findings the following recommendations were made by Dehejia Committee to bring about improvements in the lending system:

1. Credit application should be appraised by the bankers with reference to present and projected total financial position as shown by cash flow analysis and forecast submitted by borrowers.
2. The total cash credit requirement is divided into two parts namely

(i) **Hard core** components representing the minimum level of raw materials, finished goods and stores which the industry requires for maintaining a given level of production and which is made on a formal term loan basis. (ii) **Short-term** components representing the fluctuating part of current assets.

4. In order to avoid the possibility of multiple financing, a customer should deal with only one bank. However if the credit requirement is more the committee recommended the adoption of **"Consortium arrangement".**
5. The recommendations given by Dehejia Committee could not be implemented, further in view of unprecedented inflation during 1974 the demand for bank credit rose sharply. Most of the banks had to freeze the credit limit and therefore a need was felt to have a close look at the entire bank credit system. A Committee was, therefore appointed by RBI in July 1974, under the chairmanship of Shri P.L.Tandon.

2. Tandon Committee:

A study group under the chairmanship of Shri P.L. Tandon was constituted in 1974 by the RBI in order to frame guidelines for bank credit. The terms of reference of the committee were as follows.

Terms of reference

1. To suggest guidelines for commercial banks to follow up and supervise credit from the point of view of ensuring proper end-use of funds and keeping a watch on the safety of advances.
2. To make recommendations for obtaining periodical information that may be obtained by banks from the borrower.
3. To make suggestions for prescribing inventory norms for different industries.
4. To suggest criteria regarding satisfactory capital structure and sound financial basis in relation to borrowings.
5. To suggest whether the existing patterns of financing working capital requirements by cash credit / overdraft system, etc. are required to be modified, if so, to suggest modifications.

Findings

On the basis of the reference given above, the committee studied the existing system of working capital finance provided to industry andidentified the following as its major weaknesses

.
1. The banks do not have any credit appraisal or planning. It is the borrower who decides how much he would borrow.
2. The security-based approach to lending has led to division of funds to purchase of fixed assets.
3. Bank credit is treated as the first source of finance rather than being taken as a supplementary to other sources of finance.
4. The working capital finance should be made available only for a short period, as it has otherwise, led to accumulation of inventories with the industry.

Recommendations

The report was submitted on 9th August 1975 and it is a landmark in the history of financing working capital by commercial banks in India. The Tandon Committee made comprehensive recommendation regarding the bank lending practices, which can be broadly classified into four groups'. Important features of the Tandon Committee recommendations based on the fixation of norms for bank lending to industry are as follows.

Norms for Bank Lending

1. **Inventory and receivable norms**
   The borrowers are allowed to keep reasonable current assets particularly inventory and debtors. The normal current assets based on economic ordering levels and certain level of safety should be financed by banker. Finance to borrower in the form of working capital should not be made available for profit making or to keep excess inventory. Similarly the bank should finance the bills receivable, which are in line with the practices of the borrower's industry. The norms have been worked out according to the time element. The limit of the raw materials is expressed as so many months of total consumption in the year. The work-inprogress limit determined as so many months of cost of production, the finished goods and bills receivable limits are determined by cost of sales and credit sales respectively. The Tandon Committee has suggested norms for fifteen industries.

2. Tandon Committee introduced the concept of MPBF in the working capital finance by banker. The Committee suggested that bank should attempt to supplement the borrowers'

resources in financing the current assets. It has recommended that the current assets first should be financed by trade creditors and other current liabilities. The remaining current assets, which is called **working capital gap**, should be financed particularly by bankers in the form of bank credit and through long term borrowings or owner's funds. In the context of this approach, the committee has suggested three alternative methods for working out the MPBF. Each successive method reduces the involvement of short-term bank credit to finance the current assets.

3. **Chore Committee:**

Having implemented the recommendations of the Tandon committee, the RBI constituted another working group under the chairmanship of Shri K.B. Chore, Chief Officer, Department of Banking operation and development, RBI.

Terms of reference

1. The committee was asked to review the cash credit system in recent years with particular reference to the gap between sanctioned limit and the extent of their utilisation.
2. To suggest alternative types of credit facilities, which should ensure greater credit discipline and enable the banks to relate credit limits to increase in output or other production activities.

Recommendations

Continuation of existing credit : The existing system of three types of lending namely, cash credits, loans and bills should be retained.

No bifurcation of credit limit: Bifurcation of cash credit limit into a loan component and a fluctuating cash credit component has not found acceptance either on the part of the banks or the borrowers. Therefore the committee recommends withdrawing bifurcation of accounts.

Separate limit for peak and non-peak level requirements: The banks have been asked to fix separate credit limits wherever feasible for the normal non-peak level and peak level credit requirements and indicate the periods during which the separate limits would be utilised by the borrowers. If, however, there is no pronounced seasonal trend, peak-level and normal requirements should be treated as identical and limits should be fixed on that basis. It should be noted that peak level and non-peak level concepts apply not only to agriculture-based industry but also to certain other consumer industries where the demand may have pronounced seasonal tendencies. Within the limits sanctioned for the peak-level and non-peak level periods the borrowers should indicate before the commencement of each quarter the requirements of funds during that quarters. The statement so submitted by the borrowers should form the basis for quarterly review of the accounts.

Submission of Quarterly Statements: The quarterly statements should be submitted by all the borrowers enjoying working capital limit of Rs.50 lakhs and above and they will have to bring gradual additional contribution based on second method of lending as prescribed by the Tandon Committee.

4. ***Marathe committee:***

The RBI, in 1982, appointed a committee under the chairmanship of Marathe to review the working of **credit authorization scheme (CAS)** and suggest measure for giving meaningful direction to the credit management function of the RBI. The RBI with some modifications has accepted the recommendations of the committee.

Recommendations

The principal recommendations of the Marathe committee include:

1. The committee has declared the third method of lending as suggested by the Tandon committee to be dropped, hence, in future, the banks would provide credit for working capital according to the second method of lending.

2. The committee has suggested the introduction of the **'Fast-Track Scheme'** to improve the quality of credit appraisal in banks. It recommended that commercial banks can release without prior approval of the reserve bank 50% of the additional credit required by the borrowers (75% in case of export oriented manufacturing units) where the following requirements are fulfilled:

(a) The estimate/projections in regard to production, sales, chargeable current asset, current liabilities other than bank borrowings, and net working capital are reasonable in terms of the past trends and assumptions regarding most likely trends during the future projected period.

(b) The classification of assets and liabilities as ‘current’ and ‘noncurrent’ is in conformity with the guidelines issued by the Reserve Bank of India.

(c) The projected current ratio is not below 1.33:1.

(d) The borrower has been submitting quarterly information and operating statement (form 1, form 2, and 3) for the past six months within the prescribed time and undertakes to do the same in future also.

(e) The borrower undertakes to submit to the banks his annual account regularly and promptly. Further, the bank is required to review the borrower’s facilities at least once in a year even if the borrower does not need enhancement in credit facilities.

CASH MANGEMENT:

Management of cash is concerned with providing sufficient cash for meeting cash needs of a business as when needed. On other hand, if undertaking maintains excessive cash, it will remain idle in the business, contributing nothing towards the wealth of the firm. If heavy amounts are blocked, the company will not be in a position to carry on its day-to-day working efficiently. Therefore the aim of the cash management is to maintain sound cash position to keep the firm sufficiently liquid and to use the excessive cash if any in same profitable manner.

A firm that has sufficient cash balance can get the following importance in business.

- Maintenance of Goodwill: The goodwill of a firm depends to a large extent on this fact that the firm repay all the obligations as and when they mature. It can be possible only when the firm maintains a good cash balance.

- Cash discount can be availed: If a firm has sufficient cash, it can avail cash discounts offered by the suppliers. It will lower down the sort of material and finally cost of production.

- Good bank relations: Commercial banks like to maintain good relations with such firms having high liquidity in funds.

- Exploitation of good business opportunities: Firms having food cash position can exploit the business opportunities very well. They can take risk of entering into new ventures.

- Increase in efficiency: Sufficient cash funds ensuring continuity in production that results in high morale, increased productivity, lowering of costs etc.

- Overcoming abnormal situations: Firms having sufficient cash are always in a position to overcome the abnormal financial conditions with ease and without causing much loss to the interest of existing shareholders.

PRINCIPAL MOTIVES FOR HOLDING CASH:

Every firm undertaking desires to keep minimum balance of cash for its unforeseen obligations.What should be that minimum amount of cash is early a problem for the financial management to solve. Even cash is a non-productive assets, the firm needs to hold cash to meet the following motives:

TRANSACTION MOTIVE:

The transaction motive is the need for cash to meet day to day requirements such as purchase of materials payment of wages and salaries etc. The cash funds to be kept depend on cash outflows of funds and inflow of funds. If both inflow and outflow of funds are equal there will not be any need to hold cash. But inflow and outflow are not perfectly coincide. For this purpose firm maintain some cash payment.

PRECAUTIONARY MOTIVE:

The precautionary motive is the need to hold cash to meet contingencies in future. The precaution for any amount of cash depends upon the predictability of Cash flows. If it is correctly predicted, less cash will be maintained for an emergency. The precautionary cash is also influenced by the firm's ability to borrow at short notice when the need arises. The precautionary balance may be kept in less cash and more in high-liquid and low risk marketable securities.

SPECULATIVE MOTIVE:

Speculative motive relates to the holding of cash for investing in profit making opportunities as and when they arise. If cash is available to exploit such opportunities, there is a chance of making profits on investment of cash in such opportunities. Most of such opportunities are:

- Purchase of raw materials at a reduced price on immediate cash payment
- Speculate on interest rate movement by buying securities when interest rates are expected to decline and
- Delay in purchases of raw materials on the expectation of decline in prices.

COMPENSATION MOTIVE:

Bank provides various services to the firm on commission basis, while for some other services they require to maintain a minimum cash balance at the bank. This balance is known as compensation balances, from the firms, view point this amount is dead money. The quantum of compensation balance varies with banks. The balance with bank depends upon the supply of money in money market.

FACTORS AFFECTING THE SIZE OF CASH:

Major non-recurring expenditures:

- Repayment of loans
- Expected receipts & payments
- Fluctuation in cash inflows
- Inflow Capacity of the firm
- Attitudes & Policy of the firm
- Degree of efficiency

Major non-recurring expenditures:

This includes expenditure for purchase of long term assets for promotion of new project or diversification of business. Generally such expenditures are planned once or a few times. Therefore the firm has sufficient time to raise finance for these expenditure..

- Repayment of major loans:

It involves large cash out flows, for this firms may go for new issue of shares and debentures to raise enough cash. If not possible by sale of securities, it may sell some of its assets.

- Expected cash receipts and cash payments:

  This determines the size of net cash flows. Management of the firm may decide to maintain a particular level of net cash flows to guard against technical insolvency.

  There are two factors affecting cash flows a) level of sales and b) The stage in the life cycle of the firm, depending upon its policies with regard to management of non-cash assets and financing arrangements, the level of sales and the stage in the life cycle of the firm are inter related and interdependent.

- Possible fluctuations in expected cash inflows and outflows:

Short-term variations in cash flows are natural. These fluctuations determine the risk associated with liquidity. Shorter the period of forecast, precise will be the estimates for cash flows. However there is always some degree of uncertainty that actual cash flows will occur as per estimated cash flows.

- Firm's capacity to borrow emergency:
  Higher the capacities to borrow at a very short period smaller are the cash balances required for transaction and precautionary needs. The credit worthiness of firm, relationship of the firm with its banks and prevailing money market conditions are some of the factors which may influence the borrowing capacity of a firm.

- The attitude and policy of the firm’s management towards running out of cash:
  Cash balances of a firm also depend upon the management policies and attitudes as regards to liquidity preference, sales on credit, investment in inventory and sales volume. If a management gives more importance to profitability, they would tend to minimize cash balances and maximize investment of available cash to the extent possible.

- The degree of efficiency in managing flows of cash:
  Overall efficiency of cash management depends upon collection and disbursement policies and methods. These policies and methods aim at speeding up of the collections and delaying the payments, without having adverse impacts.

CONTROL OF CASH MANAGEMENT:

- **Concentration Banking**: It concentration banking system large number of collection centre are established by the firm indifferent geographical areas. The purpose of this system is to minimise the log between the mailing time from customers to the firm and the time when the firm can make use of the funds. The collection centres collect cheques from their customers and deposit them in the local bank account. Instructions are given to the local collection centre to transfer funds daily by telex, or fax or electronic mail to bank at the head office.

Advantages:

- Time gap between the cheques sent by the customers and received by the firm is reduced.
- If firm's branches is allowed to send bills; the mailing time is less than if they are mailed from the head office.
- It accelerates the overall cash collections.
- It reduces the size of float\float is the difference between the amount of deposits and the amount of usable funds.

LOCK BOX SYSTEM:

This is another method of prompt collections. This system helps the firm to dominate the time between the receipts of cheques and their deposits in the bank. In this system the firm establishes number of collection centres. At each centre, the firm hires a post office box and instructed its customers to mail their remittance to the box. The firm's local bank has been given the authority to collect the remittances directly from the local box. The bank clears the mail several times a day and deposits the cheque in the firms account. At the conclusion of each day all photo copies, invoices, deposits slips and other documents included with the remittances are mailed to the firm.

Advantages:

- The time lock for converting receivables is reduced.
- The bank takes over the task receiving, endorsing, totalling and depositing Cheques.
- With less handling of receipts by employees better audit control is achieved and the chance of documents becoming lost is reduced.
- If customer's cheque is uncollectable, it is returned by special instructions to the firm.
- This system is useful and economical when average remittance is large.
- This system is an improvement the concentration bank system. In lock box system the banker clears the remittances from post boxes, instead of remittance being sent to branch offices and branch offices sending the cheques and bills t o the bankers for collection. Thus one more

intermediary step is skipped to speed up the collection.

ZERO BALANCE ACCOUNTING SYSTEM:

In this system a centralised control over each disbursement is affected. Large companies having branches at the national level uses this system. These branches as usual have accounts will the banks and draw money for day to day expenses. Under the existing rules each branch is maintaining the branches may not properly use several lakhs of rupees with bank without earning interest and the amounts. Under these circumstances, the zero balance accounting is boon to these organisations.

In this system, branches draw their cheques on their individual accounts. When a cheque is paid to a third party these cheques get cleared through the banking system in the usual way. As and when these cheques are honoured, the bank will debit or else the negative balance will build in the account. t the close of the day, all the negative balance will be brought to the zero level once again by means of funds transferred from the concentration bank account. Every morning on electronic report is forwarded to the head office with details as to the balances in the master account and also the details of the previous day's transaction with zero balance account. On receipt of the report from the bank, the financial manager may take action, to convert the cash into Marketable Securities or The marketable securities into cash.

Advantages:

- The idle cash in the branch bank accounts are fully used.
- The minimum cash balances to be maintained by each branch are reduced.
- Centralised control over disbursement is exercised.
- Adjustments are done at bank level and it saves a lot of time for the management
- Quick clearance of cheques is possible.

PREAUTHORISED SYSTEM:

This system helps to convert the receivable cash into working cash with in short time. This system is useful only if companies receive a fixed amount from the number of customers over a period of time at fixed intervals. The difference between this system and other is that it does not contain the signature of the drawer. Thus without the signature of drawer the cheques are paid by the banks to the companies with the customers legal authorisations. This type of cash management is good and rise to insurance companies and leasing companies.

Advantages:

- The company may predict the cash flows more accurately.
- There is no postal delay, no process delay and the cost of processing is also less.
- The customer need not worry about the payment and he is free from writing the cheques and sending the same.
- In case of urgency the company may get the preauthorised cheques system discounted with the bank.

PAYMENT PRACTICES:

Controlling of cash is an important as controlling inflow of cash. In order to control the outflow of cash most of the companies follow centralised cash payment system. Under this system, all payments are transferred from branch office to the central office and it pays the creditor bill to the parties. A transaction delay is quite possible as advantage to the firm. There may be other methods of delaying payments without losing its credit.

Such methods, other than centralised cash payments are explained below:

- Avoid early payments - because it will have no special advantage for paying early except earning cash discounts which is very nominal.
- Use cheque payments- that will take extra time for collection.
- Making delay to make payments - i.e. if the outstanding cannot affect the firm in any way means, the firm can make the payment with quite delay.

RECEIVABLE MANAGEMENT

The term receivable is defined as debt owed to the concern by customers arising from sale of goods or services in the ordinary course of business. Receivables are also one of the major parts of the current assets of the business concerns. It arises only due to credit sales to customers, hence, it is also known as Account Receivables or Bills Receivables. Management of account receivable is defined as the process of making decision resulting to the investment of funds in these assets which will result in maximizing the overall return on the investment of the firm.

The objective of receivable management is to promote sales and profit until that point is reached where the return on investment in further funding receivables is less than the cost of funds raised to finance that additional credit. The costs associated with the extension of credit and accounts receivables are identified as follows:

A. Collection Cost
B. Capital Cost
C. Administrative Cost
D. Default Cost.

- Collection Cost :
  These costs incurred in collecting the receivables from the customers, to who credit sales have been made.

- Capital Cost:
  This is the cost on the use of additional capital to support credit sales which alternatively could have been employed elsewhere.

- Administrative Cost:
  This is an additional administrative cost for maintaining account receivable in the form of salaries to the staff kept for maintaining accounting records relating to customers, cost of investigation etc.

- Default Cost :

  Default costs are the over dues that cannot be recovered. Business concern may not be able to recover the over dues because of the inability of the customers.

FACTORS CONSIDERING THE RECEIVABLE SIZE

Receivables size of the business concern depends upon various factors. Some of

the important factors are as follows:

1. Sales Level : Sales level is one of the important factors which determines the size of receivable of the firm. If the firm wants to increase the sales level, they have to liberalise their credit policy and terms and conditions. When the firms maintain more sales, there will be a possibility of large size of receivable.

2. Credit Policy: Credit policy is the determination of credit standards and analysis. It may vary from firm to firm or even some times product to product in the same industry. Liberal credit policy leads to increase the sales volume and also increases the size of receivable.Stringent credit policy reduces the size of the receivable.

3. Credit Terms : Credit terms specify the repayment terms required of credit receivables, depend upon the credit terms, size of the receivables may increase or decrease. Hence, credit term is one of the factors which affects the size of receivable.

4. Credit Period : It is the time for which trade credit is extended to customer in the case of credit sales. Normally it is expressed in terms of Net days'.

5. Cash Discount : Cash discount is the incentive to the customers to make early payment of the due date. A special discount will be provided to the customer for his payment before the due date.

6. Management of Receivable : It is also one of the factors which affects the size of receivable in the firm. When the management involves systematic approaches to the receivable, the firm can

reduce the size of receivable.

INVENTORY MANAGEMENT

Inventories constitute the most significant part of current assets of the business concern. It is also essential for smooth running of the business activities. A proper planning of purchasing of raw material, handling, storing and recording is to be considered as a part of inventory management. Inventory management means, management of raw materials and related items. Inventory management considers what to purchase, how to purchase, how much to purchase, from where to purchase, where to store and When to use for production etc.

MEANING

The dictionary meaning of the inventory is stock of goods or a list of goods. In accounting language, inventory means stock of finished goods. In a manufacturing point of view, inventory includes, raw material, work in process, stores, etc.

KINDS OF INVENTORIES

Inventories can be classified into five major categories.

A. Raw Material: It is basic and important part of inventories. These are goods which have not yet been committed to production in a manufacturing business concern.

B. Work in Progress: These include those materials which have been committed to production process but have not yet been completed.

C. Consumables: These are the materials which are needed to smooth running of the manufacturing process.

D. Finished Goods: These are the final output of the production process of the business concern. It is ready for consumers.

E. Spares: It is also a part of inventories, which includes small spares and parts.

OBJECTIVES OF INVENTORY MANAGEMENT

Inventory occupies 30–80% of the total current assets of the business concern. It is also very essential part not only in the field of Financial Management but also it is closely associated with production management. Hence, in any working capital decision regarding the inventories, it will affect both financial and production function of the concern. Hence, efficient management of inventories is an essential part of any kind of manufacturing process concern. The major objectives of the inventory management are as follows:

• To efficient and smooth production process.
• To maintain optimum inventory to maximize the profitability.
• To meet the seasonal demand of the products...
• To ensure the level and site of inventories required.
• To plan when to purchase and where to purchase
• To avoid both over stock and under stock of inventory.
•To avoid price increase in future.

TECHNIQUES OF INVENTORY MANAGEMENT

Inventory management consists of effective control and administration of inventories. Inventory control refers to a system which ensures supply of required quantity and quality of inventories at the required time and at the same time prevents unnecessary investment in inventories. It needs the following important techniques.

Techniques based on the order quantity of Inventories

Order quantity of inventories can be determined with the help of the following

techniques:

1. Stock Level: Stock level is the level of stock which is maintained by the business concern at all times. Therefore, the business concern must maintain optimum level of stock to smooth running of the business process. Different level of stock can be determined based on the
volume of the stock.

2. Minimum Level: The business concern must maintain minimum level of stock at all times. If the stocks are less than the minimum level, then the work will stop due to shortage of material.

3. Re-order Level : Re-ordering level is fixed between minimum level and maximum level. Re-order level is the level when the business concern makes fresh order at this level. Re-order level=maximum consumption × maximum Re-order period.

4. Maximum Level : It is the maximum limit of the quantity of inventories, the business concern must maintain. If the quantity exceeds maximum level limit then it will be overstocking. Maximum level = Re-order level + Re-order quantity – (Minimum consumption ×Minimum delivery period

5. Danger Level : It is the level below the minimum level. It leads to stoppage of the production process. Danger level=Average consumption × Maximum re-order period for emergency purchase

6. Average Stock Level : It is calculated such as, Average stock level= Minimum stock level + ½ of re-order quantity

7. Lead Time : Lead time is the time normally taken in receiving delivery after placing order s with suppliers. The time taken in processing the order and then executing it is known as lead time.

8. Safety Stock: Safety stock implies extra inventories that can be drawn down when actual lead time and/ or usage rates are greater than expected. Safety stocks are determined by opportunity cost and carrying cost of inventories. If the business concerns maintain low level of safety stock, it will lead to larger opportunity cost and the larger

quantity of safety stock involves higher carrying costs.

ECONOMIC ORDER QUANTITY (EOQ)

EOQ refers to the level of inventory at which the total cost of inventory comprising ordering cost and carrying cost. Determining an optimum level involves two types of cost such as ordering cost and carrying cost. The EOQ is that inventory level that minimizes the total of ordering of carrying cost. EOQ can be calculated with the help of the mathematical formula: EOQ = 2ab/c

INVENTORY TECHNIQUES BASED ON THE CLASSIFICATION OF INVENTORIES

- A-B-C analysis : It is the inventory management techniques that divide inventory into three categories based on the value and volume of the inventories; 10% of the inventory's item contributes to 70% of value of consumption and this category is known as a category. About 20% of the inventory item contributes about 20% of value of consumption and this category is called category B and 70% of inventory item contributes only 10% of value of consumption and this category is called C category.

- FSND Analysis or Aging Schedule of Inventories: Inventories are classified according to the period of their holding and also this method helps to identify the movement of the inventories.

  FNSD analysis— Where, F = Fast moving inventories
  N = Normal moving inventories
  S = Slow moving inventories
  D = Dead moving inventories

  This analysis is mainly calculated for the purpose of taking disposal decision of the inventories.

- VED Analysis - This technique is ideally suited for spare parts in the inventory management like ABC analysis. Inventories are classified into three categories on the basis of usage of the inventories.

V = Vital item of inventories #
E = Essential item of inventories
D = Desirable item of inventories

- HML Analysis :Under this analysis, inventories are classified into three categories on the basis of the value of the inventories.
  H = High value of inventories
  M = Medium value of inventories
  L = Low value of inventories

Valuation of Inventories

Inventories are valued at different methods depending upon the situation and nature of manufacturing process. Some of the major methods of inventory valuation are mentioned as follows:

1. First in First out Method (FIFO)
2. Last in First out Method (LIFO)
3. Highest in First out Method (HIFO)
4. Nearest in First out Method (NIFO)
5. Average Price Method

Review Questions:

1. What are current assets and current liabilities? Explain with suitable examples.
2. Discuss the different concepts of working capital.
3. Discuss the significance of working capital management in business enterprises.
4. Distinguish between fixed and fluctuating working capital. What is the significance of such distinction in financing working capital of an enterprise?
5. Which concept of working capital is more suitable to creditors for analysis to provide working capital finance and why?

6. What are the factors, which determines the working capital requirements?
7. What are the problems faced by a firm due to inadequate working capital?
8. During inflation pressure how can a finance managers control the needs of increasing working capital.
9. Current assets are financed by both long - term and short - term funds while fixed assets are long - term funds only. Explain.
10. What is meant by negative working capital? Also explain situations in which it arises?
11. Explain the Tandan Committee and Chore Committee Findings and Suggestions on working capital management.
12. Explain the Marathe Committee and Deheja Committee Findings and Suggestions on working capital management.
13. Explain the factors determining cash requirement?
14. Discuss the motives of holding cash
15. Discuss how cash management is controlled?
16. Explain in detail receivables management.
17. Discuss the factors influencing inventory management?
18. What is inventory? Explain its types
19. Explain different techniques of inventory management.