

# 6/1/24 Unit 1 : Introduction :-

1. Define financial management? Explain the nature of financial management.

## A) Introduction :-

The term financial management consist of two words, financial & management. Financial deals with the process of identifying, obtaining and allocating sources of money. Management is the process of planning, organising, co-ordinating and controlling various resources for the accomplishment of organisational goals.

Financial management is that a branch of business management process, which deals with management of financial resources of an enterprise. Financial management may be consider to be the management of the finance function. It provides best guide for future resource allocation by a firms.

## Definitions :-

"Financial management involves the application of general management principles to a particular financial operation" - Howard

"Financial management is the application of the planning and control function to the finance function". - Archer & Ambrosio

"Financial management is concern with those managerial decisions, which result in the acquisition and financing of long term and short term assets of a firm". - S.C. Trichhal

## Nature of financial management :-

A financial manager will have to concentrate on the following areas of finance function

### 1. Estimating Capital Requirement:-

The first task of a financial Manager is to estimating capital requirement. It helps in

anticipation of funds by estimating working capital and fixed capital requirements for carrying business activities.

## 2. Deciding Capital structure.

Capital structure refers to proper balance between debt and equity should be attained, which minimizes the cost of capital.

Financial management decides proper portion of different securities should be raised. A decision about various sources for funds should be linked to the cost of raising funds

## 3. Selecting a source of finance:-

An appropriate source of finance is selected after preparing a capital structure, which includes shares, debentures and bonds, financial institutions, public deposits etc..

If finance is needed for short term finance than banks, public deposits. and financial institutions may be appropriate. On the other hand, If long term finance is required than share capital and debentures may be the use ful.

## 4. Selecting a investment Pattern:-

The funds will have to be spent first on fixed assets and then an appropriate portion will be retained for other requirements that is working capital

## 5. Proper cash management:-

Cash management is an important task of financial manager. He has to assess various cash needs at different times and then make the arrangements for arranging the cash.

Cash may be required to purchase of raw materials, make payments to creditors, other day-to-day expenses. The idle cash with the business that means it is not properly used

## 6. Implementing financial controls:-

It helps in keeping the company, alive of operation within the limits and earnings the

expected profits.

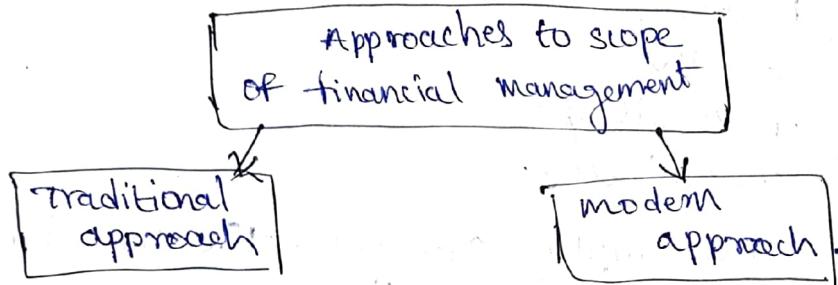
## 7. Proper use of Surpluses

The utilization of profits or surpluses is also an important factor in financial management. A balance should be needed in using funds for paying dividend and retain earnings <sup>for</sup> expansion financing expansion plans.

2) Explain the scope of financial management (or)  
Explain the approaches of financial Management

### A) Scope of financial management:

It can be divided into two different approaches. They are given below



### i. Traditional approach:-

The traditional approach to the finance function relates to the initial stages of its evolution during 1920's and 1930's. According to this approach the scope of finance function was confined to only procurement of funds needed by a business on most suitable firms. The utilization of funds was consider beyond the preview of finance function.

### Limitations of the traditional approach:-

The traditional approach suffers the following are the limitations.

1. It is outsider ~~internal~~ decision making looking in approach that completely ignores Internal decision making as to the proper utilization of funds.
2. It is ignored the important issue of working capital finance and management.
3. The issue of allocation of funds is important today, it is completely ignored under this approach.

## 2. Modern approach:-

The Modern approach views the term finance management in a broad sense. It includes both raising of funds as well as their effective utilization of the finances.

The finance function doesn't stop only by finding out sources of raising enough funds, their proper utilization is also to be considered. The utilization of funds requires decision making. Finance has to be considered an integral part of overall management.

So, finance functions according to this approach covers,

- \* Financial Planning
- \* Raising of funds
- \* Allocation of funds &
- \* Financial control etc..

The modern approach thus consider the 3 basic management decisions that is.

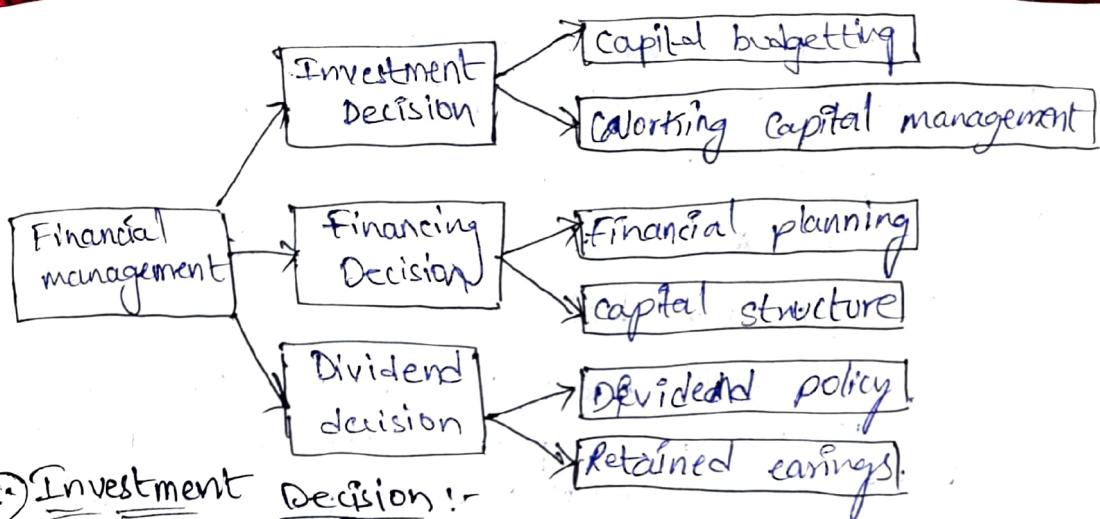
1. Investment decisions
2. Financing decisions
3. Dividend decisions

Q3. Explain the function (or) decision of the financial management?

### A) Introduction:-

The modern approach to financing management provides a conceptual and analytical framework for financial decision-making. The modern approach to financial management includes 3 major managerial financial decision (or) functions of finance, they are,

1. Investment decision,
2. Financing decision,
3. Dividend decision.



## ① Investment Decision :-

Investment decision refers to the completion of the assets in term of long term assets and short-term assets.

⇒ The long-term assets is called "Fixed assets" yielding returns over a period of time in future.

⇒ The short-term assets, otherwise called "current assets" are convertible into cash usually within a year. It is the most important financial decision.

The investment decision can be classified under two types :-

- ① a long term investment decision (or) Capital budgeting.
- ② short term investment decision (or) working capital management

## Capital Budgeting :-

It is the process of investment decision in capital expenditure. These are expenditures, the benefits of which are expected to received over a long period of time exceeding one year.

## Working Capital Management :-

short term investment decision relates to the allocation of funds as among cash and equivalents, receivables and inventories such a decision is influenced by trade off between liquidity and profitability.

## ② financing Decision :-

② other important decision is to be taken by the financial manager is the financial decision which involves to acquisition of funds to meet the firm investment requirement.

- (B) Managers make decision related to raising finance from long term sources and short-term sources; they are -
- ① financial planning decision.
  - ② Capital structure.
- ① Financial planning decision:-

which relates to estimating the source and application of funds. The primary objective of financial planning is to plan and ensure that the funds are available as when required.

- ② Capital structure decision:-

which involves identifying source of funds. It choosing the external sources like issuing shares, bonds, borrowing from banks (or) Internal sources like retained earnings for raising funds.

$$\boxed{\text{Capital structure} = \text{Equity} + \text{Debt}}$$

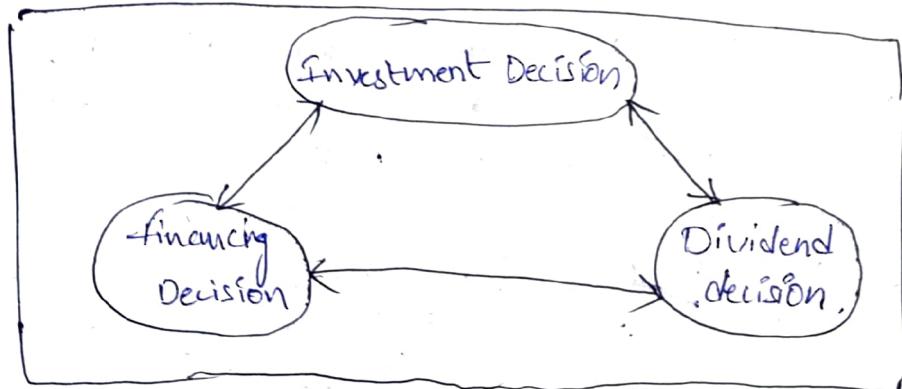
- ③ Dividend decision:-

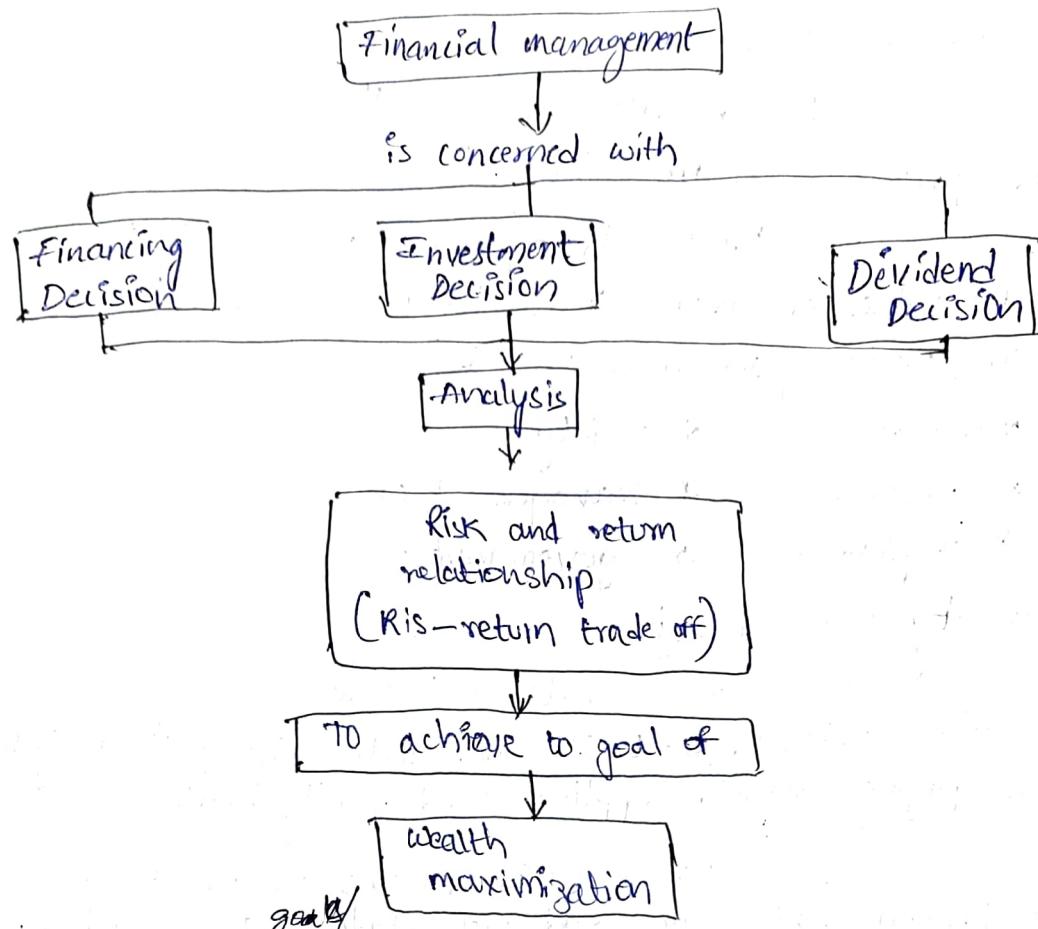
The third important managerial financial decision relates to firm's dividend policy there involve decision related to the portion of profit that will be distributed as dividend. Dividend is that portion of divisible profits that is distributed to the owners i.e., the shareholders.

Retained earnings is the proportion of profits kept in, that is invested in the business.

The optimal dividend policy maximizes the value of the share and it is consistent with the objective of wealth maximization.

- Inter-Relational Decision:-





④ Write the objectives of ~~health~~ financial Management?

A) The objectives of Financial Management is ensuring the efficient use of financial resources to achieve the organisation's goals. These are the main objective of financial management are given below.

#### i) Profit maximization:-

According to this approach, action that increase profit should be undertaken and those that decrease profits are to be avoided.

Profit maximization, implies that the investment financing and dividend policy decision of the firm should be oriented to the maximization of profit.

- \* optimum utilization of fixed assets.
- \* Market leadership
- \* providing incentives
- \* Avoiding risk
- \* preventing government intervention.
- \* maintaining optimum working capital.

## ② Wealth maximization :-

This is also known as "Value maximization".

### (Or) Net present worth maximization."

The wealth of owner is reflected in the market value of shares. So wealth maximization for the different parties are mentioned below.

- \* owners
- \* society
- \* creditors
- \* Management and
- \* employees
- \* government.

## 3. Liquidity management :-

It ensures that a business has enough cash or liquid assets to meet its immediate financial obligations such as paying salaries, suppliers and utility bills.

This objective focuses on maintaining the balance between cash inflows and cash outflows to avoid cash shortages. Therefore, financial management aims to maintain an optimum level of liquidity to ensure smooth business operations.

## 4. Cost of Capital minimization :-

It refers to the expenses incurred in raising funds through debt, equity or other financial instruments minimizing this cost is essential for improving profitability and maintaining competitive edge.

## 5. Efficient Resource allocation :-

Efficient Resource allocation ensures that financial resources are directed towards projects and activities that generates the highest returns. Those resources are used effectively to maximize value creation and avoid waste, contributing to the organisation's overall growth and profitability.

## Q) Write the importance of financial management?

A) financial management provides pathways to attain goals and objectives in an organisation. The main duty of a financial manager is to measure organisational efficiency through proper allocation, acquisition.

and management. The importance of financial management is given below.

1. It provides guidelines in financial planning.
2. It assists in acquiring funds from different sources.
3. It helps in investing an appropriate amount of funds.
4. Financial management increases organisational efficiency.
5. It reduces delay production.
6. It reduces cost of fund.
7. It ensures proper use of funds.
8. Financial management helps business firm to take financial decisions.
9. It provides guidelines for earning maximum profits with minimum cost.
10. It provides information through financial reporting.

Q. Explain the differences between profit maximization and wealth maximization.

A) Differences between profit maximization & wealth maximization :-

Profit maximization	Wealth maximization
1. The process through which the company is capable of increasing earning capacity is known as profit maximization.	1. The ability of the company in increasing the value of its stock in the market is known as wealth maximization.
2. Profit maximization is a short term objective of the firm.	2. Wealth maximization is a long-term objective of the firm.
3. Profit maximization ignores risk and uncertainty.	3. Wealth maximization recognises and considers both.
4. It avoids time value of money.	4. Wealth maximization recognises the time value of money.
5. It is necessary for the survival and growth of the enterprise.	5. It accelerates the growth of the enterprise and aims at attaining the maximum market share of the economy.

7) Explain the role of financial manager in modern business organisations?

A) A financial manager is a person who is responsible in a significant way to carry out the finance. It should be noted that in a modern enterprise the financial manager occupies a key position. He/She is one of the members of the top management team and his/her role to the day-to-day is becoming more intensive and significant in solving the complex funds management problems.

The financial manager is now responsible for shaping the fortunes of the enterprise and foresighted funds of the enterprise are utilised in the most efficient manner. That's why finance manager is an integral part of corporate management of an organization.

The main role of a finance manager is to perform the following functions.

### 1. Determining financial needs :-

One of the most important functions of the financial manager is to ensure the availability of adequate financing. Financial needs have to be assessed for different purpose. Money may be required for initial promotional expenses, fixed capital and working capital needs. promotional expenditure includes expenditure incurred in the process of company formation.

### 2. Determining source of funds :-

The financial manager has to choose sources of funds. He may issue different types of securities and debenture may borrow from a number of finance institutions and the public. The financial manager must definitely know what he is doing about strategies to ensure good financial health of the firm.

### 3. Financial analysis :-

It is the evaluation & interpretation of a firm's financial position and operation and involves a comparison and interpretation of

accounting data the financial manager has interpret different statement.

#### 4. optimal capital source :-

The F.M has to establish an optimum Capital structure and ensure the maximum rate of return on investment and the liabilities carrying fixed charges has to be defined.

#### 5. cost volume profit analysis :-

This is popularly known as the CVP relationship for this purpose are fixed cost, variable cost and semi-variable cost have to be analyzed.

#### 6. profit planning and control :-

Profit planning and control have assumed great importance in the financial activities of modern business. Profit planning ensures the attainment of stability and growth the break even analysis and cost volume profit it analysis are important tools in profit planning and control of the firms.

#### 7. Fixed assets Management :-

A firm fixed assets are land, building, machinery and equipment, furniture and such intangibles as patents, copy rights and good will these fixed assets are justified to the extent of their utility or their production capacity.

#### 8. Capital budgeting :-

It refers to the long term planning for investment in projects and fixed assets and methods of financing the approved projects. It includes the method of mobilization of long-term funds and their deployments in profitable projects. Capital budgeting is considered as the process of making investment decisions on capital expenditure.

#### 9. Dividend policies :-

The Dividend policy of a firm determines the

magnitude of the earnings distributed to shareholders the net operating profit or profit after tax (PAT) has to be intelligently appportioned between dividend payment and investments. The dividend policy determines the amount of dividend payment to be made to the shareholders. The date of payments of dividends and the effect of the dividend policy on the value of the firm.

#### 10. Acquisition and mergers:-

An merger is a transaction where two firms agree to integrate their operations on a relatively equal basis because they have resources and capabilities that together may create a stronger competitive advantage. Two or more companies combine to form either a new company or one of the combining companies survives which is generally the acquires.

#### 8. Write the functions on finance (or) detailed notes on finance functions.

A)

To financial resources wisely to achieve its goals, remain stable and grow overtime. The following are the various functions of finance.

##### 1. Investment Decisions:-

To put money for growth, like buying new equipment, launching a new product. Evaluating different options to choose the best one with the best results.

##### 2. Financing Decisions:-

Deciding how to raise money for the business, such as taking loans, issuing shares or company savings. Choosing the right mix of debt and equity to balance cost and risk.

##### 3. Dividend Decisions:-

Deciding how much profit to distribute to shareholders as dividend and how much to

reinvest in the business.

#### 4. Working Capital management:-

It is important for the company has enough cash to meet short term needs without holding too much of cost.

#### 5. Profit Management:-

Controlling cost and improving revenues to maximize profit. Focuses on increasing efficiency and finding ways to grow earnings.

#### 6. Risk Management:-

It ensures the business is protected from unexpected financial losses. Financial

#### 7. Financial Analysis and Reporting:-

Analysing financial data to understand the company's performance. Preparing reports like profit and loss statements or balance sheet for share holders.

Date  
5/7/25

Unit-II

# Capital Budgeting /

## Investment Decisions:-

1. Explain the Capital budgeting and its features?

### A). Introduction:-

\* budget is made for a long term capital investments of Capital Expenditure. The process of preparing capital budget is known as Capital budgeting. It is the process of making investment decisions in fixed assets.

### Concept of Capital Budgeting:-

The term Capital Budgeting refers to investment on long term activities, in anticipation of expected return over a period of time exceeding one year. It is also known as investment decision making or Capital expenditure decision or analysis of capital expenditure.

### Definitions:-

1. " Capital Budgeting is a long term planning for making and financing to proposed capital outlay".  
— Brigham

2. " Capital Budgeting generally refers to an acquiring inputs for achieving long run returns".  
— Solomon Ezra

3. " Capital Budgeting consists in planning development of available capital for the purpose of maximizing the long term profitability of the concern".  
— Lynch

### Features of Capital Budgeting:-

The following are the features of Capital budgeting

\* Capital Budgeting decisions involves the exchange of current funds for the benefits to be achieved in future.

\* The feature benefits are expected to be realized over a period of years.

\* The funds are invested in non-flexible and long term

activities.

- \* They have a long term and significant effect on the profitability of the concern.
- \* They involve generally huge funds
- \* The decisions taken through the capital budgeting process are irreversible decisions in nature.

2. Explain the need, significance or importance of Capital Budgeting?

A) Capital Budgeting means planning for Capital Assets.

The following are the points relates to the importance of Capital Budgeting.

1. Large Investments:-

Generally Capital budgeting decisions involve large investment of funds. But, the funds available with the firm are always limited and the demand for funds exceeds the resources. Hence it is very important for a firm to plan and control its capital expenditure.

2. Long-term commitment of funds:-

Long-term commitment of funds increases the financial risk involved in the investment decision. Greater the risk involved, Greater is the need for careful planning of capital expenditure that is capital budgeting.

3. Irreversible in nature:-

The capital expenditure decisions are of irreversible nature. Once the decision for acquiring a permanent asset is taken, It becomes very difficult to dispose of those assets without incurring heavy losses.

4. Long term effect on profitability:-

Capital budgeting decisions have a long term and significant effect on the profitability of a concern not only the present earnings of the firm.

but also the future growth and profitability of the firm depends upon the investment decision taken today.

capital budgeting is almost important to avoid over investment or under investment in fixed assets.

### 5. Difficulties of Investment Decisions :-

the long term investment decisions are difficult to be taken because

1. Decision extends to a series of 20 years beyond the current accounting period.
2. Uncertainties of future.
3. Higher degree of risk.

### 6. National Importance :-

Investment decisions though taken by individual concern is of National importance because it determines employment, economic activities and economic growth.

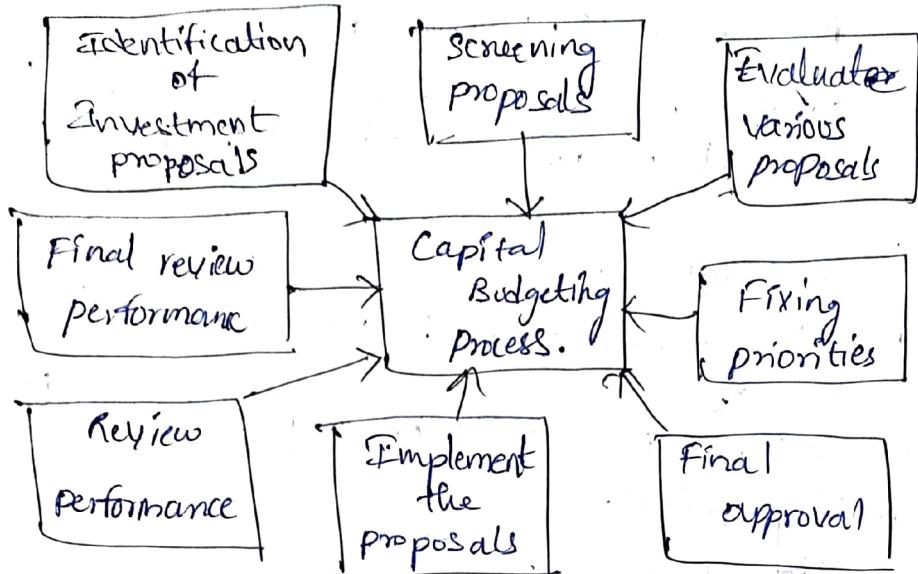
### Conclusion :-

Finally it is said that without using Capital Budgeting techniques a firm may involve itself in a losing project. Proper timing of purchase, replacement, expansion and alteration of asset is essential.

### Q) write about the capital Budgeting process?

A) Capital Budgeting is a complex process, as it involves decisions relating to the investment of current funds for the benefits to be achieved in future and the future is always uncertain.

The following procedure is adopted in the process of capital budgeting



### 1. Identification of investment proposals :-

The capital budgeting process begins with the identification of investment proposals. The proposal or the idea about potential investment opportunities from the top management of the organisation.

### 2. Screening the proposals :-

The Expenditure planning committee screens the various proposals received from different department. The committee views those proposals from various angles in accordance with the corporate strategies.

### 3. Evaluation of various proposals :-

The next step in the capital budgeting process is to evaluate the profitability of various proposals. There are followed many methods to be used such as profitability index, payback period method, internal rate of return method, net present value method etc.. All these methods of evaluating profitability of Capital investment proposals.

### 4. Fixing priorities :-

After Evaluating various proposals, unprofitable or uneconomic proposals may be rejected in the straight way. Hence, it is very essential to rank the various proposals and to establish priorities after considering urgency, Risk and profitability involved there in.

## 5. Final Approval :-

Proposals meeting the evaluation and finally approved to be included in the capital expenditure budget. It is lays down the amount of estimated expenditure to be incurred on fixed assets during the budget period.

## 6. Implementing proposals :-

Preparation of a capital expenditure budgeting and incorporation of a particular proposal in the budget with the implementation of the project.

While implementing the project, it is better to assign responsibilities. For completing the project within the given time and cost limit, so as to avoid unnecessary delays and cost over runs.

## 7. Review Performance :-

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

## 8. Final Review Performance :-

The unfavourable variances, if any should be looked into and the causes of the same to be identified so that corrective action may be taken in future.

## 4. Discuss about the factors influencing Capital budgeting decisions?

a) There are many factors, financial as well as non-financial, which influence the capital expenditure decisions. The following which are highly influencing Capital budgeting

Expenditure decisions.

1) Urgency :- A project may be selected immediately due to emergency or urgency. The reason is that such immediate selection saves the life of the company i.e., survival of a company is the primary importance than other factor.

→ Example of urgency are = Breakdown of some plant and machinery (P/M), fire accident etc..

2. Availability of funds :-

All the projects are not requiring the same level of investments. Some projects require huge amount and having high profitability. If the company does not have adequate funds, such projects may be given up.

3. Minimum rate of return on investment :-

Every management expects a minimum rate of return on capital investment. It refers to the point at which a project would not be accepted.

4. Future Earnings :-

The future earnings may be uniform or fluctuating. Even, though the company expects guaranteed future earnings in total which affects the choice of a project.

5. Legal Functions :-

The management should consider the legal factors while selecting a project. In the case of leather and chemical industries there are number of provisions created to protect environment pollution.

Now, the management gives much importance to legal provisions rather than cost and profit.

6. Degree of Risk and uncertainty :-

Every proposal involves certain risk and

uncertainty due to economic condition, competition demand and supply conditions, consumer preferences etc. The degree of risk and uncertainty affects the profitability of the project.

Hence the degree of risk and uncertainty of the project is taken into consideration for selection.

#### 7. Research and development Projects:-

It is highly required for technology based industries. The research and development project gives more benefits in the long run.

#### 8. Obt obsolescence :-

The replacement of existing fixed assets is compulsory since there can be obsolescence of plant and machinery.

#### 9. Intangible factors:-

Goodwill of the company, industries relations, safety and welfare of employees are considered while selecting a project instead of considering project alone. These factors also responsible for selection of any project.

### 5. Explain the kinds of capital decisions?

a) The overall objective of Capital budgeting is to maximize the profitability of a firm or the return on investment. This objective can be achieved either by increasing the revenues or by reducing costs.

Under consideration of the investment proposals, Capital budgeting decisions may be classified into 3..

\* Accept - Reject Decisions.

2. Mutually Exclusive project decisions

3. Capital rationing decisions.

1. Accept - Reject Decisions:-

It relates to independent proposals, which

Do not compete with one another, such decisions are generally taken on the basis of minimum return on investment.

All those proposals, which yield a rate of return higher than the minimum required rate of return are accepted and the others are rejected

## 2. Mutually Exclusive project Decisions :-

Such decisions relate to proposals, which compete with one another in such a way that acceptance of one automatically excludes the acceptance of the other. Thus, one of the proposals is selected at the cost of the other.

Ex:- A company may have the option of buying a new machine or a second-hand machine, selecting a machine out of more than one brands available in the market. In such a case the company may select one best alternative out of the various options by adopting the suitable technique of capital budgeting. Once one alternative is selected, the others are automatically rejected.

## 3. Capital Rationing Decisions :-

A firm may have several profitable investment proposals but only limited to investment. In such a case, those various investment proposals compete for limited funds and the firm has to ration them. The firm selects the combination of proposals that will return the greatest profitability by ranking them in descending order of their profitability.

6. Explain the capital budgeting Methods and techniques? (or) "While discounted cash flow methods are more superior than the

traditional methods" - Explain.

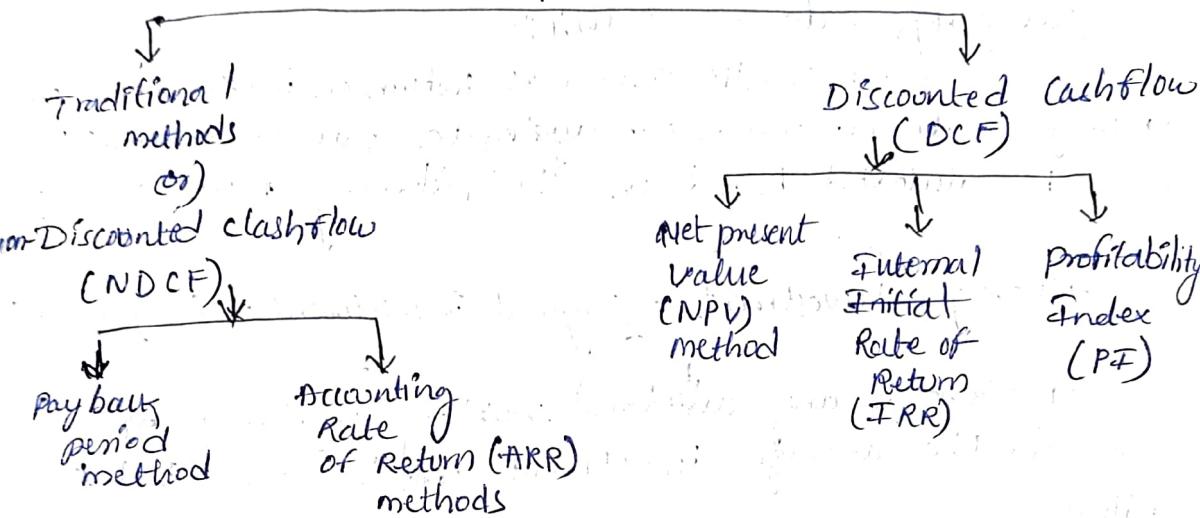
a) "Capital budgeting Evaluation techniques" or "Investment appraisal techniques".

Capital budgeting methods broadly classified into 2 categories, which are mentioned below

### Techniques of Capital Budgeting :-

Capital Budgeting techniques (or) methods

Investment appraisal methods



### Traditional Techniques or methods :-

Under traditional techniques, which future cash inflow are not discounted to arrive at their future work. Traditional techniques are divided into 2 types. They are

1. Payback period method.
2. Accounting rate of return method.

#### 1. Payback period method :-

Payback period is the no. of years required to recover the original investment of a project. It is one of the popular traditional method for evaluating the investment proposals.

In simple words, payback period refers to the period of time for which the projects Cash outflows can

be recovered from the project. Cash inflows <sup>or</sup> investment.

Formula :-

$$\text{Payback period} = \frac{\text{Investment}}{\text{Annual cash inflows}}$$

Acceptance Rule :-

Accept the project, if the calculated payback is less than the normal payback, otherwise the project should be rejected.

2. Accounting rate of Return :-

It is also known as Return on Investment or average rate of return or aggregate rate of return. It will be calculated based on the following formula.

$$\text{Average Investment} = \frac{\text{Original Investment} + \text{Scrap value}}{2}$$

If there is any additional working capital required, the average investment will be calculated as follows

$$\text{Average Investment} = \frac{\text{Original Investment} + \text{Scrap value} + \text{Additional working capital}}{2}$$

The Average rate of return is calculated as follows

$$\text{ARR} = \frac{\text{Average income after taxes}}{\text{Average investment}} \times 100$$

Acceptance Rule :-

Accept the project, if the calculated ARR is greater than normal rate of return, otherwise the project should be rejected.

Discounted cashflow methods :-

i. Net present value method :-

It is also known as net gain method. This

is one of the popular method considering time value of money. The first discounted cash flow technique is net present value.

Net present value may be defined as the summarization of the present value of the cash flows in each year minus the summarization of the present value of the net cash outflows in each year.

In order to calculate NPV the following steps should be consider.

1. Determination of annual cash inflows.
2. An appropriate rate of interest should be selected it is called cost of capital or discounting factor or present value.
3. Multiplying the annual cash inflows with respective discounting factor is get present value of cash inflows.
4. NPV should be calculated subtracting the investment from the total present value.

Acceptance Rule :-

Accept the project, if the NPV is positive or equal to zero. A project should be rejected, if the NPV is negative.

2. Internal rate of Return :-

The second discounted cash flow for appraising Capital investment decisions is the IRR method. This technique is also known as yield on investment. IRR may be define as the total present value are equal to investment at a particular rate of return. The value of IRR can be calculated by trial & error method.

Acceptance rule :-

If the calculated IRR is more than the cost of capital the project is accepted, otherwise the project should be rejected.

### 3. Profitability Index (PI) :-

Profitability index is also known as benefit cost ratio. It is based on NPV method, and similar to NPV method. The following formula to calculate the profitability index.

$$PI = \frac{\text{Present value of cash inflows}}{\text{present value of cash outflows (or) investment}}$$

### Acceptance rule :-

If the PI is greater than or equal to one the project is accepted. If the PI is less than one then that project is rejected.

### Problems

1. A project cost ₹ 100,000 and yields an annual cash inflows of ₹ 20,000 for 8 years. Calculate the payback period.

A) Payback period =  $\frac{\text{Investment}}{\text{Annual cash flow}} = \frac{100,000}{20,000}$   
 $= 5 \text{ years.}$

2. The company wants to reduce its labour cost by installing a new machine. Two types of machines are available in the market, machine X and machine Y. Machine X would cost ₹ 18,000 whereas machine Y cost ₹ 15,000. Both the machines can reduce annual labour cost by ₹ 3,000. You are required to calculate the machine X and Y the payback period and recommended the best machine.

A) Machine X =  $\frac{18,000}{3,000} = 6y$

Machine Y =  $\frac{15,000}{3,000} = 5y$

recommendations:-

According to payback period method machine Y is more desirable than machine X because it has a shorter payback period than machine X.

3. A project cost rupees 500000 and each yields annually a profit of ₹ 80,000 after depreciation, at 12% per annum. But before tax of 30%. Calculate the payback period of a project.

a) calculation of payback period:

Profit before tax	80,000
Tax 50%	40,000
Profit after tax	40,000
(+) Depreciation $(500,000 \times \frac{12}{100})$	60,000
Annual cash flow	100,000

$$\text{PBP} = \frac{\text{Investment}}{\text{Annual cash flow}}$$

$$= \frac{500,000}{100,000}$$

$$= 5 \text{ years.}$$

A. There are two projects X and Y. Each project requires an investment of ₹ 20,000. You are required to rank these projects according to payback method from the following information.

Net profit before depreciation & after tax.

Year	Project X (Rs)	Project Y (Rs)
1	1000	2000
2	2000	4000
3	4000	6000
4	5000	8000
5	2000	-

a) Project X payback period = 5 years.

$$\text{Annual cash inflow} = 1000 + 2000 + 4000 + 5000 + 8000 = 20,000$$

Project Y :-

$$PBP = 4 \text{ years.}$$

$$\text{Annual cash inflow} = 2000 + 4000 + 6000 + 8000 = 20,000$$

Hence the project Y should be preferred at the 1<sup>st</sup> rank.

5. A project cost ₹ 250000 and yields annually a profit of ₹ 50,000 after depreciation at 12% p.a. but before tax at 50%. Calculate the payback period.

A) profit before tax

50,000

(-) Tax @ 50%:

25,000

(+) Depreciation @ 12

30,000

Annual cash inflow - 55,000

$$\begin{aligned} PBP &= \frac{250000}{55000} \\ &= 4.5 \text{ yrs} \end{aligned}$$

Advantages of Payback period method :-

1. It is simple to understand and easy to calculate.
2. It requires lesser time and labour cost as compared to the other methods.
3. It reduces the loss through obsolescence and it is more suitable to the developing countries like India.

Disadvantages of Payback period method :-

1. It doesn't take into account the cash inflows earned after the payback period. Hence the true profitability of the projects can't be assessed correctly.
2. This method ignores the time value of money.
3. It doesn't take into consideration the cost of capital.
4. It may be difficult to determine the minimum acceptable payback period.

## Accounting Rate of Return method:-

1. From the following information, you are required to calculate ARR. An investment costing rupees 20,00000, It is expected to produce the following profits.

year	1	2	3	4
profit	1,60,000	3,20,000	3,60,000	1,20,000

A)  $ARR = \frac{\text{Average Income}}{\text{Average Investment}} \times 100 \Rightarrow \frac{2,40,000}{1,00,000} \times 100 = 24\%$ .

$$\text{Average income} = \frac{1,60,000 + 3,20,000 + 3,60,000 + 1,20,000}{4}$$

$$= \frac{9,60,000}{4} = 2,40,000.$$

$$\text{Average Investment} = \frac{20,00,000}{2} = 10,00,000.$$

2. A, B and C are the three projects. The projects are expected to each require ₹ 2,00,000 have an estimated life of 5y, 4y and 3y respectively. The company required rate of return is 10%. The Anticipate cash flows after tax (CFAT) for three projects are as follows.

year	project		
	A	B	C
1	50,000	80,000	100,000
2	50,000	80,000	100,000
3	50,000	80,000	100,000
4	50,000	30,000	-
5	1,90,000	-	-

rank in each project applying the method of average rate of return.

Average Rate of Return =  $\frac{\text{Average Income}}{\text{Average Investment}} \times 100$ .

Project A :-

$$\begin{aligned}\text{Average income} &= 50,000 + 50,000 + 50,000 + 50,000 + 1,90,000 \\ &= \underline{3,90,000} = 78,000.\end{aligned}$$

$$\text{Average investment} = \frac{5}{2} \underline{800,000} = 1,00,000$$

$$\text{Project A ARR} = \frac{78,000}{1,00,000} \times 100 = 78\%$$

Project B :-

$$\text{Average income} = \frac{8,70,000}{4} = 67,500$$

$$\text{Average investment} = 1,00,000$$

$$\text{Project B ARR} = \frac{67,500}{100,000} \times 100 = 67.5\%$$

Project C :-

$$\text{Average income} = \frac{8,10,000}{3} = 70,000$$

$$\text{Average investment} = 1,00,000.$$

$$\text{Project C ARR} = \frac{70,000}{1,00,000} \times 100 = 70\%$$

Ranking the projects are preferred - Project A is the first, Project C is second and Project B is third.

Advantages of ARR method :-

1. It is very simple to understand and easy to calculate.
2. It takes into consideration, the total earnings from the project during its entire economic life.
3. This approach gives weight to the profitability of the project.

Disadvantages of ARR method :-

1. This method also ignores the time value of money.

- It doesn't take into account the cash-flows, which are more important than the accounting profits.
- Under this method, longer the term of the project, greater is the risk involved.
- This method doesn't determine the fair rate of return on investment.

### Net present value method :-

i) The initial investment of ₹ 50,000, Estimated life of 5 years, Discount rate 10%. The profits before depreciation after tax. The profits (CFAT) are as follows.

Years	CFAT	Present value @ 10%
1	14,000	0.909
2	16,000	0.826
3	18,000	0.751
4	20,000	0.683
5	25,000	0.621

Calculate the net present value.

### Calculation of net present value, method :-

Year	CFAT	Present value @ 10%	Present value
1	14,000	0.909	12,726
2	16,000	0.826	13,216
3	18,000	0.751	13,518
4	20,000	0.683	13,660
5	25,000	0.621	15,525
		Total present value	68,645

$$NPV = \text{Total present value} - \text{Present value of initial Investment}$$

$$= 68,645 - 50,000 \Rightarrow 18,645$$

② From the following information of Rushi Private Limited. Suggest which of the machine to be purchased. Expected earnings after tax are given below. Each machine required investment of ₹1,00,000.

Years	Machine A Cash flows	Machine B Cash flows
0	₹100,000	₹100,000
1	40,000	1,20,000
2	1,20,000	1,160,000
3	1,60,000	2,00,000
4	2,40,000	1,20,000
5	1,60,000	88,000

cost of capital is 10%. calculate the net present value and profitability index.

a) calculation of total present values

Year	Machine A Cash flow	PV @ 10%	Present value	Machine B Cash flow	PV @ 10%	Present value
1	₹10,000	0.909	36,360	1,20,000	0.909	1,09,080
2	1,20,000	0.826	99,120	1,160,000	0.826	1,32,160
3	1,60,000	0.751	1,20,160	2,00,000	0.751	1,50,200
4	2,40,000	0.683	1,63,920	1,20,000	0.683	81,960
5	1,60,000	0.621	99,360	88,000	0.621	49,680
		TPV	5,18,920		TPV	5,23,080

$$NPV = \text{present value of cash inflow} - \text{present value of cash outflow}$$

$$\text{Machine A NPV} = 5,18,920 - 4,00,000 = 1,18,920.$$

$$\text{Machine B NPV} = 5,23,080 - 4,00,000 = 1,23,080$$

$PI = \frac{\text{Present value of cash inflows}}{\text{present value of cash outflows}}$

$$PI = \frac{5,18,920}{4,00,000} = 1.2973$$

$$\text{Machine B (PI)} = \frac{5,23,080}{4,00,000} = 1.3077.$$

- ③ From the following information, calculate the NPV of the two projects and suggest which of the two projects should be accepted, a discount rate of 10%.

particulars	project - X	project - Y
Investment	20,000	20,000
Estimated life	5y	5y
Scrap value	1000	2000

The profit before depreciation and after tax (CFAD) as follows.

year	project X	project Y
1	5000	20,000
2	10,000	10,000
3	10,000	5,000
4	3000	3000
5	2000	2,000

#### A) Calculation of NPV

Year

1  
2  
3  
4  
5

Year	Project X	DF @ 10%	Present Value	Project Y	DF @ 10%	Present Value
1	5000	0.909	4545	20,000	0.909	18,180
2	10,000	0.826	8260	10,000	0.826	8,260
3	10,000	0.751	7510	5000	0.751	3755
4	3000	0.683	2049	3000	0.683	2,049
5	2000	0.621	1242	2000	0.621	1,242
5 (sum) v)	1000	0.621	621	2000	0.621	1,242
			24,227			34,728

NPV = Present value of cash flow - present value of outflow

$$\text{Project X} = 24,227 - 20,000 = 4,227$$

$$\text{Project Y} = 34,728 - 30,000 = 4,728.$$

Acceptance Rule:-

Net present value of project 'Y' is higher than the of project 'X' and hence the project 'Y' is to be selected.

- (7) A company is apprising ten two projects A & B. The cash flows for project A is ₹ 5000 & for project B is ₹ 4,750. Both projects have an initial Capital investment of ₹ 4,750 each. Calculate the PI for both projects and determine whether or not to invest in the projects.

~~$$PI = \frac{\text{Present value of cash inflows}}{\text{Present value of cash outflows}}$$~~

$$\text{Project A PI} = \frac{5000}{4750} = 1.0526$$

$$\text{Project B PI} = \frac{4750}{4750} = 1.0211$$

Both projects have a profitability index (PI) > 1. ~~so we can accept both projects, most preferable to accept the project with the largest PI that is Project A.~~

## Advantages of NPK method :-

- It recognises the time value of money.
- This method is suitable to uniform cash outflows and uneven cash inflows at different periods of time.
- This method is useful for best decision criteria for mutually exclusive projects.
- It takes into consideration the objective of maximum profitability.

## Disadvantages :-

- As compared to the traditional methods, the net present value method is more difficult to calculate and operate.
- It is not easy to determine an appropriate discount factor.
- It doesn't give solutions, when the comparable projects are involved in different amounts of investment.

## Advantages of PI method :-

- PI method of evaluating a proposal has following advantages.
- 1. Time value of money is taken into consideration.
- 2. It is the cash flows generated during the entire life of the project are taken for analysis purpose.
- 3. It considers the exact rate of return relating to the project.
- 4. It is the objective of maximization of the shareholders wealth.

## Disadvantages :-

- 1. To determine discount rate not easy under this method.
- 2. To calculate profitability index is difficult in respect of two projects, which have different economic life.

## Capital Rationing :-

Capital Rationing is limiting factor, it occurs at any time due to lack of funds or insufficient capital to implement by investment proposals. The following steps should be consider.

1. Application of any one of the discounted cash flow methods.
2. Arranging the projects in descending order of profitability.
3. Selecting the project based on the availability of capital.

## Acceptance Rules:-

Discounting cash flow methods under 3.

$$NPV \geq 0$$

$$IRR \geq K \text{ (cost of capital)}$$

$$PI \geq 1$$

Short:-

## Risk Analysis in Capital Budgeting:-

All the techniques of Capital Budgeting required the estimation of future cash inflows and outflows. The future cash flows are estimated, Based on the following factors

1. Expected economic life of the project.
2. Capacity of the project
3. Selling price of the project
4. Production cost
5. Depreciation rate
6. Rate of taxation.
7. Future Demand of the project etc....

It is the most difficult task while making an investment decision. The following methods are suggested for accounting for risk in Capital Budgeting.

1. Accounting for risk in Capital Ex.
2. Sensitivity technique.
3. Probability technique.

- 3. Standard deviation method.
- 4. Co-efficient of various method.
- 5. Decision tree Analysis. etc...

~~Stand~~  
~~05/02/25~~

## 10/10/25 Unit-3: Financing Decisions :-

Explain the concept of leverage? write the types of leverages.

### A) Introduction :-

A company can finance its investments by variety of sources such as debt capital (debentures), preference capital and equity capital including reserves. The interest rate on debt capital is fixed and it is paid every year. The rate of preference dividend is also fixed but this dividend will be paid when the company earning profits. The rate of dividend on equity capital is not fixed, that it can be differ from year to year depending upon the decision of the board of directors at the time of annual general meeting.

### Meaning & Definition :-

"Leverage means, meeting a fixed rate or cost paying for employing the funds." The term leverage is used as the ability of the firm to meet the fixed cost assets for increasing return to the share holders." - J-L. Massie

### Classification of leverages :-

There are 2 types of leverages. They are

1. operating leverage

2. financial leverage

### 1. Operating leverage :-

The leverage associated with investment activity is called as operating leverage. operating leverage resulting from the existence of fixed operating expenses in the income. This leverage is measured to know the relationship between sales & operating profit.

### 2. Financial Leverage :-

The leverage relating to the financing activities

is known as financial leverage. Both the leverages are essential to analyse the magnitude of changes in sales. and investment.

Financial leverage resulting from the fixed financial charges in the income. The fixed financial charges doesn't change with the earning. It is always concerned with the effect of changes in EBIT on the earnings available to the owners. It may be also known as trading on equity it is divided into 2 types.

1. Trading on Thin equity
2. Trading on Thick equity

### 1. Trading on Thin Equity :-

It means the amount of borrowings are relatively large in proportion to the equity capital.

### 2. Trading on Thick Equity :-

It is just reverse position of thin equity. It will arise, when the borrowings are relatively small compared to equity capital.

### Calculation of Leverages :-

#### 1. Degree of operating leverage (DOL)

$$DOL = \frac{\text{Contribution}}{\text{EBIT} / \text{Operating profit}} = \frac{C}{EBIT}$$

#### 2. Degree of Financial leverage (DFL)

$$DFL = \frac{\text{EBIT}}{\text{EBIT}}$$

#### 3. Degree of combined leverage (DCL)

$$DCL = DOL \times DFL \quad (\text{Or})$$

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

(contd)

## Statement of profit :-

Particulars	Amount
Sales	xxxx
(-) variable cost contribution	xxx
(-) Fixed cost	xxxx
EBIT / operating profit	xxxx
(-) Interest EBIT	xxxx
(-) Taxes @ %	xxxx
Earnings after tax	xxxx
(-) Preference Dividend	xxxx
Net profit	xxxx

## Problems:-

1. A firm sales of 90,000 units, variable cost per unit 14 lakhs, fixed cost of 4 lakhs and debt of 10 lakhs at 10% rate of interest. calculate the operating leverage, financial leverage and combined leverage.

### Calculation of leverages :-

Particulars.	Amount
Sales	90,00,000
(-) variable cost contribution	14,00,000
(-) fixed cost	4,00,000
EBIT	2,00,000
(-) Interest $(10,00,000 \times \frac{10}{100})$	1,00,000
EBT	1,00,000

$$DOL = \frac{\text{E}.\text{C}}{\text{EBIT}}$$

$$= \frac{60,00,000}{2,00,000} = 3$$

$$DFL = \frac{2,00,000}{100,000} = 2$$

$$DCL = \frac{C}{EBT} = \frac{600,000}{100,000}$$

$$= 6$$

2. The following figures related to 2 companies

Particulars	Anil Ltd	Varun Ltd
Sales	500	1000
Variable cost	200	300
Contribution	300	700
Fixed cost	150	400
Interest	150	300
Profit before tax	100	200

calculate operating leverage, financial leverage and combined leverage for the 2 companies

A) calculating the leverage :-

1. operating leverage :-

$$DOL = \frac{\text{contribution}}{\text{EBIT}}$$

$\text{Anil Ltd} = \frac{300}{150} = 2$	$\text{Varun Ltd} = \frac{700}{300} = 2.333$
---	--

2. Financial leverage :-

$$DFL = \frac{\text{EBIT}}{\text{EBT}}$$

$\text{Anil Ltd} = \frac{150}{100} = 1.5$	$\text{Varun Ltd} = \frac{200}{200} = 1.0$
---	--

3. Combined leverage :-

$$DCL = \frac{C}{EBT}$$

$\text{Anil Ltd} = \frac{300}{100} = 3$	$\text{Varun Ltd} = \frac{700}{200} = 3.5$
---	--

3. A company has sales of 10 lakh variable cost are 40% of sales, while the fixed cost of 3 lakhs. The amount of interest on long term debt is of 1 lakh. If you are required to calculate the leverages

calculation of leverages

Particulars	Amount
Sales	10,00,000
Variable Cost	4,00,000
Contribution	6,00,000

① operating leverages

$$DOL = \frac{C}{EBIT}$$

$$= \frac{6,00,000}{3,00,000} = 2$$

(i) fixed cost	3,00,000
EBIT	300,000
(ii) Interest	1,00,000
EBT	200,000

(3) financial leverage:-

$$DFL = \frac{EBIT}{EBT} = \frac{3,00,000}{2,00,000} = 1.5$$

(4) combined leverage:-

$$DCL = \frac{C}{EBT} = \frac{6,00,000}{2,00,000} = 3$$

4. A firm has sales of 50,000, variable cost 25,000, fixed cost 15,000 and interest 5000. calculate the leverages.

Particulars	Amount
sales	50,000
variable cost	25,000
contribution	25,000
(i) fixed cost	15,000
EBIT	10,000
(ii) Interest	5000
EBI	5000

(1) operating leverage:-

$$DOL = \frac{C}{EBIT} = \frac{25,000}{10,000} = 2.5$$

(2) financial leverage:-

$$DFL = \frac{EBIT}{EBT} = \frac{10,000}{5,000} = 2$$

(3) combined leverage:-

$$DCL = \frac{C}{EBT} = \frac{25,000}{5,000} = 5$$

5. A company sells 10 lacs, variable cost 7 lacs, fixed cost 2 lacs and debt of 5 lacs at 10% rate of interest. Calculate the leverages.

(1) operating leverage:-

Particulars	Amount
sales	10,00,000
variable cost	7,00,000
contribution	3,00,000
fixed cost	2,00,000
EBIT	1,00,000
Interest	50,000
EBI	50,000

(2) financial leverage:-

$$DFL = \frac{EBIT}{EBT} = \frac{1,00,000}{50,000} = 2$$

(3) combined leverage:-

$$DCL = \frac{C}{EBT} = \frac{3,00,000}{50,000} = 6$$

(2) Define the concept of capital structure? Explain the principles of capital structure.

(a) Meaning:-

Capital structure represents both owned and borrowed funds. Capital structure is used the

Proportionate relationship among the various long term sources such as debt capital, preference capital, equity capital including reserves.

A firm should always try to design its capital structure in such a way, which means maximize the returns to the share holders (profit). It is due to this concept of optimum capital structure has introduced.

### Optimum capital structure:-

An optimum capital structure can be defined as "the combination of debt and equity that maximizes the market value and minimizes the cost of capital".

6. Principles Capital structure :- - David. Durand

while designing the capital structure of the firm, a manager is influenced by certain principles. They are as follows.

#### 1. cost principle:-

This principle states that the capital structure of a firm should be the cost of financing.

Ex:- Interest on debentures and long term loans.

#### 2. Risk principle:-

This principle applies more on common stock other than on debt funds for financing its capital requirements.

#### 3. Control principle:-

According to this principle, the raising, controlling position of the owner should remain undistributed. The funds should be raised in a way that of ownership may not occur.

#### 4. Timing principle:-

This principle is based on the fact that demand for different types of securities change

according to the business cycles. (Boom period & depression/ recession period)

Q) write about the importance of capital structure?

A) Capital structure is defined as the combination of equity and debt it uses by a company in order to finance the overall operation of the company and for its growth.

Importance of Capital Structure :-

Capital structuring is an essential function of the management to maintain a sound financial position of the business and fulfil the financial requirements. To know more about its significance for the company.

1. Return maximization :-

A well designed company's capital structure provides a scope of increasing the earnings per share, which ultimately maximizes the return for equity shareholders and recover the cost of borrowings.

2. Solvency :-

A sound capital structure helps to maintain liquidity in the firm because an unplanned debt capital leads to the burden of interest payments, ultimately reducing the cash in hand.

3. Flexibility :-

It also facilitates the expansion of the debt capital to suit the business strategies and conditions.

4. Reduces financial Risk :-

Balancing the proportion of debt and equity in the business through capital structure helps the business firms in managing and minimizing the Risk.

5. Tax planning tool :-

For the Company opting for debt funds,

The Capital structure provides them with a benefit tax deflection on saving, Decreasing the cost of borrowing.

④ Explain the factors determining the capital structure?

→ The proportion of debt and equity should be divided in the capital structure of a company decides the cost of capital and firms value. Such type of Capital Structure is called as optimum Capital structure. The following factors determine the Capital structure.

1. Financial Leverage/ Trading on equity :-

Capital structure consisting of long term fixed interest debt, preference capital and equity capital is called as financial leverage. This leverage can operates its impact on shareholders return (Earning per share). So the financial leverage also the rate of return on long term loans is more than the expected rate of return of the firm.

2. Growth and stability of Sales :-

Sales is the major and main source of income for any company. Capital structure of a Company is highly influenced by its growth and stability of sales. Thus Capital structure is decided by its volume of sales.

3. Cost of capital :-

Interest rate on debt is the cost of debt. Rate of returns expected by shareholders is the cost of equity. The company must be able to earn more than the above two rates. Generally the return excepted by the suppliers of Capital depends on the risk, all the above factors decide the optimum Capital structure.

#### A. Control :-

Equity share holders have voting rights. debenture holders and preference share holders don't have voting rights. If the equity shares are issued to raise additional funds, debentures and preference share may be issued to raise additional funds. thus controlling effect also decides the capital structure.

#### 5. Requirements of Investors :-

Investors generally require safety and profit. Investors require profit may invest in equity. Thus requirement of investors also decide the capital structure.

#### 6. Period of Financing :-

If the finance is required for a long period of 5 years, debentures may be issued. For the finance of permanent nature equity may be issued, preference shares may also be issued. thus the period for which the finance is needed and decides the capital structure.

#### F. Corporate taxes :-

High rate of Corporate taxes on profits of the companies to prefer debt financing, because interest is allowed to be deducted from taxable profits.

#### 8. Legal Requirements :-

Government has also issued certain guidelines for the issue of shares and debentures within that framework capital should be decided.

5) Explain the different approaches to the Capital structure. and also Explain the basic assumptions to the Capital structure.

#### A) Different theories on Capital structure :-

The Concept of the optimum Capital

structure is not accepted by several authors. There are two extreme points, net income and net operating income approach between the middle period introduced by traditional writers. Is called as traditional theory. The another theory which is defined by modigliani and miller therefore (MM). Therefore Capital structure theories is broadly divided into 4 theories. They are

1. Net Income Theory.
2. Net operating Income Theory.
3. Traditional Theory.
4. Modigliani and Miller Theory.

### Basic Assumptions of Capital structure :-

In order to understand the capital structure theories are following the assumptions.

1. There are only two sources of funds raised by the firm. that is debt and equity.
2. The total capital structure amount will remain constant.
3. operating profit is not expected to increase.
4. The Dividend payout ratio is 100%.
5. There are no taxes.

### Equations or Definitions:-

$$V = \text{total value of the firm} (S+D)$$

$$S = \text{Market value of equity}$$

$$D = \text{Market value of debt}$$

#### 1. Value of debt (D)

$$K_d = \frac{I}{D}$$

$$D = \frac{I}{K_d}$$

#### 2. Value of Equity (S) :-

$$K_e = \frac{NI}{S}$$

$$S = \frac{NI}{K_e}$$

③ Total value of the firm ( $V$ )

$$V = S + D$$

$$V = \frac{EBIT}{k_0}$$

④ WACC ( $k_0$ ) :-

$$k_0 = \frac{\cancel{EBIT}}{\cancel{k_0}}$$

$$k_0 = \frac{EBIT}{V}$$

⑥ Explain the net income approach?

a) Introduction:-

This theory is suggested by David Dobard.

According to net income theory the capital structure decision is relevant to the capital structure changes. The main imports of this theory, The firm can change its value or lower the cost of capital by increasing the debt in the capital structure. This approach followed the assumptions.

1.  $k_d$  and  $k_e$  are constant.

2.  $k_d$  is less than the  $k_e$ .

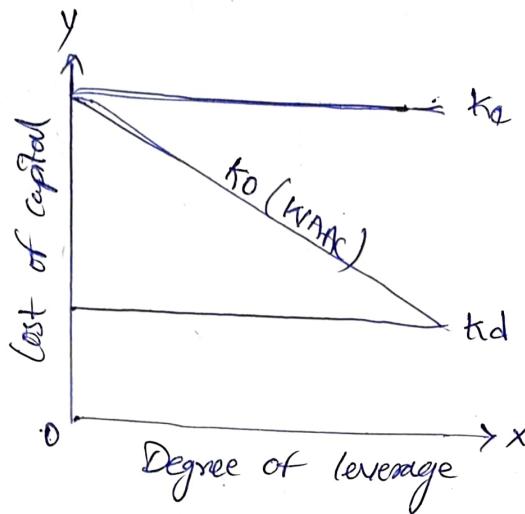
3. No taxes.

The three assumptions applied under net income theory is that, if  $k_e$  and  $k_d$  are constant the increased use of debt to the share holders earnings result in higher value of the firm. Consequently, The overall cost of Capital will decrease. The  $k_0$  is measured by the following formula.

1.  $V = S + D$

2.  $k_0 = \frac{EBIT}{V}$

The net income theory further shown graphically in the following.



It can be observed from the above graph, when the proportion of debt is increased in the capital structure the weighted average cost of capital will decrease. and proportionately the firm will have to maximize the value. lower the cost of capital.

⑦ Explain the net operating income approach.

A) Introduction:-

This approach is introduced by David Durand. It is just opposite to the net income approach. According to net operating income theory, the market value of the firm is not affected by capital structure changes. In this approach the cost of equity is increased with the leverage. as a result, the overall cost of capital and the total value of the firm will remain constant. The basic assumptions under this theory are follows

1. The debt capitalization rate ( $k_d$ ) is constant.
  2. The weighted average cost of capital ( $k_w$ ) and total value of the firm doesn't change.
  3. There are no taxes.
- Based on the above assumptions under net operating income theory the value of the firm is calculated by the following formulas.

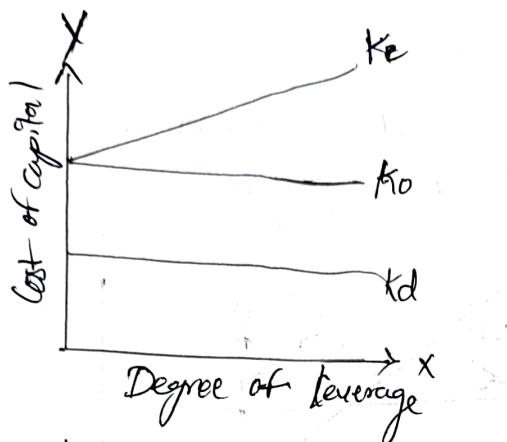
$$① V = S + D$$

$$③ D = \frac{I}{K_d}$$

$$② S = \frac{NI}{K_e}$$

$$④ V = \frac{EBIT}{K_o}$$

The net income theory further shown in graphically as follows.



The above graph shows that, when  $K_d$  and  $K_o$  are constant and the increase continuously with the leverage. When the weighted average cost of capital is constant under this approach there is no specific optimum capital structure.

⑧ Explain the modigliani and miller approach?

A) Introduction :-

M-M theory is identical with net operating income theory. Under this approach the firm's market value and cost of capital will remain constant. The M-M theory can be explained with the help of proportion one and proportion two. These proportions are based on certain assumptions.

Assumptions:-

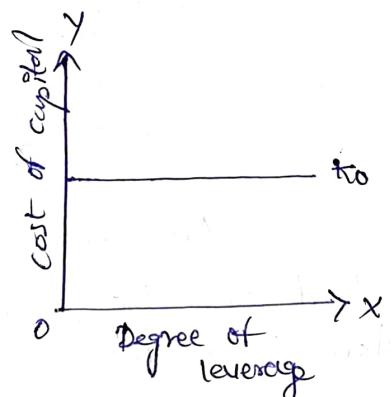
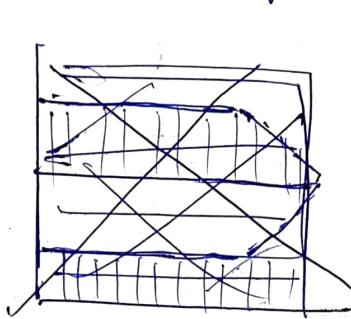
1. There is a perfect market.
2. Investors act rationally (freely).
3. There are no corporate taxes.
4. All earnings are distributed to the share holders.

## Proposition - I :-

Based on the above assumptions Modigliani-Miller argues that, the total market value is independent. Proposition I defines the total value & calculated on the following formula.

$$V = S + D$$

The cost of capital behaviour under M-M theory is shown with the help of a graph.

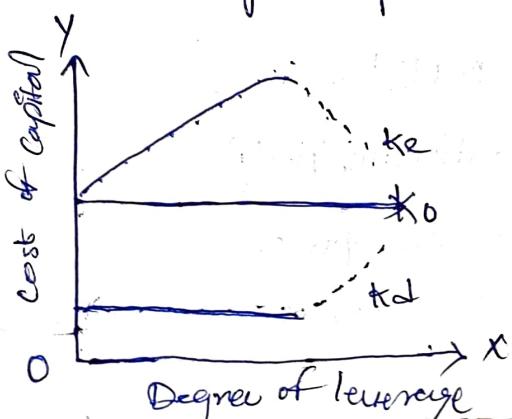


## Proposition - II :-

Proposition-II defines the cost of equity. It is calculated on the following formula.

$$k_e = \frac{NI}{S}$$

The M-M theory under proposition II is that when  $k_o$  will not raise, the use of leverage in the capital structure is constant. According to M-M theory if  $k_d$  is increasing,  $k_e$  is also increasing at a decreasing rate and turn down sequentially. This will be shown with the help of following graph.



Q) Explain the traditional approach?

A) Traditional approach is also known as intermediate theory and it is a compromise between net income & net operating income theories. According to this theory the value of the firm is increased and the cost of capital will be decreased by the proportionate mix of debt and equity.

Under this theory the behaviour of cost of capital can be divided into 3 stages. All the 3 stages the value of the firm will be calculated by the following formula.

$$V = S + D.$$

Q) Explain the cost of capital & write the measurements of cost of capital?

A) Meaning:-

Cost of capital is very important in the financial management. It is the minimum rate of return which will be maintained by the business firm at the current level. If the business firm earns more than the cost of capital, the market value of the firm is expected to increase. The measurement of the cost of capital is significant in the capital budgeting decisions.

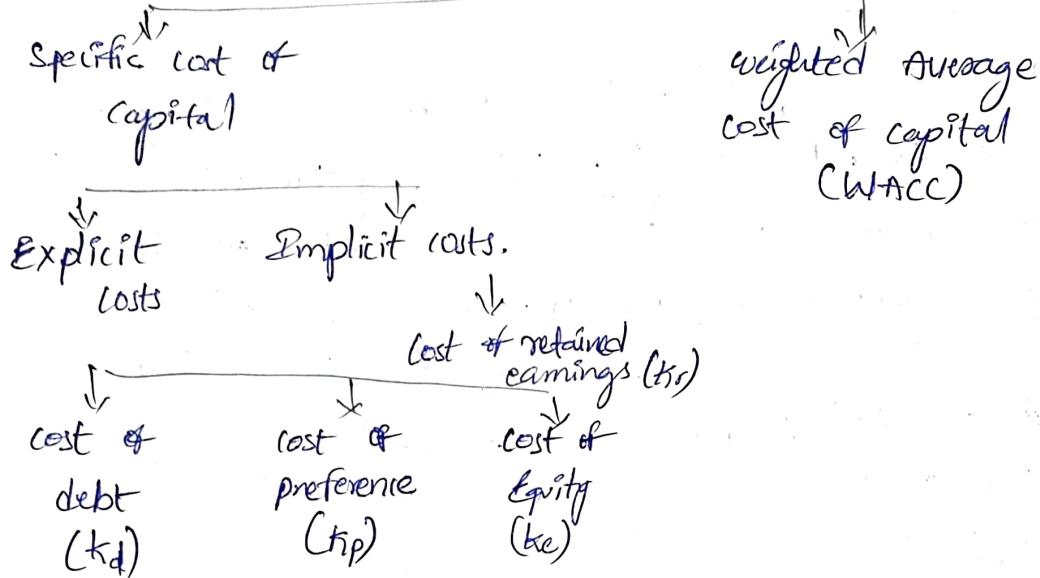
Definitions:-

"cost of capital is the minimum required rate of return in the capital expenditure" — Solomon Ezra.

Measurement of cost of capital:-

For the purpose of measuring the cost of capital, the business firm will calculate the two heads as follows—

# Cost of capital



## Specific cost of capital :-

The cost which is incurred specifically on each source of finance is called specific cost. It will be classified in the following.

### i) cost of debt ( $k_d$ ):-

Cost of debt means rate of interest payable on debt capital. It includes debentures, bonds, and long term loans.

### ii) cost of preference capital ( $k_p$ ):-

Like debt, preference capital is also major source of specific cost. It is divided in redeemable & irredeemable.

### iii) cost of equity ( $k_e$ ):-

Cost of equity is rate of dividend payable on common share holders. There are 2 models for calculating the cost of equity. They are:-

(i) Dividend model

(ii) Earnings model

### iv) cost of retained earnings ( $k_r$ ):-

The cost which is incurred for utilization of

resources, when the business firm required expansion of the business (or) introducing the new project.

### Weighted Average Cost of Capital (WACC):-

It is also called as over all cost of capital (or) average cost of capital. In order to calculate (WACC) the following steps should be consider.

1. calculation of specific cost of capital
2. Determination of weight (or) the proportion of each source of finance.
3. multiplying the specific cost with respective proportion of to find our weighted costs.
4. Adding the weighted cost of different sources to determine (WACC).

## UNIT 4: DIVIDEND DECISIONS

### 1. Define dividend? explain the types of decision?

#### **Introduction**

The term dividend refers to the portion of profit which is distributed among the shareholders of the firm. In other words, dividend is that part of the net earnings of a company that is distributed to its shareholders. It is a payment made to the equity shareholders, for their investment in the company.

The financial manager has to determine the amount of profit to be distributed as dividends and the amount of profit to be retained in the business for financing its long-term growth.

#### **Definition**

According to institute of chartered accounting (CA) of India- “A dividend is a distribution to shareholders out of profit or reserves available for this purpose.”

#### **Features of dividend**

1. Dividends are distributed to equity shareholders.
2. Dividends are variable in nature.
3. Dividends are decided by board of directors.
4. Dividends are optional payment there is no legal obligations.
5. Dividend cannot be paid out of depreciation reserve or any other capital reserves.
6. It can be paid in the form of cash or business shares.

#### **Types of dividends:**

- Cash dividend
- Stock dividend or bonus
- Scrip dividend or bond
- Property dividend
- Composite dividend

#### **1. Cash Dividend**

A cash dividend is a usual method of paying dividends and the companies which have enough cash balances will declare cash dividends. Payment of cash dividends result in out flows of funds and reduces the company's net worth. The cash account and reserve account of a company will be reduced when the cash dividend is paid. Thus, both the total assets and net worth of the company are reduced when the cash dividend is distributed.

#### **2. Stock dividend**

It is also called “bonus shares”. Stock dividend means the issue of bonus shares at free of cost to the existing shareholders. If a company does not have liquid resources, then it is better to declare the stock dividends.

**For example,** if a shareholder owns 100 shares, at the time when a 10% bonus issued, when shareholders will receive 10 additional shares.

#### **3. Scrip dividend**

It is also known as “Bond dividend”. A script dividend is a promise to pay to the shareholders at a future specific date. In case if a company does not have sufficient funds to pay dividend in cash it may issue a

note or bond for the due amount to the shareholders. The objective of Bond dividend is to postpone the immediate payment of cash. A scrip dividend bears interest and it is accepted as a additional security.

#### **4. Property dividend**

Property dividends are paid in the form of some assets other than cash. They are distributed under exceptional conditions and it is not popular in India.

#### **5. Composite dividend**

When dividend is paid partly in the form of cash and the remaining in the other form, it is called as composite dividend. This is not a new technique for payment of dividend, it is a combination of all the dividend types.

### **2. what are the factors influencing the dividend policy of a firm?**

A number of considerations influence a company in the dividend policy. These considerations are of very practical in nature. The major factors influencing dividend policy of a concern are given below.

#### **1. Liquidity of funds**

The liquidity of funds is an important consideration in dividend policy decisions. The liquidity of a firm is determined by the firm's investment and financing decisions. The investment decisions determined the rate of asset expansion and the financing of funds determined the dividend policy. If the cash position is weak, shareholders may be satisfied with stock dividends.

#### **2. Stability of learnings**

If earnings are relatively stable, a firm is better able to predict its future earnings. Dividend declaration is a decision to be taken by the management keeping into consideration the stability of earnings.

#### **3. Past dividend rates**

If an existing firm, the board of directors, while recommending the rate of dividend will have to keep in mind the rate of dividend declared in the past. In a new concern, the rate of dividend being declared by organizations will have to be honour.

#### **4. Profit rate**

The profit rate of a firm is also highly important and it is variable. The internal profit rate of the firm provides a basis of comparing the productivity of retained earnings. The alternative investment opportunities also play an important role in dividend decisions.

#### **5. Control**

One of the important variables in dividend decisions is the study of alternative sources of financing on the control situation in the firm. If maintenance of existing control is an important consideration the dividend payout may be lower to financing of retained earnings.

#### **6. Maintenance of a target dividend**

The objective of a stable dividend policy will make for low payout, when profits are temporarily high and high payouts when profit are temporarily low, it will affect of dividend policy and growth in profit until the establishment of a new income level is strongly assured.

## **7. Nature of ownership**

Natural ownership of the corporation also affects the dividend decisions. Corporations closely held by a few tax payers in high income are likely to have a lower dividend payout ratio.

## **8. Timing of investment opportunities**

If company is able to forecast its needs of funds well in advance it can make timely adjustment in investment opportunities.

## **9. Effect of trade cycle**

It is also highly influencing the dividend policy. For example, in the period of inflation, funds generated from depreciation may be insufficient to replace the assets. Consequently, a care on retained earnings simply to preserve the earnings power of the firm.

## **10. Legal requirements**

The board of directors to decide on dividends will have to consider the legal requirements under section 205 of the companies act 1956. Prescribes the guidelines in respect of declaration and payment of dividends.

## **11. Corporate taxation policy**

Corporate taxes affect dividends both directly and indirectly. Heavy rates of taxation reduce the profit after tax available for shareholders **for example** in India dividends beyond 10% of paid-up capital are subject to 7.5% by way of dividend tax.

## **3. Explain the different types of dividend policy?**

Dividend policy means that management follows in making dividend payout decisions. In other words, dividend policy is the firm's plan of actions to be followed when dividend decisions are made. It is the decisions about the earnings of the firm to pay-out as dividends versus retaining and reinvesting earnings in the firm. There are four types of dividend policy

- Regular dividend policy
- stable dividend policy
- Irregular dividend policy
- Zero dividend policy

### **1. Regular dividend policy**

In this type of dividend policy, the investors get dividend at usual rate. The investors are generally retired persons are weaker sections of the society who want to get regular income. This type of dividend payment can be maintained only if the company has regular income.

#### **❖ Assumptions/merits of regular dividend policy**

- It helps in creating confidence among the shareholders.
- It's stabilizes the market value of shares.
- It helps in maintaining the goodwill of the company.
- It helps in giving regular income to the shareholders.

### **2. Stable dividend policy**

Hear, the payment of certain sum of money is regularly paid to the shareholders.

#### ❖ Merits of stable dividend policy

- It helps in creating confidence among the shareholders.
- It's stabilizes the market value of shares.
- It helps in maintaining the Goodwill of the company.
- It helps in giving regular income to the shareholders.

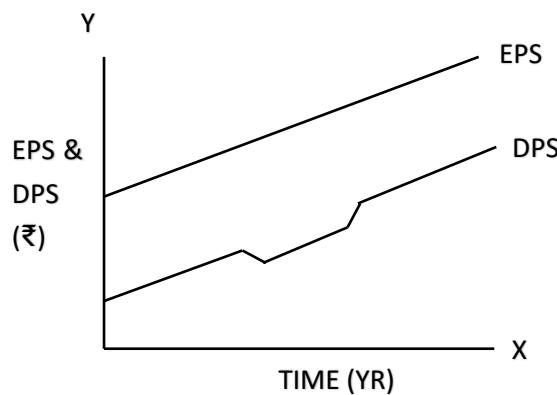
#### ❖ Forms of stable dividend policy

There are three different form of dividend policy of stability. They are

- Constant dividend per share
- Constant dividend payout ratio
- Constant dividend per share + extra dividend

##### a. constant dividend per share

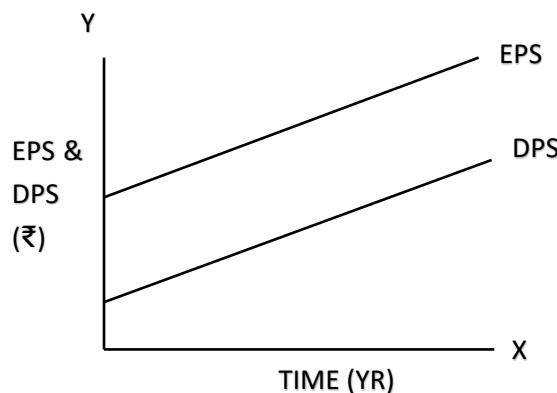
Some companies follow a policy of paying dividend per share irrespective of the level of earnings year after year. Such forms usually create a reserve for dividend capitalization, to enable them pay the fixed dividend even in the year when the earnings are not sufficient. The relationship between earnings per share (EPS) and dividend per share (DPS) under this policy is shown below.



It is easy to follow this policy when the earnings are stable. However, if the earnings pattern of a company shows wide fluctuations, it is difficult to maintain the policy.

##### b. Constant payout ratio

A certain percentage of net earnings are paid by way of dividends to the shareholders for every year. In such a policy amount of dividend fluctuations in direct proportion with earnings of the company as shown below



### c. Constant dividend per share Plus extra dividend

Some companies follow a policy of paying constant low dividend per share Plus and extra dividend in the year of high profits. This policy is suitable for the forms having fluctuations earnings from year to year.

### 3. Irregular dividend policy

The companies does not pay the regular dividend to the shareholders. In practice the following are the reasons to pay the irregular dividends.

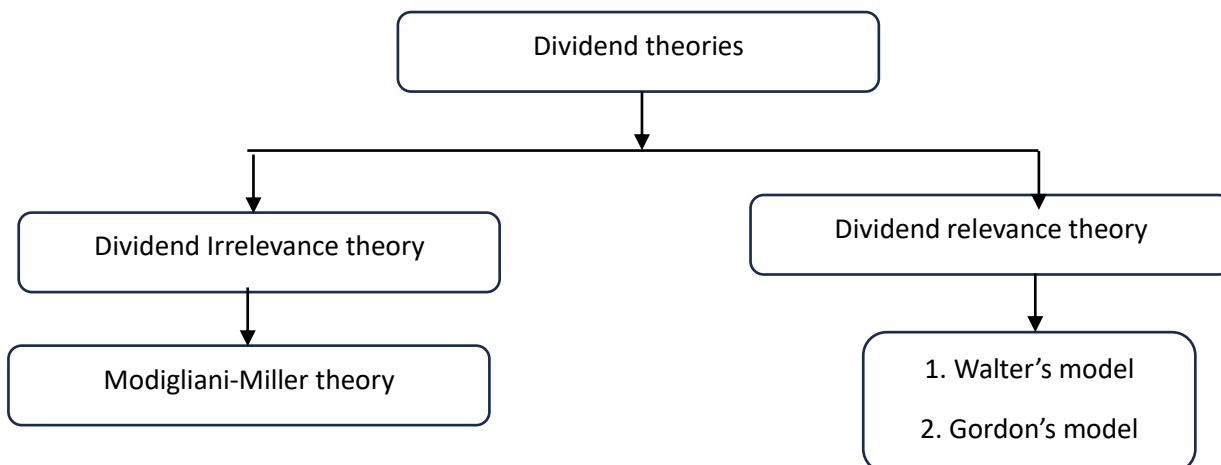
- Due to uncertain earnings of the company
- Due to lack of liquid resources
- The company is not so much successful business
- The company is afraid of giving regular dividend

### 4. Zero dividend policy

The company my follow the policy of paying no dividends permanently because of its unfavorable working capital position, requirements of funds for future expansion and growth

### 4. Explain the models of dividend?

Based on the relationship between dividend and value of the firm, different theories have been in financial management. They are listed below



#### I. Dividend irrelevance theory

##### 1. Modigliani miller theory

According to MM dividend policy of a form is irrelevant as it does not affect the wealth of the shareholders. They argue that the value of the firm depends on the firm's earnings which result from its investment policy.

##### Assumptions

- The form operates in perfect capital market
- No taxes
- The farm has a fixed investment policy
- Risk of uncertainty does not exist

The rate of return for a share held for 1 year may be calculated as

$$r = D + \frac{(p_1 + p_0)}{p_0} = \frac{\text{Dividends} + \text{Capital gains/losses}}{\text{Purchase price}}$$

P = market price per share

D = Dividend per share

### Criticism

- The assumption the taxes does not exist from reality
- MM argues that internal and external financing are equivalent
- According to MM the wealth of a shareholder will be same whether the firm pays dividend or not

## II. Dividend relevance theory

### 1. Walter's model

Professor James E. Walter argues that the choice of dividend policies almost always affect the value of the firm. His model shows clearly the importance of the relationship between the firm's IRR and its cost of capital (k) in determining the dividend policy that will maximize the wealth of the shareholders

#### Assumptions

- The firm has a very long or infinite life
- The firm's internal rate of return (r) and its cost of capital (k) are constant
- All earnings and dividends never change

#### Walter formula to determine the market price per share

$$p = D/k + r(E - D)/k/k$$

**D/k = The PV of an infinite stream of constant dividends**

**r(E - D)/k/k = The PV of an infinite stream of gain**

#### Criticism

1. Walter's model is based on the assumption that "r" is constant. In fact, decrease and more investment occurs
2. A firm's cost of capital (k) does not remain constant, it changes directly with the firm's risk. Thus, the PV of the firm's income moves inversely with the cost of capital

### 2. Gordon's model

This model developed by Myron Gordon, explains the relationship between a company's dividend policy and its market value. The model suggests that higher dividend payouts reduce risk for investors and increase the firm's market value. It emphasizes that firm's value is determined by its dividend policy, growth rate, and cost of equity.

## **Assumptions**

- The IRR is constant
- The corporate taxes are does not exits
- The firm has only equity with no dept
- Fast of equity (k) is higher than the growth rate (g)
- Financing is done only through retained earnings

## **Statement**

According to this model change in dividend will affect the value of the firm. The formula used by Gordon to determine the market price per share given by

$$P_0 = \frac{E_1[L - b]}{k - br}$$

P<sub>0</sub>= value of share

E<sub>1</sub>= current earnings

b= Dividend policy

r= internal profitability

k= firm's cost of capital

## **5. Explain the retired earnings policy and its advantages**

### **Retained Earnings Policies:**

Retained earnings refer to the portion of a company's net income that is not distributed to shareholders as dividends but is retained in the business for reinvestment or to meet future needs. The decision to retain earnings instead of paying them out as dividends is a critical aspect of financial management, particularly under the domain of dividend policy.

A company's retained earnings policy outlines how much profit will be distributed as dividends and how much will be retained for reinvestment, growth, and other purposes.

### **Factors Influencing Retained Earnings Policy:**

Several factors determine a company's approach to retained earnings:

#### **Profitability:**

Companies with higher profits can afford to retain more earnings while also paying dividends.

#### **Growth Opportunities:**

Firms with significant growth opportunities are more likely to retain earnings to finance these ventures.

#### **Liquidity:**

Adequate cash flow is essential for retaining earnings; otherwise, the company may prioritize dividend payments.

**Cost of Capital:**

If the cost of raising external funds is high, companies may prefer to retain earnings.

**Shareholder Preferences:**

Some shareholders, especially those seeking regular income, may prefer higher dividends over retained earnings.

**Legal and Regulatory Requirements:**

Certain legal authorities may impose restrictions on how much profit can be retained.

**Advantages of Retained Earnings Policies:****Self-Financing:**

Retained earnings provide an internal source of funding, reducing reliance on external debt or equity.

**Flexibility:**

Allows the company to allocate funds based on immediate needs without external approval.

**Cost-Effective:**

Avoids the costs associated with raising external capital, such as interest payments or underwriting fees.

**Strengthens Financial Position:**

Enhances the company's reserves, improving its ability to weather financial crises.

Date  
12/3/09

UNIT - III

Working Capital Management

Introductions -

The main objective of any management is to earn profit. For achieving the earnings objective how the business firm is managing the working capital is important. Working capital management is considered as management of current assets namely, Cash, Debtors, and Inventory.

X management of fixed assets comes with in the jurisdiction of Capital budgeting, while the management of working capital is a continuous function which involves control of financial resources circulating in the enterprise. As a matter of fact a business can't survive in the absence of satisfactory ratio between current assets and current liabilities. Therefore, management is setting various policies with respect to purchasing, financing, expansion and declaration of dividend with in the limitations of working capital.)

Definitions -

(1) "The sum of the current assets is the working capital of a business"

— J.S. Mill.

(2) "Working Capital is the difference between current assets and current liabilities"

— C.W. Gerstenberg

(3) "Working Capital refers to firm investment in short term assets like like Cash, A/c's receivable and stock"

— Brigham

Explain Capital Budgeting methods other than traditional methods.

### Concepts of working Capital :-

(1)

Capital (1) Gross Concept  
(2) Net concept

#### (1) Gross concept :-

Gross concept (or) Gross working Capital  
Simply called as working Capital refers to total  
of current assets.

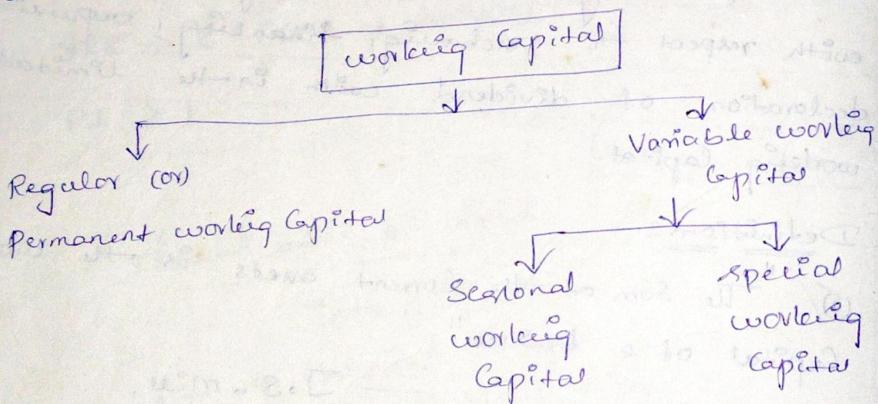
#### (2) Net concept :-

The Net concept (or) Net working  
Capital is the excess of current assets over  
current liabilities.

Geisenberg

### Kinds of working Capital :-

According to Cow. Geisenberg  
working Capital can be classified into two types  
which are mentioned below:



#### (1) Regular working Capital :-

At is the minimum amount which  
should always be maintained by the business  
firm in order to meet day to day operations.

It is also known as "Fixed working Capital (or)"

Permanent working Capital"

## (2) Variable working Capital's -

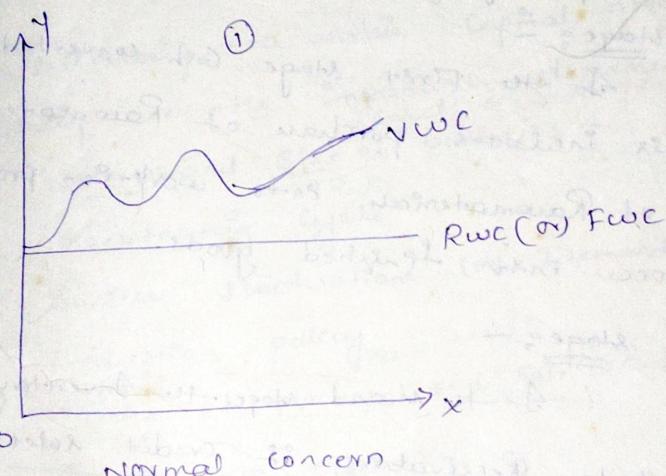
The amount of working capital over and above the regular working capital is called as "variable working capital". It may be further divided into 2 types. Namely

(A) Seasonal working Capital, and

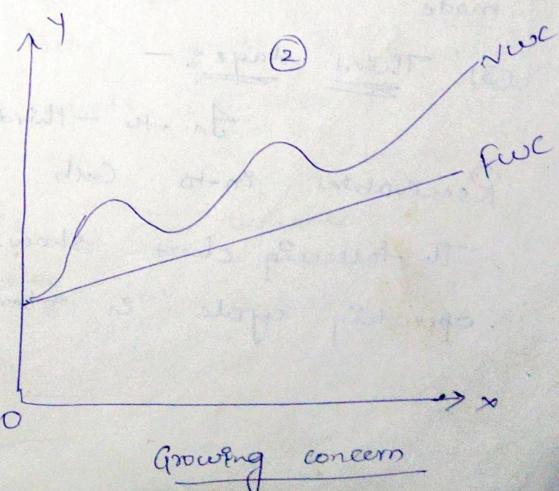
(B) Special working Capital

### Seasonal and Special working Capital :-

Seasonal working Capital is required to meet the seasonal demands and special working Capital is required to meet unforeseen conditions. The following graph shows the nature of regular working Capital and variable working Capital.



NORMAL CONCERN



GROWING CONCERN

## Need for working Capital :-

Generally the business firm has to invest sufficient funds in current assets for the success of sales activity. Current assets are required because when the sales don't convert into cash immediately. There is always an operating cycle involving the conversion of sales into cash.

## Operating cycle :-

The time required to complete the sequence of events in the case of manufacturing firm is called "operating cycle". There are 3 stages in the operating cycle. An

### (1) First stages -

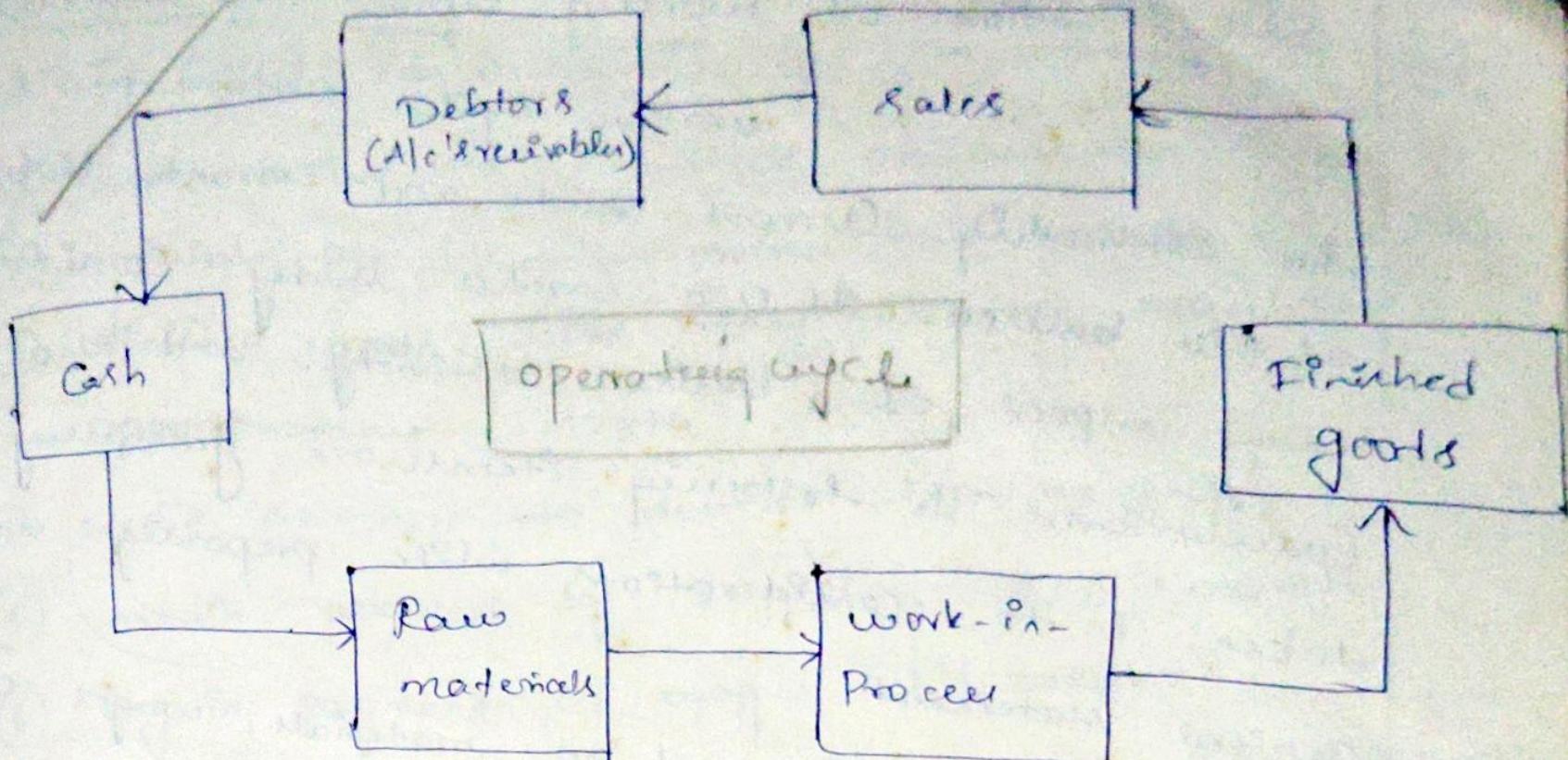
In the first stage cash converted into stock. This includes purchase of Raw materials, conversion of Raw materials into work-in-process, and work-in-process into finished goods.

### (2) Second stages -

In the second stage, the inventory is converted into Receivable, if credit sales are made.

### (3) Third stages -

In the third stage conversion of Receivable into cash after certain period. The following chart shows the activities of operating cycle in three different stages.



Operating cycle

## Estimation of working capital requirements -

A working capital statement is prepared for estimating current assets and current liabilities of the business. It is a careful study considering every aspect of business activity. and also necessary calculations. The following items are generally taken into consideration while preparing working capital statement.

- (1). cost to be incurred on materials, wages and overheads. collected from cost records.
- (2). length of time raw materials will be available in the stores before issue to the production.
- (3). length of production cycle (or) Period required for manufacturing the product.
- (4). period of time finished goods will stay in the warehouse before sale.
- (5). period of credit allowed to the debtors.
- (6). period of credit allowed by the creditors (or) Suppliers.  
(outstanding)
- (7). lag in payment of wages and overhead expenses

 10m

## Factors influencing working capital requirement (or) Determinants of working capital Explain ?

Meaning :-

The size of working capital required in an organisation depends on different policies that the firm wishes to follow with respect to its management. The amount of working capital required in an organization would not only be affected by factors specific to the operation of the firm but also in general.

### Factors influencing working capital requirements:

1. Nature and ~~size~~ size of the business.

The size of working capital needed in an organization is determined by the nature and size of business. Trade oriented enterprises like retail shops, showrooms and

and financing companies need more working capital.  
The manufacturing enterprises like steel, cement and electronic companies relatively maintain lower balance of current assets when compared to fixed assets.  
The w.c needs public utilities and service business units like transport, operators, maintain limited w.c.

## (2) Manufacturing cycle:-

Firms having longer manufacturing cycle need to maintain large balance of w.c. manufacturing heavy machines, cargo vessels, aircrafts find their inventory tied up in larger doses of w.c.

Manufacture of food products, perishable products like vegetable, fruits etc...

Circulate their investment in with in days. no need for large balance.

## 3) Production policies:-

In the light of higher cost and larger requirements for w.c firms may adopt the policy of changing production schedules. The production manager has take responsibility to adjusting his working staff.

## 4) Growth and expansion activities:-

Growth in the operations of an enterprise may demand more stock, more cash, resource to finance, day to day activities. It needs large funds.

~~Corporate~~ Increased operations double the charge in practices may also determine the size of w.c required in a growing firm.

## 5) Business Fluctuations:-

The overall business environment influences the fortune of an enterprise. Business cycle influences the psychology of management piling up a big lot of raw materials.

An upward swing in the entire economy leads to increased sales which would demand for large balance of w.c.

6) value of current assets:-  
It is the major influence factor of working capital requirement because of total current assets will be increased, total w.c is also highly required.

Total current assets will be minimum the w.c is also minimum.

7) credit standards :-

Factors influencing working capital requirement  
They are five "C" are credit control standards.

1. character
2. capacity
3. collateral
4. capital
5. condition.

Q. Explain the sources of working capital ?

A Firm can use 2 types of sources to finance in working capital

### Sources of working Capital

long Term source

short Term sources

long Term source:

Every business organisation is required to maintain a minimum balance of cash and other current assets at all times, irrespective of the ups and downs in the level of activity. The portion working capital which is constantly maintained by the business at all times to carry minimum level of activity is called permanent working capital.

Following are the long term sources of finance

1. issue of equity shares
2. issue of preference shares.

3. Retained earnings

4. Issue of debentures

5. long term loans taken from financial institution

Q. short Term sources:-

The short Term financing of working capital is generally used to support the temporary working capital.

Various short Term sources of financing are

1. Bank credit [cash credit, letter of credit, overdraft etc...]

2. Trade credit

3. public deposits.

4. outstanding exp

5. provision for taxation, and depreciation

6. loans from directors.

7. Advances from customers etc..

5M  
most

Inventory Management? Explain about accounting for inventory?

A)

Inventory management refers to the process of ordering, storing, using and selling a company stock this includes the management of Raw materials, components and finished products as well as warehousing and processing such items.

### Accounting for Inventory:

Inventory Represent a current asset, a company to sell it finished goods within a short period of time that is 1 year. Inventory has to be measured to put on a balance sheet. Inventory is accounted for using one of 3 methods

1. FIFO [First-in-First-out]
2. LIFO [Last-in-First out]

### 3. Weighted average costing

## Methods for Accounting of inventory :-

An inventory account it consist of 4 types

1. Raw material
2. Work in process (or) progress
3. Finished goods

### Raw material :-

This Represent various materials of a company purchase in a production process it works before a company can transform them into finished good it ready for sale

### Work in process :-

This represent raw material in the process of transformed into finished products.

### Finished goods :-

This are completed products readyly available for sale a customer

## Q3) Explain Inventory management Methods ?

A) Depending on the type of business a company will use various inventory management methods

They are

1. JIT [Just in Time]
2. MRP [Materials Requirement planning]
3. EOQ [Economic order quantity]

### 1. JIT [Just-in-Time]

This manufacturing model originated in Japan in the 1960's and 1970's Toyota motor contributed the most to its development. The method allows Company to save amounts of money and reduce waste by keeping only the inventory the need to produce and sell

product. This method requires storage and insurance cost as well as cost of liquidating or discarding excess inventory. JIT management can be risky if the demand increases. The manufacturer may not be able to source the inventory to meet the demand.

### ii) MRP [Materials Requirement planning]

This inventory management is sales forecasted dependent, manufacturers must have accurate sales records to enable accurate planning of inventory.

### (iii) EOQ [economic order quantity]

This model is used in calculating the no. of units of a company, should add the inventory with each order to reduce the total cost of its inventory.

The EOQ model ensures the right amount of stock is ordered per batch so orders are frequent and there is not an excess of inventory. It assumes that there is a trade off between inventory holding cost and setup cost.

## 2) cash Management Explain the functions of cash management

Cash management is required by all kinds of organization, of their size, type and location. Following are the main functions of cash management.

- 1. Investing of idle cash
- 2. Controlling cash flows.
- 3. Planning of cash
- 4. Optimising cash level
- 5. Managing cash flows

### i) Investing of idle cash

The company needs to various short term investment to utilize surplus funds.

### ii) controlling cash flows

Restructuring the cash outflow and accelerating the cash inflow

### (iii) Planning of cash :-

It is the important function to plan and decision making in terms of maintaining cash in hand and investment.

### (iv) Optimising cash levels

The organisation should continuously to maintain the level of liquidity and cash for business operation

### (v) Managing cash flows

Maintaining a proper flow of cash in the organisation through cost-cutting and profit generation from investments

## 3 Explain the models of cash management ?

Cash management requires a strong base to determine the requirement of cash by the organization to meet its daily expenses for this some models were designed to determine the level of money on different parameters

The 2 models are cash management

1. The Baumol's EOQ model
2. The "Miller - Orr" model

### The Baumol's EOQ model

These model is based on the EOQ in the year 1952

William J. Baumol gave the Baumol's EOQ model, which influences the cash management of the company.

This model important on maintaining the optimum cash balance in a year to meet the business expense on the one hand and grab the profitable investment opportunities on the other side

The following formula of the Baumol's EOQ model determines the level of cash which is to be maintained by the organisation

$$C = \sqrt{\frac{2FT}{I}}$$

$$C = \sqrt{\frac{2FT}{I}}$$

where

$C$  is the optimum cash balance

$F$  is the fixed transaction cost

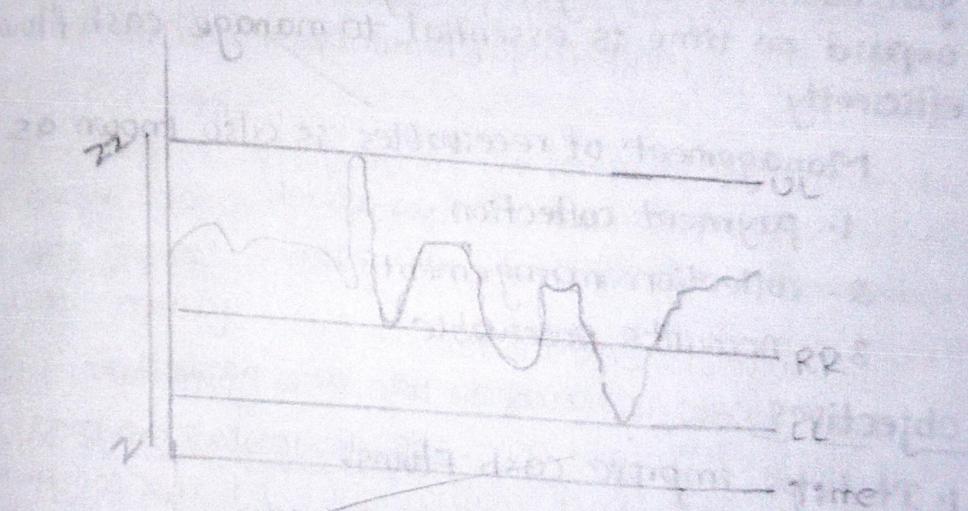
$T$  is the total requirement of that period

$i$  is the rate of interest during the period

## 2. The Miller - Orr model

Merton H. Miller and David F. Orr, showed that market determines the cash withdrawals, cash is the most uncertain element of business.

Many times when the business have surplus cash, thus discouraging withdrawls instead it may require to make investment. Therefore the company needs to decide the level of money to be maintain instead of the money they withdraw determined the withdrawal money.



$Z = \text{spread of cash}$

$UL = \text{upper limit of maximum level}$

$LL = \text{lower limit of minimum level}$

$RR = \text{Return point cash.}$

We can see that above graph a lower limit which is the minimum cash a business requires to function, After spread cash ( $Z/2$ ) lower limit gives retain point on average cash requirement.

Miller Orr

$$\text{For } z = \sqrt{\frac{3TV}{4i}}$$

$z$  = spread across the <sup>minimum</sup> level & maximum level

T = transaction cost per transfer

V = variance of daily cash flows

i = daily interest rate.

What is receivable management (or) Accounts Receivables explain its objectives?

Account receivable refers to the outstanding invoice (or) money which is to be paid by over customers. Until it is paid such money is accounted as account receivables (or) Bills Receivable. You need cash all the time to keep your business running smoothly and the accounts receivable are paid on time is essential to manage cash flows efficiently

Management of receivables is also known as

1. payment collection
2. collection management
3. Accounts Receivable

objectives :-

1. It helps improve cash flows.
2. Reduces losses due to bad debts.
3. Improved customer satisfaction.
4. Boost up sales volume
5. keep a close ~~an~~ eye on long pending bills