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Preface

It gives us immense pleasure to place the Self Instructional Material (SIM) of Business Finance (Paper I). This book has been written keeping in mind the requirement of the students of distance education. However, it may be helpful to teachers also.

The text of this book has been divided into four chapters for Semester III. The first unit covers the concept, scope and significance of business finance. It also includes concept and theories of capitalization. The second unit focuses on various financial statements and its analysis. The various sources of long term finance and marketing of securities are discussed in the unit number three. The fourth unit covers the concept, types, significance and various sources of working capital.

The book has been written keeping in mind 'teach yourself' technique. The language used is lucid and objective type questions; short notes as well as long answer questions are given at the end of each unit for self-study and practice.

We are thankful to the authors who have contributed significantly in this book. We are also thankful to Director, Distance Education and office bears of the university as well as distance education center for facilitating this book to the readers.We hope that this book will prove to be useful to students at M.Com. Part II Sem. III as well as teachers.We also appeal that if there are any suggestions; please let us know so that this can be further improved.

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Business Finance
M. Com. II Sem. III

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M. Com Part-II

Semester III

BUSINESS FINANCE PAPER I

INDEX

Each Unit begins with the section 'Objectives' -

Objectives are directive and indicative of :

1. What has been presented in the Unit and
2. What is expected from you
3. What you are expected to know pertaining to the specific Unit once you have completed working on the Unit.

The self check exercises with possible answers will help you to understand the Unit in the right perspective. Go through the possible answer only after you write your answers. These exercises are not to be submitted to us for evaluation. These are provided to you as Study Tools to help keep you in the right track as you study the Unit.

Unit-1

Environment of Business Finance

Unit Structure

1.0 Objectives:

After studying this unit you will be able to:

- Understand the concept of Business Finance
- Know the scope and significance of Business Finance
- Understand the concept of Financial Goal
- Differentiate between Profit Maximization and Vs Wealth Maximization
- Know the relationship of finance with other areas of management
- Know the finance functions
- Understand the concept and theories of capitalization
- Know the concept, symptoms, causes, effects and remedies of over capitalization
- Know the concept symptoms, causes, effects and remedies of under capitalization

1.1 Introduction:

Every Business needs capital. Capital is required at the time of beginning of the business, is in operation and also it's grows in size and expands. Establishment of any business is not possible without finance. Business finance means the management of assets and money. Today, finance is crucial for any company. Its primary focus is to increase profit and minimize financial risks. Business finance refers to money and credit employed in business. It involves procurement and utilization of funds so that business may be able to carry out their operations effectively and efficiently. Business finance includes all types of funds used in business. Business finance is needed in all types of organisations large or small, manufacturing or trading and any other type. The amount of business finance varies from one business firm to another depending upon its nature and size. It also differs from time to time. Business finance involves estimation of funds. It is concerned with raising funds from different sources as well as investment of funds for different purposes. Funds are required for the purchase of land and building, machinery and other fixed assets. Besides this, money is also needed to meet day-to-day expenses e.g. purchase of raw material, payment of wages and salaries, electricity bills, telephone bills etc. Business aware the production continues in anticipation of demand. Expenses continue to be incurred in anticipation of the goods are sold and money is recovered. Money is required to bridge the time gap between production and sales. Besides producers, may be necessary to change the office set up in order to install computers. Renovation of facilities can be taken up only when adequate funds are available. To meet contingencies funds are always required meeting the ups and downs of the business. Finance decision regarding source of funds are very crucial for any business. The problems of determining the amount of capitalization is necessary both for a newly started company as well as for an established concern.

1.2 Presentation of Subject Matter

1.2.1 Concept of Business Finance

Business finance consists of a wide range of activities and disciplines regarding the management of money and other valuable assets. Small business owners must have a solid understanding of the principles of finance to keep their companies profitable. Business finance refers to money and credit employed in business. Finance is the basic of business. It is required to purchase assets, goods, raw materials and for the other flow of economic activities. Business finance programs in universities familiarize students with accounting methodologies, investing strategies and effective debt management.

Definitions:

Scott and Brigham

"Finance is concerned with decision about money or more appropriately cash flows."

Professor Gloss and Baker

Business finance is concerned with the sources of funds available to enterprises of all sizes and the proper use of money or credit obtained from such sources."

E.W Walker

"Business finance is to planning, coordinating, controlling and implementing of financial activities of business institution."

Henry Hoagland

Business Finance is concerned with the financing and investment decisions made by the management of companies in pursuit of corporate goals.

Wheeler,

"Business finance is that business activity which concerns with the acquisition and conversation of capital funds in meeting financial needs and overall objectives of a business enterprise".

Guthumann and Dougall

"Business finance can broadly be defined as the activity concerned with planning, raising, controlling, administering of the funds used in the business".

Parhter and Wert

"Business finance deals primarily with raising, administering and disbursing funds by privately owned business units operating in non-financial fields of industry".

Business finance can be defined as "The provision of money at the time when it is needed by a business".

The term 'business finance' is very comprehensive. It implies finances of business activities. Business can be categorized into three groups: commerce, industry and service. It is a process of rising, 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. No doubt, the abovementioned organizations have different characteristics, features, different regulations and rules and financial problems faced by them vary depending upon the nature of business and scale of operations. However, it should be remembered that the same principles of finance are applicable to large and small organizations, proprietary and non-proprietary organizations.

1.2.2. Scope of Business Finance

The scope of business finance is very wide. While accounting is concerned with the routine type of work, business finance is concerned with financial planning, policy formulation and control. Earnest W. Walker and William are of the opinion that the financial function has always been important in business management. The financial organization depends upon the nature of the organization whether, it is a proprietary organization, a partnership firm or corporate body. The significance of the finance function depends on the nature and size of a business firm. The role of business finance officers must be clearly defined to avoid conflicts and the overlapping of responsibilities. There are various fields covered by business finance and some of them are:

1. Financial Planning and Control: Any business firm must manage and make their financial analysis and planning. To make these planning's and management, the financial manager must have knowledge about the present financial situation of the firm. On the basis of this information, he/she regulates the plans and managing strategies for future financial situation of the firm with in different economic scenario. Financial budget also relies in these financial plans. Financial budget serves as the basis of control over financial plans. The firms on the basis of budget, finds out the deviation between the plan and the performance and tries to correct them. Hence, business finance consists of financial planning and control.

2. Deciding Capital Structure: The Capital structure refers to the kind and proportion of different securities for raising funds. After deciding about 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 if gestation period is longer, then share capital may be most suitable. Long-term funds should be raised. It may be wise to finance fixed assets through long-term debts. Even here if gestation period is longer, then share capital may be most suitable. Long-term funds should be employed to finance working capital also, if not wholly then partially. Entirely depending upon overdrafts and cash creditors 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. If cost of raising funds is very high then such sources may not be useful for long.

3. Selection of Source of Finance: After preparing a capital structure, an appropriate source of finance is selected. Various sources, from which finance may be raised, include: share capital, debentures, financial institutions, commercial banks loans, public deposits, etc. If finances are needed for short periods then banks, public deposits and financial institutions may be appropriate; on the other hand, if long-term finances are required then share capital and debentures may be useful. If the concern does not want to tie down assets as securities then public deposits may be a suitable source. If management does not want to dilute ownership then debentures should be issued in preference to share.

4. Financial Statement Analysis: Another scope of business finance is to analyses the financial statements. However, it also analyses the financial situations and problems that arises in the promotion of the business firm. This statements consists the financial aspect related to the promotion of new business. Administrative difficulties arise at the time expansion, necessary adjustments for the rehabilitation of the firm also in difficulties.

5. Working Capital Management: The financial decision making that relates to current assets or short-term assets is known as working capital management. Short-term survival is a prerequisite of long term success and this is the important factor in business. Therefore the current assets should be efficiently managed so that the business won't suffer any inadequate or unnecessary funds locked up in future. This aspect implies that the individual current assets such as cash, receivable and inventory should be very efficiently managed. Hence, the efficiency in the management of working capital ensures the balance between liquidity and profitability.

6. Capital Building: Financial decision making related to long-term assets is known as capital budgeting or long-term investment decision. This scope s related tot eh selection of an investment proposal out of the many related alternatives available to the firm. However, the acceptance of the proposal depends on the returns associated with that particular proposal. Here, the capital budgeting technique measures the worth of the investment proposal. This technique studies the method of appraising investment proposals. It also analysis the risk and uncertainty, as the returns from the investment proposal extends into the future. All the returns are evaluated in relation to the risk.

7. Management of Financing: Managing financing is yet another important area of business finance. The management of finance is concerned with the mix of assets or structure of the assets of the firm. As the firm should always pay special attention to it's assets. The firm should properly mix the ratio of debt and equity capital while main investment. As capital structure is the ratio of debt and equity capital. Now, the capital structure consisting of the proper ratio of debt and equity is known as optimum capital structure. Hence, the financial manager should make decision regarding optimum capital structure and the ratio of fund to be raised to maximize the returns for the shareholders.

8. Dividend Management: Business finance also analyses the policies regarding the dividend, depreciation and reserve. Every dividend decisions are made on the basis of financing decision of the firm. The firm should decide, how much of profit should be distributed among shareholders as dividend and how much should be retained as earnings. This decision depends on the priority of the shareholders and the investment opportunities available to the firm. Here, the financial manager should develop a sound dividend policy.

These were some aspects and scopes of Business Finance. Though, Business Finance covers a wider scope than this above are limited and important scopes of the field.

1.2.3 Significance of Business Finance

Businesses have to consider their finances for so many purposes, ranging from survival in bad times to improving the next success in good ones. How you finance your business can affect your ability to employ staff, purchase goods, acquire licenses, expand and develop. While finances are not necessarily as important as vision and a great product, they are crucial to making the good issue happen.

1. Initial Capital: Every new venture needs seed money. Entrepreneurs only have dreams and ideas until they have some capital to put their ideas in motion. Whether it's a product or service, you will need a way to create and deliver it as well as enough money and time to lay the groundwork of selling and establishing important relationships. Most business owners face the critical choice between debt and equity financing. A small business loan leaves you free to own and have absolute control over your company while it also leaves you lasting financial obligations. Equity gives you cash, but you have to share the success. The critical decision in your financing will determine how your business will work from that point onward.

2. Debt Ratios: Finances are about more than money in your hand. While most businesses have some amount of debt especially in the beginning stages too much debt compared with revenues and assets can leave your with more problems than making your loan payments. Vendors and suppliers often run credit checks and may limit what you can buy on credit or keep tight payment terms. Debt ratios can affect your ability to attract investors including venture capital firms and to acquire or lease commercial space.

3. Business Cycles: No matter how well your business is doing, you have to prepare for rainy days and even storms. Business and economic cycles bring dark clouds you can't predict. That's why smart businesses create financial plans for downturns. Cash savings, good credit, smart investments, and favorable supply and real estate arrangements can help a business stay afloat or even maintain momentum when the business climate is unfavorable.

4. Growth: Success can bring a business to a difficult crossroads. Sometimes to take on more business and attain greater success, a company needs significant financial investment to acquire new capital, staff or inventory. When business managers hit this juncture, they have to wade through their financial options, which may involve infusions of equity capitals perhaps from venture capitalists. Every situation is different, but smart managers consider the cost of success and their options for obtaining growth financing.

5. Payroll: Nothing spells imminent death like a company being unable to make payroll. Even the most dedicated staff won't stick around long once the paychecks stop. The larger an organization gets, the larger the labor costs. Above all, companies have to ensure they have enough cash on hand to make payroll for at least two payroll cycles ahead if not more. Financial planning to ensure your payroll accounts are in strong shape are essential to the integrity and longevity of your company.

1.2.4 Financial Goal

Every firm has a predefined goal or an objective. Therefore the most important goal of a financial manager is to increase the owner's economic welfare. Here economics welfare may refer to maximization of profit or maximization of shareholders wealth. Therefore Shareholders wealth maximization (SWM) plays a very crucial role as far as financial goals of a firm are concerned.

Profit is the remuneration paid to the entrepreneur after deduction of all expenses. Maximization of profit can be defined as maximizing the income of the firm and minimizing the expenditure. The main responsibility of a firm is to carry out business by manufacturing goods and services and selling them in the open market. The mechanism of demand and supply in an open market determine the price of a commodity or a service. A firm can only make profit if it produces a good or delivers a service at a lower cost than what is prevailing in the market. The margin between these two prices would only increase if the firm strives to produce these goods more efficiently and at a lower price without compromising on the quality.

The demand and supply mechanism plays a very important role in determining the price of a commodity. A commodity which has a greater demand commands a higher price and hence may result in greater profits. Competition among other suppliers also effect profits. Manufacturers tend to move towards production of those goods which guarantee higher profits. Hence there comes a time when equilibrium is reached and profits are saturated. According to Adam Smith - business man in order to fulfill their profit motive in turn benefits the society as well. It is seen that when a firm tends to increase profit it eventually makes use of its resources in a more effective manner. Profit is regarded as a parameter to measure firm's productivity and efficiency. Firms which tend to earn continuous profit eventually improvise their products according to the demand of the consumers. Bulk production due to massive demand leads to economies of scale which eventually reduces the cost of production. Lower cost of production directly impacts the profit margins. There are two ways to increase the profit margin due to lower cost. Firstly a firm can produce at lower sot but continue to sell at the original price, thereby increasing the revenue. Secondly a firm can reduce the final price offered to the consumer and increase its market thereby superseding its competitors. Both ways the firm will benefit. The second way would increase its sale and market share while the first way only tend to increase its revenue. Profit is an important component of any business. Without profit earning capability it is very difficult to survive in the market. If a firm continues to earn large amount of profits then only it can manage to serve the society in the long run. Therefore profit earning capacity by a firm and public motive in some way goes hand in hand. This eventually also leads to the growth of an economy and increase in National Income due to increasing purchasing power of the consumer.

1.2.5 Profit Maximization Vs Wealth maximization

In any company, the management is the decision taking authority. As a normal tendency the management may pursue its own personal goals (Profit maximization) but in an organization, where there is a significant outside participation (shareholders, lenders etc.) the management may not be able to exclusively pursue its personal goals due to the constant supervision of the various stakeholders of the company-employees, creditors, customers, Government etc.

Every entity associated with the company will evaluate the performance of the management from the fulfillment of its own objective. The survival of the management will be threatened if the objective of any of the entities remains unfulfilled.

The wealth maximization objective is generally in accord with the interests of the various groups such as owners, employees, creditors, and society, and thus, it may be consistent with the management objective of survival.

Due to limitation (timing and social consideration etc.) in profit maximization, in today's real world situations which is uncertain and multi-period in nature, wealth maximization is a better objective. Where the time period is short and degree of uncertainty is not great, wealth maximization and profit maximization amount to essentially the same.

Profit Maximization as its name signifies refers that the profit of the firm should be increased while Wealth Maximization aims at accelerating the worth of the entity. Profit maximization is the primary objective of the concern because of profit act as the measure of efficiency. On the other hand, wealth maximization aims at increasing the value of the stakeholders.

Definition of Profit Maximization

Profit Maximization is the capability of the firm in producing maximum output with the limited input, or it uses minimum input for producing stated output. It is termed as the foremost objective of the company.

It has been traditionally recommended that the apparent motive of any business organisation is to earn a profit, it is essential for the success, survival, and growth of the company. Profit is a long term objective, but it has a short-term perspective i.e. one financial year.

Profit can be calculated by deducting total cost from total revenue. Through profit maximization, a firm can be able to ascertain the input-output levels, which gives the highest amount of profit. Therefore, the finance officer of an organisation should take his decision in the direction of maximizing profit although it is not the only objective of the company.

Definition of Wealth Maximization

Wealth maximization is the ability of a company to increase the market value of its common stock over time. The market value of the firm is based on many factors like their goodwill, sales, services, quality of products, etc.

It is the versatile goal of the company and highly recommended criterion for evaluating the performance of a business organisation. This will help the firm to increase their share in the market, attain leadership, and maintain consumer satisfaction and many other benefits are also there.

It has been universally accepted that the fundamental goal of the business enterprise is to increase the wealth of its shareholders, as they are the owners of the undertaking, and they buy the shares of the company with the expectation that it will give some return after a period. This states that the financial decisions of the firm should be taken in such a manner that will increase the Net Present Worth of the company's profit.

Basis for Comparison	**Profit Maximization**	**Wealth Maximization**
Concept	The main objective of a concern is to earn a larger amount of profit.	The ultimate goal of the concern is to improve the market value of its shares.
Definition	Profit Maximization is the capability of the firm in producing maximum output with the limited input, or it uses minimum input for producing stated output.	Wealth maximization is the ability of a company to increase the market value of its common stock over time.
Objective	Profit Maximization objective leads to exploiting employees and consumers. it also leads to inequalities and lowers human values.	Wealth Maximization provides efficient allocation of resource; It ensures the economic interest of the society.
Emphasizes on	Achieving short term objectives.	Achieving long term objectives

Consideration of Risks and Uncertainty	No	Yes
Advantages	i. easy to calculate profits ii. easy to determine the link between financial decisions and profits	i. Emphasizes the long term gains ii. recognizes risk or uncertainty iii. recognizes the timing of returns iv. considers shareholders return
Disadvantages	i. emphasizes the short term gain ii. ignores risk or uncertainty iii. ignores the timing of returns iv. requires immediate resources	i. offers no clear relationship between financial between financial decisions and share price ii can lead to management anxiety and frustration
Recognition of Time Pattern of Returns	No	Yes
Focused on	Profit Maximization is based on the increase of sales and profits of the organization.	Wealth Maximization emphasizes on long term goals.
Time value of money	Profit Maximization ignores the time value of money. Time value of money refers the money receivable today is more valuable than the money which is going to be	Wealth Maximization considers the time value of money. In wealth maximization, the future cash flows are discounted at a suitable discounted rate to

	received in future.	represent their present value.
Risk	Profit Maximization ignores the risk and uncertainty.	Wealth Maximization considers the risk and uncertainty.
Reliability	In the new business environment Profit maximization is regarded as unrealistic, difficult, inappropriate and immoral.	Wealth maximization objective ensures fair return to the shareholders, reserve funds for growth and expansion, promoting financial discipline in the management.

There is always a contradiction between Profit Maximization and Wealth Maximization. We cannot say that which one is better, but we can discuss which is more important for a company. Profit is the basic requirement of any entity. Otherwise, it will lose its capital and cannot be able to survive in the long run. But, as we all know, the risk is always associated with profit or in the simple language profit is directly proportional to risk and the higher the profit, the higher will be the risk involved with it. So, for gaining the larger amount of profit a finance manager has to take such decision which will give a boost to the profitability of the enterprise.

In the short run, the risk factor can be neglected, but in the long-term, the entity cannot ignore the uncertainty. Shareholders are investing their money in the company with the hope of getting good returns and if they see that nothing is done to increase their wealth. They will invest somewhere else. If the finance manager takes reckless decisions regarding risky investments, shareholders will lose their trust in that company and sell out the shares which will adversely effect on the reputation of the company and ultimately the market value of the shares will fall.

Therefore, it can be said that for day to day decision making, Profit Maximization can be taken into consideration as a sole parameter but when it comes to decisions which will directly affect the interest of the shareholders, then Wealth Maximization should be exclusively considered.

1.2.6 Relationship of finance with other areas of management

There is a close relationship between the finance and other areas of management such as production, Human resource, marketing etc. Almost all business activities in an organization directly or indirectly involve the acquisition and use of funds. The determination of production, human resource and marketing strategies are the freedom of the chief of production, purchase and marketing divisions respectively, but for implementing their decisions funds are required. **For example,** the production department may decide to replace an old machine with a new one to increase the production capacity but it has financial implications too. Similarly, the purchase and sales promotion policies are laid down by the purchase and marketing divisions respectively, but procurement of materials, advertising and other sales promotion activities cannot be carried out without funds. Likewise, the recruitment and promotion of staff is the responsibility of the Human resource department but recruitment and promotion of employees require funds for the payment of wages, salaries and other benefits. Many times, it may be difficult to separate where the one function ends and other starts. It may, however be noted that although the finance of raising and using funds has a significant effect on other areas of management, it need not limit or obstruct the general functions of the business. It is possible that a firm facing financial difficulties may give more weightage to financial considerations and develop its own production and marketing strategies to suit the situation. On the other hand a firm with plenty of funds may not have much inflexibility with regard to financial considerations vis-à-vis other management functions. In such a firm, financial policies may be adjusted to the needs of the decisions relating to **production, Human resource, marketing** and other functions.

Relationship shows balanced behavior of officers of finance department and other department's officers. They should concentrate on one target of company and many other things, they should know for creating good relation.

Relationship of finance with other areas of management can be explained in following way:

1. Relationship of Finance with Production: Production department's main duty is to produce the goods. For producing goods, it needs raw material, labour and other expenses. For paying all expenses, production department needs money and fund which will be fulfilled by finance department. Finance department checks the budget of production department and allow funds for production department. With this view, we can understand that production department is dependent on finance department's decision. Now, if production department performs his duty honestly and products are produced and sold on time, it will be helpful for increase sale and profitability and it will again recycle the fund with high profit in finance department. So, we can say both are dependent on each other. Both are players of business team. Both should be adopt co-operative view for each other. After this, business team can succeed in business.

2. Relationship of Finance with Marketing: Marketing department's main duty is to sell maximum goods and satisfy the consumers. Its product's input cost will decrease if all products are sold by marketers of company. For developing the product, promotion activities and distribution activities of marketing department need some money for paying salesmen, advertising budget and other promotional expenses. For this marketing department makes his marketing budget and it is cleared by finance department, but sometime finance department will not all specific marketing expenses but marketing department need that type of expenses for promotion of sales. This will create confliction. Good relations will be helpful for both departments. If both department does meeting and show behavior like good relative, the problem can easily solve. Both departments should think that both are the part of company's organization and co-ordination between them is must. Sometime, marketing department obtains big order for supplying the goods, at that time finance department should help marketing department for arrangement of money for buying raw material and supplying quickly without any delay.

3. Relationship of Finance with Personnel: Personnel are that science which manages the employees of company and finance is that science which manages the money. If personnel department and finance department work together with co-operation, both departments can satisfy the objectives of company. It is the objective of company to satisfy employee by fulfilling their financial needs. It is also objective of company to reduce the misuse of fund by paying excess salary that required cost of doing work by employee. So, both department should understand each other's objective and should help other department for fulfilling the objectives. One more thing, financial decisions are also very necessary in human resource area. Corporate are moving to the development of employees. They are human resource capital of company. Now, investment in training of employees, incentive schemes and retirement schemes etc should be calculated like other investment and both departments should take maximum advantages from this asset.

The finance cannot work effectively unless it draws on the -disciplines which are closely associated with it. Management is heavily dependent on accounting for operating facts. Accounting' has been described by Richard M. Lynch and Robert W. Williamson as "the measurement and communication of financial and economical data. In fact, accounting information relates to the production, sales, expenses, investments, losses and gains of the business. Accounting has three branches namely, financial accounting, cost accounting and management accounting.

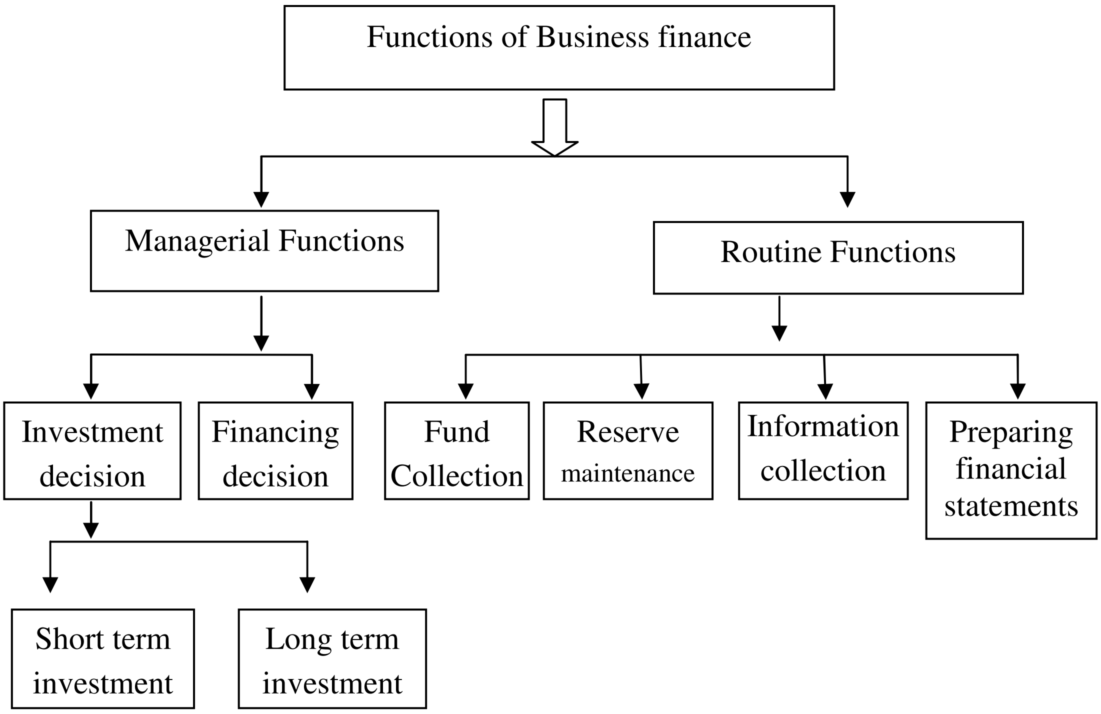
4. Financial Accounting: It is concerned with the preparation of reports which provide information to users outside the firm. The most common reports are the financial statements included in the annual reports of stock-holders and potential investors. The main objective of these-reports is to inform stockholders, creditors and other investors how assets are controlled by a firm. In the light of the financial statements and certain other information, the accountant prepares funds film statement, cash flow statement and budgets. A master plan (Budget) of the organization includes and coordinates the plans of every department in financial terms. According to Guthmann and Dougall, “Problems of finance are intimately connect ed while problems of purchasing, production and marketing”.

5. Cost Accounting: It deals primarily with cost data. It is the process of classifying, recording, allocating and reporting the various costs incurred in the operation of an enterprise. It includes a detailed system of control for material, labour and overheads. Budgetary control and standard casting are integral part of Primary Disciplines. The purpose of cost accounting is to provide information to the management for decision making, planning and control. It facilitates cost reduction and cost control. It involves reporting of cost data to the management.

6. Management Accounting: It refers to accounting for the management. It provides necessary information to assist the management in the creation of policy and in the day to day operations. It enables the management to discharge all its functions, namely, planning, organizing, staffing, direction and control efficiently with the help of accounting information. Functions of management accounting include all activities connected with collecting, processing, interpreting and presenting information to the management. According to J. Batty, ‘management accounting' is the term used to describe the accounting methods, systems and technique which coupled with special knowledge and ability, assist management in its task of maximizing profits or minimizing losses. Management accounting is related to the establishment of cost centres, preparation of budgets, and preparation of cost control accounts and fixing of responsibility for different functions.

1.2.7 Finance Functions

Since last 20 years, business world has exchanged their tasks. Now, business finds their relying on another variety of fiscal entity. Although business finance still takes care of money and assets, it serve many other primary functions that can help firm realize growth. Raising and managing of stores by business organizations. Such movements are usually the concern of senior administrators, who must use financial forecasting to explain a long-term plan for the firm. Shorter-term resources are then devised to meet the plan's intentions. When a company plans to develop, it may rely on cash reserves, expected progress in sales, or bank loans and trade credits prolonged by suppliers. Managers may also decide to raise long-term capital in the form of either debt (bonds) or equity (stock).



A) Managerial functions:

a. Investment decision: Investment decisions relate to the selection of assets in which funds will be invested by a firm. Funds procured from different sources have to be invested in various kinds of assets. The investment of funds is used in a project for various fixed assets and also for current assets. The investment of funds in a project has to be made after careful assessment of the various projects through capital budgeting. A part of long term funds is also to be kept for financing the working capital requirements. Asset management policies are to be laid down regarding various items of current assets. The inventory policy would be determined by the production manager and the finance manager keeping in view the requirement of production and the future price estimates of raw materials and the availability of funds. One of the most important finance functions is to intelligently allocate capital to long term assets. This activity is also known as capital budgeting. It is important to allocate capital in those long term assets so as to get maximum yield in future.

a. Following are the two aspects of investment decision Evaluation of new investment in terms of profitability

b. Comparison of cut off rate against new investment and prevailing investment.

Since the future is uncertain therefore there are difficulties in calculation of expected return. Along with uncertainty comes the risk factor which has to be taken into consideration. This risk factor plays a very significant role in calculating the expected return of the prospective investment. Therefore while considering investment proposal it is important to take into consideration both expected return and the risk involved.

Investment decision not only involves allocating capital to long term assets but also involves decisions of using funds which are obtained by selling those assets which become less profitable and less productive. It wise decisions to decompose depreciated assets which are not adding value and utilize those funds in securing other beneficial assets. An opportunity cost of capital needs to be calculating while dissolving such assets. The correct cut off rate is calculated by using this opportunity cost of the required rate of return (RRR)

- **Short-term investment:** In this case investment is made in current assets for one or less than one year.

- **Long-term investment:** Capital budgeting is concerned for investing in term project where the following things are considered: overall assets and cost, expected the future return, the risk of expected return, cost of capital.

Factors Influencing Investment Decisions

The main factors which, influence capital investment are:

1. Technological change: In modem times, one often finds fast obsolescence of technology. New technology, which is relatively more efficient, takes the place of old technology; the latter getting downgraded to some less important applications. However, in taking a decision of this type, the management has to consider the cost of new equipment vis-à-vis the productive efficiencies of the new as well as the old equipments. However, while evaluating the cost of new equipment, the management should not take into, account its full accounting cost (as the equipment lasts for years) but its incremental cost. Also, the cost of new equipment is often partly offset by the salvage value of the replaced equipment.

2. Competitors 'strategy: Many a time an investment is taken to maintain the competitive strength of the firm; If the competitors are installing new equipment to expand output or to improve quality of their products, the firm under consideration will have no alternative but to follow suit, else it will perish. It is, therefore, often found that the competitors' strategy regarding capital investment plays a very significant role in forcing capital decisions on a firm.

3. Demand forecast: The long -run forecast of demand is one of the determinants of investment decision. If it is found that there is a market potential for the product in the long run, the dynamic firm will have to take decisions for capital expansion.

4. Type of management: Whether capital investment would be encouraged or not depends, to a large extent, on the viewpoint of the management. If the management is modern and progressive in its outlook, the innovations will be encouraged, whereas a conservative management discourages innovation and fresh investments.

5 Fiscal policies: Various tax policies of the government (like tax concessions on investment income, rebate on new investment, method of allowing depreciation deduction allowance) also have favourable or unfavourable influence on capital investment.

6. Cash flows: Every firm makes a cash flow budget. Its analysis influences capital investment decisions. With its help the firm plans the funds for acquiring the capital asset. The budget also shows the timing of availability of cash flows for alternative investment proposals, thereby helping the management in selecting the desired project.

7. Return expected from the investment: In most of the cases, investment decisions are made in anticipation of increased return in future. While evaluating investment proposals, it is therefore essential for the firm to estimate future returns or benefits accruing from the investment.

C) Finance decision:

These decisions relate to acquiring the optimum finance to meet financial objectives and seeing that fixed and working capital are effectively managed. The financial manager needs to possess a good knowledge of the sources of available funds and their respective costs and needs to ensure that the company has a sound capital structure. i.e. clear understanding as to the difference between profit and cash flow, bearing in mind that profit is the little avail unless the organisation is adequately supported by cash to pay for assets and sustain the working capital cycle. Financing decisions also call for a good knowledge of evaluation of risk e.g. excessive debt carried high risk for an organization’s equity because of the priority rights of the lenders. A major area for risk related decisions is in overseas trading. Where an organisation is vulnerable to currency fluctuations, and the manager must be well aware of the various protective procedures such as hedging- it is a strategy designed to minimize, reduce or cancel out the risk in another investment available to him. For example, someone who has a shop takes care of the risk of the goods being destroyed by fire by hedging it via a fire insurance contract.

Financial decision is important function which a financial manger must perform. It is important to make wise decisions about when, where and how should a business acquire funds. Funds can be acquired through many ways and channels. Broadly speaking a correct ratio of an equity and debt has to be maintained. This mix of equity capital and debt is known as a firm’s capital structure. A firm tends to benefit most when the market value of a company’s share maximizes this not only is a sign of growth for the firm but also maximizes shareholders wealth. On the other hand the use of debt affects the risk and return of a shareholder. It is more risky though it may increase the return on equity funds. A sound financial structure is said to be one which aims at maximizing shareholders return with minimum risk. In such a scenario the market value of the firm will maximize and hence an optimum capital structure would be achieved. Other than equity and debt there are several other tools which are used in deciding a firm capital structure.

According to Henry Hoagland, The Financial decision affects both the profitability and risk of a firm's operation. An increase in cash holdings, for instance risk, but, because of cash is not an earning asset, converting other types of assets to cash reduces the other firm's profitability. Similarly, the issue of additional debt can raise the profitability of a firm, but more debt means more risk. Striking a balance between risk and profitability that will maintain the long term value of a firm's securities in the large of finance.

D) Dividend decision:

These decisions relate to the determination as to how much and how frequently cash can be paid out of the profits of an organization as income for its owners/shareholders. The owner of any profit making organization looks for reward for his investment in two ways, the growth of the capital invested and the cash paid out as income for a sole trader this income would be termed as drawings and for a limited liability company the term is dividends. The dividend decision thus has two elements- the amount to be paid out and the amount to be retained to support the growth of the organisation, the latter being also a financing decision, the level and regular growth of dividends represent a significant factor in determining a profit making company's market value, i.e. the value placed on its shares by the stock market. Earning profit or a positive return is a common aim of all the businesses. But the key function a financial manger performs in case of profitability is to decide whether to distribute all the profits to the shareholder or retain all the profits or distribute part of the profits to the shareholder and retain the other half in the business. It's the financial manager's responsibility to decide a optimum dividend policy which maximizes the market value of the firm. Hence an optimum dividend payout ratio is calculated. It is a common practice to pay regular dividends in case of profitability another way is to issue bonus shares to existing shareholders. The financial manager must take careful decisions on how the profit should be distributed among shareholders. It is very important and crucial part of the business concern, because these decisions are directly related with the value of the business concern and shareholder's wealth. Like financing decision and investment decision, dividend decision is also a major part of the financial manager. When the business concerns decide dividend policy, they have to consider certain factors such as retained earnings and the nature of shareholder of the business concern.

Factors which influence dividend decisions

1. Legal constraints: Normally all countries prohibit companies from paying out as cash dividends any portion of the firm's legal capital, which is measured by the par value of equity shares (common stock) Other countries define legal capital to include not only the par value of the equity shares (common stock), but also premium paid if any (any-paid in–capital in excess of par). These capital impairment restrictions are generally established to provide a sufficient equity base to protect creditor's claims. An earnings requirement limiting the amount of dividends to the sum of the firm's present and past earnings is sometimes imposed. In other words the firm cannot pay more in cash dividends than the sum of its most recent and past-retained earnings. However, the firm is not prohibited from paying more in dividends than its current earnings. Thus dividends can be paid only out of the profits earned during a financial year after providing for depreciation and after transferring to reserves such percentage of profits as prescribed by law. Due to inadequacy or absence of profits in any year, dividend may be paid out of the accumulated profits of the previous years. Dividends cannot be declared for past years for which the accounts have been closed.

2. 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.

3. 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. (Cash and marketable securities)

4. Growth prospects: The firm's financial requirements are directly related to the anticipated degree of asset 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

5. 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 favorable rate than the one applied to ordinary income. Lower-income shareholders, however who need dividend income will prefer a higher payout of earnings. As of now, the dividend income is not taxed in the hands of the share holders in India. Instead, for paying out such dividends to its share holders, the company bears the dividend distribution tax.

6. 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. In other words, the market consideration is a kind of information content of the dividends. It's a kind of signal for the firm to decide its final policy. A stable and continuous dividend is a positive signal that conveys to the owners that the firm is in good in health. On the other side, if the firm skips in paying dividend due to any reason, the shareholders are likely to interpret this as a negative signal.

7. Taxation: the firm's earnings are taxable in many countries. This taxation is applied differently in different countries.

E) Liquidity decision:

It is very important to maintain a liquidity position of a firm to avoid insolvency. Firm's profitability, liquidity and risk all are associated with the investment in current assets. In order to maintain a tradeoff between profitability and liquidity it is important to invest sufficient funds in current assets. But since current assets do not earn anything for business therefore a proper calculation must be done before investing in current assets. Current assets should properly be valued and disposed of from time to time once they become non profitable. Currents assets must be used in times of liquidity problems and times of insolvency.

F) Routine Functions:

Routine function is also called incidental function. Some other functions are also accomplished by financial managers. These are commonly known as routine works:

- Fund collection
- Reserve maintenance
- Information collection
- Preparing financial statements, etc.

1.2.8 Capitalization

Capitalization is one of the most important parts of financial decision, which is related to the total amount of capital employed in the business concern. Understanding the concept of capitalization leads to solve many problems in the field of financial management. Because, the confusion between the concept of capital, capitalization and capital structure.

Capitalization refers to the process of determining the quantum of funds that a firm needs to run its business. Capitalization is only the par value of share capital and debenture and it does not include reserve and surplus.

Capitalization can be defined by the various financial management experts. Some of the definitions are mentioned below:

Guthman and Dougall,

"Capitalization is the sum of the par value of stocks and bonds outstanding".

Bonneville and Dewey

"Capitalization is the balance sheet value of stocks and bonds outstands".

Arhur. S. Dewing

"Capitalization is the sum total of the par value of all shares".

1.2.9 Theories of capitalization

The problems of determining the amount of capitalization is necessary both for a newly started company as well as for an established concern. In case of the new enterprise, the problem is more severe in so far as it requires the reasonable provision for future as well as for current needs and there arises the danger of either raising excessive or insufficient capital. But the case is different with established concerns.

They have to revise or modify their financial plan either by issuing of fresh securities or by reducing the capital and making it in conformity with the needs of the enterprises. However, to estimate the amount of capitalization two theories have been pronounced.

1. The cost theory of capitalization:

Under this theory, the capitalization of a company is determined by adding the initial actual expenses to be incurred in setting up a business enterprise as a going concern. It is aggregate of the cost of fixed assets (plant, machinery, building, furniture, goodwill, and the like), the amount of working capital (investments, cash, inventories, receivables) required to run the business, and the cost of promoting, organizing and establishing the business.

In other works, the original total outlay incurred on various items becomes the basis for determining the capitalization of a company. If the funds raised are sufficient to meet the initial costs and day to day expenses, the company is said to be adequately capitalized. This theory is very helpful for the new companies as it facilitates the calculation of the amount of funds to be raised initially.

Cost theory, no doubt, gives a concrete idea to determine the magnitude of capitalization, but it fails to provide the basis for assessing the net worth of the business in real terms. The capitalization determined under this theory does not change with earnings.

Moreover, it does not take into account the future needs of the business. This theory is not applicable to the existing concerns because it does not suggest whether the capital invested justifies the earnings or not. Moreover, the cost estimates are made at a particular period of time. They do not take into account the price level changes. For example, if some of the assets may be purchased at inflated prices, and some assets may remain idle or may not be fully utilized, earnings will be low and the company will not be able to pay a fair return on the capital invested. The result will be over-capitalization. In order to do away with these difficulties and arrive at a correct figure of capitalization, 'earnings approach' is used.

2. The earnings theory of capitalization:

This theory assumes that an enterprise is expected to make profit. According to it, its true value depends upon the company's earnings and/or earning capacity. Thus, the capitalization of the company or its value is equal to the capitalized value of its estimated earnings. To find out this value, a company, while estimating its initial capital needs, has to prepare a projected profit and loss account to complete the picture of earnings or to make a sales forecast.

Having arrived at the estimated earnings figures, the financial manager will compare with the actual earnings of other companies of similar size and business with necessary adjustments.

After this the rate at which other companies in the same industry, similarly situated are making earnings on their capital will be studied. This rate is then applied to the company's estimated earnings for determining its capitalization.

Under the earnings theory of capitalization, two factors are generally taken into account to determine capitalization (i) how much the business is capable of earning and (ii) What is the fair rate of return for capital invested in the enterprise. This rate of return is also known as 'multiplier' which is 100 per cent divided by the appropriate rate of return.

Thus, if a company is capable of making net profit of Rs. 30,000 annually and the rate of earnings is 10%, the capitalization of the company will be 3,00,000 (i.e. 30,000 x 100/ 10). But if the total investment during that period in the whole industry is ten crores of rupees and the total earnings of the industry rate Rs. 1.5 crores, the earning capacity of the industry are thus 15%.

But business under consideration is earning 10% only. This is a case of over capitalization as the earnings of Rs. 30,000 justify investment of Rs. 2,00,000 only Rs. 30,000 X 100/15) in view of earning capacity of the industry. Hence, the company is over- capitalized to the tune of Rs. 1, 00,000. Though earning theory is more appropriate for going concerns, it is difficult to calculate the amount of capitalization under this theory. It is based upon a 'rate' by which earnings are capitalized. This rate is difficult to estimate in so far as it is determined by a number of factors not capable of being calculated quantitatively.

These factors include nature of industry/ financial risks, competition prevailing in the industry and so on. New companies cannot depend upon this theory as it is difficult to estimate the expected returns in their case.

As regards capitalization, it is often said that "a concern should neither be overcapitalized, nor under-capitalized, the aim should be to achieve fair capitalization". To understand the significance of this statement, let us first look into the technicalities of over and under capitalization.

1.2.10 Overcapitalization

It is a situation where a firm has more capital than it needs. Assets are worth less than its issued share capital, and earnings are insufficient to pay dividend and interest. This situation mainly arises when the existing capital is not effectively utilized on account of fall in earning capacity of the company while company has raised funds more than its requirements. The chief sign of overcapitalization is the fall in payment of dividend and interest leading to fall in value of the shares of the company.

Concept of overcapitalization

Over capitalization refers to the company which possesses an excess of capital in relation to its activity level and requirements. In simple means, over capitalization is more capital than actually required and the funds are not properly used.

According to Bonneville, Dewey and Kelly, over capitalization means, "When a business is unable to earn fair rate on its outstanding securities".

Example

A company is earning a sum of Rs. 50,000 and the rate of return expected is 10%. This company will be said to be properly capitalized. Suppose the capital investment of the company is Rs. 60,000, it will be over capitalization to the extent of Rs. 1,00,000. The new rate of earning would be: 50,000/60,000×100=8.33% When the company has over capitalization, the rate of earnings will be reduced from 10% to 8.33%.

According to Gerstenberg, **"A company is over-capitalized when its earnings are not large enough to yield a fair return on the amount of stock and bonds that have been issued, or when the amount of securities outstanding exceeds the current value of the assets".** Simply stated, over-capitalization means more capital than actually required, and therefore, in a over capitalized concern, the invested funds are not properly used. It is, therefore, quite clear that over-capitalization may be explained in terms of earnings as well as cost of assets.

Symptoms of overcapitalization

Generally, an entity is said to be overcapitalized when it has fixed assets in excess of its actual needs and a reasonable return is not being earned on the investments of these fixed assets. Sometimes, we might consider an entity overcapitalize when it has substantial amounts of intangibles represented by inflated values like in the case of patents, trademark, good will and other deferred assets. Hence instead of looking at the shareholder funds alone, there is a need for the deduction of these intangibles assets from the shareholder fund to get the real tangible worth of the entity.

1. High proprietary ratio (refer to my previous article on this)
2. Low earnings per share
3. Low assets utilization particularly with a lot of fixed assets and small revenue generated
4. Too much capital invested in unproductive fixed assets

Causes of overcapitalization: There are many factors which account for the situation of over-capitalization of a company. **Following are some of the important causes of over-capitalization:**

1. Over-issue of capital: while floating a new company, the promoters over-estimate the financial requirements, and as a result, they raise more capital than what is actually needed, resulting in over-capitalization.

2. Promotion, formation or development during inflation: If a company is to be floated during an inflationary period, or any development activity is carried out in such a period, it will be a victim of over-capitalization because it has to spend huge amounts.

3. Buying assets of lower value at higher prices: It promoters buy assets of lower values at higher prices; they are led to a situation of over-capitalization because assets of lower value will be shown at higher value in the Balance sheet.

4. High Promotion expenses: Incurring high promotional expenses, excessive preliminary expenses etc. may lead to over-capitalization.

5. Inadequate depreciation: Providing inadequate depreciation results in over-capitalization as it leaves insufficient provision for replacement of assets.

6. Liberal dividend policy: Many companies prefer to declare a higher rate of dividend instead of retaining a part of the profits and ploughing them back or reinvesting them. Such a practice should be discouraged as it leads to over-capitalization, because liberal dividends are paid at the cost of inadequate provision for depreciation.

7. Taxation Policy: High rates of taxation may leave little in the hands of the management to provide for depreciation, replacements and dividends. This will adversely affect earnings capacity and thus leads to over-capitalization.

8. Inadequate demand for products: If a company's products register a constant decline, it will bring down the profitability of the concern and as a result, returns on capital employed will be reduced which represents over-capitalization.

9. Payment of high rate of interest: Procurement of funds at high rate of interest will adversely affect the company resulting in over-capitalization.

10. Under-estimation of the capitalization rate: If the rate of capitalization is under-estimated, it will lead to a situation of over-capitalization.

Effects of Over-Capitalization: Over-capitalization affects not only the company and its owners (shareholders) but also the society as a whole. The evil effects of over-capitalization are discussed below:

A. Effects on the Company:

The effects of over-capitalization on the company itself are disastrous in many ways:

(i) Loss of goodwill: In an over-capitalized company, there is a reduced earning capacity resulting in the fall of market price of its shares and thereby shaking up the investor's confidence. A company whose shares sell below the face value may find it difficult to improve its goodwill in the market.

(ii) Poor creditworthiness: Reduced earnings of an over-capitalized concern affect its creditworthiness and as a result, it becomes difficult for it to get loans or credit at cheaper rates of interest.

(iii) Difficulties in obtaining capital: For a company faced with a situation of over-capitalization, it is very difficult to obtain further capital for its growth and expansion programmes. It is so because the investors have already lost confidence in the company. **(iv) Decline in efficiency of the company**: To cover for one loss, other losses are incurred by the company and in the process overall efficiency of the company declines. Such a company usually does not make adequate provisions for depreciation, repairs and renewals, etc., leading to further decline in its efficiency.

(v) Loss of market: Over-Capitalized companies fail to produce goods at competitive costs and, hence, often lose their market to competitors.

(vi) Inflated profits: In order to regain the confidence of its investors, over-capitalized companies generally resort to manipulation of accounts and over-statement of their profits. These inflated profits lead to payments of dividends out of capital.

(vii) Liquidation of company. An over-capitalized company goes into liquidation unless drastic steps are taken to re-organize the whole capital structure and re-organisation would itself lead to a lot of problems.

B. Effects on Shareholders:

As, shareholders are the real owners of a company, they suffer most on account of over-capitalization. Some of the major effects of over-capitalization on shareholders are:

(i) Reduced dividends: An over-capitalized company will not be able to pay a fair rate of dividend to its shareholders because it is earning a low rate of return (earnings) on its capital. More so, the payment of dividend becomes uncertain and irregular.

(ii) Fall in the value of shares: Low rate of earnings and reduced dividends cause fall in the market value of shares of the over-capitalized company. Thus, shareholders have to suffer a loss in capital due to depreciation of their investments.

(iii) Unacceptable as collateral security: The shares of an over-capitalized company have small value as collateral security. Banks and other financial institutions are reluctant to lend money against such securities. Hence, it is very difficult for the shareholders to borrow money against the security of their shares.

(iv) Loss on speculation: the prices of the shares of an over-capitalized company remain unstable because of speculative dealings in such shares. This malpractice further adds to the losses of the shareholders.

(v) Loss on re-organisation: An over-capitalized company has to often resort to organization and reduction of its capital in order to write off the accumulated losses. This results in the reduction of face value of shares and loss to its owners.

C. Effects on Society:

Over-capitalization affects not only the company and its owners but also the society as a whole.

(i) Loss to Consumers: In order to prevent declining trend of income, an over-capitalized concern resorts to increased prices and reduction in quality of its products.. Hence, consumers have to suffer by paying more for the poorer quality.

(ii) Loss to Workers: An over-capitalized company tends to reduce wages and welfare facilities of the workers to reduce losses of the earnings. No consideration is given to the demands of the workers and some of them even lose their jobs because of lay offs and retrenchment and closure of such units.

(iii) Under or misutilisation of Resources: An over-capitalized concern either misutilises or under utilizes its resources. Hence, the scarce resources of society are not properly utilized.

(iv) Gambling in Shares: Another social evil of over-capitalization is promotion of gambling habits by providing scope for gambling in shares of such a company.

(v) Recession: Over-capitalization leads to increased losses, poor quality of products, retrenchment or unemployment of workers, decline in wage rates and purchasing power of labour. This tendency gradually affects the entire industry and the society, and may lead to recession of economy.

Remedies for Over-Capitalization: The evil effects of over-capitalization are so grave that the management must take remedial measures to rectify the situation as soon as the first symptoms of over-capitalization are observed by the firm. An over-capitalized company has been rightly compared with a very fat person who is likely to suffer from various diseases unless he takes steps to immediately reduce his weight. Likewise, an over-capitalized company must cut its dead weight before it becomes deep rooted and almost impossible to get rid of. In this regard, various remedial measures such as increasing the efficiency of management, reduction of high interest bearing funded debt, redemption of preference shares, reduction in face value and number of shares, etc., have been suggested.

1. To have Efficient Management: Management should try to become more efficient and try to curb excess expenditure. Earning capacity should be improved and care must be taken to spend every single rupee in the most profitable and economic manner.

2. Redemption of Preference Shares: Preference shares carrying high rate of dividend should be redeemed out of retained earnings in order to raise the share of equity shareholders.

3. Reduction of Funded Debts: Debentures, public deposits and loans taken at higher rates of interest should be prepaid out of accumulated profits or out of fresh borrowings at lower rates of interest, if there are no accumulated profits.

4. Reorganization of Equity Share Capital: The face value or the number of equity shares may be reduced in order to rectify over-capitalization. Sometimes, shareholders may oppose to this proposal but actually their proportionate interest in the equity is not reduced. The amount available due to reorganization of share capital is utilized for writing off the fictitious assets and other over-valued assets.

1.2.11 Undercapitalization:

Under capitalization is the opposite concept of over capitalization and it will occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity. Under capitalization is not the so called inadequate capital. It is a state, when its actual capitalization is lower than its proper capitalization as warranted by its earning capacity. This situation normally happens with companies which have insufficient capital but large secret reserves in the form of considerable appreciation in the values of the fixed assets not brought into the books.

Concept of undercapitalization

According to Gersrtenberg, **"A company may be under-capitalized when the rate of profits it is making on the total capital is exceptionally high in relation to the return enjoyed by similarly situated companies in the same industry, or when it has too little capital with which to conduct its business".**

Hoagland defined under capitalization as "an excess of true assets value over the aggregate of stocks and bonds outstanding".

In simple words, we can say that under-capitalization is the reverse phenomenon of over-capitalization, and occurs when a company's actual capitalization is lower than its proper capitalization as warranted by its earning capacity. The term under-capitalization should never be considered synonymous with inadequate capital. The real value of an under-capitalized company is more than its book value. The profits are higher than warranted by the book value of its assets. Such a company can pay a higher rate of dividend and the market value of its shares is much higher than its face value.

Symptoms of undercapitalization

The assets acquired with the existing capitalization facilitate the generation of higher profits. It so happens when**:** (i) The assets have been acquired at lower rates, or (ii). The company has generated secret reserves by paying lower dividends to the shareholders over a number of years. The symptoms of under-capitalization are as follows:

1. There is an unforeseen increase in earnings of the company.
2. Future earnings of the company were under-estimated at the time of promotion.
3. Assets might have been acquired at very low prices.

Causes of undercapitalization

Following are the important causes of under-capitalization in a company:

1. Under-Estimation of Capital Requirements: If the future capital requirements are underestimated by the promoters, the inadequacy of capital is experienced at a later stage. The company may arrange cheaper debt at lower rate of interest at that stage resulting in increased earnings per share. This leads the company to a situation of under-capitalization.

2. Under-Estimation of Future Earnings: While preparing the financial plan, if the future earnings of the company are under estimated and the actual earnings turn out to be higher than the estimated figure, the company may find itself in a condition of under-capitalization.

3. Promotion during Depression: Companies promoted during a period of depression often experience under-capitalization when inflation sets in because of a sudden rise in their earnings.

4. Conservative Dividend Policy: If the management of a particular company adopts an orthodox dividend policy, i.e. where it follows a cautious policy regarding the distribution of dividend and keeps a major part of its earnings for re-investment purpose, it results into higher earnings and conditions of under-capitalization.

5. Very Efficient Management: In companies, where the management is very efficient, the rate of return may be quite high as compared to other companies in the same industry, and such a high rate of return may eventually lead towards under-capitalization.

6. Desire of Control and Trading on Equity: In many companies, the promoter desires to retain control over the company and raises lesser amount of share capital. However, later on when the funds are required they resort to trading on equity. This raising of funds at a lower rate of interest than the earnings of the company eventually leads to under-capitalization.

Effects of undercapitalization: under capitalization have the following effects:

1. Limited marketability of shares: share of undercapitalized company enjoy market value but it limits marketability. It may cause large fluctuations in the market. Due to limited marketability, such company's shares may not command a price which commensurate with the increase in its earnings.

2. Industrial unrest: employees know the company has tremendous profits and it is not allotted with them, it may encourage industrial unrest. But company cannot satisfy the financial demands of the employees. These demands continue to grow day by day.

3. Consumer dissatisfaction: consumer always aware of the significant profits of a company. They also feel that company is exploiting them by earning higher profits. Hence, they expect from a company to lower the price or improve the quality of product. When a company cannot satisfy consumer's expectations, it leads to consumer dissatisfaction.

4. Government interference: the government always keeps watch on profit making companies. It often suspects that company may be concealing their profits with a view to evading tax. High earning per share may attract government interference to bring down the prices of the product so as to protect the interest of consumer and other stakeholders.

5. Inadequacy of capital: undercapitalized company suffers from inadequacy of capital and a company depends on borrowing on debts at higher rate of interest. It leads to increase in creditors control over company.

6. Cut-throat competition: Undercapitalization Company has high rate of earnings. High rate of earning may attract competitors to entre into market. It causes cut throat competition.

Remedies for Under-Capitalization:

Under-capitalization can be corrected by taking any of the following remedial measures:

1. Fresh Issue of Shares: If under-capitalization is due to inadequacy of capital, then it can be corrected by the issue of fresh shares, the company may also redeem its long-term debt by the issue of fresh share capital.

2. Issue of Bonus Shares: The Company may issue bonus shares by capitalizing its accumulated earnings. This is the most commonly used and effective method of correcting under-capitalization. It reduces earnings per share after the bonus issue.

3. Increasing the Par Value of Shares: The Company may revalue its assets and increase their values. In lieu, thereof, the par value of shares may also be increased. This will result into reduction of earnings per rupee of share value but the amount of dividend per share will remain same.

4. Splitting Stock: Another effective method of correcting under-capitalization is to split up the existing stock into larger number of shares reducing the value of each share. It neither affects the total earnings of the company nor the total amount of capital of the company but still dividend per share shall reduce.

1.3 Summary

The term 'business finance' is very comprehensive. It implies finances of business activities. Business can be categorized into three groups: commerce, industry and service. It is a process of rising, 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. Profit Maximization as its name signifies refers that the profit of the firm should be increased while Wealth Maximization aims at accelerating the worth of the entity. There is a close relationship between the finance and other areas of management such as production, Human resource, marketing etc. Almost all business activities in an organization directly or indirectly involve the acquisition and use of funds. Capitalization is one of the most important parts of financial decision, which is related to the total amount of capital employed in the business concern. Understanding the concept of capitalization leads to solve many problems in the field of financial management.

1.4 Term to remember

- **Finance:** It is defined as the position of money at the time it is needed.

- **Business Finance:** According to Guthmann & Dougall, business finance can be broadly defined as the activity concerned with planning, raising, controlling and administering of funds used in the business
- **Finance Function:** The finance function is the process of acquiring and utilizing funds of a business.
- **Financial decisions:** It refers to decisions concerning financial matters of a business firm.

1.5 Check your progress

I) Choose the correct alternative:

1. ----------------- can be calculated by deducting total cost from total revenue.

   a. wealth b. profit c. capital d. Loss

2. ------------------- maximization is the ability of a company to increase the market value of its common stock over time.

   a. profit b. wealth c. capital d. Revenue

3. ------------------ decisions relate to the selection of assets in which funds will be invested by a firm.

   a- investment b- dividend c- Routine d- finance

4. ----------------- decisions relate to acquiring the optimum finance to meet financial objectives and seeing that fixed and working capital are effectively managed.

   a- investment b- dividend c- Routine d- finance

5. ----------------- decisions relate to the determination as to how much and how frequently cash can be paid out of the profits of an organization as income for its owners/shareholders.

   a- investment b- dividend c- Routine d- finance

6. ---------------- refers to the process of determining the quantum of funds that a firm needs to run its business.

   a- capitalization b- under capitalization c- over capitalization d- optimum capitalization

7. -------------------------------- refers to the company which possesses an excess of capital in relation to its activity level and requirements.

   a- capitalization b- under capitalization

   c- over capitalization d- optimum capitalization

8. ---------------------------- is occur when the company's actual capitalization is lower than the capitalization as warranted by its earning capacity.

   a- capitalization b- under capitalization

   c- over capitalization d- optimum capitalization

II) Fill in the blanks

a. **-----------** is the remuneration paid to the entrepreneur after deduction of all expenses.

b. The **---------------** function is the process of acquiring and utilizing funds of a business.

c. **---** aims at accelerating the worth of the entity.

d. **---------------------------** encompasses a wide range of activities and disciplines regarding the management of money and other valuable assets.

e. **-------------------------** refers to the kind and proportion of different securities for raising funds.

III) State 'True' or False'

1. Profit Maximization is the capability of the firm in producing maximum output with the limited input, or it uses minimum input for producing stated output.
2. The financial decision making that relates to current assets or short-term assets is known as Fixed capital management
3. Profit Maximization is based on the increase of sales and profits of the organization.
4. Wealth Maximization ignores the risk and uncertainty.
5. Dividend decision refers to decisions concerning financial matters of a business firm.

1.6 Answers to check your progress

I) 1- b 2- b 3- a 4- d 5- b 6- a

7- c 8- b

II) a- Profit b- finance c- wealth maximization d- business finance

e- capital structure

III) 1- True 2- False 3. True 4. False 5.False

1.7 Exercises

A) Write short answers to the following questions

1. Explain the scope of Business Finance.
2. Explain the significance of Business Finance.
3. Describe the relationship of finance with other areas of management.
4. What are the symptoms of over capitalization?
5. Explain the causes of over capitalization.
6. State the remedies for over capitalization.
7. Explain the effects of under capitalization.
8. Describe the causes of under capitalization

B) Write long answers to the following questions

1. Explain the scope and significance of business finance.
2. Explain the Profit maximization Vs Wealth maximization
3. What is investment decision? Explain the factors affecting on investment decision.
4. What is dividend decision? Explain the factors affecting on dividend decision.
5. Describe the theories of capitalization.
6. Explain the effects and remedies of over capitalization
7. Explain the causes and remedies of under capitalization.

C) Write short notes

1. Profit maximization Vs Wealth maximization
2. Finance decision
3. Liquidity decision
4. Routine Functions
5. Capitalization
6. Over capitalization
7. Under capitalization
8. The Cost theory of Capitalization
9. The earning theory of Capitalization

Practical:

Practical: Visit to any organization and do interaction with finance Controller & understand the various financial functions.

My self Ameya meet to Dr. Amit CA Professional. He has working as finance controller at Synergy Pvt., Ltd. The aim of the meeting to understand the functions of finance controller. Meeting with Dr. Amit I discussed regarding various functions of finance controller in his Organization.

Dr. Amit said that the Financial Controller job involves managing leadership over finances, accounting, and financial strategies. They must possess the ability to see the larger picture while focusing on detail. He also opinioned that the efficiency and accuracy are the good quality which are essential in the organization as a financial controller. While the controller's work is centered around financial data, which helps to formulate sound policies and strategies regarding financial management.

Dr. Amit commented as Finance Controllers may be accountants, but they don't do accounting work. Accounting refers to the act of recording company transaction data, where controllers are focused on making sure the data is recorded accurately, in time to time, as well as it is maintained in accordance with company rules and regulations. He also followed the guidelines of Accounting standard issued by Indian Institute of Chartered Accountant. If anyerrors and frauds emerge, the controller often find such malpractices and determine what was being happened, and investigate such practices.

When I was asking about role of finance controller in particular industry. Dr. Amit expressed that as a controller he has play a specific role in Synergy Pvt. Ltd. Being a finance controller, he leads the department to ensure all activities are completed and in compliance with government, industry, and company standards. They are responsible for the general ledgers and financial statements like balance sheets and income statements, ensuring he presents the true nature of cash flow in the organization. He serves as the link between the senior management team and the finance department. His responsibilities include:

1. To ensure the payments from debtors and customers
2. To observe general accounting operations
3. To set-up bank accounts.
4. To work with Chartered Accountant outside of the company.
5. To create effective internal policies and apply to control financial system.
6. To prepare financial reports to deliver to the Chief Financial Officer (CFO) or higher authorities.
7. To complete all the essential compliances regarding central and state tax.
8. To review payroll for accuracy and ensure whether it is maintained properly.

Finally, Dr. Amit opinioned that the financial controller is often responsible for use of ICT in organization for recording and preparing financial reports. He also reviewed state and central tax reports to ensure accuracy, insurance policies and conducted audits. He also told me that the overall documentation and transactions of organization is controlled by financial Controller.

Considering the career opportunities as finance controller I inquired about the qualification of particular post. Dr. Amit responded that to work as a financial controller, a Bachelor’s degree in finance is essential. Along with it the candidate should complete master degree or professional qualification in field of financial sector. Most of the financial controllers are also Chartered Accountant accountants or certified management accountants (CMAs). Controllers may also have additional qualifications such as, Certified Financial Analyst, Certified Fraud Examiner, Certified Financial Controller. Moreover, it is noted that to successin the field, financial controllers also need a comprehensive set of soft skills, including, Communication skills, Leadership skills, Emotional intelligence, Flexibility and adaptability, Problem solving skills.

In this way we (Students) should visit any organization and interact with finance controller and they may understand the various financial functions of finance controller in specific industry. Through this visit we may understand the nature of organization, types, operation of business which affect on the financial functions.

(Author visited to Synergy Pvt. Ltd and interacted with Dr. Amit *for compiling function of Finance Controller)*

1.8 References

1. Advanced Financial Management – Dr. N. M. Vechalekar
2. Financial Management- Hogland
3. Financial Management- S. C. Saxena
4. Financial Management- P. V. Kulkarni
5. Financial Management- Ravi M. Kishore

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Unit 2

Capital Structure

Unit Structure

2.0 Objectives

After Studying this unit you will be able to:

- Understand the term Capital Structure
- Understand principles of capital structure
- Understand factors influencing the capital structure
- Know the concept of Trading on Equity
- Understand the concept of Weighted Average cost of Capital (WACC)

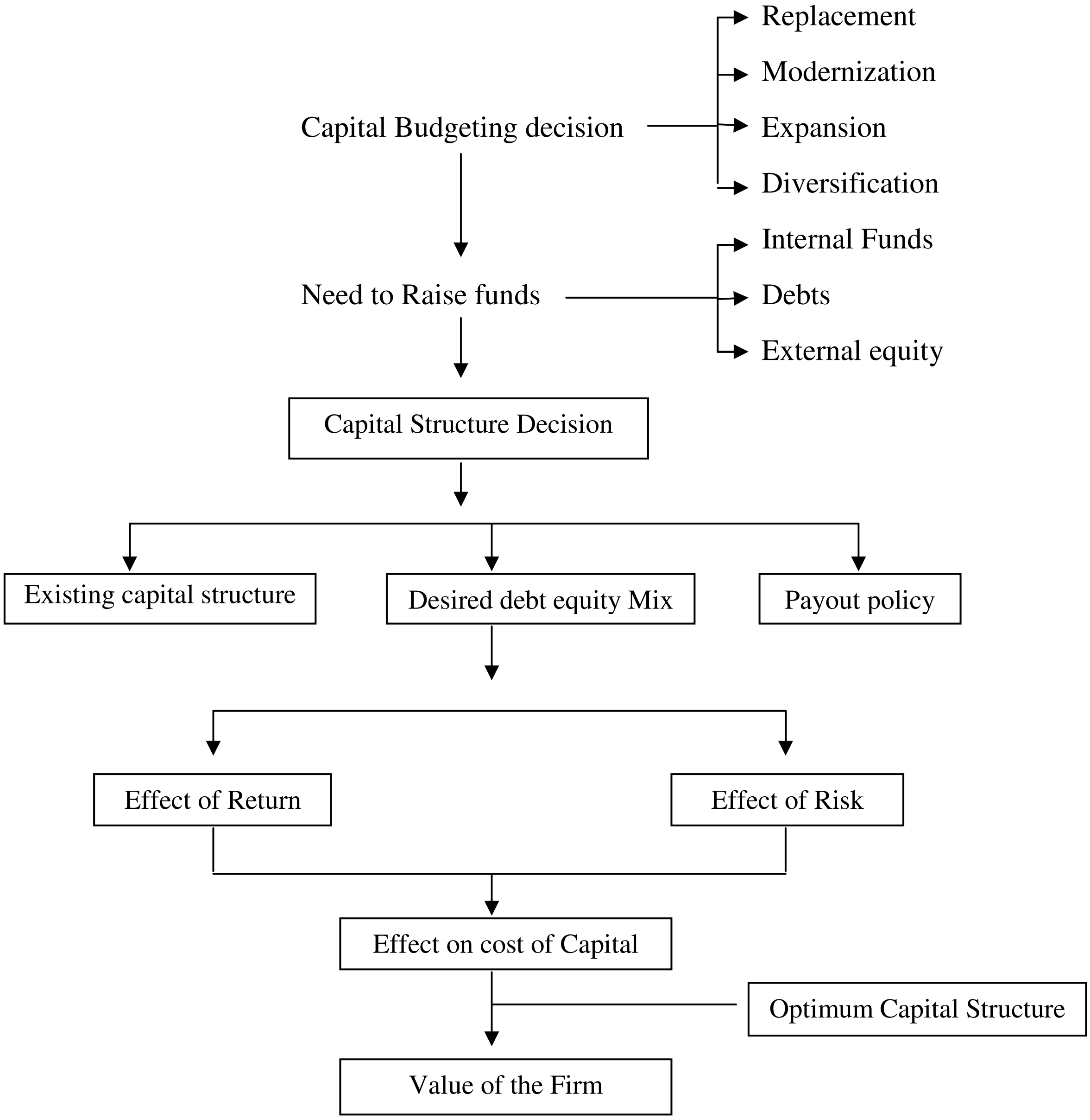
2.1 Introduction:

The term 'structure' means the arrangement of the various parts. Capital structure means the arrangement of capital from different sources so that the long-term funds needed for the business are raised. Capital structure refers to the proportions or combinations of equity share capital, preference share capital, debentures, long-term loans, retained earnings and other long-term sources of funds in the total amount of capital which a firm should raise to run its business. Decisions relating to financing the assets of a firm are very crucial in every business. The finance manager is regularly fixed in the difficulty of what the optimum proportion of debt and equity. As a general rule, there should be a proper mix of debt and equity capital in financing the firm's assets. Capital structure is usually considered to serve the interest of the equity shareholders.

The relative proportion of various sources of funds used in a business is termed as financial structure. Capital structure is a part of the financial structure and refers to the proportion of the various long-term sources of financing. It is concerned with making the selection of the sources of the funds in a proper manner, which is in relative degree and proportion. The capital structure of a company is made up of debt and equity securities that include a firm's financing of its assets. It is the permanent financing of a firm represented by long-term debt, preferred stock and net worth. It relates to the arrangement of capital and excludes short-term borrowings. It denotes some degree of permanency as it excludes short-term sources of financing. Again, each component of capital structure has a different cost to the firm. In case of companies, it is financed from various sources. In proprietary concerns, usually, the capital employed, is entirely contributed by its owners. In this context, capital refers to the total of funds supplied by both owners and long-term creditors. What should be the appropriate proportion between owned and debt capital? It depends on the financial policy of individual firms. In one company debt capital may be zero while in another such capital may even be greater than the owned capital. The proportion between the two, usually expressed in terms of a ratio, denotes the capital structure of a company.

In short, Capital structure refers to the percentage of capital (money) at work in a business by type. There are two forms of capital: equity capital and debt capital. Each type of capital has its own benefits and drawbacks and a substantial part of wise corporate stewardship and management is attempting to find the perfect capital structure in terms of risk/reward payoff for shareholders. Many middle-class investors believe that the goal in life is to be debt-free.

The **process of capital structure decision** is depicted in the figure below:



2.2 Presentation of Subject Matter

2.2.1 Meaning of Capital Structure:

1. Gerestenberg, 'Capital structure of a company refers to the composition or make up of its capitalization and it includes all long term capital resources viz., loans, reserves, shares and bonds'.

2. **Keown et al.** defined capital structure as, 'balancing the array of funds sources in a proper manner, i.e. in relative magnitude or in proportions'.

3. P. Chandra, 'capital structure is essentially concerned with how the firm decides to divide its cash flows into two broad components, a fixed component that is earmarked to meet the obligations toward debt capital and a residual component that belongs to equity shareholders'.

4. John J. Hampton Capital structure is the combination of debt and equity securities that comprise a firm's financing of its assets."

5. I. M. Pandey "Capital structure refers to the mix of long-term sources of funds, such as, debentures, long-term debts, preference share capital and equity share capital including reserves and surplus."

Capital structure is the mix of the long-term sources of funds used by a firm. It is made up of debt and equity securities and refers to permanent financing of a firm. It is composed of long-term debt, preference share capital and shareholders' funds. Hence, capital structure implies the composition of funds raised from various sources broadly classified as debt and equity. It may be defined as the proportion of debt and equity in the total capital that will remain invested in a business over a long period of time. Capital structure is concerned with the quantitative aspect. A decision about the proportion among these types of securities refers to the capital structure decision of an enterprise.

The term capital structure should not be confused with financial structure and Assets structure. While financial structure consists of short-term debt, long-term debt and share holders' fund i.e., the entire left hand side of the company's Balance Sheet. But capital structure consists of long-term debt and shareholders' fund. The capital structure of a firm is a part of its financial structure. Some experts of financial management include short-term debt in the composition of capital structure. In that case, there is no difference between the two terms—capital structure and financial structure. So, capital structure is different from financial structure. It is a part of financial structure. Capital structure refers to the proportion of long-term debt and equity in the total capital of a company. On the other hand, financial structure refers to the net worth or owners' equity and all liabilities (long-term as well as short-term). Capital structure does not include short-term liabilities but financial structure includes short-term liabilities or current liabilities.

Capital Structure is referred to as the ratio of different kinds of securities raised by a firm as long-term finance. The capital structure involves two decisions-

a. Type of securities to be issued is equity shares, preference shares and long term borrowings (Debentures).

b. Relative ratio of securities can be determined by process of capital gearing. On this basis, the companies are divided into two-

   i) Highly geared companies - Those companies whose proportion of equity capitalization is small.

   ii) Low geared companies - Those companies whose equity capital dominates total capitalization.

For instance - There are two companies A and B. Total capitalization amounts to be Rs. 200,000 in each case. The ratio of equity capital to total capitalization in company A is Rs. 50,000, while in company B, ratio of equity capital is Rs. 150,000 to total capitalization, i.e., in Company A, proportion is 25% and in company B, proportion is 75%. In such cases, company A is considered to be a highly geared company and company B is low geared company.

Components of Capital Structure

Shareholders Funds

1. **Equity Capital**
2. **Preference Capital**
3. **Retained Earnings**

Borrowed Funds

1. **Debentures**
2. **Term Loans**
3. **Public Deposits**

2.2.2 Cardinal Principles of Capital Structure

A) Cost Principle: cost is an important principle of capital structure. It is clear that a business should be at least able of earning enough revenue to meet its cost of capital and finance its growth. Hence, along with a risk as principle the finance manager has to consider the cost aspect carefully while determining the capital structure. According to this principle, an ideal pattern of capital structure is one that minimizes cost of capital structure and maximizes earnings per share. For example, Debt capital is cheaper than equity capital from the point of its cost and interest being deductible for income tax purpose, whereas no such deduction is allowed for dividends.

B) Risk Principle: The finance manager attempts to plan the capital structure in such a manner, that risk and cost are the least and the control of the existing management is diluted to the least extent. However, there are also additional factors also like marketability of the issue and flexibility of the capital structure, timing of raising the funds. According to this principle, reliance is to be found more on common equity for financing capital requirements than excessive use of debt. Use of more and more debt means higher commitment in form of interest payout. This would lead to erosion of shareholders value in unfavourable business situation. There are two risks associated with this principle:

(i) **Business Risk:** it is an unavoidable risk because of the environment in which the firm has to operate and it is represented by the variability of earning before interest and tax. The variability in turn is influenced by revenues and expenses. Revenues and expenses are affected by demand of firm products, variations in prices and proportion of fixed cost I in total cost.

(ii) **Financial risk:** it is a risk associated with the availability of earnings per share caused by use of financial leverage. It is the additional risk borne by the shareholders when a firm uses debt in addition to equity financing. Financial risk also two types:

a. **Risk of cash insolvency**- as a firm raises more debt, its commitment towards debt service increases. This is due to two reasons. Firstly, higher the debt, the greater the amount of interest payable, even in years o insufficient profit. Secondly, the principal has to be repaid in committed installments, even if sufficient cash is not available. Thus the risk of cash insolvency increases.

b. **Risk of variation in the EPS**- Equity shareholders are entitled to residual earnings only, i.e. earning after meeting interest, tax and preference dividend. Hence, as interest increases, these will be lower probability that equity shareholders will enjoy a stable dividend. As a result of financial leverage, if debt content is high in the capital structure, the risk of variations in expected earnings available to equity shareholders will be higher.

Generally, a firm should neither be exposed to high degree of business risk and low degree of financial risk or vice-versa, so that shareholders do not bear a higher risk.

C) Control Principle:

Along with cost and risk principles, the control principle is also important consideration in planning the capital structure. When a company issues further equity shares, automatically dilutes the controlling interest of the present owners. Similarly, preference shareholders can have voting rights and thereby affect the composition of the Board of Directors, in case dividends on such shares are not paid for two consecutive years. Financial institutions normally require that they shall have one or more directors on the Boards. Hence, when the management agrees to raise loans from financial institutions by implication it agrees to sacrifice a part of its control over the company. It is noticeable, therefore, that decision concerning capital structure are taken after keeping the control factor in mind.

While designing a capital structure, the finance manager may also keep in mind the present management control and ownership remains uninterrupted. Issue of new equity will reduce existing control pattern and also it involves higher cost. Issue of more debt causes no reduction in control, but causes a higher degree of financial risk. The consideration of retaining control of the business is an important factor in capital structure decisions. If the existing equity shareholders do not like to reduce the control, they may prefer debt capital to equity capital, as previous has no voting rights.

There are three major considerations in capital structure are Risk, Cost and Control. These are differing for various components of capital i.e. own funds and loan funds a comparative analysis is given as under:

Comparative Analysis

Types of fund	Risk	Cost	Control
Equity Capital	Low risk- no question of repayment of capital expect when the company is under liquidation- hence best from viewpoint of risk	Most expensive- dividend expectations of shareholders are higher than interest rats also dividends are not tax deductible	Dilution of control- since the capital base might be expanded and new shareholders/public are involved
Preference capital	Slightly higher risk when compared to Equity capital principal is redeemable after a certain period even if dividend payment is based on profits	Slightly cheaper cost than Equity but higher than interest rate on loan funds. Further, preference dividends are not tax-deductible	No dilution of control since voting rights are restricted
Loan funds	High risk-capital should be repaid as per agreement interest should be paid irrespective of performance or profits	Comparatively Cheaper- prevailing interest rates are considered only to the extent of after tax impact	No dilution of control-but some financial institutions may insist on nomination of their representatives in the board of directors

D) Flexibility Principle:

Flexibility it means that the management chooses such a combination of sources of financing which it finds easier to adjust according to changes in need of funds in future. While debt could be interchanged (if the company is loaded with a debt of 18% and funds are available at 15% it can return old debt with new debt, at a lesser interest rate) but the same option may not be available in case of equity investment. The capital structures of a company should be such that it can raise funds as and when required. Flexibility provides opportunity for expansion, both in terms of lower impact on cost and with no significant rise in risk profile.

In an enterprise, the capital structure should be such that there are both contractions as well as relaxation in plans. Debentures and loans can be refunded back as the time requires. While equity capital cannot be refunded at any point it provides inflexibility to plans. Therefore, in order to make the capital structure possible, the company should go for issue of debentures and other loans.

E) Timing Principle:

Proper timing of a security issue often brings sustainable savings because of the dynamic nature of the capital market. Hence, the issue should be made at the right time so as to minimize effective cost of capital. The management should constantly study the trend in the capital market and time its issue carefully.

Besides, above principles, other factors such as nature of industry and competition in the industry should also be considered. Industries facing severe competition also resort to more equity than debt.

Thus, a finance manager in designing a suitable pattern of capital structure must put forward about satisfactory compromise between the above principles. The compromise can be reached by assigning weights to these principles in terms of various characteristics of the company.

2.2.3 Factors influencing the capital structure

There are various factors influencing on capital structure. These factors are mostly depending on types of business and situation of economy of the country. The following factors influence the capital structure decisions:

1. Risk of cash insolvency: Risk of cash insolvency arises due to failure to pay fixed interest liabilities. Generally, the higher proportion of debt in capital structure compels the company to pay higher rate of interest on debt irrespective of the fact that the fund is available or not. The non-payment of interest charges and principal amount in time will call for liquidation of the company. The sudden withdrawal of debt funds from the company can cause cash insolvency. This risk factor has an important bearing in determining the capital structure of a company and it can be avoided if the project is financed by issues equity share capital.

2. Risk in variation of earnings: The higher the debt content in the capital structure of a company, the higher will be the risk of variation in the expected earnings available to equity shareholders. If return on investment on total capital employed (i.e., shareholders' fund plus long-term debt) exceeds the interest rate, the shareholders get a higher return.

On the other hand, if interest rate exceeds return on investment, the shareholders may not get any return at all.

3. Cost of capital: Cost of capital means cost of raising the capital from different sources of funds. It is the price paid for using the capital. A business enterprise should generate enough revenue to meet its cost of capital and finance its future growth. The finance manager should consider the cost of each source of fund while designing the capital structure of a company. Many of the most successful companies in the world decide their capital structure on one simple consideration — the cost of capital. If you can borrow money at 7 percent for 30 years in a world of 3 percent inflation and reinvest it in core operations at 15 percent, you would be wise to consider at least 40 percent to 50 percent in debt capital in your overall capital structure particularly if your sales and cost structure are relatively stable.

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

The use of fixed interest bearing securities along with owner's equity as sources of finance is known as trading on equity. It is an arrangement by which the company aims at increasing the return on equity shares by the use of fixed interest bearing securities (i.e., debenture, preference shares etc.).

If the existing capital structure of the company consists mainly of the equity shares, the return on equity shares can be increased by using borrowed capital. This is so because the interest paid on debentures is a deductible expenditure for income tax assessment and the after-tax cost of debenture becomes very low.

Any excess earnings over cost of debt will be added up to the equity shareholders. If the rate of return on total capital employed exceeds the rate of interest on debt capital or rate of dividend on preference share capital, the company is said to be trading on equity.

6. Government policies: Capital structure is influenced by Government policies, rules and regulations of SEBI and lending policies of financial institutions which change the financial pattern of the company totally. Monetary and fiscal policies of the Government will also affect the capital structure decisions. Raising finance by way of borrowing or issue of equity is subject to policies of the Government and its r regulatory bodies like RBI etc. The various policies and rules, regulations stipulated from time to time by these bodies have to be complied with for acquiring funds through the particular mode.

7. Size of the company: Availability of funds is greatly influenced by the size of company. A small company finds it difficult to raise debt capital. The terms of debentures and long-term loans are less favourable to such enterprises. Small companies have to depend more on the equity shares and retained earnings. On the other hand, large companies issue various types of securities despite the fact that they pay less interest because investors consider large companies less risky. Small size business firm's capital structure generally consists of loans from banks and retained profits. While on the other hand, big companies having goodwill, stability and an established profit can easily go for issuance of shares and debentures as well as loans and borrowings from financial institutions. The bigger the size, the wider is total capitalization.

8. Needs of the investors: While deciding capital structure the financial conditions and psychology of different types of investors will have to be kept in mind. For example, a poor or middle class investor may only be able to invest in equity or preference shares which are usually of small denominations, only a financially sound investor can afford to invest in debentures of higher denominations. A cautious investor who wants his capital to grow will prefer equity shares. Different types of securities are issued to different classes of investors according to their requirements, sometimes; the investor may be motivated by the options and advantages available with a security e.g. double options, convertibility, security of principal and interest etc.

9. Period of finance: The period for which finance is needed also influences the capital structure. When long-term funds (say 10 years) are needed, it should be raised by issuing debentures or preference shares. But if the funds are for permanent requirement, it will be appropriate to raise them by the issue of equity shares. for Medium term it should be raise by debt.

10. Nature of business: It has great influence in the capital structure of the business, companies having stable and certain earnings prefer debentures or preference shares and companies having no assured income depends on internal resources. Enterprises which enjoy stable earnings and dividend with a proven track record may go for borrowings or preference shares, since they are having adequate profits to pay interest/ fixed charges. But companies, which do not have assured income, should preferably rely on internal resources to a large extent since; it may be difficult to attract investors towards the issue.

11. Purpose of financing: Capital structure of a company is also affected by the purpose of financing. Funds are required for long term productive purposes like manufacturing; setting up new plant etc. may be procure through issue of long- term sources. But, the funds are required for non-Productive purposes like welfare facilities to employees, such as school, hospital etc. internal sources of financing may have to be procured.

12. Corporate taxation: Interest on borrowed capital is a tax- deductible expense. But, dividend is not. Also the cost of raising finance through borrowing is deductible in the year in which it is incurred. If it is incurred during the pre-commencement period, it is to be capitalized. Due to the tax saving advantage, debt has a cheaper effective cost than preference shares or equity shares. The impact of taxation should be carefully analyzed. When corporate income is subject to taxes, debt financing is favourable. This is so because the dividend payable on equity share capital and preference share capital are not deductible for tax purposes, whereas interest paid on debt is deductible from income and reduces a firm's tax liabilities. The tax saving on interest charges reduces the cost of debt funds. Moreover, a company has to pay tax on the amount distributed as dividend to the equity shareholders. Due to this, total earnings available for both debt holders and stockholders are more when debt capital is used in capital structure. Therefore, if the corporate tax rate is high enough, it is prudent to raise capital by issuing debentures or taking long-term loans from financial institutions.

13. Cash inflows: The selection of capital structure is also affected by the capacity of the business to generate cash inflows. It analyses solvency position and the ability of the company to meet its charges.

14. Provision for future: The provision for future requirement of capital is also to be considered while planning the capital structure of a company. Future growth considerations and further requirements of capital should also be considered

15. EBIT-EPS analysis: In accounting and finance, earnings before interest and taxes (EBIT), is a measure of a firm's profit that includes all expenses except interest and income tax expenses. It is the difference between operating revenues and operating expenses. If the level of EBIT is low from HPS point of view, equity is preferable to debt. If the EBIT is high from EPS point of view, debt financing is preferable to equity. If ROI is less than the interest on debt, debt financing decreases ROE. When the ROI is more than the interest on debt, debt financing increases ROE.

2.2.4 Trading on Equity

Trading on equity means to raise fixed cost capital (borrowed capital and preference share capital) on the basis of equity share capital so as to increasing the income of equity shareholders. Trading on equity occurs when a corporation uses bonds, other debt, and preferred stock to increase its earnings on common stock. The term trading on equity means debts are contracted and loans are raised mainly on the basis of equity capital. Those who provide debt have a limited share in the firm’s earning and hence want to be protected in terms of earning and values represented by equity capital. Since fixed charges do not vary with firms earnings before interest and tax a magnified effect is produced on earning per share. Whether the leverage is favourable, in the sense, increase in earnings per share more proportionately to the increased earnings before interest and tax, depends on the profitability of investment proposal. If the rate of returns on investment exceeds their explicit cost, financial leverage is said to be positive. In a company, it is the directors who are so called elected representatives of equity shareholders. These members have got maximum voting rights in a concern as compared to the preference shareholders and debenture holders. Preference shareholders have reasonably less voting rights while debenture holders have no voting rights. If the company's management policies are such that they want to retain their voting rights in their hands, the capital structure consists of debenture holders and loans rather than equity shares.

Trading on Equity, also known as financial leverage is the balance between the cost financing operations with equity or debt and the income earned from the operations. In other words, it's a gamble. The company is betting that the return from the investment will generate more income than it costs to finance the investment. Trading on the equity occurs using both equity and debt.

Example

First let's look at an equity example. The board of directors can issue more preferred shares to pay for its expansions or operations. In this case, management is betting that the new expansions will generate more income for the common shareholders than the newly issued preferred shares will require in annual dividend payments.

Companies also finance much of their operations and expansions using debt in the form of bonds or loans. In this case, management is usually convinced that it will be able to generate more profits from the new expanded assets than the interest and principle payments required by the new liabilities.

Depending on the company issuing preferred shares is more profitable than taking on more debt. This is because many investors who think common stock is too risky are interested in the benefits of preferred shares. With equity investors, there are no interest obligations and depending on the class of shares being issued dividends doesn't have to be paid annually. This allows the company to gain the capital it needs to expand without immediate cash outlays for interest. It also gives the company time to make a profit with the new assets.

As you can see, Trading on Equity is a type of trade off. The firm uses its financing of debt or equity to purchase new assets. In turn, it uses its new assets to pay for or finance its debt and equity obligations.

Effects of Trading on Equity:

Trading on equity acts like as a lever to enlarge the influence of fluctuations in earnings. Any fluctuation in earnings before interest and taxes (EBIT) is magnified on the earnings per share (EPS) by operation of trading on equity larger the magnitude of debt in capital structure, the higher is the variation in EPS given any variation in EBIT.

Solution:

Impact on trading on equity, will be reflected in earnings per share available to common stock holders. To calculate the EPS in each of the four alternatives EBIT has to be first of all calculated. (Amount is ₹)

Particulars	Proposal 'A'	Proposal 'B'	Proposal 'C'	Proposal 'D'
Proposal Amount	1,20,000	1,20,000	1,20,000	1,20,000
Less EBIT	-	25,000	60,000	-
Earnings Before tax	1,20,000	95,000	60,000	1,20,000
Less tax @ 50%	60,000	47,500	30,000	60,000
Earnings after Tax	60,000	47,500	30,000	60,000
Less preferred Stock dividend	25,000	-	-	-
Earnings available for common stock holder	20,000	15,000	10,000	15,000
No. of Common shares	20,000	15,000	10,000	15,000
Earnings Per Share- EPS	3.00	3.67	3.00	2.33

Effects of trading on equity can be explained with the help of the following example.

Practical :

Ramchandra Company is capitalized with Rs. 10,00,000 dividends in 10,000 common shares of Rs. 100 each. The management wishes to raise another Rs. 10,00,000 to finance a major programme of expansion through one of four possible financing plans.

Then management

A) May finance the company with all common stock,

B) Rs. 5 lakhs in common stock and Rs. 5 lakhs in debt at 5% interest,

C) All debt at 6% interest or

D) Rs. 5 lakhs in common stock and Rs. 5 lakhs in preferred stock with 5-4 dividend.

The company's existing earnings before interest and taxes (EBIT) amounted to Rs. 12,00,000, corporation tax is assumed to be 50%

Thus, when EBIT is Rs. 1,20,000 proposals B involving a total capitalization of 75% common stock and 25% debt, would be the most favourable with respect to earnings per share. It may further be noted that proportion of common stock in total capitalization is the same in both the proposals B and D but EPS is altogether different because of induction of preferred stock.

While preferred stock dividend is subject to taxes whereas interest on debt is tax deductible expenditure resulting in variation in EPS in proposals B and D, with a 50% tax rate the explicit cost of preferred stock is twice the cost of debt.

C. Cost of Control: Meaning and Significance

Meaning of Cost of Control

Cost of capital is an essential component of accounting and financial analysis for a business. The cost of capital should be key element for a business that successfully manages its finances. Cost of capital refers to the return a company expects on a specific investment to make it worth the expenditure of resources. In other words, the cost of capital determines the rate of return required to influence investors to finance a capital budgeting project. Cost of capital is greatly dependent on the type of financing used in the business. A business can be financed through debt or equity. However, most companies employ a combination of equity and debt financing. Therefore, the cost of capital comes from the weighted average cost of all capital sources. Cost of capital is extremely important to investors and analysts. These groups use it to determine stock prices and potential returns from acquired shares. For example, if a company's financial statements or cost of capital are volatile, cost of shares may fall; as a result, investors may not provide financial backing.

Definition:

Cost control is the practice of identifying and reducing business expenses to increase profits, and it starts with the budgeting process.

Cost control is an important factor in maintaining and growing profitability. Outsourcing is a common method to control costs because many businesses find it cheaper to pay a third party to perform a task than to take on the work within the company.

Significance of Cost of Control

The cost of capital is very important concept in the financial decision making. Cost of capital is the measurement of the sacrifice made by investors in order to invest with a view to get a fair outcome in future on his investments as a reward for the rearrangement of his present needs. On the other hand from the point of view of the firm using the capital, cost of capital is the price paid to the investor for the use of capital provided by him. Thus, cost of capital is reward for the use of capital. The progressive management always likes to consider the importance cost of capital while taking financial decisions as it's very relevant in the following spheres:

1. **Designing the capital structure:** The cost of capital is the significant factor in designing a balanced and optimal capital structure of a firm. While designing it, the management has to consider the objective of maximizing the value of the firm and minimizing cost of capital. Comparing the various specific costs of different sources of capital, the financial manager can select the best and the most economical source of finance and can designed a sound and balanced capital structure.

2. **Capital budgeting decisions:** The cost of capital sources as a very useful tool in the process of making capital budgeting decisions. Acceptance or rejection of any investment proposal depends upon the cost of capital. A proposal shall not be accepted till its rate of return is greater than the cost of capital. In various methods of discounted cash flows of capital budgeting, cost of capital measured the financial performance and determines acceptability of all investment proposals by discounting the cash flows.

3. **Comparative study of sources of financing:** There are various sources of financing a project. Out of these, which source should be used at a particular point of time is to be decided by comparing costs of different sources of financing. The source which bears the minimum cost of capital would be selected. Although cost of capital is an important factor in such decisions, but

equally important are the considerations of retaining control and of avoiding risks.

4. **Evaluations of financial performance:** Cost of capital can be used to evaluate the financial performance of the capital projects. Such as evaluations can be done by comparing actual profitability of the project undertaken with the actual cost of capital of funds raise to finance the project. If the actual profitability of the project is more than the actual cost of capital, the performance can be evaluated as satisfactory.

5. **Knowledge of firms expected income and inherent risks:** Investors can know the firms expected income and risks inherent there in by cost of capital. If a firms cost of capital is high, it means the firms present rate of earnings is less, risk is more and capital structure is imbalanced, in such situations, investors expect higher rate of return.

6. **Financing and Dividend Decisions:** The concept of capital can be suitably employed as a tool in making other important financial decisions. On the basis, decisions can be taken regarding dividend policy, capitalization of profits and selections of sources of working capital.

In sum, the importance of cost of capital is that it is used to evaluate new project of company and allows the calculations to be easy so that it has minimum return that investor expect for providing investment to the company. In a competitive marketplace, the low-cost producers are the ones that can earn the highest profits. Reducing costs is therefore a key objective for most businesses since it increases both efficiency and profitability.

2.2.5 Weighted Average cost of Capital (WACC)

Before going to study the weighted average cost of capital, we must understand capital structure at first. Capital structure refers to the amount of debt and/or equity employed by a firm to fund its operations and finance its assets. A firm's capital structure is typically expressed as a debt-to-equity or debt-to-capital ratio. Capital structure is the mix of debt and equity capital.

ASSETS	**DEBT**
	EQUITY

There are various sources of finance for raising the funds required for every organization to acquire the assets. These are:

- Equity share capital
- Preference share capital
- Debentures
- Bonds
- Long term loan and
- Retained earnings etc.

These sources of finance are useful under different circumstances. The cost of capital is largely an academic term which is useful for measuring the efficiency of management in decision making of rising of funds through the above mentioned sources of finance. It is an important concept in formulating a firm’s capital structure. Each source has the cost i.e. dividend and interest and that particular cost is known as cost of capital.

Meaning of WACC-

A firm’s Weighted Average Cost of Capital (WACC) represents its blended cost of capital across all sources, including common shares, preferred shares, and debt. The cost of each type of capital is weighted by its percentage of total capital and they are added together. A firm’s total cost of capital is a weighted average of the cost of equity and the cost of debt, known as the Weighted Average Cost of Capital. The Weighted Average Cost of Capital shows us the relationship between the components of capital, commonly Equity and Debt. Debt and equity capital are used to fund a business’s operations, capital expenditure, acquisitions, and other investments. There are tradeoffs firms have to make when they decide whether to use debt or equity to finance operations, and managers will balance the two to find the optimal capital structure. In short Capital Structure is the Mix of Debt Capital (Long

Term Liability) and Equity Capital Equity Capital, Reserve and Surplus, Profit and Loss Account less fictitious Assets.

Importance of Weighted Average Cost of Capital (WACC)

WACC has the purpose of determining the cost of each component of the structure of capital. Each element has its associated cost:

Ordinary shares pay out dividends;

The firm pays interest on its debt;

Preferred stock has a fixed rate payment.

The WACC is an essential part of the Discounted Cash Flow (DCF) model, which makes it a vital concept, especially for finance professionals in business development and investment banking.

WACC is dictated by the external market and not by the management of the company. It represents the minimum return a company must earn on its asset base to satisfy its owners, creditors, and other capital providers, or they will invest elsewhere.

A company can have multiple sources of capital, like common stock, preferred stock, regular debt, convertible debt, options, pension liabilities, government subsidies, and others. Different securities represent different sources of financing and are expected to generate separate returns. Therefore the Weighted Average Cost of Capital considers the weights of all sources of financing. However, the more complex the capital structure of a company is, the harder it gets to calculate its WACC.

Optimal capital structure

The optimal capital structure of a firm is often defined as the proportion of debt and equity that results in the lowest weighted average cost of capital (WACC) for the firm. This technical definition is not always used in practice, and firms often have a strategic or philosophical view of what the ideal structure should be.

Low leverage

ASSETS	**DEBT 2,000**
Rs. 10,000	**EQUITY- 8,000**

High Leverage

ASSETS	**DEBT 8,000**
Rs. 10,000	**EQUITY- 2,000**

Debt investors take less risk because they have the first claim on the assets of the business in the event of insolvency. For this reason, they accept a lower rate of return and, thus, the firm has a lower cost of capital when it issues debt compared to equity.

Equity investors take more risk, as they only receive the residual value after debt investors have been repaid. In exchange for this risk, investors expect a higher rate of return and, therefore, the implied cost of equity is greater than that of debt.

Conclusion

Companies need to know their WACC as a way to gauge expenses and analyze new projects. It is also a way to explain the capital structure of the company and determine the best proportions between various financing sources. The lower the WACC, the cheaper it is for the company to fund further investment initiatives. It is also important to remember that the more complex the capital structure of the company is, the harder it gets to calculate the Weighted Average Cost of Capital.

Cost of capital formula:

The formula is equal to:

WACC = (E/V x Re) + ((D/V x Rd) x (1 – T))

Where:

E = market value of the firm's equity (market cap)
D = market value of the firm's debt
V = total value of capital (equity plus debt)
E/V = percentage of capital that is equity
D/V = percentage of capital that is debt

Re = cost of equity (required rate of return)

Rd = cost of debt (yield to maturity on existing debt)

T = tax rate

Illustration no. 1

Calculate the cost of capital in the following cases:

I) ABC ltd. Issues 12% Debentures of face value Rs. 100 each and realizes Rs. 95 Debenture. The Debentures are redeemable after 10 years at a premium of 10%.

II) XYZ Ltd. Issues 14% preference shares of face value 100 each Rs. 92 per share. The shares are repayable after 12 years at par.

Both companies are paying income tax at 50%.

Solution:

Cost of Debt

$$\mathbf{Kd} = \frac{[\mathbf{Int} + (\mathbf{RV} - \mathbf{SV})/\mathbf{N}]\ (\mathbf{1} - \mathbf{t})}{(\mathbf{RV} + \mathbf{SV})/\mathbf{2}}$$

Int = Annual interest to be paid i.e. 12%

t = Company's effective tax rate i.e. 50% or 0.50

RV= Redemption value of per debenture i.e. 110

N = Number of years to maturity i.e. 10 years

SV= Issue price per debenture i.e. Rs. 95

$$\mathbf{Kd} = \frac{[\mathbf{12} + (\mathbf{110} - \mathbf{95})/\mathbf{10}]\ (\mathbf{1} - \mathbf{0.5})}{(\mathbf{110} + \mathbf{95})/\mathbf{2}}$$

$$= \frac{[\mathbf{12} + \mathbf{2.5}](\mathbf{0.5})}{\mathbf{97.50}}$$

$$= \frac{\mathbf{7.25}}{\mathbf{97.50}}$$

$$= 7.43$$

$$\mathbf{Kp} = \mathbf{7.43}$$

Cost of preference capital

$$\mathbf{Kp} = \frac{\mathbf{D + (RV - SV)/N}}{\mathbf{(RV + SV)/2}}$$

Where,

D = Dividend on preference shares i.e. Rs. 14

SV= Issue price per share minus flotation cost Rs. 92

N = Number of years for redemption i.e. 12 years

RV= Net price payable on redemption Rs. 100

$$\mathbf{Kp} = \frac{\mathbf{14 + (100 - 92)/12}}{\mathbf{(100 + 92)/2}}$$

$$\mathbf{Kp} = \frac{\mathbf{14 + 0.67}}{\mathbf{95}}$$

$$\mathbf{Kp = 15.28}$$

Illustration no. 2

A firm has the following capital structure and after-tax costs for the different sources of funds used:

Source of funds	Amount Rs.	Proportion %	After tax cost%
Debt	15,00,000	25	5
Preference Shares	12,00,000	20	10
Equity Shares	18,00,000	30	12
Retained Earnings	15,00,000	25	11
Total	60,00,000	100	

You are required to compute the weighted average cost of capital.

Solution 2

Source of funds	Proportion X	Cost W	(XW)%

Debt	25	5	1.25
Preference Shares	20	10	2.00
Equity Shares	30	12	3.60
Retained Earnings	25	11	2.75
Weighted Average Cost Of Capital			**9.60%**

Illustration no. 3

The following information has been extracted from the balance sheet of fashions ltd. as on 31/12/2018

Equity share capital	4,00,000
12% Debentures	4,00,000
18% Term loan	12,00,000
18% Term loan	20,00,000

a) Determine the weighted average cost of capital of the company. It had been paying dividends at a consistent rate of 20% p.a.

b) What difference will it make if the market price of equity shares Rs. 160? (face value Rs. 100)

c) Determine the effect of income tax on the cost of capital under both premises.

Solution 3:

a) Weighted average cost of capital of the company is as follows:

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	20%	4/20	4.00%
12% Debentures	12%	4/20	2.40%
Term loan	18%	12/20	10.80%
WACC			17.20%

Therefore, weighted average cost of capital of the company is 17.20 p.a. without considering market price and income tax.

b) What difference will it make if the market price of equity shares Rs. 160? (face value Rs. 100)

Ke = D1/p

Ke = 20/160

= 12.5

Weighted average cost of capital will therefore be:

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	12.5%	4/20	2.5%
12% Debentures	12%	4/20	2.40%
Term loan	18%	12/20	10.80%
WACC			15.7%

c) As interest on Debentures and Term loan is allowable deductable expenditure for arriving taxable income, the real cost of the company will be interest charges less tax benefit. (assuming that company earns taxable income)

So interest cost will be rate of interest (1-t)

12% Debentures: 12×0.60 = 7.2%

18% Term Loan: 18×0.60 = 10.8%

a) WACC after tax benefit (as per premises a);

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	20%	4/20	4.00%
12% Debentures	7.2%	4/20	1.44%
Term loan	10.8%	12/20	6.48%
WACC			11.92%

b) WACC after tax benefit (as per premises a);

Source of capital	Cost of capital	Proportion of total	Weighted average cost of capital
Equity share capital	12.5%	4/20	2.50%
12% Debentures	7.2%	4/20	1.44%
Term loan	10.8%	12/20	6.48%
WACC			10.42%

Illustration no. 4

The following information is available from the balance of Fortune Ltd. Company

Equity share capital	2,00,000
Reserve and Surplus	1,30,000
8% Debentures	1,70,000

The tax rate of the company is 50%. Current level of equity dividend is 12%. Calculate weighted average cost of capital of Fortune Ltd. Company.

Solution 4:

Capital Structure	Amount Rs.	Proportion (weight)	After tax cost	Weighted cost
Equity share capital	200000	40%	12%	40%×12%=4.80%
Reserve and Surplus	130000	26%	12%	26%×12%=3.12%
8% Debentures	170000	34%	4%	34%×4%=1.36%
Total	500000	100%		**WACC=9.28%**

2.3 Summary

Capital structure refers to the mix of a firm's capitalization. Mix of long term sources of funds such as debentures, preference share capital, equity share capital and retained earnings for meeting total capital requirement. Capital structure decision refers to deciding the forms of financing which sources to be tapped, their actual requirements amount to be funded and their relative proportions in total capitalization. Normally a finance manager tries to choose a pattern of capital structure which minimizes cost of capital and maximizes the owners return. While, choosing a suitable financing pattern, certain factors like cost, risk, control, flexibility and timing and other considerations like nature of industry, competition of industry etc. should be considered. For e.g. industries facing severe competition also resort to more equity than debt.

While capital structure is designing some principles can be considered such as risk, cost, control, flexible and timing. Other factors such as nature of industry and competition in the industry should also be considered. Industries facing severe competition also resort to more equity than debt. Thus, a finance manager in designing a suitable pattern of capital structure must put forward about satisfactory compromise between the principles. The compromise can be reached by assigning weights to these principles in terms of various characteristics of the company.

There are various factors influencing on capital structure. These factors are mostly depending on types of business and situation of economy of the country. These factors are Risk of cash insolvency, risk of variation of earnings, cost of capital, trading on equity, nature of business, period of finance, size of the company, Government policies, legal requirements, need of investors, EBIT-EPS, purpose of financing, corporate taxation, Cash inflows, provision for future etc.

Trading on equity means to raise fixed cost capital (borrowed capital and preference share capital) on the basis of equity share capital so as to increasing the income of equity shareholders. Trading on equity occurs when a corporation uses bonds, other debt, and preferred stock to increase its earnings on common stock.

2.4 Terms to Remember:

- **Trading on equity**- Trading on equity means to raise fixed cost capital (borrowed capital and preference share capital) on the basis of equity share capital so as to increasing the income of equity shareholders. Trading on equity occurs when a corporation uses bonds, other debt, and preferred stock to increase its earnings on common stock.
- **EBIT** - Earnings Before Interest and Taxes- In accounting and finance, earnings before interest and taxes (EBIT), is a measure of a firm's profit that includes all

expenses except interest and income tax expenses. It is the difference between operating revenues and operating expenses.

- **EPS**- Earnings Per Share- is the portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability.
- **ROI**- Return on Investment- A performance measure used to evaluate the efficiency of an investment or to compare the efficiency of a number of different investments. ROI measures the amount of return on an investment relative to the investment's cost.

2.5 Check Your Progress:

A. Choose the correct alternative:

1. The term "capital structure" refers to:
   i. Long-term debt, preferred stock, and common stock equity
   ii. Current assets and current liabilities
   iii. Total assets minus liabilities.
   iv. Shareholders equity
2. EBIT is usually the same thing as:
   i. funds provided by operations.
   ii. Earning before taxes
   iii. Net income
   iv. Operating profit
3. Financial risk is the risk associated with a firm's:
   i. cost of equity capital.
   ii. capital structure.
   iii. daily operations.
   iv. business classification.

B. Fill in the blanks:

1. There are two forms of capital ----------- capital and ----------- capital.

2. Capital structure is the mix of the ---------- sources of funds used by a firm.
3. ----------------------- means the taking advantage of equity share capital to borrowed funds on reasonable basis.
4. --------------------------------- is a measure of a firm's profit that includes all expenses except interest and income tax expenses.
5. There are two forms of capital: equity capital and --------------- capital.

C. State the following statement 'True' or 'False'

1. Recapitalization occurs when the firm alters its capital structure.
2. Increasing the value of the firm through different types of financing is the basis behind looking at the optimal capital structure.
3. The key issue in the whole capital structure discussion is whether a firm can not affect its total valuation and its cost of capital by changing its financing mix.
4. According to the traditional approach, an optimal capital structure would probably not be a financing mix consisting entirely of debt.
5. Capital structure is the mix of the short term sources of funds used by a firm.
6. Capital structure refers to the mix of a firm's capitalization.

2.6 Answers to check your progress:

A. Choose the correct alternative:

1. Long-term debt, preferred stock, and common stock equity
2. Operating profit
3. Capital structure

B. Fill in the blanks:

1. Equity and debt
2. Long term
3. Trading on equity
4. Earnings before interest and taxes (EBIT)

5. Debt

C. State' True' or 'False'

1. True 2. True 3. False 4. True 5. False 6. True

2.7 Exercise:

A) Short Notes

1. Trading on equity
2. Cost principle of capital structure
3. Risk principle of capital structure
4. Control principle of capital structure
5. Flexible and Timing principle of capital structure

B) Long Answer Type Questions

1. What is Capital structure? Explain cardinal principles of capital structure.
2. Explain the factors influencing the capital structure.
3. Explain the concept of Trading on equity
4. Explain the concept of Weighted Average Cost of Capital

2.8 Reference to Further Study:

1. Financial Management – S C Saxena
2. Essentials of Business Finance-Dr R.M.Shrivastav
3. Financial Management – P V Kulkarni
4. Financial Management- Prasanna Chandra
5. Financial Management- Dr Anil Kumar Dhagat

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Unit-3

Sources of Finance

Unit Structure

3.0 Objectives:

After studying this unit you will be able to:

- Know the various sources of finance
- Understand the concept differential rights of equity shares
- Know the concept and characteristics of Preference shares
- Understand the concept and legal provisions of Debentures
- Know concept and process of venture capital
- Understand the concept and mechanism of lease finance
- Understand concept and features of project finance

3.1 Introduction:

Sources of finance mean the ways for mobilizing various terms of finance to the industrial concern. Sources of finance state that, how the companies are mobilizing finance for their requirements. The companies belong to the existing or the new which need sum amount of finance to meet the long-term and short-term requirements such as purchasing of fixed assets, construction of office building, purchase of raw materials and day-to-day expenses. A finance manager has to assemble funds form numerous sources to satisfy varied financial needs of the firm.

Sources of finance may be classified under various categories according to the following important heads:

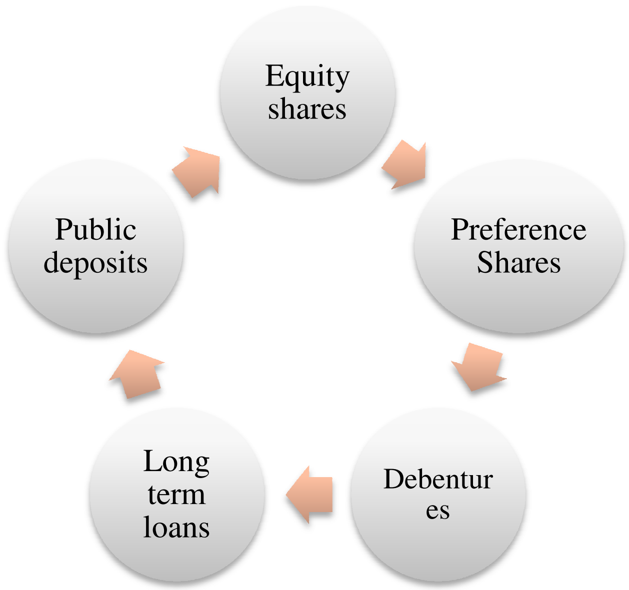
1. Based on the Period

Sources of Finance may be classified under various categories based on the period.

Long-term sources:

Finance may be mobilized by long-term or short-term. When the finance mobilized with large amount and the repayable over the period will be more than five years, it may be considered as long-term sources. Share capital, issue of debenture, long-term loans from financial institutions and commercial banks come under this kind of source of finance. Long-term source of finance needs to meet the capital expenditure of the firms such as purchase of fixed assets, land and buildings, etc.

Long-term sources of finance



Short-term sources:

Apart from the long-term source of finance, firms can generate finance with the help of short-term sources like loans and advances from commercial banks, moneylenders, etc. Short-term source of finance needs to meet the operational expenditure of the business concern.

Short-term source of finance

2. Based on Ownership

Sources of Finance may be classified under various categories based on the period:

An ownership source of finance include

- Shares capital, earnings
- Retained earnings
- Surplus and Profits

Borrowed capital include

- Debenture
- Bonds
- Public deposits
- Loans from Bank and Financial Institutions.

3. Based on Sources of Generation

Sources of Finance may be classified into various categories based on the period.

Internal source of finance includes

- Retained earnings
- Depreciation funds
- Surplus

External sources of finance may be include

- Share capital
- Debenture
- Public deposits
- Loans from Banks and Financial institutions

4. Based in Mode of Finance

Security finance may be include

- Shares capital
- Debenture

Retained earnings may include

- Retained earnings
- Depreciation funds

3.2 Presentation of Subject Matter

3.2.1 a. EQUITY SHARES

Equity Shares also known as ordinary shares, which means, other than preference shares. Equity shareholders are the real owners of the company. They have a control over the management of the company. Equity shareholders are eligible to get dividend if the company earns profit. Equity share capital cannot be redeemed during the lifetime of the company.

The liability of the equity shareholders is the value of unpaid value of shares.

Characteristics of Equity Shares

Equity shares consist of the following important features:

1. Maturity of the shares: Equity shares have permanent nature of capital, which has no maturity period. It cannot be redeemed during the lifetime of the company.

2. Residual claim on income: Equity shareholders have the right to get income left after paying fixed rate of dividend to preference shareholder. The earnings or the income available to the shareholders is equal to the profit after tax minus preference dividend.

3. Residual claims on assets: If the company wound up, the ordinary or equity shareholders have the right to get the claims on assets. These rights are only available to the equity shareholders.

4. Right to control: Equity shareholders are the real owners of the company. Hence, they have power to control the management of the company and they have power to take any decision regarding the business operation.

5. Voting rights: Equity shareholders have voting rights in the meeting of the company with the help of voting right power; they can change or remove any decision of the business concern. Equity shareholders only have voting rights in the company meeting and also they can nominate proxy to participate and vote in the meeting instead of the shareholder.

6. Pre-emptive right: Equity shareholder pre-emptive rights. The pre-emptive right is the legal right of the existing shareholders. It is attested by the company in the first opportunity to purchase additional equity shares in proportion to their current holding capacity.

7. Limited liability: Equity shareholders are having only limited liability to the value of shares they have purchased. If the shareholders are having fully paid up shares, they have no liability. For example: If the shareholder purchased 100 shares with the face value of Rs. 10 each. He paid only Rs. 900. His liability is only Rs. 100.

Total number of shares 100

Face value of shares Rs. 10

Total value of shares 100 × 10 = 1,000

Paid up value of shares 900

Unpaid value/liability 100

Liability of the shareholders is only unpaid value of the share (that is Rs. 100).

Merits of Equity Shares

Equity shares are the most common and universally used shares to mobilize finance for the company. It consists of the following merits.

1. **Permanent sources of finance:** Equity share capital is belonging to long-term permanent nature of sources of finance; hence, it can be used for long-term or fixed capital requirement of the business concern.

2. **Voting rights:** Equity shareholders are the real owners of the company who have voting rights. This type of advantage is available only to the equity shareholders.

3. **No fixed dividend:** Equity shares do not creating any obligation to pay a fixed rate of dividend. If the company earns profit, equity shareholders are eligible for profit, they are eligible to get dividend otherwise, and they cannot claim any dividend from the company.

4**. Less cost of capital:** Cost of capital is the major factor, which affects the value of the company. If the company wants to increase the value of the company, they have to use more share capital because, it consists of less cost of capital while compared to other sources of finance.

5. Retained earnings: When the company have more share capital, it will be suitable for retained earnings which are the less cost sources of finance while compared to other sources of finance.

Demerits of Equity Shares

1. Irredeemable: Equity shares cannot be redeemed during the lifetime of the business concern. It is the most dangerous thing of over capitalization.

2. Obstacles in management: Equity shareholder can put obstacles in management by manipulation and organizing themselves. Because, they have power to contrast any decision is against the wealth of the shareholders.

3. Leads to speculation: Equity shares dealings in share market lead to secularism during prosperous periods.

4. Limited income to investor: The Investors who desire to invest in safe securities with a fixed income have no attraction for equity shares. 5. No trading on equity: When the company raises capital only with the help of equity, the company cannot take the advantage of trading on equity.

5. Ownership Dilution: new equity shares may dilute the ownership and control of the existing shareholders. The shareholders have a pro-emptive right to retain their proportionate ownership; they may not have funds to invest in additional shares. Dilution of ownership assumes great significance in the case of closely held companies.

Legal Provisions:

A guidance of SEBI covers the public issue of equity shares. The public issue may be through the prospectus, private placement or offer for sale. Following are the guidelines issued by SEBI for issue of shares:

a. The draft prospectus is to be approved by the SEBI

b. The equity preference ratio should be 3:1

c. The debt equity norm has to be 1:2

d. In case of new company issue should be made at par

e. The stock exchange listing of shares should be satisfied

f. If the minimum subscription list is not met from public and underwriters within 120 days from the date of opening of the issue, the subscription amount has to be refunded.

Equity shares with differential rights:

Rule 4 of the Companies (Share Capital and Debentures) Rules 2014 deals with equity shares with differential rights. The differential rights regime has undergone a significant change with the coming into effect of the provisions of the 2013 Act. Under the 1956 Act, the provisions governing issue of shares with differential rights did not apply to purely private companies. There was therefore sufficient freedom to structure the contractual terms agreed between parties to a joint venture should they choose a purely private company as the JV vehicle. Without going into the issue as to whether the exemption available for purely private companies should have continued, what requires to be clarified immediately is that the actions taken by purely private companies under the provisions of the 1956 Act will continue to remain valid. This would help avoid confusion as to whether beginning 1 April 2014, the provisions of the 2013 Act will be applicable notwithstanding actions duly taken under the 1956 Act, although the legal basis for such an interpretation is not very sound. Under the 2013 Act and rules governing issue of shares with differential rights, it is specified that shares with differential rights shall not exceed 26% of the total post issue paid up equity share capital. This 26% includes equity shares issued with differential rights issued at any point in time. There are various purely private companies whose capital comprises of shares with differential rights in excess of

26%. An explanation in the rules clarifies that differential rights attached to the shares issued by any company under the provisions of the 1956 Act shall continue. However, the grandfathering effect seems to have a condition attached to it. The condition states that such rights shall continue till they are converted with differential rights in accordance with the 2013 Act. It therefore appears that while the existing differential shares can continue, the differential terms cannot be converted/ modified. One other condition imposed is that a company shall not convert its existing equity share capital with voting rights into equity capital carrying differential voting rights and vice versa. This is possibly to address a situation where parties would have attempted to convert existing shares into differential shares by adopting a strict interpretation that such conversion does not amount to 'issue' and therefore will not be subject to the limit prescribed.

Which Company may issue:

A company limited by shares *shall* issue equity shares with differential rights as to dividend, voting or otherwise, when it complies with the following conditions, namely:-

(a) The articles of association of the company authorize the issue of shares with differential rights.

(b) The issue of shares is authorized by an *ordinary resolution* passed at a general meeting of the shareholders. Where the equity shares of a company are listed on a recognized stock exchange, the issue of such shares shall be approved by the shareholders through *postal ballot*.

(c) The shares with differential rights shall *not exceed twenty-six percent of the total post-issue paid up equity share capital* including equity shares with differential rights issued at any point of time.

(d) The company having consistent *track record of distributable profits* for the last three years;

(e) The company has not *defaulted in filing* financial statements and annual returns for three financial years immediately proceeding the financial year in which it is decided to issue such shares.

(f) The company has *no subsisting default in the payment* of a declared dividend to its shareholders or repayment of its matured deposits or redemption of its preference shares or debentures that have become due for redemption or payment of interest on such deposits or debentures or payment of dividend.

(g) The company has *not defaulted in payment* of the dividend on preference shares or repayment of any term loan from a public financial institution or State level financial institution or scheduled Bank that has become repayable or interest payable thereon or dues with respect to statutory payments relating to its employees to any authority or default in crediting the amount in Investor Education and Protection Fund to the Central Government.

(h) the company has *not been penalized by Court or Tribunal* during the last three years of any offence under the Reserve Bank of India Act, 1934, the Securities and Exchange Board of India Act, 1992, the Securities Contracts Regulation Act, 1956, the Foreign Exchange Management Act, 1999 or any other special Act, under which such companies being regulated by sectoral regulators.

b. PREFERENCE SHARES

The parts of corporate securities are called as preference shares. It is the shares, which have preferential right to get dividend and get back the initial investment at the time of winding up of the company. Preference shareholders are eligible to get fixed rate of dividend and they do not have voting rights.

Preference shares may be classified into the following major types:

1. Cumulative preference shares: Cumulative preference shares have right to claim dividends for those years which have no profits. If the company is unable to earn profit in any one or more years, C.P. Shares are unable to get any dividend but they have right to get the comparative dividend for the previous years if the company earned profit.

2. Non-cumulative preference shares: Non-cumulative preference shares have no right to enjoy the above benefits. They are eligible to get only dividend if the company earns profit during the years. Otherwise, they cannot claim any dividend.

3. Redeemable preference shares: When, the preference shares have a fixed maturity period it becomes redeemable preference shares. It can be redeemable during the lifetime of the company. The Company Act has provided certain restrictions on the return of the redeemable preference shares.

4. Irredeemable Preference Shares: Irredeemable preference shares can be redeemed only when the company goes for liquidator. There is no fixed maturity period for such kind of preference shares.

5. Participating Preference Shares: Participating preference shareholders have right to participate extra profits after distributing the equity shareholders.

6. Non-Participating Preference Shares: Non-participating preference shareholders are not having any right to participate extra profits after distributing to the equity shareholders. Fixed rate of dividend is payable to the type of shareholders.

7. Convertible Preference Shares: Convertible preference shareholders have right to convert their holding into equity shares after a specific period. The articles of association must authorize the right of conversion.

8. Non-convertible Preference Shares; There shares, cannot be converted into equity shares from preference shares.

Characteristics of Preference Shares

The following are the important characteristics of the preference shares:

1. Maturity period: Normally preference shares have no fixed maturity period except in the case of redeemable preference shares. Preference shares can be redeemable only at the time of the company liquidation.

2. Residual claims on income: Preferential shareholders have a residual claim on income. Fixed rate of dividend is payable to the preference shareholders.

3. Residual claims on assets: The first preference is given to the preference shareholders at the time of liquidation. If any extra Assets are available that should be distributed to equity shareholder.

4. Control of Management: Preference shareholder does not have any voting rights. Hence, they cannot have control over the management of the company.

Merits of Preference Shares

Preference shares have the following important advantages.

1. Fixed dividend: The dividend rate is fixed in the case of preference shares. It is called as fixed income security because it provides a constant rate of income to the investors.

2. Cumulative dividends: Preference shares have another advantage which is called cumulative dividends. If the company does not earn any profit in any previous years, it can be cumulative with future period dividend.

3. Redemption: Preference Shares can be redeemable after a specific period except in the case of irredeemable preference shares. There is a fixed maturity period for repayment of the initial investment.

4. Participation: Participative preference shareholders can participate in the surplus profit after distribution to the equity shareholders.

5. Convertibility: Convertibility preference shares can be converted into equity shares when the articles of association provide such conversion.

Demerits of Preference Shares

1. Expensive sources of finance: Preference shares have high expensive source of finance while compared to equity shares.

2. No voting right: Generally preference shareholders do not have any voting rights. Hence they cannot have the control over the management of the company.

3. Fixed dividend only: Preference shares can get only fixed rate of dividend. They may not enjoy more profits of the company.

4. Permanent burden: Cumulative preference shares become a permanent burden so far as the payment of dividend is concerned. The company must pay the dividend for the unprofitable periods also.

5. Taxation: In the taxation point of view, preference shares dividend is not a deductible expense while calculating tax. But, interest is a deductible expense. Hence, it has disadvantage on the tax deduction point of view.

Legal provision of preference shares

a. The company should have to obtain in principle the approval for listing of preference shares on the recognized stock exchange

b. Credit rating of not less than AA from the recognized agency should be is obtained by the company while issuing preference shares

c. At the time of issue the company should create capital redemption reserve.

c. SWEAT EQUITY SHARES:

Sweat equity shares are such **equity shares,** which are issued by a Company to its directors or employees at a discount or for consideration, other than cash, for providing their know-how or making available rights in the nature of intellectual property rights or value additions, by whatever name called.

Issue of Sweat Equity Shares for a private limited company used to be regulated by Section 79A and Unlisted Companies (Issue of Sweat Equity Shares) Rules, 2003 under Companies Act, 1956 which under the Companies Act, 2013 is governed by Section 54 read with Companies (Share Capital and Debentures) Rules, 2014 under Chapter IV to the Act whereas the listed companies shall adhere to the SEBI (Issue of Sweat Equity) Regulations, 2002 laid down by the Securities Exchange Board of India (SEBI). This section is a sole exception to Section 53 of the Companies Act, 2013 which imposes the restrictions on issue of shares at a discount. as explained in the current rules in this regard, expression 'Employees' mean a permanent employee of the Company who has been working in India or outside India, for at least one year; or a director of the Company, whether a whole time director or not; or an employee or a Director as mentioned above of a subsidiary, in India or outside India, or of a holding company of the Company.

The rules also provides for the explanation to the expression 'Value additions', which means actual or anticipated economic benefits derived or to be derived by the Company from an expert or a professional for providing know-how or making available rights in the nature of intellectual property rights, by such person to whom sweat equity is being issued for which the consideration is not paid or included in the normal remuneration payable under the contract of employment, in the case of an employee. Not less than one year has, at the date of issue of sweat equity, elapsed since the date on which the company had commenced business i. e the company to be eligible to issue sweat equity shall be a company which has been in existence for not less than at least 1 year.

Essentials of Sweat Equity:

- **Eligibility for Sweat-**

a) Permanent employee of the Company who has been working in India or outside India, or at least last 1 year

b) Director of Company-Whole time director or not

c) An employee or a director as defined in sub-clauses (a) or (b) above of a subsidiary (in India or outside India) or of a holding Company.

- **Value Addition–**It means actual or anticipated economic benefits derived or to be derived by Company from an expert or a professional for providing know-how or making available rights in the nature of intellectual property rights.
- **Authorization by shareholders–**prior shareholders approval through special resolution is required.
- **Time limit for issuing Sweat:** Allotment of sweat equity shares shall be made within 12 months from the date of passing special resolution.
- **Time Gap–** There should be at least 1 year between the commenced of business and issue of such shares.
- **Valuation–** Valuation of sweat shares and intellectual property rights(IPR)/know how/ value additions shall be done by Registered Value.
- **Notice of General Meeting–** Critical elements of Valuation Report shall be sent along with the Notice. Particulars like class of shares, price, consideration, principal terms of conditions, employees to who sweat is proposed is required to be mentioned in explanatory statement.
- **Limit on sweat equity**: In a year, sweat shares shall not exceed 15% of existing paid up equity share capital or shares having issue value of Rs. 5,00,00,000, whichever is higher. However, it should not exceed 25% of paid up equity capital of Company at any time.
- **Mandatory lock-in period- 3 years** from the date of allotment. The fact that the share certificates are under lock-in and the period of expiry of lock in shall be mentioned in prominent manner on share certificate.
- **Manner of treatment of sweat issued** for other than cash in Books of accounts-
  a) If non-cash consideration takes the form of a depreciable or amortizable asset- Should be carried to the balance sheet according to accounting standards; or
  b) In other cases- Shall be expensed as provided in the accounting standards.

- **Accounting value of sweat equity –**

a) If sweat equity shares are not issued for acquisition of an asset- Value shall be treated as a form of compensation to the employee or the director in the financial statements of the Company.

b) If sweat equity shares are issued for acquisition of an asset- the value of the asset, as determined by the valuation report, shall be carried in the balance sheet as per the Accounting Standards and such amount of the accounting value of the sweat equity shares that is in excess of the value of the asset acquired, as per the valuation report, shall be treated as a form of compensation to the employee or the director in the financial statements of the company

- **Rights/limitations/restrictions applicable** on sweat equity shares- Shall rank paripassu with other equity shareholders.

- **Disclosure in Directors Report-** Particulars like class of director or employee, class of shares, number of sweat equity shares, percentage of sweat equity shares in total post issued and paid up share capital, diluted Earnings Per Share, consideration received.

- **Register of Sweat Equity Shares**– Details of sweat shares shall be mentioned in this Register. It shall be maintained at Registered Office or such other place as the Board may decide. Entries shall be authenticated by CS of the Company or by any other person authorized by Board.

Conditions for the Issue:

Conditions for the issue of Sweat Equity under Rule 8 of Companies (Shares and Debentures) Rules, 2014:

1. The special resolution authorizing the issue of sweat equity shares shall be valid for making the allotment within a period of not more than twelve months from the date of passing of the special resolution.

2. The company shall not issue sweat equity shares for more than Fifteen percent of the existing paid up equity share capital in a year or shares of the issue value of Rupees Five Crores, whichever is higher. However the issuance of sweat equity shares in the Company shall not exceed 25% of the paid up capital of the company at any time.

3. The sweat equity shares issued to directors or employees shall be locked in/non transferable for a period of three years from the date of allotment and the fact that the share certificates are under lock-in and the period of expiry of lock in shall be stamped in bold or mentioned in any other prominent manner on the share certificate.
4. The sweat equity shares to be issued shall be valued at a price determined by a registered valuer as the fair price giving justification for such valuation.
5. The valuation of intellectual property rights or of know how or value additions for which sweat equity shares are to be issued, shall be carried out by a registered valuer, who shall provide a proper report addressed to the Board of directors with justification for such valuation.
6. Where sweat equity shares are issued for a non-cash consideration on the basis of a valuation report in respect thereof obtained from the registered valuer, such non-cash consideration shall be treated in the following manner in the books of account of the company –
7. where the non-cash consideration takes the form of a depreciable or amortizable asset, it shall be carried to the balance sheet of the company in accordance with the accounting standards; or
8. Where (a) above is not applicable, it shall be expensed as provided in the accounting standards.
9. The amount of sweat equity shares issued shall be treated as part of managerial remuneration for the purposes of sections 197 and 198 of the Act, if the following conditions are fulfilled, namely –
10. the sweat equity shares are issued to any director or manager; and
11. They are issued for consideration other than cash, which does not take the form of an asset which can be carried to the balance sheet of the company in accordance with the applicable accounting standards.
12. In respect of sweat equity shares issued during an accounting period, the accounting value of sweat equity shares shall be treated as a form of compensation to the employee or the director in the financial statements of the

company, if the sweat equity shares are not issued pursuant to acquisition of an asset.

13. If the shares are issued pursuant to acquisition of an asset, the value of the asset, as determined by the valuation report, shall be carried in the balance sheet as per the Accounting Standards and such amount of the accounting value of the sweat equity shares that is in excess of the value of the asset acquired, as per the valuation report, shall be treated as a form of compensation to the employee or the director in the financial statements of the company.
14. The company on issue and allotment of sweat equity shall *inter allia* disclose in its Boards Report every year the following details:
15. the class of director or employee to whom sweat equity shares were issued;
16. the class of shares issued as Sweat Equity Shares;
17. the number of sweat equity shares issued to the directors, key managerial personnel or other employees showing separately the number of such shares issued to them , if any, for consideration other than cash and the individual names of allottees holding one percent or more of the issued share capital;
18. the principal terms and conditions for issue of sweat equity shares, including pricing formula;
19. the total number of shares arising as a result of issue of sweat equity shares;
20. the percentage of the sweat equity shares of the total post issued and paid up share capital;
21. the consideration (including consideration other than cash) received or benefit accrued to the company from the issue of sweat equity shares;
22. The diluted Earnings Per Share (EPS) pursuant to issuance of sweat equity shares.

d. Employee’s Stock Option (ESOP)

ESOPs, or employee stock ownership plans, are a type of business programme that appears as investment opportunities, compensation, or incentives for employees. The primary purpose of an ESOP is that it allows an employee to own part of a company. You can make more informed decisions about the ESOPs provided to you by understanding the pros and cons of this type of employee ownership and payment. In this article, we explain what ESOPs are and discuss how they work, their advantages and disadvantages, and the different types of employee stock ownership plans. An employee stock option plan, or Employee Stock Ownership Plan (ESOP) is an employee benefit scheme that enables employees to own shares in the company. These shares are purchased by employees at a price below the market price, or, in other words, at a discounted price. The purpose of providing an ESOP is to make the employee more committed towards the company. In other words, an ESOP motivates the employee to be committed to the company for the long term and also take ownership of the company. If the employees are provided with a sense of ownership of the company by making them shareholders of the company, this will result in the employees focusing more on performing better for the company. However, in order to claim the benefits of the ESOP, the employees have to wait for a certain time period, which is known as the vesting period. After the completion of the vesting period, the employees can purchase the specified amount of shares. ESOPs are awarded to employees based on tenure or performance. Therefore, it serves the following purpose for the company:

1. It acts as a source of motivation for the employees after making them shareholders of the company. Owning stock makes them more responsible towards the company, and they provide better performance for increasing the value of shares in the company.
2. It helps the business owners in retaining the employees and ensures better performance for their work.

An employee stock ownership plan (ESOP) is a retirement plan in which an employer contributes its stock to the plan for the benefit of the company’s employees. This type of plan should not be confused with employee stock option plans, which give employees the right to buy their company’s stock at a set price after a certain period of time.

Meaning:

An employee stock ownership plan, sometimes called employee share ownership, is a benefit plan that gives employees ownership, or shares, in the company where they work. A share in a company means that they own a unit of capital or a piece of the company's profits and assets. Owning shares in a company indicates that you're a partial owner of the company. Employee stock ownership plans can align employee interests with the interests of the shareholders. If an employee is a shareholder, they may work harder to contribute to the success of the company.

Definition: An employee stock ownership plan (ESOP) is a type of employee benefit plan which is intended to encourage employees to acquire stocks or ownership in the company.

In other word its can be define as "An Employee Stock Option Plan (ESOP) is a retirement or employee benefit scheme that allows employees to own shares of the company and have a financially stable post-retirement life. This provision helps strengthen the bond between employers and employees, encouraging the latter to stick with the former for a longer term.

From the above definition and discussion it is stated that,

1. The ESOP basic objective is employee motivation or reward for performance, retention, and so on.
2. The approved modes of payment include stock shares, cash, or a combination of the two of these.
3. When it comes to equity shares, whether secondary or primary, the streams of the shares are essential.
4. Strategy for execution: directly by the company or through a trusted party.

Characteristics:

An ESOP can have a number of characteristics. Here are a few of them:

1. **Paid/Unpaid Options:** The employee can pay to receive options, the options may be granted automatically with the passing of milestones (financial or time-based) or the Board of Directors may be given discretion to grant options.
2. **Payment for shares –** determination of strike price: The "strike price" or price per share at which the option is exercised can be based on market value or anticipated market value at the time of exercise (as determined at the time of option grant). Market value at the time of option grant is preferable, because, presumably, as time passes, the employee's effort had contributed to the increase in the market value. Where a company is a public company, generally

there are rules that set out how much the grant of an option can deviate from the current market value, so as not to unfairly prejudice existing shareholders.

3. **Rights of option holders:** Typically option holders will have limited rights. Option holders usually do not have any shareholder rights in the corporation and thus, for example, would not receive any dividends before their options are exercised. Option holders are often unable to exercise their options right after the options are granted as they need to be vested which is usually spread over time. Finally, exercising of options may be governed by very stringent rules setting, for example, very tight expiry dates.

4. **Result of termination of the employment agreement:** Unvested options will typically be revoked. In some cases vested but unconverted options will also be revoked. In some cases the company will buy back shares that were purchased. In some cases a fixed price for buyback will be determined in advance (and this is typical for a company in which the ESOP is used to distribute excess cash, to provide to current employees the opportunity to share in company profits).

5. **Dilution:** ESOP is a pool of shares that is intended to benefit all employees. As a result, it is difficult to negotiate an anti-dilution clause. A company may run more than one ESOP program simultaneously so as to reward executives separately from non-executives.

6. **Number of shares set aside for ESOP:** While there are many ways to structure an ESOP, typically, five to fifteen per cent of the company's issued and outstanding shares are usually set aside for the purpose of ESOP, but, further to the dilution point mentioned above, that may be distributed amongst various plans. The company should also consider allocating a larger option pool if it is in early stages of development. Doing this will allow the company to attract good talent at early stages.

7. **Vesting:** The Company should carefully consider its ESOP vesting schedule. The company would want to provide options as an incentive and a reward for talented employees and advisors rather than as a source of financing. Short periods of vesting might be damaging to the company as its employees' performance may decrease after they exercise their options. The company may wish to provide shorter vesting period for early stage employees as they assume more risk.

Advantages:

There are many advantages to ESOPs, including the following:

1. **Flexibility:** Shareholders have the option of withdrawing funds slowly over time or only selling a portion of their shares. They can stay active even after releasing their portion of the company. Additionally, if an employee retires or leaves the company, they can opt to retain their shares, giving them a voice in the company even after they depart.
2. **Confidentiality:** ESOPs don't share employee information. This means that members' data remains confidential and secure. ESOPs' terms and conditions are fair, with no hidden fine print, and they support employees when they need it most.
3. **Simplicity:** ESOPs offer ease of transfer, which makes them a great option for retirement planning. They provide employees with the opportunity to have a stake in the company for as long as they want, and they can even sell portions back to the company if desired. Owners can reward employees with a portion of the business, incentivizing payment and production. Employee productivity increases, as does the quality of company culture. The company can then repurchase shares and continue to support employees throughout retirement.
4. **Consistency in leadership:** There may be stronger employee and management retention, resulting in continuity, lower turnover, and a vested interest in company success. Employees are well-informed on company success, can have voting rights, and receive updates on plan descriptions and annual statements. These forms of communication function to align the interests of all within the company to enable focus. Company culture drives everyone toward a common goal, creating a positive atmosphere and work environment.
5. **Beneficial for employees:** When a company offers ESOPs to their employees, it's likely to reduce the turnover of employees, which can provide greater job security and better employee retention. Companies that demonstrate an invested interest in their employees see productivity levels increase, which ultimately helps the company gain more profits and grow at a quicker pace. This might also help them find and recruit candidates that are highly skilled. Generally, you can make investments before taxes and enjoy tax-deductible ESOP payments.

ESOPs are tax-exempt trusts, and the longer funds remain, interest compounds, which increases cash flow.

Thus, it is understand that the ESOP has several advantages, its beneficial to motivation for employees who will be benefiting when the prices of the company shares rise in the market. Moreover, it helps to retain employees in the organization, Employees are benefited for the hard work they perform in trying times, as well as it cause preventing a significant amount of cash outflow from the company.

Limitations:

As with most employee incentives and wage plans, there can be obstacles to getting ESOPs. Here are some of the limitation which are associated with ESOPs:

1. **Price per share has limitations:** Price per share is dependent upon the company's performance. Without viable profits, the value of the company decreases, which means the value of shares may fluctuate. ESOPs are most beneficial to employees with companies that have an established management plan, producing predictable and consistent financial results.

2. **Timing:** In order to get the most value from ESOPs, employees may have to time their exit based on company performance. Exiting the company when the stock value is lower will result in a lower payout. Therefore, it's important to consider the timing when deciding when to sell shares.

3. **Share values are inconsistent:** The value fluctuates with company success, and this can make planning for retirement challenging. Because of this inconsistency, if you have ESOPs for retirement, you may need to consider exploring other options in addition to this plan to ensure financial stability, such as a Registered Retirement Savings Plan (RRSP) or Tax-Free Savings Account (TFSA). These plans serve as additional income for individuals who hold ESOPs and are unsure or unable to predict the total value upon retirement.

Thus, it is understand that the ESOP, or employee stock option, it allows employees to own a share of the company at a very low cost. To take advantage of this plan, an employee needs to remain in the company for the entire vesting period. This plan allows employees to be profitable. However, an employee needs to know all the key features of an Employee Stock Option Plan scheme before opting for it.

3.2.2 Debentures

A Debenture is a document issued by the company. It is a certificate issued by the company under its seal acknowledging a debt. A debenture is a long term promissory note for raising loan capital. The firm promises to pay interest and principal as stipulated period. The purchaser of debenture is called debenture holder. According to the Companies Act 1956, "debenture includes debenture stock, bonds and any other securities of a company whether constituting a charge of the assets of the company or not." It is certificate issued by a company under its seal acknowledging a debt due by it to its holders.

Types of Debentures

Debentures may be divided into the following major types:

1. Unsecured debentures: Unsecured debentures are not given any security on assets of the company. It is also called simple or naked debentures. This type of debentures is treaded as unsecured creditors at the time of winding up of the company.

2. Secured debentures: Secured debentures are given security on assets of the company. It is also called as mortgaged debentures because these debentures are given against any mortgage of the assets of the company.

3. Redeemable debentures: These debentures are to be redeemed on the expiry of a certain period. The interest is paid periodically and the initial investment is returned after the fixed maturity period.

4. Irredeemable debentures: These kinds of debentures cannot be redeemable during the life time of the business concern.

5. Convertible debentures: Convertible debentures are the debentures whose holders have the option to get them converted wholly or partly into shares. These debentures are usually converted into equity shares. Conversion of the debentures may be:

Non-convertible debentures

Fully convertible debentures

Partly convertible debentures

6. Other types: Debentures can also be classified into the following types. Some of the common types of the debentures are as follows:

1. Collateral Debenture
2. Guaranteed Debenture
3. First Debenture
4. Zero Coupon Bond
5. Zero Interest Bond/Debenture

Characteristics of Debentures

1. Maturity period: Debentures consist of long-term fixed maturity period. Normally, debentures consist of 10–20 years maturity period and are repayable with the principle investment at the end of the maturity period.

2. Residual claims in income: Debenture holders are eligible to get fixed rate of interest at every end of the accounting period. Debenture holders have priority of claim in income of the company over equity and preference shareholders.

3. Residual claims on asset: Debenture holders have priority of claims on Assets of the company over equity and preference shareholders. The Debenture holders may have either specific change on the Assets or floating change of the assets of the company. Specific change of Debenture holders are treated as secured creditors and floating change of Debenture holders are treated as unsecured creditors.

4. No voting rights: Debenture holders are considered as creditors of the company.

Hence they have no voting rights. Debenture holders cannot have the control over the performance of the business concern.

5. Fixed rate of interest: Debentures yield fixed rate of interest till the maturity period. Hence the business will not affect the yield of the debenture.

Merits of Debenture

Debenture is one of the major parts of the long-term sources of finance which of consist the following important merits:

1. Long-term sources: Debenture is one of the long-term sources of finance to the company. Normally the maturity period is longer than the other sources of finance.

2. Fixed rate of interest: Fixed rate of interest is payable to debenture holders, hence it is most suitable of the companies earn higher profit. Generally, the rate of interest is lower than the other sources of long-term finance.

3. Trade on equity: A company can trade on equity by mixing debentures in its capital structure and thereby increase its earning per share. When the company apply the trade on equity concept, cost of capital will reduce and value of the company will increase.

4. Income tax deduction: Interest payable to debentures can be deducted from the total profit of the company. So it helps to reduce the tax burden of the company.

5. Protection: Various provisions of the debenture trust deed and the guidelines issued by the SEB1 protect the interest of debenture holders.

Demerits of Debentures

Debenture finance consists of the following major demerits:

1. Fixed rate of interest: Debenture consists of fixed rate of interest payable to securities. Even though the company is unable to earn profit, they have to pay the fixed rate of interest to debenture holders; hence, it is not suitable to those company earnings which fluctuate considerably.

2. No voting rights: Debenture holders do not have any voting rights. Hence, they cannot have the control over the management of the company.

3. Creditors of the company: Debenture holders are merely creditors and not the owners of the company. They do not have any claim in the surplus profits of the company.

4. High risk: Every additional issue of debentures becomes more risky and costly on account of higher expectation of debenture holders. This enhanced financial risk increases the cost of equity capital and the cost of raising finance through debentures which is also high because of high stamp duty.

5. Restrictions of further issues: The Company cannot raise further finance through debentures as the debentures are under the part of security of the assets already mortgaged to debenture holders.

Legal provision of Debentures:

a. If the maturity period is less than or equal to 18 months, appointment of debenture trustees and creation of debenture redemption reserve is not required

b. Credit rating is made compulsory for all the companies

c. A debenture trust deed has to be executed within 6 months from the closure of the issue

d. If the maturity period is more than 36 months, the conversion is optional with 'put and call' option

e. Premium amount to be stated in the prospectus when company issues debenture at premium also the redemption amount, period of maturity, yield on redemption shall be predetermined and stated in the prospectus.

3.2.3 TERM LOANS:

A term loan is a loan from a bank for a specific amount that has a specified repayment schedule and a fixed or floating interest rate. For example, many banks have term-loan programs that can offer small businesses the cash they need to operate from month to month. Often, a small business uses the cash from a term loan to purchase fixed assets such as equipment for its production process.

A term loan is for equipment, real estate or working capital paid off between one and 25 years. The loan carries a fixed or variable interest rate, monthly or quarterly repayment schedule, and set maturity date. The loan requires collateral and a rigorous approval process to reduce the risk of repayment. A term loan is appropriate for an established small business with sound financial statements and a substantial down payment to minimize payment amounts and total loan cost.

Meaning: Term loan is a medium-term source financed primarily by banks and financial institutions. Such a type of loan is generally used for financing of expansion, diversification and modernization of projects so this type of financing is also known as project financing. Term loans are repayable in periodic installments.

Features of Term Loans:

Term loan is a part of debt financing obtained from banks and financial institutions.

The basic features of term loan have been discussed below:

1. Security: Term loans are secured loans. Assets which are financed through term loans serve as primary security and the other assets of the company serve as collateral security.

2. Obligation: Interest payment and repayment of principal on term loans is obligatory on the part of the borrower. Whether the firm is earning a profit or not, term loans are generally repayable over a period of 5 to 10 years in installments.

3. Interest: Term loans carry a fixed rate of interest but this rate is negotiated between the borrowers and lenders at the time of dispersing of loan.

4. Maturity: As it is a source of medium-term financing, its maturity period lies between 5 to 10 years and repayment is made in installments.

5. Restrictive Covenants: Besides asset security, the lender of the term loans imposes other restrictive covenants to themselves. Lenders ask the borrowers to maintain a minimum asset base, not to raise additional loans or to repay existing loans, etc.

6. Convertibility: Term loans may be converted into equity at the option and according to the terms and conditions laid down by the financial institutions.

Merits of Term Loans:

Term loans are one of the important sources of project financing. The merits of term loans are as follows;

i. From Point of View of the Borrower:

Cheap: It is a cheaper source of medium-term financing.

Tax Benefit: Interest payable on term loan is a tax deductible expenditure and thus taxation benefit is available on interest.

Flexible: Term loans are negotiable loans between the borrowers and lenders. So terms and conditions of such type of loans are not rigid and this provides some sort of flexibility.

Control: Since term loans represent debt financing, the interest of the equity shareholders are not diluted.

ii. From Point of View of the Lender:

Secured: Term loans are provided by banks and other financial institutions against security—so term loans are secured.

Regular Income: It is obligatory on the part of the borrower to pay the interest and repayment of principal irrespective of its financial position—hence the lender has a regular and steady income.

Conversion: Financial institutions may insist the borrower to convert the term loans into equity. Therefore, they can get the right to control the affairs of the company.

Demerits of Term Loans:

Term loans have several disadvantages which are discussed below.

i. From Point of View of the Borrower:

Obligation: Yearly interest payment and repayment of principal is obligatory on the part of borrower. Failure to meet these payments raises a question on the liquidity position of the borrower and its existence will be at stake.

Risk: Like any other form of debt financing term loans also increases the financial risk of the company. Debt financing is beneficial only if the internal rate of return of the concern is greater than its cost of capital; otherwise it adversely affects the benefit of shareholders.

Interference: In addition to collateral security, restrictive covenants are also imposed by the lenders which lead to unnecessary interference in the functioning of the concern.

ii. From Point of View of the Lender:

Negotiability: Terms and conditions of term loans are negotiable between borrower and lenders and thus it sometimes can affect the interest of lenders.

Control: Like other sources of debt financing, the lenders of term loans do not have any right to control the affairs of the company.

3.2.4 VENTURE CAPITAL

Concept of Venture Capital: Venture Capital finance is a new type of financial intermediary which has emerged in India during 1980s. It is a long-term financial assistance provided to projects, which are established to introduce new products, inventions, idea and technology. Venture capital finance is more suitable to risky oriented business which consists of huge investment and provides results after 5 to 7 year.

The term Venture Capital fund is usually used to denote Mutual funds or Institutional investors. They provide equity finance or risk capital to little known, unregistered, highly risky, young and small private business, especially in technology oriented and knowledge intensive business. Venture Capital termed as long-term funds in equity or semi-equity form to finance hi-tech projects involving high risk and yet having strong potential of high profitability.

Definition of Venture Capital

According to Jame Koloski Morries, venture capital is defined as providing seed, start up and first stage financing and also funding expansion of companies that have already Special Financing demonstrated their business potential but do not yet have access to the public securities market or to credit oriented institutional funding sources. Venture Capital also provides management in leveraged buy out financing. 1995 finance bill define Venture Capital as long-term equity investment in novel technology based projects with display potential for significant growth and financial return.

Process of Venture capital

1. Deal Origination: Venture capital financing begins with origination of a deal. For venture capital business, stream of deals is necessary. There may be various sources of origination of deals. One such source is referral system in which deals are referred to venture capitalists by their parent organizations, trade partners, industry association, friends, etc. Another source of deal flow is the active search through, networks, trade fairs, conferences, seminars, foreign resist etc. Certain intermediaries, who act as link between venture capitalists and the potential entrepreneurs, also become source of deal origination.

2. Screening: Venture capitalist in his endeavor to choose the best ventures first of all undertakes preliminary scrutiny of all projects on the basis of certain broad criteria, such as technology or product, market scope, size of investment, geographical location and stage of financing. Venture capitalists in India ask the applicant to provide a brief profile of the proposed venture to establish prime facie eligibility. Entrepreneurs are also invited for face-to-face discussion for seeking certain clarifications.

3. Evaluation: After a proposal has passed the preliminary screening, a detailed evaluation of the proposal takes place. A detailed study of project profile, track record of the entrepreneur, market potential, technological feasibility future turnover, profitability, etc. is undertaken. Venture capitalists in Indian factor in the entrepreneur's background, especially in terms of integrity, long-term vision, urge to grow managerial skills and business orientation. They also consider the entrepreneur's entrepreneurial skills, technical competence, manufacturing and marketing abilities and experience. Further, the project's viability in terms of product, market and technology is examined. Besides, venture capitalists in India undertake thorough risk analysis of the proposal to ascertain product risk, market risk, technological and entrepreneurial risk. After considering in detail various aspects of the proposal, venture capitalist takes a final decision in terms of risk return spectrum, as brought in figure below

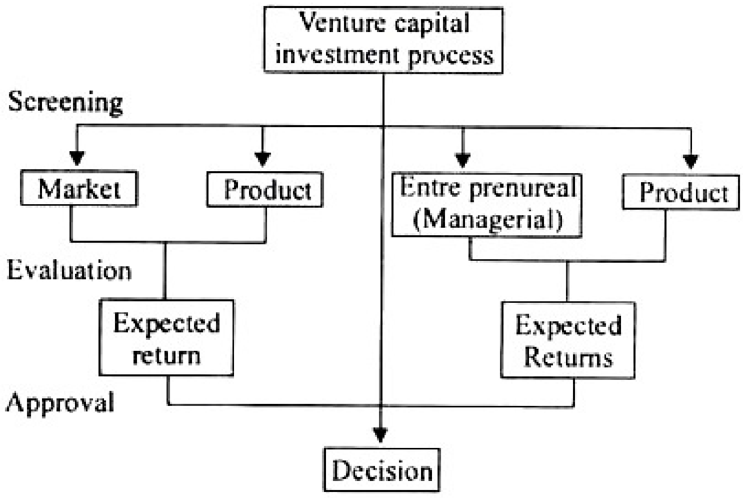


Figure. 31.1. Venture capital Investment Process
source : Typsee and Burno (1984).

4. Deal Negotiation: Once the venture is found viable, the venture capitalist negotiates the terms of the deal with the entrepreneur. This it does so as to protect its interest. Terms of the deal include amount, form and price of the investment.

It also contains protective covenants such as venture capitalists right to control the venture company and to change its management, if necessary, buy back arrangements, acquisition, making IPOs. Terms of the deal should be mutually beneficial to both venture capitalist and the entrepreneur. It should be flexible and its structure should safeguard interests of both the parties.

5. Post Investment Activity: Once the deal is financed and the venture begins working, the venture capitalist associates himself with the enterprise as a partner and collaborator in order to ensure that the enterprise is operating as per the plan.

The venture capitalists participation in the enterprise is generally through a representation in the Board of Directors or informal influence in improving the quality of marketing, finance and other managerial functions. Generally, the venture capitalist does not meddle in the day-to-day working of the enterprise; it intervenes when a financial or managerial crisis takes place.

6. Exit Plan: The last stage of venture capital financing is the exit to realise the investment so as to make a profit/minimize losses. The venture capitalist should make exit plan, determining precise timing of exit that would depend on an a myriad of factors, such as nature of the venture, the extent and type of financial stake, the state of actual and potential competition, market conditions, etc. At exit stage of venture capital financing, venture capitalist decides about disinvestments/realization alternatives which are related to the type of investment, equity/quasi-equity and debt instruments. Thus, venture capitalize may exit through IPOs, acquisition by another company, purchase of the venture capitalist's share by the promoter and purchase of the venture capitalist's share by an outsider.

Merits of Venture Capital

This is a very important source of financing for a new business. Here money is provided by investors to start a business that has strong potentiality of high growth and profitability. The provider of venture capital also provides managerial and technical support. Venture capital is also known as risk capital.

The merits of venture capital are as follows:

1. Business expertise. Aside from the financial backing, obtaining venture capital financing can provide a start-up or young business with a valuable source of guidance and consultation. This can help with a variety of business decisions, including financial management and human resource management. Making better decisions in these key areas can be vitally important as your business grows.

2. Additional resources. In a number of critical areas, including legal, tax and personnel matters, a VC firm can provide active support, all the more important at a key stage in the growth of a young company. Faster growth and greater success are two potential key benefits.

3. Connections. Venture capitalists are typically well connected in the business community. Tapping into these connections could have tremendous benefits.

4. New innovative projects are financed through venture capital which generally offers high profitability in long run.

5. In addition to capital, venture capital provides valuable information, resources, technical assistance, etc., to make a business successful.

Demerits of Venture Capital

1. Loss of control. The drawbacks associated with equity financing in general can be compounded with venture capital financing. You could think of it as equity financing on steroids. With a large injection of cash and professional—and possibly aggressive—investors, it is likely that your VC partners will want to be involved. The size of their stake could determine how much say they have in shaping your company's direction.

2. Minority ownership status. Depending on the size of the VC firm's stake in your company, which could be more than 50%, you could lose management control. Essentially, you could be giving up ownership of your own business.

3. It is an uncertain form of financing.

4. Benefit from such financing can be realized in long run only.

3.2.5 LEASE FINANCE

Lease financing is one of the popular and common methods of assets based finance, which is the alternative to the loan finance. Lease is a contract. A contract under which one party, the leaser (owner) of an asset agrees to grant the use of that asset to another leaser, in exchange for periodic rental payments. Lease is contractual agreement between the owner of the assets and user of the assets for a specific period by a periodical rent.

Definition of Leasing

Lease may be defined as a contractual arrangement in which a party owning an asset provides the asset for use to another, the right to use the assets to the user over a certain period of time, for consideration in form of periodic payment, with or without a further payment.

According to the equipment leasing association of UK definition, leasing is a contract between the lesser and the leaser for hire of a specific asset selected from a manufacturers or vender of such assets by the lessee. The leaser retains the ownership of the asset. The lessee passes possession and uses the asset on payment for the specified period.

Parties or Elements of Leasing

Leasing is one of the important and popular parts of asset based finance. It consists of the following essential elements. One should understand these elements before they are going to study on leasing.

1. Parties: These are essentially two parties to a contract of lease financing, namely the owner and user of the assets.

2. Leaser: Leaser is the owner of the assets that are being leased. Leasers may be individual partnership, joint stock companies, corporation or financial institutions.

3. Lease: Lease is the receiver of the service of the assets under a lease contract.

Lease assets may be firms or companies.

4. Lease broker: Lease broker is an agent in between the leaser (owner) and lessee.

He acts as an intermediary in arranging the lease deals. Merchant banking divisions of foreign banks, subsidiaries Indian banking and private foreign banks are acting as lease brokers.

5. Lease assets: The lease assets may be plant, machinery, equipments, land, automobile, factory, building etc.

Term of Lease

The term of lease is the period for which the agreement of lease remains for operations.

The lease term may be fixed in the agreement or up to the expiry of the assets.

Lease Rental

The consideration that the lease pays to the leaser for lease transaction is the rental.

Mechanism of lease finance

Leases are legally binding contracts that financially obligate the University. The negotiation, approval and processing of all leases will be the responsibility of Treasury Operations and will require final approval from the Vice President for Finance and Treasurer. Leasing equipment is subject to the same policies and procedures (including the CEA process and the creation of a requisition through the Purchasing Department) that would apply to the acquisition of any piece of capital equipment, such as computers, scientific equipment, business related equipment, etc. Leasing is a financing technique, not a funding source. The acquiring department must identify the funding source prior to entering into a lease. In order to be considered for leasing, the item must have a value of at least $50,000 and must have CEA approval.

Types of Leasing

Leasing, as a financing concept, is an arrangement between two parties for a specified period. Leasing may be classified into different types according to the nature of the agreement.

The following are the major types of leasing as follows:

(A) Lease based on the term of lease

1. Finance Lease
2. Operating Lease

(B) Lease based on the method of lease

1. Sale and lease back
2. Direct lease

(C) Lease based in the parties involved

1. Single investor lease
2. Leveraged lease

(D) Lease based in the area

1. Domestic lease
2. International lease

1. Financing lease: Financing lease is also called as full payout lease. It is one of the long-term leases and cannot be cancelable before the expiry of the agreement. It means a lease for terms that approach the economic life of the asset, the total payments over the term of the lease are greater than the leasers initial cost of the leased asset. For example: Hiring a factory, or building for a long period. It includes all expenditures related to maintenance.

2. Operating lease: Operating lease is also called as service lease. Operating lease is one of the short-term and cancelable leases. It means a lease for a time shorter than the economic life of the assets; generally the payments over the term of the lease are less than the leaser's initial cost of the leased asset. For example: Hiring a car for a particular travel. It includes all expenses such as driver salary, maintenance, fuels, repairs etc.

3. Sale and lease back: Sale and lease back is a lease under which the lease sells an asset for cash to a prospective leaser and then leases back the same asset, making fixed periodic payments for its use. It may be in the firm of operating leasing or financial leasing. It is one of the convenient methods of leasing which facilitates the financial liquidity of the company.

4. Direct lease: When the lease belongs to the owner of the assets and users of the assets with direct relationship it is called as direct lease. Direct lease may be Dipartite lease (two parties in the lease) or tripartite lease. (Three parties in the lease)

5. Single investor lease: When the lease belongs to only two parties namely leaser and it is called as single investor lease. It consists of only one investor (owner). Normally all types of leasing such as operating, financially, sale and lease back and direct lease are coming under these categories.

6. Leveraged lease: This type of lease is used to acquire the high level capital cost of assets and equipments. Under this lease, there are three parties involved; the leaser, the lender and the lessee. Under the leverage lease, the leaser acts as equity participant supplying a fraction of the total cost of the assets while the lender supplies the major part.

7. Domestic lease: In the lease transaction, if both the parties belong to the domicile of the same country it is called as domestic leasing. 8. International lease If the lease transaction and the leasing parties belong to the domicile of different countries, it is called as international leasing.

3.3 Summary

Equity Shares also known as ordinary shares, which means, other than preference shares. Equity shareholders are the real owners of the company. They have a control over the management of the company. Equity shareholders are eligible to get dividend if the company earns profit. Equity share capital cannot be redeemed during the lifetime of the company. **Sweat equity shares** are such **equity shares,** which are issued by a Company to its directors or employees at a discount or for consideration, other than cash, for providing their know-how or making available rights in the nature of intellectual property rights or value additions. A debenture is a long term promissory note for raising loan capital. The firm promises to pay interest and principal as stipulated period. The purchaser of debenture is called debenture holder. According to the Companies Act 1956, “debenture includes debenture stock, bonds and any other securities of a company whether constituting a charge of the assets of the company or not.” It is certificate issued by a company under its seal acknowledging a debt due by it to its holders. Term loan is a medium-term source financed primarily by banks and financial institutions. Such a type of loan is generally used for financing of expansion, diversification and modernization of projects so this type of financing is also known as project financing. Term loans are repayable in periodic installments. venture capital is defined as providing seed, start up and first stage financing and also funding expansion of companies that have already Special Financing demonstrated their business potential but do not yet have access to the public securities market or to credit oriented institutional funding sources. Lease may be defined as a contractual arrangement in which a party owning an asset provides the asset for use to another, the right to use the assets to the user over a certain period of time, for consideration in form of periodic payment, with or without a further payment. Project finance is a funding technique that looks to the cash flows generated by a project to provide investor returns and lenders’ debt service. The World Bank defines project finance as the “use of nonrecourse or limited-recourse financing.” Further defining these two terms, “the financing of a project is said to be nonrecourse when lenders are repaid only from the cash flow generated by the project or, in the event of complete failure, from the value of the project’s assets.

3.4 Terms to Remember

- **Employee stock options: Employee** stock options are call options on a company's common stock granted to a select group of its employees.
- **Debenture:** It is certificate issued by a company under its seal acknowledging a debt due by it to its holders.
- **Lease:** the assets provided on rental basis
- **Term Loan:** A term loan is a loan from a bank for a specific amount that has a specified repayment schedule and a fixed or floating interest rate.

- **Venture Capital:** venture capital is a providing seed, start up and first stage financing and also funding expansion of companies that have already Special Financing demonstrated their business potential but do not yet have access to the public securities market or to credit oriented institutional funding sources.

3.5 Check your progress

A) Choose the correct alternative

1. Equity shareholders are the ----------- of the company.

   a. Owners b. borrower c. employee d. manager

2. ------------------- preference shares have right to claim dividends for those years which have no profits.

   a. Cumulative b. Non- cumulative

   c. Redeemable d. Non-redeemable

3. ------------------- finance is also known as equipment leasing.

   a. Venture b. Project c. Lease d. Term

4. Lease finance is new mode of ------------------------

   a. amalgamation b. Financing c. Absorption d. Joint venture

5. ------------------- is a providing seed, start up and first stage financing

   a. Venture capital b. Lease c. debenture d. term loan

B) Fill in the Blanks

1. -------------------------------------are call options on a company's common stock granted to a select group of its employees.

2. --------------------------is a funding technique that looks to the cash flows generated by a project to provide investor returns and lenders' debt service.

3. --------------------- debentures are not given any security on assets of the company.

4. Allotment of ---------------------------- shall be made within 12 months from the date of passing special resolution.

5. Equity Shares also known as -------------- shares.

C) Write 'True or False'

1. The articles of association of the company authorize the issue of shares with differential rights.
2. Allotment of sweat equity shares shall be made within 6 months from the date of passing special resolution.
3. Preference shareholders are eligible to get fixed rate of dividend and they do not have voting rights.
4. The dividend rate is fixed in the case of sweat shares
5. A debenture is a long term promissory note for raising loan capital.
6. Term loans are repayable in periodic installments.
7. Lease finance is mode of financing in cash

3.6 Answers to Check your Progress

A) 1- b 2 - a 3 - c 4 - b 5- a

B) 1- **Employee** stock options 2- Project finance 3- Unsecured

4- sweat equity shares 5- ordinary

C) 1- True 2- False 3. True 4- False 5. True 6. True 7- False

3.7 Exercise

A) Short Notes

1. Sweat Shares
2. Employee's Stock Option
3. Equity shares with differential rights
4. Characteristics of Preference Shares
5. Merits of Debentures
6. Legal Provisions of Term loans
7. Demerits of equity shares
8. Process of Venture capital
9. Mechanism of Lease Capital
10. Features of Project finance

B) Long answer type questions

1. Explain the meaning, merits and demerits of equity shares
2. Describe the characteristics, types and legal provisions of preference share.
3. State the meaning, merits and demerits of Debentures.
4. Explain the concept, process, merits and demerits of Venture capital
5. Describe the concept, parties and types of Lease Finance.
6. Explain the concept, feature and main parties of Project finance.

Practical

Prepare & present comparative analysis chart of all sources of Finance learnt by students:

It seems that the sources of finance for business are equity, debt, debentures, retained earnings, term loans, working capital loans, letter of credit, euro issue, venture funding etc. These sources of funds are used in different situations. They are classified based on time period, ownership and control, and their source of generation. It is ideal to evaluate each source of capital before opting for it. Sources of capital are the most explorable area especially for the entrepreneurs who are about to start a new business. It is perhaps the toughest part of all the efforts. There are various capital sources, we can classify on the basis of different parameters.

It is understood that there are many alternatives to sources of finance or capital. It is stated that the select the right source and the right mix of finance is a key challenge for every finance manager as well as entrepreneurs. The process of selecting the right source of finance involves in-depth analysis of each and every source of fund. Hence, it is stated that for the analysing and comparing the sources, it needs the understanding of all the characteristics of the financing sources. There are many characteristics on the basis of which sources of finance are classified. It is understood that on the basis of a time period, sources are classified as long-term, medium term, and short term. It seems that the ownership and control classify sources of finance into owned and borrowed capital. Internal sources and external sources are the two sources of generation of capital. It is stated that the all the sources have different characteristics to suit different types of requirements. Hence, herewith tried to understand comparative analysis chart of all sources of finance, which learnt by students.

Sr.	View	Personal Financing	Family and Friend	Shares	Bond/ Debenture	Bank Loan	Lease Financing	Factoring	Micro Loan	Crowd funding	Venture Capital
1	Base	MOM	OPM	OPM	OPM	OPM	OPM	OPM	OPM	OPM	OPM
2	Generation	Internal	Internal	Internal	External	External	External	External	External	External	External
3	Nature	Informal	Informal	Formal	Formal	Formal	Formal	Formal	Formal	Formal	Formal
4	Ownership	Own Fund	Own Fund	Own Fund	One Fund	One Fund	One Fund	One Fund	One Fund	One Fund	One Fund
5	Mortage	No	No	No	Yes	Yes	No	-	Yes	No	No
6	Period	-	-	Long	Long	Long/ Medium / Short	Medium	Short	Short	Short	Short
7	Repayment	Profit	-	Dividend	Interest	Interest	Interest	Interest	Interest	Return	Return
8	ROI	Low	Low	Low	High	High	High	High	Medium	High	High
9	Cost	Low	Low	Low	High	High	High	High	Low	High	High
10	Benefit	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive	Positive
11	Risk	Low	Low	Low	High	High	High	High	Low	High	High
12	Decision Making	Easy	Easy	Easy	Difficult	Difficult	Difficult	Difficult	Difficult	Difficult	Difficult

(Compiled by Discussion with Financial Expert Note: MoM = My Own Money, OPM = Other People Money)

It is important to note that there are a number of factors which influence the owner's decision which determines the source of fund to be selected in financing mix. Thus, it is stated that such factors include a time period for which funds are required, the purpose of raising finance, and the total funds required by the particular business entity or firm.

3.8 Reference for Further Study

1. Advanced Financial Management – Dr. N. M. Vechalekar
2. Financial Management- Hogland
3. Financial Management- S. C. Saxena
4. Financial Management- P. V. Kulkarni
5. Financial Management- Ravi M. Kishore

Unit-4

Working Capital Management

Structure:

4.0 Objectives

4.1 Introduction

4.2 Presentation of Subject Matter

4.2 A Working Capital

4.2. A. 1: Concept of Working Capital

4. 2. A. 2: Types of Working Capital

4. 2. A. 3: Significance of Working Capital

4. 2. A. 4: Factors Determining Working Capital Requirements

4.2 B Sources of Working Capital

4. 2. B. 1: Accruals

4. 2. B. 2: Trade Credit

4. 2. B. 3: Commercial Banks

4. 2. B. 4: Public Deposits

4. 2. B. 5: Inter-Corporate Deposits

4. 2. B. 6: Short-term Loans from Financial Institutions

4. 2. B. 7: Commercial Papers (CP)

4. 2. B. 8: Factoring

4.2 C. Working Capital Management

4. 2. C.1: Cash Management

4. 2. C.2: Liquidity Management

4. 2. C.3: Receivables Management

4.0 Objectives:

After studying this unit, the students will be able to:

- Understand the concept of Working Capital
- Know the types and significance of Working Capital
- Understand the determinants and sources of Working Capital
- Study the Working Capital Management
- Learn the Cash Management, Liquidity Management, Credit Management and Inventory Management

4.1 Introduction:

The definition of working capital itself explains the significance of it in the business that it is the amount which is used to carry on day to day working of the business. That means without working capital the working of the business cannot be possible. Working capital is called as the life blood or heart of the business. Importance of working capital in the business explains the need of working capital management.

4.2 Presentation of Subject Matter:

4.2 A Working Capital

4.2 A.1: Concept of Working Capital:

In general sense, the working capital means, the capital which is needed to carry on the day to day working of the business.

Shubin defined the working capital as, "the funds necessary to cover the cost of operating the business enterprise." The cost of operating the enterprise includes purchases of raw materials or finished goods, wages and salaries of staff, payment of other expenses like rent, insurance, printing, lighting, advertisement etc. The funds need to cover this cost is called as working capital. Such capital is in the form of different current assets and they change their form in the ordinary course of business e.g. from cash to inventories, inventories to receivable and receivables into cash.

Hoagland defines it as, “the difference between the book value of the current assets and the current liabilities.

In his view, Gestenberg called it as a circulating capital.

The most widely used concept of working capital is defined as, "the difference between current assets and current liabilities." This concept is useful to know the liquidity of the firm.

4.2. A.2 Types of Working Capital:

There are different concepts/types of working capital having different meanings which are explained as follows –

1. **Gross working capital** – It is a broad concept of working capital. According to this concept working capital means the total of all current assets of the firm. This concept is important from view point of management because the management can plan for the working capital well in advance and use effectively all the current assets. As per this concept working capital and current assets are the two inter-changeable terms.

2. **Net working capital** – According to this concept the working capital means the net current assets that mean current assets minus current liabilities. This concept is widely current assets used. It is used to find out the soundness of short term financial position of the firm by the concerned parties.

3. **Negative working capital** – It means the excess of current liabilities over the current assets. It is opposite to net working capital. Negative working capital is also called as working capital deficit. It shows that the working capital position of the firm is not good.

4. **Permanent working capital** – It is the minimum amount of investment in current assets required at all time to carry out minimum level of business activities. In other words it is the amount of working capital which remains in the business permanently in one form or another. Every business firm is required to maintain a minimum balance of cash, inventory and receivables irrespective of the short term ups and downs in the level of activity. It is referred to as the care current assets by the Deheja committee and Tondon committee. It is also called as fixed working capital or minimum working capital. It represents the long term capital.

5. **Variable working capital** – It means the working capital invested in the business over and above the fixed/permanent working capital. The amount of variable working capital keeps on fluctuating from time to time depending upon the scale of operations and stage of business cycle. It increases during the peak period and decreases during the period of recession. It represents the short term capital.

6. **Cash working capital** – The cash working capital refers to the working capital which is available in cash. It is determined with the help of cash-flow statement.

4.2. A.3 Significance / Importance of Working Capital:

The definition of working capital itself explains the significance of it in the business that it is the amount which is used to carry on day to day working of the business. That means without working capital the working of the business cannot be possible. Working capital is called as the life blood or heart of the business. The significance or importance of working capital can be explained as under —

i) It is important to maintain the smooth flow of the working of the business.

ii) With the help of working capital, the required raw materials and other materials can be purchased in time which leads to full utilization of the capacity of the business.

iii) It is possible to avail the benefits of large scale purchases.

iv) If the working capital is sufficient, the firm can pay its short term claims in time which will useful to maintain good relations with claimants.

v) Working capital is the indicator of liquidity position and if it is good short term loans can easily be made available from banks and financial institutions.

vi) It is possible to take the advantage of favourable and profitable market conditions.

vii) A firm can pay the government dues and other claims in time and avoid penalties.

viii) If a firm ensures a good flow of working capital, there is no need to borrow funds at high rate of interest.

ix) The sufficient working capital ensures the payment of wages and salaries to the staff in time which develops good working environment.

x) A firm having sufficient working capital can increase the sales by allowing credit facility to customers.

4.2. A.4 Factors Determining Working Capital Requirement:

Each business firm needs the working capital but the requirement of the working capital of each firm is different because it depends upon various factors. These factors are as follows:

i) **Size of the firm:** The amount of working capital required depends upon the size of the firm. Big firm require more working capital as compare to the small firms.

ii) **Nature of business:** The requirement of working capital also depends on the nature of the business carried out by the firm. If the firm is a trading firm it requires more working capital and if the firm is an industrial or public utilities concern it requires less working capital.

iii) **Volume of business:** If the volume of business is large it requires more working capital and if the volume of business is small there is a less need of working capital.

iv) **Length of processing or selling period:** If the processing or selling period is large it requires more working capital and vice versa.

v) **Policy of purchase and sale:** The requirement of working capital depends upon the firm's policy of purchase and sale. If a firm has a policy of cash purchases and credit sales it requires more working capital and if a firm has a policy of credit purchases and cash sales it requires less working capital.

vi) **Large stock of raw materials:** Some firms require large stock of raw materials for some reasons such as seasonal nature, long distance etc. Such firms need more working capital than others.

vii) **Expansion:** If a firm wants to make rapid expansion or expansion on large scale it require more working capital.

viii) **Cash requirements:** If a firm requires more cash for payment of different expenses, taxes, charges etc. the requirement of working capital is more and if cash requirement is less, the need of working capital is also less.

ix) **Use of Labour:** The firm, who use labour on large scale for business activities, needs more working capital and if the firm is highly mechanized it needs less working capital.

x) **Management attitude and efficiency :** The attitude or policy of management in respect of payments of dividend, discount, price, expenses etc. is of cash saving and efficiency of management is more that time requirement of working capital is less and vice-versa.

4.2. B Sources of Working Capital:

Working capital finance generally refers to debt raised for a period of less than a year from Term Lending Institutions, Commercial Banks and Non-Banking Finance Companies (NBFC) catering to the short-term credit needs of the business entities. There are different sources of working capital. These sources are as follows:

4.2. B. 1: Accruals:

It is an internal source of working capital finance. In addition to the sources of raising finance for working capital needs, one more source in the form of accrued expenses or outstanding expenses is available. Like trade credit, this source also does not actually generate funds but it only postpones the payment of certain expenses. The greater is the postponement, the greater is the amount available for financing. But legal aspects should be taken into consideration before using this source.

Internal funds are very important source of financing short-term obligations. It is a spontaneous source of meeting the working capital needs. Such accounts are self-generating and available immediately. The most common accruals are wages and salaries, taxes, short-terms obligations, retained earnings and depreciation fund amounts. Amount kept aside for payment of salaries and wages can be a good source, since the payment has to be made on a fixed date. Similarly, a provision for tax is created out of the profits but the taxes are paid only after assessment is finalized. Thus the time-interval between the receipt of income and actual payment helps the business in meeting some of its short-term requirements. In addition the profits earned by the company remain with the company till the dividend and interest payments are made. Some amount is available from the depreciation fund also. All such accrual accounts become an important source for working capital needs. When the size of the business grows, amount of accrual also increases. This enables the firm to finance its short-term obligations. Accruals vary with the level of activity of the firm. When the activity level expands, accruals increase and when the activity level shortened accruals decrease. It is costless and interest free and internal source of financing. There are no formalities involved. Accruals do not create any change on the assets of the company. But there are some shortcomings of this source such as temporary source of finance, a company cannot use such amount indefinitely, trade unions will oppose, if the employees are not paid on time, it might reduce the morale of the employees, it may lead to lower efficiency and high labour turnover. Hence, internal accruals as a source of working capital should be used only in the last. Yet some companies who are having shortage of funds can resort to this source.

4.2. B. 2: Trade Credit

Trade credit represents the credit extended by the suppliers of goods and services. It is a form of short-term financing of working capital needs. It is available and common to all types of business firms. In actual practice, it is the largest source of short-term funds. It is an important source of finance representing 25% to 50% of short term financing. Almost in all modern economies, buyers are not required to pay for goods on delivery. They are allowed a short-term credit period before payment becomes due. The confidence of suppliers is the key to securing trade credit. This credit may take the form of either Open account credit arrangement or Acceptance credit arrangement.

In an open account credit arrangement, the buyer is not required to sign a formal debt instrument. The seller does not ask the buyer to sign any instrument as evidence for the amount due. The seller trusts the buyer and expects him to pay the price after the credit period expires. In case of acceptance credit arrangement the buyer accepts a bill of exchange or gives a promissory note for the amount due by him. Thus, it is an arrangement by which the creditworthiness of the buyer is recognized formally. The buyer has to pay the amount of the bill or note after a stipulated time or on a specified date.

Trade credit arrangement is generally made available to the buyer on informal basis. It does not create any charge on the assets. Such arrangement usually allows a cash discount to the buyer for prompt payment. The volume of trade credit and its use can be a good source of short-term financing. The amount available depends on the following factors (i) The terms of trade credit, (ii) reputation of the purchasing firm, (iii) financial position of the seller and (iv) volume of purchases by the buyer. This source is beneficial because it does not create any charge on the asset of the buyer, readily available, flexible and continuous source of financing. But the cost of trade credit may be very high. The firm or company should balance the advantages against disadvantages of trade credit. It should be resorted to considering the price loss of discount and possibility of deterioration in reputation. Hence a company should have a selective approach in using trade credit. It should not be stretched too much and beyond limits.

4. 2. B. 3: Commercial Banks

The commonly used source for financing working capital needs is the finance by commercial banks. Normally, a bank assesses the requirements of customers for working capital needs. This assessment is done on the basis of the sales level as well as production plans of the firm. How much amount of current assets should be maintained is also assessed by the bank. After deducting the margin money from the total requirements, the balance amount is financed by the bank. There may be separate financing limits for peak periods and non-peak periods.

a) Fund-based:

1) Overdrafts: An overdraft is a temporary accommodation by the bank by which a borrower is allowed to overdraw his current account up to a fixed limit, usually against collateral securities such as hypothecation of marketable shares, stocks or bonds. This system operates exactly on similar lines to that of cash credits, the only difference being that an overdraft is intended to be used only temporarily, whereas a cash credit is used regularly and for longer periods.

This is most common method of bank financing. A customer is allowed to withdraw more amount than the balance to his credit in the account. For example, if bank balance to the credit of a customer is Rs. 20.000 he may be allowed to withdraw Rs. 30.000 thus indicating that there is a bank overdraft of Rs. 10.000. How much amount is allowed to be withdrawn as overdraft depends upon the limit sanctioned by the bank. The limits are decided after a careful scrutiny of the bank account transactions of the customer. Interest is charged only on the amount which is withdrawn as overdraft. Like trade credit, bank overdraft arrangements can also offer wide flexibility once relations between the bank and the customer are developed.

2) Cash Credit: Cash credit refers to a system of financing where a borrower is provided a credit limit, which could be utilized by him for the purpose of running day-to-day business. The limits are decided based on his overall cash requirement of the business. The calculation is based on the total operating cycle and gap between payment to be received and to be made.

Like overdraft, in this method also, a bank sanctions a particular limit up to which a borrower can borrow. It is not necessary for a borrower to withdraw the entire amount of borrowing immediately. He can withdraw the amount as per his requirements. Interest is charged only on the amount withdrawn and not on the entire amount sanctioned. A bank may demand security in the form of a current asset. Similar to overdraft, cash credit also offers wide flexibility and therefore is very popular method of financing

3) Working Capital Loan: In addition to the above mentioned methods, sometimes temporary working capital loans may also be sanctioned by the bank. This refers to the working capital limit of a borrower extended to him in the form of a loan. The loan component covers the permanent part of the working capital need while cash credit component caters to the fluctuating part of the limit. The interest is charged on the loan component irrespective of utilization when such a term loan is availed. Since small firms do not generally possess expertise in managing loan funds in case of low utilization of limits and also have lower control on their working capital management, carving out a loan component is not mandatory in their case.

4) Bills Financing: Bills are negotiable instruments that the buyer agrees to pay the drawer/payee the value of the goods after a specified period of time. On effecting sale of his products on credit, an entrepreneur could draw a bill on the purchaser and on his acceptance avail credit against the bill from his banker. Bank financing against bills is in the form of either discounting or purchase. In case of discounting, the banker credits the client's account for the bill amount (less discount for meeting interest charges for a remaining number of days to maturity) and collects the bill as an agent of the client. In case of purchase, the banker assumes ownership of the bill and claims it in his own right.

5) Bills discounting: A bill of exchange which is drawn by a creditor on his debtor is a negotiable instrument. It contains an unconditional order to pay a certain sum of money after a certain period of time to the creditor. But the creditor has to wait till the maturity date before he receives the payment. His money remains blocked till the period is over. In order to remove this difficulty, the creditor can discount the bill with his bank. The bank deducts certain amount as commission from the amount of the bill and the remaining amount is paid to the creditor. However, before giving this facility to the drawer or the creditor, the credit rating of the drawer is checked by the bank.

6) Export financing: This financial instrument is offered in case of goods exported from the country in order to arbitrage on lower interest rates abroad. In order to offset the disadvantage of higher interest rates in India faced by units competing in export markets, banks extend concessional financing for exports. The export financing can be broadly classified into:

a. **Pre-shipment credit** - Such financing is provided for meeting costs related to purchase of goods, processing, packing and shipping. Pre-shipment credit is available both in rupees as well as in foreign currency depending upon the requirement.

b. **Post-shipment credit** - Post-shipment credit is provided for financing the exporter subsequent to dispatch of goods until realization of sales proceeds from the foreign buyer as per the terms of the transaction or the letter of credit received from the foreign buyer's banker.

Other forms of Export financing include Foreign usance bills (FBE), and Foreign Demand Bills (FDB), Foreign L/Cs (FLCs) and Export Performance Guarantees.

For all the financing modes, discussed above, a bank will usually demand some kind of security. The security may be in the form of hypothecation, pledge, mortgage or lien.

b) Non-fund based/Documentary Credit instruments:

These are commercial documents guaranteeing payment by the bank to the beneficiary, who is usually the seller of merchandise, against the underlying transaction.

1) Letter of credit: Through a letter of credit issued by a bank, it commits to honour the payment terms of the underlying transaction if the seller delivers the goods as stipulated in the contract. It could be issued either for domestic transaction or for international trade, most typically for the latter because of the long gestation periods involved.

2) Letter of guarantee: A letter of guarantee is issued by a banker to a third party indicating that the bank would meet the financial consequences (to a specified amount) in the event of failure of its client in adhering to the terms of the contract with the third party.

3) Deferred payment guarantee: Typically in case of equipment financing, the manufacturer (by itself/through a financing tie-up) offers credit to the buyers of its equipment at attractive terms to generate additional demand for its products. The Deferred Payment Guarantee (DPG) is a bank facility where the bank extends a guarantee to the equipment manufacturer on behalf of its client that the financing extended by the manufacturer (by himself or through its preferred financier) would be repaid as per the terms agreed upon.

4. 2. B. 4: Public Deposits

Public deposits constitute an important source of business finance in Indian industries. Many firms, large and small, have solicited unsecured deposits from the public in recent years, mainly to finance their working capital requirements. Especially, such deposits are found in sugar, cotton textiles, engineering, chemicals and trading concerns. They are mainly a source of short-term finance, but they have also been utilized to provide long and medium term finance also. Initially, these deposits were received from the public, the shareholders and the employees of the mills. The Indian Central Banking Inquiry Committee (1931) recognized the importance of public deposits in financing cotton textile industry. Then the growth of such deposits has been considerable after the third five year plan. Taking into account the shortage of funds from the capital market, many companies attempted to raise funds needed by them directly from the public offering more interest rates than banks. In order to avoid competition between the companies and the banks in obtaining such deposits, The Reserve Bank of India has laid down restrictions on these deposits.

Advantages :

1. The cost of deposits is lower than the rate of interest charged by the banks.
2. They do not create any charge on the assets of the company.
3. They introduce an element of flexibility in the financial structure of the company.
4. The company can adopt a liberal dividend policy as the rate of interest on deposits is fixed. It helps in enhancing the prestige of the company.
5. There are no restrictions on the companies about the use of funds collected through public deposits.
6. There are very few legal complications and formalities.
7. The short-term and medium term financial needs can be satisfied by raising such deposits.
8. There is no dilution of control of the company when the funds are raised through deposits.

Disadvantages:

1. The public deposits are very uncertain and inelastic.
2. These deposits disturb the interest rates in the capital market. There is an unhealthy competition between the companies and the banks in attracting deposits from the people.
3. They are unsecured deposits. There is no security given to depositors for getting their money back from the company.
4. It is sometimes said that it is a costly method of raising loans as compared to other sources of finance.

5. Many times, the depositors cannot judge the soundness of the company and thus risk their money by investing in weak companies
6. The Reserve Bank rules are not effective. There is hardly any protection to the depositors.
7. Public deposits may lead to over-capitalization if the company mobilizes more funds through public deposits.
8. Such deposits affect the business of the banks adversely. Banks may not be in a position to attract deposits, if the companies are allowed to accept the deposits.

Legal Provisions for Public Deposits

Initially in 1974, the Reserve Bank of India appointed a Study Group under the chairmanship of James Raj, chairman of the Unit Trust of India. The group was asked to suggest measures to enlighten non-banking companies regarding public deposits. The group recommended that the companies be allowed to accept deposits from the public, but the quantity of deposits should be restricted.

The Companies (Acceptance of Deposits) Amendment Rules – 1978 governs fixed deposits. The important features of these regulations are as follows:

1. Public deposits cannot exceed 25% of paid-up share capital and free reserves.
2. The minimum period for which companies will be able to accept deposits will be 6 months and maximum 36 months.
3. The company had to deposit or invest in scheduled bank at least 10% of deposits maturing during the year. The amount set aside can be used only for repaying such deposits.
4. A company inviting deposits from the public is required to disclose certain facts about its financial performance and position.

Section 58 of the Indian Companies Act is deals with the public deposits. There are rules for non-banking companies, who wish to raise deposits from the public.

No deposits can be invited from the public unless the companies follow the rules and guidelines made by the Department of Company Affairs of the Central Government in consultation with the Reserve Bank of India. The rate of interest, maturity period of deposits and the amount permitted to be raised by the companies are given in the guidelines. The companies have to follow these guidelines while accepting deposits from the public.

4.2. B. 5: Inter-Corporate Deposits

These are unsecured short term funding raised from other corporates that have surplus funds. An inter-corporate deposit is, the deposit made by one corporate body (company) with another company. Such deposits are usually made for a maximum period of six months. It can be a good source of working capital.

Types of Deposits : Such deposits may generally be of three types.

(a) **Call Deposits :** Such deposits are payable on call. They are repayable on call or as soon as demand is made. It can be just one or two-three days' notice to get the amount back.

(b) **Three Months Deposits :** These inter-corporate deposits are made for a period of three months. Such deposits have been found to be most popular among the companies. Some companies have surplus funds while some are in need of such short-term funds.

(c) **Six Months Deposits :** These deposits are made for six months by the companies. Generally, they are made for a maximum of 6 months and that too with A category companies only.

Legal provisions : The Companies Act (Section 372 A) makes provisions for inter-corporate deposits.

1. They are in the nature of unsecured deposits.
2. Such deposits are made on the basis of credits worthiness and willingness of the company concerned.
3. A Company cannot make deposits, loans and guarantees all the three together. The amount cannot be more than 60% of its net worth plus free reserves or cent percent of its free reserves, whichever is more.
4. In case the above limit is to be crossed, it can be done only with the prior permission of central government.
5. A special resolution has also to be passed by the company, granting permission to exceed the ceiling.

4. 2. B. 6: Short-term Loans from Financial Institutions

Financial institutions at the national and state level provide short-term funds to the business units. The financial institutions can be broadly classified into national financial institutions and state level financial institutions. The Life Insurance Corporation of India and the General Insurance Corporation of India provide short term loans to manufacturing companies.

A company is to be eligible to receive short term loans should satisfy the following conditions:

1. It should have declared an annual dividend of not less than 6% for the past five years with certain relaxation.
2. The debt-equity ratio of the company should not exceed 2:1.
3. The current ratio of the company should be at least 1:1.
4. The average of the interest cover ratios for the past three years should be at least 2:1.

Features:

The short term loans provided by financial institutions have the following features;

1. They are unsecured and are given on the strength of a demand promissory note.
2. The loan is given for a period of one year and can be renewed for two consecutive years, provided the original eligibility criteria are satisfied.
3. After a loan is repaid, the company will have to wait for at least 6 months before availing of a fresh loan.

The form of assistance can be broadly classified into direct and indirect assistance. The basic feature of direct assistance is that financial institutions provide funds directly to the project. In indirect assistance, the institutions provide guarantee on behalf of promoters of the project. In addition to long-term funding, they give margin money for working capital. The assistance carries interest starting from one percent and repayable on easy terms. ICICI enables domestic manufacturers and dealers to increase their sales by offering deferred credit to their buyers. IDBI has a similar scheme of Bill Rediscounting.

The financial institutions generally provide medium and long-term loans. Term loans are generally provided as working capital for acquiring income producing assets. Such assets generate the cash flows for repayment of the loan. The repayment of the loans and facilities is normally fixed on case to case basis depending on projected cash-flow of the borrower. Such loans are given on an individual basis as small business loans. The ability to repay is taken into consideration. Short Term loans given for working capital are a good source of quickly increasing capital to raise business supply capabilities.

Finance assistance is given on merits of each case Interest rate may be fixed or floating. Repayment schedule and time of maturity are as per the guidelines of said institution. Firms can have term loans but they are usually for small business loans. It can be an attractive loan for new or expanding enterprises. Such loans can increase the profitability over time. The individual firm has to submit loan application with project report. The report should cover cost of the project, means of financing, marketing arrangement, profitability and cash inflow. If the terms are acceptable to the borrower, the financial institution sends loan agreement to him for approval and signature.

Short-term loans are typically working capital loans. Their maturity is within one year or less. It is an option for an established business. Such loans do not require any collateral. They require less paper work and are available to meet unexpected needs. But they are little more expensive.

4. 2. B. 7: Commercial Papers (CP)

These are short term unsecured promissory notes issued by firms with a high credit rating at a discount on the face value. The maturity varies from 15 days to a year. It was introduced in India in 1990. The purpose was to enable companies to diversify their sources of short-term borrowings. Beside CP aimed at providing an additional instrument to investors. Subsequently, primary dealers and all India financial institutions were also permitted to issue CP to enable to meet their short term working capital requirements.

Companies, primary dealers and all India financial institutions are eligible to issue CP. No corporate would be eligible to issue CP unless:

(a) The tangible net worth of the company as per the latest audited balance sheet is not less than Rs. 4 crores.

(b) Company has been sanctioned working capital limit by banks or all-India financial institutions.

(c) The borrowed or loan account of the company is classified as a Standard Asset by the financing banks and institutions.

(d) Company has obtained minimum credit rating A-2 for issue of commercial paper.

There are certain legal provisions or rules for the issue of commercial paper prescribed by' Reserve Bank of India. Such rules are as follows:

1. The minimum credit rating of A-2 is obtained at the time of issue of CP.
2. The time-period of maturity prescribed for CP is minimum 15 days and maximum upto one year.
3. The maturity date of CP should not go beyond the date of validity of credit rating of the issuer.
4. The aggregate amount of CP from an issuing company (issuer) shall be within the limit as approved by the Board or quantum indicated by credit rating agency, whichever is lower.
5. Financial institutions can issue CP within the overall limit prescribed by their Board and updated from time to time.
6. CP can be issued in denominations of Rs. 5 lakhs or multiple thereof.
7. The total amount of CP proposed to be issued should be raised within a period of 2 weeks from the date on which the issuer opens the issue for subscription.
8. CP may be issued on a single date or in parts on different dates. If it is issued on different dates, each CP will have the same maturity date.
9. Only a scheduled bank can act as an Issuing and Paying Agent (IPA) for issuance of CP.
10. CP can be issued in the form of promissory note or in dematerialised form.
11. Each issuer must appoint an IPA for issuance of CP.

Commercial papers are negotiable by endorsement and delivery. Hence they are liquid instruments. They can be sold either directly by the issuing company to the investor. Alternatively issuer can sell it to the dealer who in turn will sell it into the market. CP helps the highly rated company since it gets cheaper funds rather than borrowing from the bank.

Advantages :

1. It is a quick and cost effective way of raising working capital.
2. It proves the best way to the company to take advantage of short-term interest fluctuations in the market.
3. It provides the exit option to the investors to quit the investment.
4. CPs are cheaper than a bank loan.
5. As CPs require to be rated, good rating reduces the cost of capital.
6. It is unsecured and thus does not create any liens on the assets of the company.
7. It has wide range of maturity.
8. It is exempt from securities registration requirements.

Disadvantages :

1. CP is available only to a few selected profitable companies.
2. By issue of CP, the credit available from the banks may get reduced
3. Issue of CP is closely regulated by RBI and SEBI guidelines

4. 2. B. 8: Factoring

It is a structured working capital finance solution that includes finance against the client's domestic or export receivables, collection of receivables on due date, credit protection and credit advisory services. It allows the client to convert the accounts receivables to cash thereby releasing the cash generation potential of the business.

4. 2. C. Working Capital Management

Working capital management is a managerial accounting strategy focusing on maintaining efficient levels of both components of working capital, current assets and current liabilities in respect to each other. Working capital management ensures a company has sufficient cash flow in order to meet its short-term debt obligations and operating expenses.

According to Investopedia, implementing an effective working capital management system is an excellent way for many companies to improve their earnings. The two main aspect of working capital management are ratio analysis and management of individual components of working capital.

A few key performance ratios of a working capital management system are the working capital ratio, inventory turnover and the collection ratio. Ratio analysis will lead management to identify areas of focus such as inventory management, cash management, accounts receivable and payable management.

The importance of working capital management is reflected in the fact that financial managers spend a great deal of time in managing current assets and current liabilities. Arranging short-term financing, negotiating favourable credit terms, controlling cash movement, managing accounts receivables and monitoring investments in inventories consume a great deal of time of financial managers.

Working capital, in general practice, refers to the excess of current assets over current liabilities. Management of working capital therefore, is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exists between them. In other words it refers to all aspects of administration of both current assets and current liabilities.

The basic goal of working capital management is to manage the current assets and current liabilities of a firm in such a way that a satisfactory level of working capital is maintained, i.e., it is neither inadequate nor excessive. This is so because both inadequate as well as excessive working capital positions are bad for any business. Inadequacy of working capital may lead the firm to insolvency and excessive working capital implies idle funds which earn no profits for the business. Working capital management policies of a firm have a great effect on its profitability, liquidity and structural health of the organization.

Need For Working Capital Management:

1. There is a positive correlation between the sale of the product of the firm and the current assets. An increase in the sale of the product requires a corresponding

increase in current assets. It is therefore indispensable to manage the current assets properly and efficiently.

2. More than half of the total capital of the firm is generally invested in current assets. It means less than half of the capital is blocked in fixed assets. We pay due attention to the management of fixed assets through the capital budgeting process. Management of working capital too, therefore, attracts the attention of the management.

3. In emergency (non-availability of funds etc.) fixed assets can be acquired on lease but there is no alternative for current assets. Investment in current assets, i.e., inventory or receivables can in no way be avoided without sustaining loss.

4. Working capital needs are more often financed through outside sources so it is necessary to utilize them in the best way possible.

5. The management of working capital is more important for small units because they scarcely rely on long term capital market and have an easy access to short term financial sources i.e. trade credit, short term bank loan etc.

6. In the modem system approach to management, the operations of the firm are viewed as a total that is an integrated system. In this sense it is not possible to study one segment of the firm individually or leave it out completely. Hence, an overall look on the management of working capital is necessary.

Process of Working capital management

Working Capital means current assets such as cash, accounts receivable and inventory etc. minus the current liabilities. The management of current assets is as important as or rather more important than the management of fixed assets because, the fate of most of the business very largely depends upon the manner in which their working capital is managed. The study of working capital management is incomplete unless we have an overall look on the management of current liabilities. Determining the appropriate level of current assets, current liabilities and of working capital involves fundamental decisions regarding firm's liquidity and the composition of firm's debts.

There are two fold objectives of the Management of Working Capital

(i) Maintenance of working capital at appropriate level and

(ii) Availability of ample funds as and when they are needed.

In the accomplishment of these two objectives the management has to consider the composition of current assets pool. The working capital position sets the various policies in the business with respect to general operation, purchasing, financing expansion and dividend etc.

In general, working capital management involves decisions regarding the composition and financing the current assets. Now, these decisions were presumed to involve trade-offs between risk and responsibility.

In this context, working capital management is three dimensional in nature:

i) Dimension I, is concerned with the formulation of policies with regard to profitability, risk and liquidity.

ii) Dimension II, is concerned with the decisions about the composition and level of Current assets.

iii) Dimension III is concerned with the decisions about the composition and level of current liabilities.

Now, in short, we could describe the basic steps involved in management of working capital as follows:

(a) Long-run View of Working Capital: The working capital is classified into gross working capital and net working capital. But from the management point of view, gross working capital is of less importance as compared to net working capital. For having a long-run view of working capital, we have to concentrate on the net value of the current assets, i.e. the operation of current assets which is constant in short-run analysis but variable and manageable in the long-run operations.

(b) Measurement of Working Capital: It is important to measure the working capital balances from the financial data of corporate balance sheet.

(c) Ratio Analysis: The ratio analysis of working capital is then utilised by management as a means of checking the efficiency with which the working capital is being used in the enterprise. From the management point of view the most important ratios are turnover working capital ratio, current debt to tangible net worth (current liabilities) etc.

(d) Funds Flow Analysis of Working Capital: Fund flow analysis of working capital is an effective management tool to study how the funds have been procured for the business and how they have been utilized for the business or for the venture undertaken.

(e) Preparation of Working Capital Budget: The preparation of working capital budget from the point of view of efficient management involves careful measurement of future requirements and the formulation of plans for meeting them. Thus, to conclude it can be stated that the preparation of working capital budget constitutes an important part of an overall financial budgeting.

4. 2. C.1: Cash Management

Cash is one of the current assets of a business. It is needed at all times to keep the business going. A business concern should always keep sufficient cash for meeting its obligations. Taking into consideration the importance of cash in business the management of cash become very important. Cash management refers to management of cash balance and the bank balance including the short terms deposits. The following discussion explains the meaning of cash as well as cash management.

Meaning of Cash:

Cash is one of the current assets of a business. It is needed at all times to keep the business going. A business concern should always keep sufficient cash for meeting its obligations. Any shortage of cash will hamper the operation of a concern and any excess of it will be unproductive. Cash is the most unproductive of all the assets. While fixed assets like machinery, plant, etc. and current assets such as inventory will help the business in increasing its earning capacity, cash in hand will not add anything to the concern.

There are two ways of viewing the term 'cash'. In a narrow sense it includes actual cash in the form of notes and coins and bank drafts held by a firm and the deposits withdraw able on demand. And in a broader sense, it includes even marketable securities which can be immediately sold or converted into cash.

Thus, cash is the balancing figures between debtors, stock and creditors. Without adequate cash to meet working capital demands, it is impossible to extend credit, order stock or pay creditors. To understand the meaning of the term cash it is necessary to know the nature of cash, motives for holding cash and also the factors affecting the cash balance. Cash is an asset but it is an idle asset because cash doesn't produce anything by itself. Cash is an unproductive or least productive asset which does not earn any profit for the firm. Shortage of cash harms the operations of a firm and there is a cost of cash shortage also. Minimum level of cash is necessary to carry on business activities. This level is also known as critical level of cash. There are different motives for holding cash. The firm's needs for cash may be attributed to the various motives/needs such as Transactions motive, Precautionary motive, Speculative motive and Compensation motive. Some people are of the view that a business requires cash only for the first two motives while others feel that speculative motive also remains. A firm needs cash for making transactions in the day to day operations. A firm is required to keep cash for meeting various contingencies. The speculative motive relates to holding of cash for investing in profitable opportunities as and when they arise. A minimum cash balance should be maintained by a firm for different security deposits and this is known as the compensation motive for holding cash. The various factors affecting the cash balance are like Credit Position of the Firm, Status of Firm's Receivable, Status of Firm's Inventory Account, Nature of Business Enterprise, Managements Attitude towards Risk, Amount of Sales in Relation to Assets,Cash Inflows and Cash Outflows, Cost of Cash Balance etc.

Meaning of Cash Management:

Cash management refers to management of cash balance and the bank balance including the short terms deposits. For cash management purposes, the term cash is used in this broader sense, i.e., it covers cash, cash equivalents and those assets which are immediately convertible into cash. A financial manager is required to manage the cash flows (both inflows and outflows) arising out of the operations of the firm. Cash management, deals with optimization of cash as an asset and for this purpose the financial manager has to take various decisions from time to time. He has to deal as the cash flows director of the firm. Even if a firm is highly profitable, its cash inflows may not exactly match the cash outflows. He has to manipulate and synchronize the two for the advantage of the firm by investing excess cash if any as well as arranging funds to cover the deficiency.

Objectives of Cash Management:

The basic objectives of cash management are two-fold:

1) Meeting the Payment Schedule: In the normal course of business firms have to make payments of cash on a continuous and regular basis to suppliers of goods, employees and so on. At the same time, there is a constant inflow of cash through collections from debtors. A basic objective of cash management is to meet the payment schedule, i.e., to have sufficient cash to meet the cash disbursement needs of a firm. The importance of sufficient cash to meet the payment schedule can hardly be over-emphasized. The advantages of adequate cash are:

i) It prevents insolvency or bankruptcy arising out of the inability of a firm to meet its obligations

ii) The relationship with the bank is not strained;

iii) It helps in fostering good relations with trade creditors and suppliers of raw materials, as prompt payment may help their own cash management;

iv) A trade discount can be availed of if payment is made within the due date;

v) It leads to a strong credit rating which enables the firm to purchase goods on favorable terms and to maintain its line of credit with banks and other resources of credit;

vi) To take advantage of favorable business opportunities that may be available periodically;

vii) Finally, the firm can meet unanticipated cash expenditure with a minimum of strain during emergencies, such as strikes, fires or a new marketing campaign by competitors. Keeping large cash balances, however, implies a high cost; the advantages of prompt payment of cash can well be realized by sufficient and not excessive cash.

2) Minimizing Funds Committed to Cash Balances: The second objective of cash management is to minimize cash balances. In minimizing the cash balances two conflicting aspects have to be reconciled. A high level of cash balances will, as shown above, ensure prompt payment together with all the advantages. But it also implies that large funds will remain idle, as cash is a non-earning asset and the firm will have to forego profits. A low level of cash balances, on the other hand, may mean failure to meet the payment schedule. The aim of cash management should be to have an optimal amount of cash balances.

Basic Strategies for Cash Management:

The broad cash management strategies are essentially related to the cash turnover process, that is, the cash cycle together with the cash turnover. The cash cycle refers to the process by which cash is used to purchase materials from which goods are produced, which are then sold to customers, who later pay the bills. The firm receives cash from customers and the cycle repeats itself. The cash turnover means the number of times cash is used during each year. The cash cycle involves several steps along the way as funds flow from the firm's accounts, as shown in table below:

Details of Cash Cycle

A = Materials ordered	D = Cheque clearance	G = Payment received
B = Materials received	E = Goods sold	H = Cheques deposited
C = Payments	F = Customer mails payments	I = Funds collected

In addressing the issue of cash management strategies, we are concerned with the time periods involved in stages B, C, D, and F, G, H, I. A firm has no control over the time involved between stages A and B. The lag between D and E is determined by the production process and inventory policy. The time period between stages E and F is determined by credit terms and the payments policy of customers.

The higher the cash turnover, the less is the cash a firm requires. A firm should, therefore, try to maximize the cash turnover. But it must maintain a minimum amount of operating cash balance so that it does not run out of cash. The minimum level of operating cash is determined by dividing the total operating annual outlays by the cash turnover rate.

Cash Management Strategies are intended to minimize the operating cash balance requirement. The basic strategies that can be employed to do the needful are as follows:

1) Stretching Accounts Payable:

One basic strategy of efficient cash management is to stretch the accounts payable. In other words, a firm should pay its accounts payable as late as possible without damaging its credit standing. It should, however, take advantage of the cash discount available on prompt payment

2) Efficient Inventory-Production Management:

Another strategy is to increase the inventory turnover, avoiding stock-outs, that is, and shortage of stock. This can be done in the following ways:

i) Increasing the raw materials turnover by using more efficient inventory control techniques.

ii) Decreasing the production cycle through better production planning, scheduling and control techniques; it will lead to an increase in the work-in-progress inventory turnover.

iii) Increasing the finished goods turnover through better forecasting of demand and a better planning of production.

Thus, efficient inventory and production management causes a decline in the operating cash requirement and, hence, a saving in cash operating cost.

3) Speeding Collection of Accounts Receivable:

Yet another strategy for efficient cash management is to collect accounts receivable as quickly as possible without losing future sales because of high-pressure collection techniques. The average collection period of receivables can be reduced by changes in: i) Credit terms, ii) Credit standards, and iii) Collection policies. In brief, credit standards represent the criteria for determining to whom credit should be extended. The collection policies determine the effort put forth to collect accounts receivable promptly.

4) Combined Cash Management Strategies:

We have shown the effect of individual strategies on the efficiency of cash management. Each one of them has a favorable effect on the operating cash requirement. We now illustrate their combined effect, as firms will be well advised to use a combination of these strategies.

Cash Management Techniques/Processes:

There are some specific techniques and processes for speedy collection of receivables from customers and slowing disbursements.

1) Cash Management Planning:

Cash planning is a technique to plan and control the use of cash. It protects the financial condition of the firm by developing a projected cash statement from a forecast of expected cash inflows and outflows for a given period. The forecast may be based on the present operations or the anticipated future operations. Cash plans are very crucial in developing the overall operating plans of the firm.

Cash planning may be done on daily, weekly or monthly basis. The period and frequency of cash planning generally depends upon the size of the firms and philosophy of the management. Large firms prepare daily and weekly forecasts. Medium-size firms usually prepare weekly and monthly forecasts. Small firms may not prepare formal cash forecasts because of the non-availability of information and small-scale operations. But, if the small firms prepare cash projections, it is done on monthly basis. As a firm grows and business operations become complex, cash planning becomes inevitable for its continuing success. In order to take care of all these considerations, the firm should prepare a cash budget.

2) Cash Management Control:

The efficiency of the firm's cash management program can be enhanced by the knowledge and use of various procedures aimed at: Accelerating cash inflows, and controlling cash outflows.

i) Accelerating Cash Inflows:

Efficient cash management is possible only when the collections of cash are accelerated. The delay between the time customers pay their dues and the time the cash is collected in the sense of becoming useable by the firm should be attempted to be reduced to the extent possible. Collection process may be speeded up in any of the following manners:

a) The mailing time of payment from customers to the firm may be reduced.

b) The time during which payments received by the firm remain uncollected may be minimized. It includes the time a company takes in processing the cheques internally and the time consumed in the clearance of the cheques through the banking system.

There are different methods/techniques considered to be useful to accelerate the collections such as Prompt Payment by Customers, Early Conversion of Payments into Cash, Concentration Banking, and Lock Box System etc.

ii) Controlling Cash Outflows:

Just as the golden rule for controlling cash inflows is accelerate the collections'; similarly, the golden rule for controlling cash outflows is 'slow down the disbursements'. Decentralized collection system is the best way to acceierate collections and centralized payment system is the best way to slow down the disbursements. Delaying the accounts payable the extent possible can help the firm only if the firm's credit standing does not suffer. If an effective control over disbursements is exercised, without losing goodwill, cash availability is certainly enhanced.

The methods/techniques which can be fruitfully employed to slow down the disbursements as far as possible are Payments through Drafts, Adjusting Payroll Funds, Inter-bank Transfer, Paying the Float, Avoidance of Early Payments, Centralized Disbursements etc.

3) Determining the Optimum Cash Balance:

One of the primary responsibilities of the financial manager is to maintain a sound liquidity position of the firm so that the dues are settled in time. The firm needs cash to purchase raw materials and pay wages and other expenses as well as for paying dividend, interest and taxes. The test of liquidity is the availability of cash to meet the firm's obligations when they become due.

Liquid balance (balance of cash and marketable securities) must be maintained at the optimum level. It is the level which gives the minimum cost of holding the liquid balance. Determination of such a level is very important for an efficient cash management. If the liquid balance exceeds the required balance, it remains idle and, therefore, it involves opportunity costs in the sense that the amount could have been put to more effective use. None the less, liquidity position of the enterprise becomes more sounds. On the other hand, if liquid balance is short of the requirements, the firm may have to incur shortage costs. The firm may be required to sell its fixed investments or it may have to resort to fresh borrowings. It may have to forego cash discounts and pay higher rates of interest on borrowings. There is a danger of losing goodwill and there is a risk of insolvency even. Thus, with increasing liquid balances, 'opportunity' or 'holding' costs increase, but the 'shortage' costs go down, and vice versa. The combination of opportunity costs and shortage costs gives the total cost of maintaining liquid balances at various levels. The point which gives the minimum total cost is the point of optimum liquidity balance—representing a trade-off of shortage costs against opportunity costs.

4) Investing Surplus Cash:

Cash not required for temporary periods of short durations can be invested in near-cash assets, i.e., marketable securities which are readily convertible into cash. Even though the cash is temporarily ideal, it should not be kept so because if the firm has an opportunity to earn interest through investing it in marketable securities, why should it not avail of the same. The selection of the securities should, however, be made very cautiously. The criterion for selecting securities may be as Marketability, Maturity, Risk of Default, Liquidity, and Yield etc.

How much amount should be invested in marketable securities and when should a security transaction take place is a crucial problem before the financial manager. If the amount and the timing of transactions can be determined, the firm can minimize the costs of maintaining liquid balance.

Cash Management Models:

Two important cash management models which lead to determination of optimum balance of cash are -

1) Optimum Cash Balance under Certainty: Baumol's Model

2) Optimum Cash Balance under Uncertainty: The Miller-Orr Model

These models are explained in short as follows:

1) Optimum Cash Balance under Certainty: Baumol's Model:

The Baumol cash management model provides a formal approach for determining a firm's optimum cash balance under certainty. It considers cash management similar to an inventory management problem. As such, the firm attempts to minimize the sum of the cost of holding cash (inventory of cash) and the cost of converting marketable securities to cash.

The Baumol's model makes the following assumptions:

a) The firm is able to forecast its cash needs with certainty.

b) The firm's cash payments occur uniformly over a period of time.

c) The opportunity cost of holding cash is known and it does not change over time.

d) The firm will incur the same transaction cost whenever it converts securities to cash.

Let us assume that the firm sells securities and starts with a cash balance of C rupees. As the firm spends cash, its cash balance decreases steadily and reaches to zero. The firm replenishes its cash balance to C rupees by selling marketable securities. This pattern continues over time. Since the cash balance decreases steadily, the average cash balance will be: C/2.

The firm incurs a holding cost for keeping the cash balance. It is an opportunity cost; that is, the return foregone on the marketable securities. If the opportunity cost is k, then the firm's holding cost for maintaining an average cash balance is as follow:

Holding cost = k (C/2)

The firm incurs a transaction cost whenever it converts its marketable securities to cash. Total number of transactions during the year will be total funds requirement, T, divided by the cash balance, C, i.e. T/C. The cost per transaction is assumed to be constant. If per transaction cost is c, then the total transaction cost will be:

Transaction cost = c (T/C)

The total annual cost of the demand for cash will be:

Total cost = k(C/2) + c(T/C)

The holding cost increases as demand for cash, C, increases. However, the transaction cost reduces because with increasing C the number of transaction will decline. Thus, there is a trade-off between the holding cost and the transaction cost.

The optimum cash balance, C*, is obtained when the total cost is minimum. The formula for the optimum cash balance is as follow:

$$C^* = \sqrt{\frac{2cT}{k}}$$

Where C* is the optimum cash balance, c is the cost per transaction, T is the total cash needed during the year and k is the opportunity cost of holding cash balance. The optimum cash balance will increase with increase in per transaction cost and total funds required and decrease with the opportunity cost.

Limitations of the Baumol Model

1) Assumes a constant disbursement rate.

2) Ignores cash receipts during the period.

3) Does not allow for safety cash reserves.

Inspite of the limitations, the model has a theoretical value. It gives an idea as to how the holding cost and transaction cost should be optimized by the firm. The cash balance being maintained by the firm should be a level close to optimum level as given by the model so that the total cost is minimized.

2) Optimum Cash Balance under Uncertainty: The Miller-Orr Model

The Miller-Orr (MO) model is also known as stochastic model. This model overcomes the shortcoming of Baumol's model and allows for daily cash flow variation. It assumes that net cash flows are normally distributed with a zero value of mean and a standard deviation. The MO model provided for two control limits-the upper control limit and the lower control limit as well as a return point. If the firm's cash flows fluctuate randomly and hit the upper limit, then it buys sufficient marketable securities to come back to a normal level of cash balance i. e. the return point. Similarly, when the firm's cash flows wander and hit the lower limit, it sells sufficient marketable securities to bring the cash balance back to the normal level i. e. the return point.

The firm sets the lower control limit as per its requirement or maintaining minimum cash balance. It is necessary to decide the distance between the upper control limit and lower control limit. The difference between the upper limit and the lower limit depends on the following factors:

i) The transaction cost (c)

ii) The interest rate (i)

iii) The standard deviation (σ) of net cash flows.

The formula for determining the distance between upper and lower control limits (called Z) is as follows:

(Upper Limit — Lower Limit) = (3/4x Transaction Cost x Cash Flow Variance/Interest Rate) 1/3

$Z = (3/4 \times c\sigma^2 / i)^{1/3}$

4. 2. C.2: Liquidity Management

Liquidity refers to the ability of a concern to meet its current obligations as and when these become due. The short-term obligations are met by realizing amounts from current, floating or circulating assets. The current assets should either be liquid or near liquidity. These should be convertible into cash for paying obligations of short-term nature. The sufficiency or insufficiency of current assets should be assessed by comparing them with short-term/current liabilities. If current assets can pay off current liabilities, then liquidity position will be satisfactory. On the other hand, if current liabilities may not be easily met out of current assets then liquidity position will be bad. The bankers, suppliers of goods and other short-term creditors are interested in the liquidity of the concern. They will extend credit only if they are sure that current assets are enough to pay out the obligations.

Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm. To maintain the proper liquidity in the firm, management has to measure it. To measure the liquidity of a firm Current Ratio, Liquid Ratio and Absolute Liquid Ratio are used. One of the primary responsibilities of the financial manager is to maintain a sound liquidity position of the firm so that the dues are settled in time. The firm needs cash to purchase raw materials and pay wages and other expenses as well as for paying dividend, interest and taxes. The test of liquidity is the availability of cash to meet the firm's obligations when they become due.

Liquid balance (balance of cash and marketable securities) must be maintained at the optimum level. It is the level which gives the minimum cost of holding the liquid balance. Determination of such a level is very important for an efficient cash management. If the liquid balance exceeds the required balance, it remains idle and, therefore, it involves opportunity costs in the sense that the amount could have been put to more effective use. None the less, liquidity position of the enterprise becomes more sounds. On the other hand, if liquid balance is short of the requirements, the firm may have to incur shortage costs. The firm may be required to sell its fixed investments or it may have to resort to fresh borrowings. It may have to forego cash discounts and pay higher rates of interest on borrowings. There is a danger of losing goodwill and there is a risk of insolvency even. Thus, with increasing liquid balances, 'opportunity' or 'holding' costs increase, but the 'shortage' costs go down, and vice versa. The combination of opportunity costs and shortage costs gives the total cost of maintaining liquid balances at various levels. The point which gives the minimum total cost is the point of optimum liquidity balance—representing a trade-off of shortage costs against opportunity costs.

Liquidity is a vital factor in business operations. Liquidity should be optimum, that neither excess nor less. Excess liquidity means idle funds while inadequate liquidity results in interruptions in business. A proper balance has to be maintained through efficient liquidity management.

Need and Importance of Liquidity Management:

The need and importance of liquidity management can be explained as follows:

1. Liquidity gives indication that firm has capacity to meet short-term obligations.
2. It throws light on the efficiency of the collection department.
3. Inter-firm comparison can be made on the basis of liquidity.
4. Timely and early payments to suppliers become possible.
5. A firm can enjoy the benefit of cash discount due to liquidity.
6. Dividend payment to the shareholders can be regular.
7. Such company is treated more creditworthy and can get loans easily.
8. A company with liquidity can take advantage of favourable market conditions.
9. A company can meet contingencies or unexpected expenses.

Techniques of Liquidity Management:

The techniques of liquidity management involve the techniques used for proper cash control, which includes techniques regarding accelerating the cash inflow and slowing down the cash outflow. These techniques/methods are explained as follows:

i) Methods/Techniques for Accelerating Cash Inflows:

Efficient cash management is possible only when the collections of cash are accelerated. The delay between the time customers pay their dues and the time the cash is collected in the sense of becoming useable by the firm should be attempted to be reduced to the extent possible. Collection process may be speeded up in any of the following manners:

a) The mailing time of payment from customers to the firm may be reduced.

b) The time during which payments received by the firm remain uncollected may be minimized. It includes the time a company takes in processing the cheques internally and the time consumed in the clearance of the cheques through the banking system.

Following methods/techniques are considered to be useful to accelerate the collections:

a) Prompt Payment by Customers: One way to ensure prompt payment by customers is prompt billing. What the customer has to pay and the period of payment should be notified accurately and in advance. The use of mechanical devices for billing along with the enclosure of a self-addressed return envelope will speed up payment by customers. Another, and more important, technique to encourage prompt payment by customers is the practice of offering cash discounts. The availability of discount implies considerable saving to the customers. To avail of the facility, the customers would be eager to make payment early.

b) Early Conversion of Payments into Cash: Once the customer makes the payment by writing a cheque in favor of the firm, the collection can be expedited by prompt encashment of the cheque. There is a lag between the time a cheque is prepared and mailed by the customer and the time the funds are included in the cash reservoir of the firm.

Within this time interval three steps are involved:

- Transit or mailing time, that is, the time taken by the post offices to transfer the cheque from the customers to the firm. This delay or lag is referred to as postal float;

- Time taken in processing the cheques within the firm before they are deposited in the banks, termed as lethargy; and
- Collection time within the bank, that is, the time taken by the bank in collecting the payment from the customer's bank. This is called bank float.

The early conversion of payment into cash, as a technique to speed up collection of accounts receivable, is done to reduce the time lag between posting of the cheque by the customer and the realization of money by the firm.

c) Concentration Banking: To speed up collections, these should be decentralized as far as possible. If, instead of one collection center, there are a number of collection centers for the purpose, collections would certainly be speeded up. This procedure is named as concentration banking. Through this procedure, the mailing time of the customers is reduced. Customers of a particular region may be directed to deposit/remit their payments to a collection center established at the central place of that region. The collection center will deposit the payments received in the local bank account. Surplus (over the minimum balance to be kept) is transferred to a concentration bank regularly (may be daily), which is generally at the firm's head office. This concentration bank or central bank can get the payments by telegraphic transfer or telex, as per the instructions given by the firm. The collection centres may themselves collect the cheques or the cash payment from the customers, instead of customers remitting the payments to the collection center. It further accelerates the process of collection because of the reduction in the mailing time. The advantage of system of decentralized collection is two-fold:

- The mailing time is reduced, because the bills are prepared by the local collection centres and sent by them to the customers. Further, if the collection centres collect the payments by themselves, the time requires for mailing is reduced on this account also.
- Collection time is reduced, since the payments collected are deposited in the local bank accounts. The funds become useable by the firm immediately on hearing from the collection center about the amount being deposited in the local bank account.

d) Lock Box System: The system is a further improvement over the concentration banking system in the matter of accelerating the cash inflows. Under this system, the time required in collecting the payments, processing them and finally depositing them in the local bank accounts is further reduced. Before determining the collection centers, a feasibility study is made of the possibility of cheques that would be deposited under alternative plans. In this regard operations research techniques nave proved useful in the location of lock box sites. A post office box is hired by the firm at each collection center and the customers are instructed to mail through remittances to the box. The remittances are picked up by the local bank directly from the post office box (i.e., lock box) as per the instructions given by the firm. The bank can pick up the mail several times a day and deposit the cheques in the account of the firm. A record is kept by the bank regarding the cheques deposited and is sent to the firm as and when required.

The advantages of such a system are as under:

- The cheques are deposited sooner than if they were processed by the firm prior to deposit-thus the time lag between the receipt of cheques by the firm and the actual deposit thereof at the bank is eliminated.
- The firm is freed from the responsibility of handling and depositing the cheques. The main disadvantages of such a system is the cost involved of making such arrangements—hiring post office box and loading the bank with additional burden of work entail costs and sometimes it may be uneconomical for the firm to adopt such a system.

ii) Controlling Cash Outflows:

Just as the golden rule for controlling cash inflows is accelerate the collections'; similarly, the golden rule for controlling cash outflows is 'slow down the disbursements'. Decentralized collection system is the best way to acceierate collections and centralized payment system is the best way to slow down the disbursements. Delaying the accounts payable the extent possible can help the firm only if the firm's credit standing does not suffer. If an effective control over disbursements is exercised, without losing goodwill, cash availability is certainly enhanced.

Methods/Techniques of Slowing Disbursement:

The following methods/techniques can be fruitfully employed to slow down the disbursements as far as possible.

a) Payments through Drafts:

A company can delay payments by issuing drafts to the suppliers instead of giving cheques. When a cheque is issued then the company will have to keep a balance in its account so that the cheque is paid whenever it comes. On the other hand a draft is payable only on presentation to the issuer. The receiver will give the draft to its bank for presenting it to the buyer's bank. It takes a number of days before it is actually paid.

b) Adjusting Payroll Funds:

Some economy can be exercised on payroll funds also. it can be done by reducing the frequency of payments. It the payments are made weekly then this period can be extended to a month. Secondly, finance manager can plan the issuing of salary cheque and their disbursements.

c) Inter-bank Transfer:

An efficient use of cash is also possible by inter-bank transfers. If the company has accounts with more than one bank then amounts can be transferred to the bank where disbursements are to be made. It will help in avoiding excess amount in one bank.

d) Paying the Float:

'Float' is the lag between the time the cheque is written and the time the firm's bank receives it. A firm may have less balance in its bank account but the firm may issue a cheque to its supplier because the supplier would present the cheque to his bank for payment only when he receives it after a few days. Moreover, after presentation to the bank, the bank would send the cheque for collection, which would also consume some time. The time by which firm's bank receives the cheque for payment can be used by the firm for utilizing funds for business purposes and exactly on the time when the payment has to be made by the bank, the amount may be deposited in the bank by the firm. In case the period of time gap can be accurately estimated by the financial manager, the firm can certainly earn during the float period. However, the game is a risky one and should be played with caution.

e) Avoidance of Early Payments:

One way to delay payments is to avoid early payments. According to the terms of credit, a firm is required to make a payment within a stipulated period. It entitles a firm to cash discounts. If, however, payments are delayed beyond the due date, the credit standing may be adversely affected so that the firms would find it difficult to secure trade credit later. But if the firm pays its accounts payable before the due date it has no special advantage. Thus, a firm would be well advised not to make payments early that is, before the due date.

f) Centralized Disbursements:

Another method to slow down disbursements is to have centralized disbursements. All the payments should be made by the head office from a centralized disbursement account. Such an arrangement would enable a firm to delay payments and conserve cash for several reasons. Firstly, it involves increase in the transit time. The remittance from the head office to the customers in distant places would involve more mailing time than a decentralized payment by the local branch. The second reason for reduction in operating cash requirement is that since the firm has a centralized bank account, a relatively smaller total cash balance will be needed. In the case of a decentralized arrangement, a minimum cash balance will have to be maintained at each branch which will add to a large operating cash balance. Finally, schedules can be tightly controlled and disbursements made exactly on the right day.

4. 2. C.3: Receivables Management

Meaning and Definition of Credit/Receivables:

Credit/Receivables represent amounts owed to the firm as a result of sale of goods or services in the ordinary course of business. These are claims of the firm against its customers and form part of its current assets. Receivables are also known as accounts receivables, trade receivables, customer receivables or book debts. The receivables are carried for the customers. The period of credit and extent of receivables depends upon the credit policy followed by the firm. The purpose of maintaining or investing in receivables is to meet competition, and to increase the sales and profits.

According to Hampton, "Receivables are asset accounts representing amount owned to firm as a result of sale of goods or services in ordinary course of business".

Receivables are the extension of credit facilities to customers. Their basic aim is to provide facility to customers to allow them a reasonable time in which they can pay for goods purchased by them.

The investments in receivables involve both benefits and costs. The total cost of receivables consists of cost of financing, which is a factor of time, plus cost of administration plus cost of delinquency plus cost of default. However, the receivables does not result in increasing the cost only, rather they bring some benefits also to the firm. The benefits of credit/receivables are increase in sales, increase in profit and even to make extra profit. The extension of trade credit has a major impact on sales, costs and profitability. Other things being equal, a relatively liberal policy and, therefore, higher investments in receivables, will produce larger sales. However, costs will be higher with liberal policies than with more stringent measures. Therefore, accounts receivable management should aim at a trade-off between profit (benefit) and risk (cost). That is to say, the decision to commit funds to receivables (or the decision to grant credit) will be based on a comparison of the benefits and costs involved, while determining the optimum level of receivables. The costs and benefits to be compared are marginal costs and benefits. The firm should only consider the incremental (additional) benefits and costs that result from a change in the receivables or trade credit policy.

Factors Influencing the Size of Receivables:

Besides sales, a number of other factors also influence the size of receivables. The following factors directly and indirectly affect the size of receivables:

1) **Size of Credit Sales:** The volume of credit sales is the first factor which increases or decreases the size of receivables. If a concern sells only on cash basis, as in the case of Bata Shoe Company, then there will be no receivables. The higher the part of credit sales out of total sales, figures of receivables will also be more or vice versa.

2) **Credit Policies:** A firm with conservative credit policy will have a low size of receivables while a firm with liberal credit policy will be increasing this figure. The vigor with which the concern collects the receivables also affects its receivables. If collections are prompt then even if credit is liberally extended the size of receivables will remain under control. In case receivables remain outstanding for a longer period, there is always a possibility of bad debts.

3) **Terms of Trade:** The size of receivables also depends upon the terms of trade. The period of credit allowed and rates of discount given are linked with receivables. If credit period allowed is more than receivables will also be more. Sometimes trade policies of competitors have to be followed otherwise it becomes difficult to expand the sales. The trade terms once followed cannot be changed without adversely affecting sales opportunities.

4) **Expansion Plans:** When a concern wants to expand its activities, it will have to enter new markets. To attract customers, it will give incentives in the form of credit facilities. The periods of credit can be reduced when the firm is able to get permanent customers. In the early stages of expansion more credit becomes essential and size of receivables will be more.

5) **Relation with Profits:** The credit policy is followed with a view to increase sales. When sales increase beyond a certain level the additional costs incurred are less than the increase in revenues. It will be beneficial to increase sales beyond a point because it will bring more profits. The increase in profits will be followed by an increase in the size of receivables or vice-versa.

6) **Credit Collection Efforts:** The collection of credit should be streamlined. The customers should be sent periodical reminders if they fail to pay in time. On the other hand, if adequate attention is not paid towards credit collection then the concern can land itself in a serious financial problem. Efficient credit collection machinery will reduce the size of receivables. If these efforts are slower then outstanding amounts will be more.

7) **Habits of Customers:** The paying habits of customers also have a bearing on the size of receivables. The customers may be in the habit of delaying payments even though they are financially sound. The concern should remain in touch with such customers and should make them realize the urgency of their needs.

8) **Stability of Sales:** In the business of seasonal character, total sales and the credit sales will go up in the season and therefore volume of receivables will also be large. On the other hand, if a firm supplies goods on installment basis, its balance in receivables will be high.

9) **Size and Policy of Cash Discount:** It is also an important variable in deciding the level of investment in receivables. Cash discount affects the cost of

capital and the investment in receivables. If cost of capital of the firm is lower in comparison to the cash discount to be allowed, investment in receivables will be less. If both are equal, it will not affect the investment at all. If cost of capital is higher than cash discount, the investment in receivables will be larger.

10) **Bill Discounting and Endorsement:** If firm has any arrangement with the banks to get the bills discounted or if they re-endorsed to third parties, the level of investment in assets will be automatically low. If bills are honored on due dates, the investment will be larger.

A concern should be clear about its credit policies. How much will be the size of receivables on the basis of present policies? This is an important estimation which will help the concern in planning its working capital. Though it is not possible to forecast exact receivables in the future but some estimation is possible on the basis of past experience, present credit policies and policies pursued by other concerns. The factors help in forecasting receivables are Credit Period Allowed, Effect of Cost of Goods Sold, Forecasting Expenses, Forecasting Average Collection Period and Discounts, and Average Size of Receivables etc.

Meaning of Credit/Receivables Management:

Credit/Receivables management is the process of making decisions relating to investment in trade debtors. Certain investment in receivables is necessary to increase the sales and the profits of a firm. But at the same time investment in this asset involves cost considerations also. Further, there is always a risk of bad debts too. The term Receivables management may be defined as collection of steps and procedure required to properly weigh the costs and benefits attached with the credit policies. The Receivables management consists of matching the cost of increasing sales (particularly credit sales) with the benefits arising out of increased sales with the objective of maximizing the return on investment of the firm.

Objectives of Credit/Receivables Management:

The objectives of credit/receivables management are to improve sales, eliminate bad debts, and reduce transaction costs incidental to maintenance of accounts and collection of sale proceeds and, finally, enhance profits of the firm. Credit sales help the organization to make extra profit. It is a known fact; firms charge a higher price, when sold on credit, compared to normal price.

1) **Book Debts are used as a Marketing Tool for Improvement of Business:** If the firm wants to expand business, it has to, necessarily, sell on credit. After a certain level, additional sales do not create additional production costs, due to the presence of fixed costs. So, the additional contribution, totally, goes towards profit, improving the profitability of the firm.

2) **Optimum Level of Investment in Receivables:** To support sales, it is necessary for the firm to make investment in receivables. Investment in receivables involves costs as funds are tied up in debtors. Further, there is also risk in respect of bad debts too. On the other hand, receivables bring returns. If so, till what level investment is to be made in receivables? Investment in receivables is to be made till the incremental costs are less than the incremental return.

Thus, the objective of receivables management is to make a sound Investment in debtors. In the words of Bolton, S.E., The objective of receivables management is 'to promote sales and profits 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 (i.e. cost of capital)'.

Dimensions of Credit/Receivables Management:

Credit/Receivables management involves the careful consideration of the following aspects:

1) Credit Policy.

2) Credit Evaluation

3) Monitoring Receivables

These points are explained below:

1. Credit Policy:

The credit policy of a company can be regarded as a kind of trade-off between increased credit sales leading to increase in profit and the cost of having larger amount of cash locked up in the form of receivables and the loss due to the incidence of bad debts. In competitive market, the credit policy adopted by a company is considerably influenced by the practices followed by the industry. A change in the credit policy of a company, say, by extending credit policy of a company, to 30 days, when the other companies are following a credit period of 15 days can result in such a high demand for the company's product that it cannot cope with. Further, other companies also may have to fall in line in the long run. It is assumed generally that such factors have already been taken into consideration before making changes in the credit policy of a company.

The credit policy of a firm provides the framework to determine:

i) Whether or not to extend credit to a customer and

ii) How much credit to extend.

The credit policy decision of firm has following dimensions:

A) Credit Standards

B) Credit Term

C) Collection Efforts.

A. Credit Standards:

The term credit standards represent the basic criteria for the extension of credit to customers. The quantitative basis of establishing credit standards are factors such as credit ratings, credit references, average payments period and certain financial ratios. The overall standards are divided into two categories as - 1) Tight or restrictive, and 2) Liberal or non-restrictive.

The optimum level of investment in receivables should be where there is a trade-off between the costs and profitability. The increased investment in receivables also adversely affects the liquidity of a firm. On the other hand, a tight credit policy increases the liquidity of a firm. Thus, optimum level or investment in receivables is achieved at a point where there is a trade-off between cost, profitability and liquidity. The trade-off with reference to credit standards covers Collection Costs, Investments in Receivables or the Average Collection Period,Bad Debt Expenses,and Sales Volume etc.

The basic changes and effects on profits arising from a relaxation of credit standards are summarized in the following table. If the credit standards are tightened, the opposite effects, as shown in the brackets, would follow:

Effect of Relaxation of Standards

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	I (D)	+ (-)
Average Collection Period	I (D)	- (+)
Bad Debts	I (D)	- (+)

B. Credit Terms

The second decision area in credit policies of firm is the credit terms. After the credit standards have been established and the credit-worthiness of the customers has been assessed, the management of a firm must determine the terms and conditions on which trade credit will be made available. The stipulations under which goods are sold on credit are referred to as credit terms. These relate to the repayment of the amount under the credit sale. Thus, credit terms specify the repayment terms of receivables.

Credit term has three Components:

1) **Cash Discount Period:** The collection of receivables is influenced by the period allowed for availing the discount. The additional period allowed for this facility may prompt some more customers to avail discount and make payments. This will mean additional funds released from receivables which may be alternatively used. At the same time the extending of discount period will result in late collection of funds because those who were getting discount and making payments as per earlier schedule will also delay their payments.

2) **Cash Discount:** Cash discount is allowed to expedite the collection of receivables. The funds tied up in receivables are released. The concern will be able to use the additional funds received from expedited collections due to cash discount. The discount allowed involves cost. The financial manager should compare the earnings resulting from released funds and tht cost of discount. The discount should be allowed only if its cost is less than the earnings from additional funds. If the funds

cannot be profitably employed then discount should not be allowed. The implications of increasing or initiating cash discount are as follows:

i) The sales volume will increase. The grant of discount implies reduced prices. If the demand for the products is elastic, reduction in prices will result in higher sales volume.

ii) Since the customers, to take advantage of the discount, would like to pay within the discount period, the average collection period would be reduced. The reduction in the collection period would lead to a reduction in the investment in receivables as also the cost. The decrease in the average collection period would also cause a fall in bad debt expenses. As a result, profits would increase.

iii) The discount would have a negative effect on the profits. This is because the decrease in prices would affect the profit margin per unit of sale.

The effects of increase in the cash discount are summarized in Table below. The effect of decrease in cash discount will be exactly opposite.

Effect of Increase in Cash Discount

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	I	+
Average Collection Period	D	+
Bad Debts	D	+
Profit Per Unit	D	-

3) Credit Period: The credit period is an important aspect of the credit policy. It refers to the length of time over which the customers are allowed to delay the payment. There is no hard and fast rule regarding the credit period and it may differ from one market to another. The credit period generally varies from 3 days to 60 days. In some cases, the credit period may be zero and only cash sale are made. Customary practices are important factor in deciding the credit period. The firm however, must be aware of the cost of granting credit to the customers for different periods.

Lengthening the credit period increases the sales by attracting more and more customers, whereas the squeezing the credit period has the distracting effect. The effect of changing the credit period is similar to that of changing the credit standard and hence requires careful analysis. The firm must consider the cost involved in increasing the credit period which will result in increase in the investment in receivables.

The expected effect of an increase in the credit period is summarized as follows:

Effect of Increase in Credit Period

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	I	+
Average Collection Period	I	-
Bad Debts	I	-

A decrease in credit period will have an opposite effect.

C. Collection Effort

The third area involved in the credit policy is collection policies. They refer to the procedures followed to collect accounts receivable when, after the expiry of the credit period, they become due. These policies cover two aspects:

1. Degree of Effort to Collect the Overdue:

To show the effects of the collection effort, the credit policies of a firm may be categorized into strict and lenient.

A strict policy of collection will involve more efforts on collection. Such a policy has both plus and negative effects. This policy will enable early collection of dues and will reduce bad debt losses. The money collected will be used for other purposes and the profits of the concern will go up. On the other hand a rigorous collection policy will involve increased collection costs. It may also reduce the volume of sales.

A lenient policy may increase the debt collection period and more bad debt losses. A customer not clearing the dues for long may not repeat his order because he will have to pay earlier dues first, thus causing loss of customers. The collection policy should weigh various aspects associated with it, the gains and losses of such policy and its effect on the finances of the concern.

Basic Trade-off from Tight Collection Effort

Item	Direction of Change (I =Increase, D = Decrease)	Effect on Profits (Positive +, Negative -)
Sales Volume	D	-
Average Collection Period	D	+
Bad Debts	D	+
Collection Expenditure	I	-

The effect of the lenient policy will be just the opposite.

2. Types of Collection Effort:

The second aspect of collection policies relates to the steps that should be taken to collect overdue from the customers. A well-established collection policy should have clear-cut guidelines as to the sequence of collection efforts. After the credit period is over and payment remains due, the firm should initiate measures to collect them. The effort should in the beginning be polite, but, with the passage of time, it should gradually become strict. The steps usually taken are: 1) Letters, including reminders, to expedite payment; 2) Telephone calls for personal contact; 3) Personal visits; 4) Help of collection agencies; and finally, 5) Legal action.

The firm should take recourse to very stringent measures, like legal action, only after all other avenues have been fully exhausted. They not only involve a cost but also affect the relationship with the customers. The aim should be to collect as early as possible; genuine difficulties of the customers should be given due consideration.

2. Credit Evaluation

Besides establishing credit standards, a firm should develop procedure for evaluating credit applicants. The second aspect of receivables management of a firm is credit analysis and investigation. Two basic steps are involved in the credit investigation process:

1) **Obtaining Credit Information:** The first step in credit analysis is obtaining credit information on which to base the evaluation of a customer. The sources of information, broadly speaking, are:

i) **Internal:** Usually, firms require their customers to fill various forms and documents giving details about financial operations. They are also required to furnish trade references with whom the firms can novo contacts to judge the suitability of the customer for credit. This type of information is obtained from internal sources of credit information. Another internal source of credit information is derived from the records of the firms contemplating an extension of credit. It is likely that a particular customer/applicant may have enjoyed credit facility in the past. In that case, the firm would have information on the behavior of the applicant(s) in terms of the historical payment pattern. This type of information may not be adequate and may, therefore, have to be supplemented by information from other sources.

ii) **External:** The availability of information from external sources to assess the credit-worthiness of customers depends upon the development of institutional facilities and industry practices. In India, the external sources of credit information are not as developed as in the industrially advanced countries of the world depending upon the availability; the following external sources may be employed to collect information.

a) **Financial Statements:** One external source of credit information is the published financial statements, that is, the balance sheet and the profit and loss account. The financial statements contain very useful information. They throw light on an applicant's financial viability, liquidity, profitability and debt capacity. Although the financial statements do not directly reveal the past payment record of the applicant, they are very helpful in assessing the overall financial position of a firm, which significantly determines its credit standing.

b) **Bank References:** Another useful source of credit information is the bank of the firm which is contemplating the extension of credit. The modus operandi here is that the firm's banker collects the necessary information from the applicant's banks. Alternatively, the applicant may be required to ask his banker to provide the necessary information either directly to the firm or to its bank.

c) **Trade References:** These refer to the collection of information from firms with whom the applicant has dealings and who on the basis of their experience would vouch for the applicant.

d) **Credit Bureau Reports:** Finally, specialist credit bureau reports from organizations specializing in supplying credit information can also be utilized.

2) Analysis of Credit Information: Once the credit information has been collected from different sources, it should be analyzed to determine the credit-worthiness of the applicant. The well-known 5 C's of Credit.

i) **Character:** The word character as a credit standard refers to borrowers' honesty, responsibility, integrity and consistency. These are evidenced in variety of ways. For example, police action, legal actions and complaints about a person's character.

ii) **Capacity:** It refers to the ability of the borrowers to pay their financial obligations. This is determined by current expected income, existing debts and ongoing operating expenses. This type of information is available in current and proforma financial statements.

iii) **Capital:** It is the amount of assets that can be liquidated for the payment of debt if all other means of collecting it fail. This cushion of assets is represented by a firm's equity.

iv) **Collateral:** Collateral refers to assets that are pledged for security in a credit transaction.

v) **Conditions:** Conditions refer to economic factors, which are beyond the control of funds and which affect company's ability to pay debts.

Although there are no established procedures to analyze the information, the firm should devise one to suit its needs.

The analysis should cover two aspects:

i) **Quantitative:** The assessment of the quantitative aspects is based on the factual information available from the financial statements, the past records of the firm, and so on. The first step involved in this type of assessment is to prepare an aging schedule of the accounts payable of the applicant as well as calculate the average age of the accounts payable. This exercise will give an insight into the past payment pattern of the customer. Another step it analyzing the credit information is through a ratio analysis of the liquidity, profitability and debt capacity of the applicant. These ratios should be compared with the industry average. Moreover, trend analysis over a period of time would reveal the financial strength of the customer.

ii) **Qualitative:** The quantitative assessment should be supplemented by a qualitative/subjective interpretation of the applicant's credit-worthiness. The subjective judgment would cover aspects relating to the quality of management. Here, the references from other suppliers, bank references and specialist bureau reports would form the basis for the conclusions to be drawn. In the ultimate analysis, therefore, the decision whether to extend credit to the applicant and what amount to extend will depend upon the subjective interpretation of his credit standing.

3. Monitoring of Receivables

The next important step in management of receivables is control of these receivables. Setting of standard and framing the credit policy is not sufficient and their effective implementation is also equally important.

In order to controls the level of receivable, the firm should apply regular checks and there must be continuous monitoring system. The financial manager should keep a watch on the creditworthiness of all the customers as well as on the total credit policy of the firm. The following methods can be adopted for this purpose:

1) **Average Collection Period:** The average collection period may be found by dividing the average receivables by the amount of credit sales per day.

$$\text{Average Collection Period} = \frac{\text{Average Receivables}}{\text{Credit Sales per day}}$$

Number of day's sales outstanding may be calculated on a weekly basis. The managerial efficiency can be ascertained by comparing it with the past year's period of the firm.

2) **Aging Schedule of Receivables:** The quality of receivables of the firm can be measured by looking at the age of receivables. The older the receivable, lower is the quality and greater chances of default. In aging schedule, total outstanding

receivables on a particular day are classified into different age groups together with percentage of total receivables that fall in each age group.

3) **Line of Credit:** This is an another control measure for receivables management which refers to the maximum amount a particular customer may have as due to the firm at any time. Different lines of credit are allowed to different customers. As long as the customer's unpaid balance remains within this maximum limit, account may be routinely handled. The line of credit must be reviewed periodically for all the customers. This does not mean that credit line must be changed, rather it may be unchanged or increased or reduced.

4) **Accounting Ratios:** They are of good help in order to control the receivables. Though several ratios may be calculated in this regard, two accounting ratios, in particular, may be used. They are: i) Receivables Turnover Ratio, and ii) Average Collection Period. Both the ratios should be calculated on a continuous basis to monitor the receivables.

4. 2. C.4: Inventory Management

Meaning and Definition of Inventory:

The dictionary meaning of inventory is 'stock of goods'. The word 'Inventory' is understood differently by various authors. In accounting language it may mean stock of finished goods only. In a manufacturing concern, it may include raw materials, work in process and stores, etc.

International Accounting Standard Committee (I.A.S.C) defines inventories as "Tangible property - 1) Held for sale in the ordinary course of business, 2) In the process of production for such sale or, 3) To be consumed in the process of production of goods or services for sale".

The American Institute of Certified Public Account (AICPA) defines "inventory in the sense of tangible goods, which are held for sale, in process of production and available for ready consumption."

According to Bolten S.E., "Inventory refers to stock-pile of product, a firm is offering for sale and components that make up the product".

Inventory includes the following things:

1) Raw Material: It includes direct material used in the manufacture of a product. The purpose of holding raw material is to ensure uninterrupted producton in the event of delaying delivery. The amount of raw materials to be kept by a firm depends on various factors such as speed with which raw materials are to be ordered and procured and uncertainty in the supply of these raw materials.

2) Work-in-Progress: It includes partly finished goods and materials held between manufacturing stages. It can also be stated that those raw materials which are used in production process but are not finally converted into final product are work-in-progress.

3) Consumable: Consumables are products that consumers buy recurrently, i.e., items which "get used-up" or discarded. For example, consumable office supplies are such products as paper, pens, file folders, post-it notes, computer disks, and toner or ink cartridges. Not included capital goods such as computers, fax machines, and other business machines or office furniture.

4) Finished Goods: The goods ready for sale or distribution comes under this class. It helps to reduce the risk associated with stoppage in output on account of strikes, breakdowns, shortage of material, etc.

5) Stores and Spares: This category includes those products, which are accessories to the main products produced for the purpose of sale. For example, stores and spares items are bolts, nuts, clamps, screws, etc. These spare parts are usually bought from outside or sometimes they are manufactured in the company also.

Each firm hold inventory for one or another purpose. There are three main purposes or motives of holding inventories. These are Transaction Motive, Precautionary Motive, and Speculative Motive. Every firm has to maintain some level of inventory to meet the day to day requirements of sales, production process, customer demand etc. It is called as transaction motive. A firm should keep some inventory for unforeseen circumstances also. It is a precautionary motive. The firm may be tempted to keep some inventory in order to capitalize an opportunity to make profit e.g., sufficient level of inventory may help the firm to earn extra profit in case of expected shortage in the market, it is a speculative motive.

Meaning of Inventory Management:

The investment in inventory is very high in most of the undertakings engaged in manufacturing, whole-sale and retail trade. The amount of investment is sometimes more in inventory than in other assets. About 90 per cent part of working capital invested in inventories. It is necessary for every management to give proper attention to inventory management. A proper planning of purchasing, handling, storing and accounting should form a part of inventory management. An efficient system of inventory management will determine (a) what to purchase (b) how much to purchase (c) from where to purchase (d) where to store, etc.

The purpose of inventory management is to keep the stocks in neither a way that there is over-stocking nor under-stocking. The over-stocking will mean reduction of liquidity and starving of other production processes; under-stocking, on the other hand, will result in stoppage of work. The investments in inventory should keep in reasonable limits.

Objective of Inventory Management:

The objectives of inventory management may be discussed under two heads:

1) Operating Objectives:

Operational objectives refer to material and other parts which are available in sufficient quantity. It includes -

i) Availability of Materials: The first and the foremost objective of the inventory management is to make all types of materials available at all times whenever they are needed by the production departments so that the production may not be held up for want of materials. It is therefore advisable to maintain a minimum quantity of all types of materials to move on the production on schedule.

ii) Minimizing the Wastage: Inventory control is essential to minimize the wastage at all levels i.e. during its storage in the godown or at work in the factory. Normal wastage, in other words uncontrollable wastage, should only be permitted. Any abnormal but controllable wastage should strictly be controlled. Wastage of materials by leakage, theft, embezzlement and spoilage due to rust, dust or dirt should be avoided.

iii) Promotion of Manufacturing Efficiency: The manufacturing efficiency of the enterprise increases if right types of raw material are made available to the production department at the right time. It reduces wastage and cost of production and improves the morale of workers.

iv) Better Service to Customers: In order to meet the demand of the customers, it is the responsibility of the concern to produce sufficient stock of finished goods to execute the orders received. It means, a flow of production should be maintained.

v) Control of Production Level: The concern may decide to increase or decrease the production level in favorable time and the inventory may be controlled accordingly. But in odd times, when raw materials are in short supply. Proper control of inventory helps in creating and maintaining buffer stock to meet any eventuality. Production variations can also be avoided through proper control to inventories.

vi) Optimal Level of Inventories: Proper control of inventories helps management to procure materials in time in order to run the plan efficiently. It thus, helps in the maintaining the optimum level of inventories keeping in view the operational requirements. It also avoids the out of stock danger.

2) Financial Objectives:

The financial objectives means that investment in inventories must not remain idle and minimum capital must be locked in it. It includes -

i) Economy in Purchasing: Proper inventory control brings certain advantages and economies in purchasing the raw materials. Management makes every attempt to purchase the raw materials in bulk quantity and to take advantage of favorable market conditions.

ii) Optimum Investment and Efficient Use of Capital: The prime objective of inventory control from financial point of view is to have an optimum level of investment in inventories. There should neither be any deficiency of stock of raw materials so as to hold up the production process nor there any excessive investment in inventories so as to block the capital that could be used in an efficient manner otherwise. It is, therefore, the responsibility of financial management to set up the maximum and minimum levels of stocks to avoid deficiency or surplus stock positions.

iii) Reasonable Price: Management should ensure the supply of raw materials at a responsibility low price but without sacrificing the quality of it. It helps in controlling the cost of production and the quality of finished goods in order to maximize the profits of the concern.

iv) Minimizing Costs: Minimizing inventory costs such as handling, ordering and carrying costs, etc., is one of the main objectives of inventory management. Financial management should help controlling the inventory costs in a way that reduces the cost per unit of inventory. Inventory costs are the part of total cost of production hence cost of production can also a minimized by controlling the inventory costs.

Tools and Techniques of Inventory Management:

Effective inventory management requires an effective control system for inventories. A proper inventory control not only helps in solving the acute problem of liquidity but also increases profits and causes substantial reduction in the working capital of the concern.

The following are the important tools and techniques of inventory management and control:

1) Determination of Stock Levels
2) Determination of safety stocks
3) Ordering System of Inventory
4) Determination of Economic Order Quantity
5) JIT Analysis
6) A-B-C Analysis
7) VED Analysis
8) Inventory Turnover Ratio
9) Aging Schedule of Inventories
10) Periodic Inventory System
11) Perpetual Inventory System

Some of the above techniques of inventory management are explained below in short.

1) Determination of Stock Levels:

Carrying of too much and too little of inventories is detrimental to the firm. If the inventory level is too little, the firm will face frequent stock-outs involving heavy ordering cost and if the inventory level is too high it will be unnecessary tie-up of capital. Therefore, an efficient inventory management requires that a firm should maintain an optimum level of inventory where inventory costs are the minimum and at the same time there is no stock-out which may result in loss of sale of stoppage of production. The various stock levels are as Minimum Stock Level, Maximum Stock Level, Re-ordering Level, Danger Level and Average Stock Level etc.

2) Determination of Safety Stocks:

Safety stock is a buffer to meet some unanticipated increase in usage. The usage of inventory cannot be perfectly forecasted. It fluctuates over a period of time. The demand for materials may fluctuate and delivery of inventory may also be delayed and in such a situation the firm can face a problem of stock-out. The stock out can prove costly by affecting the smooth working of the concern. In order to protect against the stock out arising out of usage fluctuations, firms usually maintain some margin of safety stocks. The basic problem is to determine the level of quantity of safety stocks. Two costs are involved in the determination of this stock i.e. opportunity cost of stock-outs and the carrying costs. The stock-outs of raw materials cause production disruption resulting into higher cost of production. Similarly, the stock-outs of finished goods result into the failure of the firm in competition as the firm cannot provide proper customer service. If a firm maintains low level of safety frequent stock-outs will occur resulting into the larger opportunity costs. On the other hand, the larger quantities of safety stocks involve higher carrying costs.

3) Ordering Systems of Inventory:

The basic problem of inventory is to decide the re-order point. This point indicates when an order should be placed. There-order point is determined with the help of (a) average consumption rate, (b) duration of lead time, (c) economic order quantity, when the inventory is depleted to lead time consumption, the order should be placed. There are three prevalent systems of ordering and a concern can choose any one these:

i) Fixed Order Quantity System (or Q System): Under this system, materials are reordered at irregular intervals whenever the stock reaches the reorder level. The reorder quantity is normally the economic ordering quantity so that the aggregate ordering costs and stock holding costs are the lowest. In this system the order quantity is fixed but the order period varies.

ii) Periodic Review System (or P System): Under this P system, the economic ordering quantity is converted into a time scale, and this period is known as periodic review time or cycle time. The period between the placements of orders is fixed, while the quantity ordered varies. The average inventory held in the P system is greater than that held in the Q system. But the great advantage in P system lies in reduction or monitoring labor and launching of orders. In P system, the buffer stock indicates the average consumption during lead time and review time. The safety stock is the same as in the Q system to denote increased consumption as a result of possible extension of lead time. The reserved stock is calculated on the basis of excess consumption during lead time and review time.

iii) Modified Replenishment System: Under this system reorder quantity is variable like the P system but lower limit is placed on its size, i.e., reordering quantity should not be below the fixed lower limit when the order is placed at a fixed period to time. This system combines the main features of the other two systems namely, maximum level, a variable order quantity subject to a certain lower limit, a reordering level and review of the level at a fixed interval.

4) Economic Order Quantity (EOQ):

EOQ is an important factor in controlling the inventory. It is a quantity of inventory which can reasonably be ordered economically at a time. It is also known as 'Standard Order Quantity', 'Economic Lot Size,' or 'Economical Ordering Quantity'. In determining this point ordering costs and carrying costs are taken into consideration. Ordering costs are basically the cost of getting an item of inventory and it includes cost of placing an order. Carrying cost includes costs of storage facilities, property insurance, and loss of value through physical deterioration, cost of obsolescence. Either of these two costs affects the profits of the firm adversely and management tries to balance these two costs. The balancing or reconciliation point is known as economic order quantity.

The quantity may be calculated with the help of the following formula:

$$\text{EOQ} = \sqrt{\frac{2AS}{I}}$$

Where, A = Annual quantity used (in units)

S = Cost of placing an order (fixed cost)

I = Cost of holding one unit.

5) Just-In-Time (JIT):

Just-In-Time (JIT) is defined in the APICS dictionary as "a philosophy of manufacturing based on planned elimination of all waste and on continuous improvement of productivity". It also has been described as an approach with the objective of producing the right part in the right place at the right time (in other words, "just-in-time"). Waste results from any activity that adds cost without adding value, such as the unnecessary moving of materials, the accumulation of excess inventory, or the use of faulty production methods that create products requiring subsequent rework. JIT (also known as lean production or stockless production) should improve profits and return on investment by reducing inventory levels (increasing the inventory turnover rate), reducing variability, improving product quality, reducing production and delivery lead times, and reducing other costs (such as those associated with machine setup and equipment breakdown). In a JIT system, underutilized (excess) capacity is used instead of buffer inventories to hedge against problems that may arise. JIT applies primarily to repetitive manufacturing processes in which the same products and components are produced over and over again. The general idea is to establish flow processes (even when the facility uses a jobbing or batch process layout) by linking work centers so that there is an even, balanced flow of materials throughout the entire production process, similar to that found in an assembly line. To accomplish this, an attempt is made to reach the goals of driving all inventory buffers toward zero and achieving the ideal lot size of one unit. The main advantages of JIT system are as - i) Increased awareness of different problems and their costs, ii) Reducing lot size and less work in progress, iii) Less raw material inventory, less indirect material and less finished goods, iv) Higher productivity, v)

Faster feedback of defects, vi) Reduced material inventory as well as material waste, vii) High quality of finished goods and smoother output, viii) Better control over defects and improved overall working etc.

6) A-B-C Analysis:

The materials are divided into a number of categories for adopting a selective approach for material control. It is generally seen that in manufacturing concern, a small percentage of items contribute a large percentage of value of consumption and a large percentage of items of materials contribute a small percentage of value. In between these two limits there are some items which have almost equal percentage of value of materials. Under A-B-C analysis, the materials are divided into three categories viz., A, B and C. Past experience has shown that almost 10 percent of the items contributes to 70 per cent of value consumption and this category is called 'A' category. About 20 per cent of the items contribute about 20 per cent of value of consumption and this is known as category 'B' materials. Category 'C' covers about 70 per cent of items of materials which contribute only 10 per cent of value of consumption. There may be some variation in different organization and an adjustment can be made in these percentages.

A-B-C analysis helps to concentrate more efforts on category A since greatest monetary advantage will come by controlling these items. An attention should be paid in estimating requirements, purchasing, maintaining safety stocks and properly storing of 'A' category materials. These items are kept under a constant review so that a substantial material cost may be controlled. The control of 'C' items may be relaxed and these stocks may be purchased for the year. A little more attention should be given towards `B' category items and their purchase should be undertaken at quarterly or half-yearly intervals.

The following points should be kept in mind for ABC analysis:

i) Where items can be substituted for each other, they should be preferably treated as one item.

ii) More emphasis should be given to the value of consumption and not to price per unit of the item.

iii) All the items consumed by an organization should be considered together for classifying as A, B or C instead of taking them as spares, raw materials, semi-finished and finished items and then classifying as A, B and C.

iv) There can be more than three classes and the period of consumption need not necessarily be one year.

7) VED Analysis

VED is an acronym in which (V) stands for Vital, (E) stands for Essential, and (D) stands for Desirable. These are three categories of stock based on its functional or process importance. VED analysis is an inventory management technique that classifies inventory based on its functional importance. It categorizes stock under three heads based on its importance and necessity for an organization for production or any of its other activities.

V-Vital category

As the name suggests, the category "Vital" includes inventory, which is necessary for production or any other process in an organization. The shortage of items under this category can severely hamper or disrupt the proper functioning of operations. Hence, continuous checking, evaluation, and replenishment happen for such stocks. If any of such inventories are unavailable, the entire production chain may stop. Also, a missing essential component may be of need at the time of a breakdown. Therefore, the order for such inventory should be beforehand. Proper checks should be put in place by the management to ensure the continuous availability of items under the "vital" category.

E- Essential category

The essential category includes inventory, which is next to being vital. These, too, are very important for any organization because they may lead to a stoppage of production or hamper some other process. But the loss due to their unavailability may be temporary, or it might be possible to repair the stock item or part.

The management should also ensure optimum availability and maintenance of inventory under the "Essential" category. The unavailability of inventory under this category should not cause any stoppage or delays.

D- Desirable category

The desirable category of inventory is the least important among the three, and their unavailability may result in minor stoppages in production or other processes. Moreover, the easy replenishment of such shortages is possible in a short duration of time.

Importance/Usage of VED Analysis

VED analysis is a crucial tool for understanding and categorizing inventory according to its importance. It is of utmost importance to any organization to maintain an optimum level of inventory. Maintaining inventory has its costs, and hence, this analysis bifurcates inventory into three parts to help in managerial decisions on inventory maintenance. There are four types of costs to maintain stock which are Item cost, Ordering / Set-up Cost, Holding Costs and Stock-Out Cost. Because of it, the management can optimize costs by investing more in the vital and essential categories of stock and lesser in the desirable category of inventory. Small and big organizations both widely use VED analysis.

Resources are always scarce for any organization, and thus optimum utilization of available resources is the key to success. Since costs related to maintaining inventory are high, it becomes the responsibility of the management to tackle these costs effectively. Scientific methods like VED analysis help maintain an optimum stock level without posing risks of shortages or non-availability of essential spares, parts, or products.

8) Inventory Turnover Ratio:

Inventory turnover ratio is an expression of how often a company sold and replaced its inventory during particular period of time like half year, year etc. Calculating inventory turnover can help businesses make more informed decisions on pricing, marketing, manufacturing, and purchasing new inventory items. To calculate Inventory Turnover Ratio, the following formula is used.

Inventory Turnover Ratio = Cost of Goods Sold ÷ Average Inventory Value

A slow turnover rate might imply weak sales or a large volume of excess inventory, whereas a faster ratio likely signifies strong sales or insufficient inventory levels. Either way, ITR is an important tool for analysing areas of inventory improvement.

9) Aging Schedule of Inventory

Every business owner is more enjoyable when the products are sold out fast, and have enough available inventory to accurately fulfil every order. Stagnant, excess inventory can cause serious issues, from increasing storage costs to diminished profit margins. There's a viable solution to avoid the traps of unmoved inventory and keep cash flowing and that is Aging Schedule of Inventory.

Aging inventory is a term for goods that haven't sold quickly or haven't sold for their suggested retail price. Retailers track aging inventory because once an item has reached its threshold and remains unsold (i.e. after six or more months), that merchandise likely needs to be marked down to clear out the dead stock and bring in new products.

Calculating average inventory age is an important part of inventory management, and for this it is necessary to know average inventory cost, cost of goods sold (COGS), as well as inventory turnover ratio (ITR).

i. Average Inventory Cost:

Average inventory estimates the amount or value of a company's inventory over a specific time period. To calculate average inventory cost, the following formula is used.

Average Inventory Cost = Annual Cost of Goods Sold ÷ Total Ending Inventory

While inventory balances can fluctuate significantly — depending on seasonality, when shipments are received, and so on — an average cost calculation evens out these sudden spikes in either direction, and serves as a reasonable indicator of inventory valuation.

ii. Cost of goods sold:

Cost of goods sold refers to the price of producing the goods sold by a business. The COGS amount includes expenses directly related to production like raw materials and cost of labour etc., but it excludes a range of indirect expenses like overhead and marketing etc.To calculate Cost of Goods Sold, the following formula is used.

Cost of Goods Sold = [Beginning Inventory + Purchases during period] – Ending inventory

Here, the beginning inventory is the amount of inventory leftover from the previous period (month, quarter, etc). As its name suggests, purchases during the period points to the cost of what you purchased within the designated accounting period. Lastly, ending inventory is whatever didn't sell during that same time period.

iii. Inventory Turnover Ratio:

Inventory turnover ratio is an expression of how often a company sold and replaced its inventory during particular period of time like half year, year etc. Calculating inventory turnover can help businesses make more informed decisions on pricing, marketing, manufacturing, and purchasing new inventory items. To calculate Inventory Turnover Ratio, the following formula is used.

Inventory Turnover Ratio = Cost of Goods Sold ÷ Average Inventory Value

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iv. Average Inventory Age:

Inventory's age reflects the average number of days it takes to sell off certain goods. For that reason, analysts often utilize this measure to determine the efficiency of a company's sales. On occasion, the average age of inventory is also referred to as days sales in inventory (DSI). To find inventory age of goods, following formula is used.

Average Inventory Age = [Average Inventory Cost ÷ Cost of Goods Sold] X 365 days

In general, it is recommended that businesses confirm this figure with supplemental inventory metrics such as gross profit margin.

Importance/Advantages:

Leveraging the inventory aging formula and/or an inventory aging report is vital to the business health and wealth. Inventory aging analysis is a powerful resource or tool designed to improve the business conditions in various ways.

i. It improves storage cost efficiency

ii. Optimize your inventory control strategy

iii. Minimize excess inventory
iv. Maximize your cashflow
v. It is usedto form inventory management strategy
vi. It is used to understand demand trends
vii. It is used to provide information for inventory planning
viii. It is used to make data-driven sales decisions

10) Periodic Inventory System

There are many inventory valuation methods available for businesses to use, and picking the right valuation method can have long-lasting effects. The two systems of maintaining inventory are perpetual and periodic inventory systems. Perpetual system continuously upgrades sales and purchase records on the software. Conversely, the Periodic inventory system manually registers the inventory updates and transactions at periodic intervals.One of the more common and simplistic valuation methods is a periodic inventory system.

Periodic inventory system is a system of inventory valuation where the business's inventory and cost of goods sold (COGS) are not updated in the accounting records after each sale and/or inventory purchase. Instead, the income statement is updated after a designated accounting period has passed.

In a periodic system, businesses don't keep a continuous record of each sale or purchase; inventory balance updates are only recorded in a purchases account over a specified period of time e.g., each month, quarter, or year.

At the end of the accounting period, the final inventory balance and COGS is determined through a physical inventory count. As periodic inventory is an accounting method rather than a calculation itself, there is no formula. However, we will use the formulas for calculating cost of goods sold and cost of goods available. To calculate the cost of goods available, add the account total for purchases to the inventory's initial balance.

Cost of Goods Sold (COGS) = (Beginning Inventory + Cost of Inventory Purchases) – Closing Inventory

OR

Cost of Goods Sold (COGS) = Cost of Goods Available – Closing Inventory

Cost of Goods Available = Beginning Inventory + Purchases

Periodic inventory allows a business to track its beginning inventory and ending inventory within an accounting period for their financial statements. Here are some of the ways it can benefit your business.

1. Easy to implement

Periodic inventory systems are relatively simple to implement as it requires fewer records than other valuation methods. The calculations are easy too.

2. Great option for small business

A periodic inventory system is best suited for smaller businesses that don't keep too much stock in their inventory. For such businesses, it is easy to perform a physical inventory count. It is also far simpler to estimate the cost of goods sold over designated periods of time.

3. Requires minimal information

While a perpetual system requires comprehensive information about each sale and purchase, periodic systems don't need to monitor each transaction.

But the periodic inventory system has some drawbacks. It can be risky for many businesses as stock levels are not up to date, leading to delays in issues being identified, inventory write-offs, and major challenges with inventory forecasting as the businesses don't always have exact figures on finished goods inventory, or the total stock available for customers to purchase.

11) Perpetual Inventory System

The real-time inventory information certainly helps the merchant handle predictions, offer precise shipment instructions, and provide superior customer service. Furthermore, periodic and perpetual inventory system are two contrasting methods following real-time and manual stockpile management processes, respectively.

A perpetual inventory system permits real-time updating of the physical inventory and so, workers save these details in a frequently modified directory to trace each change. In addition, it tracks the merchandise by updating the product catalogue upon each transaction. That is to say, it is a more pragmatic and capable inventory management choice for numerous corporations.

Please note that the inventory management system derives its value from the coordination capacity with other industries. For instance, its unification with the fiscal system ensures correct tax reporting. Also, the integration with the marketing system aids in comprehending consumer behaviour.

Large companies with huge inventory amounts or small and medium enterprises looking for expandability maintain the perpetual system. That is to say, it is useful to understand profitability and margins.

Whenever the enterprise sells or purchases the latest inventory, the software registers the prices charged and any modifications within the sales revenueaccount. It certainly confirms that accounting documents display specific balances in the affected accounts. Furthermore, the market price, purchase price, and accounts affected are crucial elements of the perpetual inventory system journal entry.

Advantages of Perpetual Inventory System:

There are various advantages of Perpetual Inventory System out of which a few advantages are mentioned below:

i. Real-time Inventory Management

The perpetual inventory system meaning signifies the immediate reporting of stockpile developments as well as updates. Hence, the inventory counts are always error-free. Moreover, external auditors get financial statements like an inventory checklist with related unit quantities and placements for the stock-taking procedure.

ii. Money-saving

Owing to the perpetual inventory, companies are not required to shut the establishments for physical inspection. Additionally, details from scanned barcodes assist in estimating economic order quantity and stock forecasting. This certainly aids businesses in accounting for all dealings to offer absolute liability for the items.

iii. Perfect Demand Estimation

It undoubtedly aids in predicting subsequent sales cycles to guarantee precise inventory availability throughout different seasons, like public holidays. In addition, it helps determine the reorder point and thus, avoids the problems associated with overstocking. Moreover, utilizing Point of sales terminals aids in the precise calculation of when, what, and how much to stock.

iv. Comprehensive Documentation

Please note that the perpetual system comprises records for all transactions entailing inventory. Consequently, it becomes effortless to discover filling mistakes. This not only helps sustain total management but also aids in directing transaction inquiries to facilitate instruction and operations. Moreover, it soars the accuracy of inventory records over time.

Difference between Periodic Inventory System V/s Perpetual Inventory System:

Particulars	Periodic Inventory System	Perpetual Inventory System
Definition	Manual recording of transactions	Computerized recording of transactions
Accounts updating frequency	Periodically	Constantly
Complexity level	Relatively low	Higher
Computing COGS	Computable at the end of the accounting period	Always computable
Documentation of transactions	Physically	Digitally
Cycle counting	No	Yes
Conducting investigations	Complicated	Uncomplicated
Suitable consumers	Growing businesses with little sales volume and easily trackable stockpile	Firms with high gross revenues or various retail stores, or Organizations specializing in drop shipping or marketing and delivery.
Reporting purchases	Purchases asset account	Raw materials inventory account, or Merchandise account

4.3 Summary:

The definition of working capital itself explains the significance of it in the business that it is the amount which is used to carry on day to day working of the business. That means without working capital the working of the business cannot be possible. Working capital is called as the life blood or heart of the business. Importance of working capital in the business explains the need of working capital management. The most widely used concept of working capital is defined as, "the difference between current assets and current liabilities." This concept is useful to know the liquidity of the firm. There are different concepts/types of working capital having different meanings such as Gross Working Capital, Net Working Capital, Negative Working Capital, Permanent Working Capital, Variable Working Capital, and Cash Working Capital. Working capital finance generally refers to debt raised for a period of less than a year from Term Lending Institutions, Commercial Banks and Non-Banking Finance Companies (NBFC) catering to the short-term credit needs of the business entities. Working capital finance may be fund-based or through non-fund based or documentary credit instruments.

Working capital, in general practice, refers to the excess of current assets over current liabilities. Management of working capital therefore, is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exists between them. In other words it refers to all aspects of administration of both current assets and current liabilities. Cash management refers to management of cash balance and the bank balance including the short terms deposits. For cash management purposes, the term cash is used in this broader sense, i.e., it covers cash, cash equivalents and those assets which are immediately convertible into cash. A financial manager is required to manage the cash flows (both inflows and outflows) arising out of the operations of the firm. Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm. Credit/Receivables management is the process of making decisions relating to investment in trade debtors. Certain investment in receivables is necessary to increase the sales and the profits of a firm. But at the same time investment in this asset involves cost considerations also. Further, there is always a risk of bad debts too. The Receivables management consists of matching the cost of increasing sales (particularly credit sales) with the benefits arising out of increased sales with the objective of maximizing the return on investment of the firm. Inventory management includes proper planning of purchasing, handling, storing and accounting of inventory. An efficient system of inventory management will determine (a) what to purchase (b) how much to purchase (c) from where to purchase (d) where to store, etc. There are different important tools and techniques of inventory management and control such as Determination of Stock Levels, Determination of safety stocks, Ordering System of Inventory, Determination of Economic Order Quantity, JIT Analysis, A-B-C Analysis, VED Analysis, Inventory Turnover Ratio, Aging Schedule of Inventories, Perpetual inventory system etc.

4.4 Terms to Remember :

- **Working Capital:** Working capital is defined as, "the difference between current assets and current liabilities."
- **Working Capital Management:** Management of working capital therefore, is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the inter-relationship that exists between them. In other words it refers to all aspects of administration of both current assets and current liabilities.
- **Cash Management:** Cash management refers to management of cash balance and the bank balance including the short terms deposits.
- **Liquidity Management:** Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm.
- **Credit/Receivables Management:** Liquidity Management is the management who looks after to maintain the sound liquidity position of the firm.
- **Inventory Management:** Inventory management includes proper planning of purchasing, handling, storing and accounting of inventory.

4.5 Check Your Progress:

A. Choose the correct alternative:

1. The current assets minus the current liabilities is termed as ---------

   a. Working Capital b. Circulating Capital

   c. Net Current Assets d. All of above

2. Permanent working capital is also known as -----------

a. Minimum working capital b. Fixed working capital

c. Care current assets d. All of above

3. CP can be issued in denominations of ------ or multiple thereof.

a. Rs. One Lakh b. Rs. Five Lakhs

c. Rs Five Thousand d. Rs. One Thousand

4. The most common accruals are -----------

a. Wages and salaries b. Taxes

c. Short-terms obligations d. All of above

5. Credit/Receivables management involves the careful consideration of ------ aspects.

a. Credit Policy b. Credit Evaluation

c. Monitoring Receivables d. All of above

6. Public deposits cannot exceed -------- of paid-up share capital and free reserves.

a. 10% b. 50%

c. 25% d. 5%

7. Cash Management Strategies are intended to ------- the operating cash balance requirement.

a. Maximize b. Minimize

c. Expand d. All of above

8. The credit policy decision of firm has ---------- dimensions.

a. Credit Standards b. Credit Term

c. Collection Efforts d. All of above

9. Inter-corporate deposits are may be of --------

a. Call Deposits b. Three Months Deposits

c. Six Months Deposits d. All of above

10. An efficient system of inventory management will determine

a. what to purchase b. how much to purchase

c. from where to purchase and where to store d. All of above

B. Fill in the Blanks:

i) Difference between current assets and current liabilities is known as.......

ii) -------- working capital remains in the business in one form or another.

iii) Negative working capital means the excess of current --------- over the current ------.

iv) Working capital finance generally refers to debt raised for a period of ------ than a year.

v) ------------- are short term unsecured promissory notes issued by firms with a high credit rating at a discount on the face value.

vi) The Miller-Orr (MO) model is also known as --------- model.

vii) Credit/Receivables management is the process of making decisions relating to investment in -------------.

C. State 'True' or 'False'.

i. Trade credit it is the largest source of short-term funds.

ii. The higher the cash turnover, the more is the cash a firm requires.

iii. Variable working capital is financed out of short term funds.

iv. Permanent working capital is different from fixed capital.

v. The Baumol cash management model provides a formal approach for determining a firm's optimum cash balance under uncertainty.

vi. A proper balance in liquidity is maintained through efficient liquidity management.

vii. Proper inventory control brings economies in purchasing the raw materials.

4.6 Answers to Check Your Progress:

A. Choose the correct alternative:

1 – d, 2 – d, 3 – b, 4 – d, 5 – d, 6 – c, 7 – b, 8 – d, 9 – d, 10 - d

B. Fill in the Blanks:

i- working capital, ii – Permanent, iii – liabilities, assets, iv – less,

v - Commercial Papers, vi – stochastic, vii – trade debtors

C. State 'True' or 'False'.

i- True, ii – False, iii – True, iv – True, v – False, vi – True, vii - True

4.7 Exercise:

1. What is working capital? State its significance.
2. Explain the types of working capital.
3. Describe the various factors determining the working capital.
4. What are the various sources of financing working capital requirement?
5. What is working capital management?
6. What is cash management? Explain the techniques of cash management.
7. What is liquidity management? State the techniques of liquidity management.
8. What is credit/receivables management? Explain the dimensions of credit management.
9. What is inventory management? What are the objectives of inventory management?
10. Explain the various techniques of inventory management.

Practical: Obtain financial report of any company and calculate working capital and identify source of finance.

Calculation of working capital:

1. Working Capital is calculated on the basis of difference between Current Assets and Current Liabilities. The formula is:

   Working Capital = Current Assets - Current Liabilities

2. Current Assets include Inventory/Closing Stock, Sundry Debtors, Cash and Bank Balance and Prepaid Expenses/ Advance Payments. In the given illustration the current assets are Inventory/Closing Stock, Sundry Debtors, Cash and Bank Balance.

3. Current Liabilities include Sundry Creditors and Outstanding Expenses/Delay in Payments. In the given illustration the current liabilities include Sundry Creditors.

4. Inventory/Closing Stock is of three types namely Raw Materials, Work in Process and Finished Goods. It is estimated on the basis the period of inventory/stock with company.

5. Sundry Debtors are calculated on the basis of period of credit allowed to customers and only on credit sales. These are calculated generally on the basis of cost of sales.

6. Sundry Creditors are calculated on the basis of period of credit allowed by suppliers.

7. If period is given in weeks 52 weeks in a year, in months 12 months in a year and in days 360 days in a year are considered.

   On the basis of above calculation is made as follows:

Illustration:

The financial information of Coal India Ltd. for the year ending 31st March 2020 was as follows:

1. Total sales during the year were Rs. 845.16 crores.
2. Fixed expenses per month were Rs. 92.68 crores.

3. Operating profit was 19.22% of sales

4. Inventory Turnover Ratio 7.55

5. Debtors Turnover Ratio 11.48

6. Trade payables per month were Rs. 14.19 crores.

Calculate working capital.

Solution:

Statement of Working Capital

(Rs in Crore)

Particulars	**Rs.**	**Rs.**
A) Current Assets :		
1. Stock/Inventory (Note 1)		90.43
2. Sundry Debtors (Note 2)		26.95
3. Cash		092.68
Total Current Assets (A)		210.06
Less :		
B) Current Liabilities :		
1. Trade payables (B)		014.19
Net Working Capital (A-B)		**195.87**

Working Notes:

1. Stock/Inventory:

Stock Turnover Ratio = $\frac{\textit{Cost of Goods Sold}}{\textit{Average Stock}}$

$$7.55 = \frac{682.72}{\textit{Average Stock}}$$

= 90.43 Crores

Average Stock = 90.43 Crores

Cost of Goods Sold:

= Sales – Operating Profit

= 845.16 – 162.44 (19.22% of 845.16)

= 682.72 Crores

2. Debtors Turnover Ratio

Debtors Turnover Ratio = $\frac{Debtors}{Credit\ sales} \times 360$ days

11.48 $= \frac{Debtors}{845.16} \times 360$ days

= 26.95 Crores

Sundry Debtors = 26.95 Crores

Sources of Working Capital Finance:

Working capital finance generally refers to debt raised for a period of less than a year from Term Lending Institutions, Commercial Banks and Non-Banking Finance Companies (NBFC) catering to the short-term credit needs of the business entities.

In the above illustration the sources of Working Capital Finance may be Accruals, Trade Credit, Loan from Commercial Banks, Working Capital Loan like Bills Financing, Bills discounting etc.

4.8 Further Readings:

1. Advanced Financial Management - Dr. N. M. Vechalekar.
2. Introduction to Financial Management - I M Pandey
3. Financial Management - Prasanna Chandra
4. Financial Management - Khan and Jain
5. Financial management - Ravi M Kirhare
6. Cost Accounting and Financial management – Tulsian
7. Financial Management - P V Kulkarni
8. Financial Management - S C Saxena
9. Financial Management - Hogland.

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