KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University)
(Established under section 3 of UGC Act 1956)
Coimbatore-641021

DEPARTMENT OF MANAGEMENT

Subject: **FINANCIAL MANAGEMENT** Semester: **III**
Subject Code: **17BAU303A** **Class- II BBA**

SCOPE

Financial Management represents how the funds are managed and their reflections on the fundamental decisions to be taken by the corporate world. This paper presents the basics of Finance functions, cost of capital, Capital structure, Dividend policy and working capital management.

OBJECTIVES

- To enable the students to acquire knowledge in financial management
- Impart the knowledge in finance functions, cost of capital, capital structure, capital budgeting and leverage.

UNIT I

Financial Management - Finance and related disciplines - Scope of Financial Management - Functions of Finance - Traditional and Modern Approach in Finance Decisions, Investment Decision and Dividend Decision - Objectives of Financial Management - Profit Maximization - Wealth Maximization - Organisation of Finance Function - Concept of Time Value of Money - Present Value - Future value - annuity - Risk and Return - Historical return - Expected return - Absolute return - Holding period return - Annualized return - Arithmetic and Geometric return - Systematic Risk - Unsystematic risk - Sources and Measures.

UNIT II

Long term investment decisions: Capital Budgeting - Principles and Techniques - Nature and meaning of capital budgeting - Estimation of relevant cash flows and terminal value - Evaluation techniques - Accounting Rate of Return - Net Present Value - Internal Rate of Return and MIRR - Net Terminal Value - Profitability Index Method.

UNIT III

Cost of Capital - Explicit and Implicit costs - Measurement of cost of capital - Cost of debt - Cost of perpetual debt - Cost of Equity Share - Cost of Preference Share - Cost of Retained Earning - Computation of overall cost of capital based on Historical and Market weights.

UNIT IV

Capital Structure - Approaches to Capital Structure Theories - Net Income approach - Net Operating Income approach - Modigliani-Miller (MM) approach - Traditional approach - Capital Structure and Financial Distress - Trade-Off Theory - Dividend Policy Decision - Dividend and Capital - The Irrelevance of dividend - General, MM hypothesis - Relevance of dividend - Walter's Model -

Gordon's Model - Leverage Analysis - Operating and Financial Leverage - EBIT / EPS analysis - Combined Leverage.

UNIT V

Working Capital Management - Determination of Working Capital - Management of Cash - Preparation of Cash Budgets - Cash management technique - Receivables Management - Objectives - Credit Policy - Cash Discount - Debtors Outstanding and Ageing Analysis - Costs - Collection Cost - Capital Cost - Default Cost - Delinquency Cost - Inventory Management - Techniques - ABC Analysis - Minimum Level - Maximum Level - Reorder Level - Safety Stock - EOQ.

SUGGESTED READINGS:

TEXT BOOKS

1. Maheswari, S.N. (2014). *Financial Management*. New Delhi: Sultan Chand and Sons.

REFERENCES

1. Khan, M.Y., & Jain, P.K. (2007). *Financial Management Text Problem and Cases* (5th ed.). New Delhi:Tata McGraw Hill Publishing Co. Ltd.
2. Rustogi, R. P. (2011). *Financial Management: Theory Concepts and Practices* (5th ed.). New Delhi: Taxmann Publication.
3. Pandey, I.M. (2009). *Financial Management: Theory and Practices* (19th ed.). New Delhi: Vikas Publishing House Pvt Ltd.
4. Brealey, R.A., Myers, S.C., Allen, F., & Mohanty, P. (2002). *Principles of Corporate Finance* (17th ed.). New Delhi: Tata McGraw Hill Publications.
5. Horne, J.V., & Wachowicz, J.M. (2009). *Fundamentals of Financial Management*, (13th ed.). New Delhi: Prentice Hall of India Publication.
6. Kulkarni, P.V. (2011). *Financial Management*. Mumbai: Himalaya Publishing house.

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Department of Management

Name: **Dr.M.NANDHINI**
Department: **Management**
Subject Code: **17BAU303A** Semester: **III** Year: **2017 - 2020 Batch**
Subject: **Financial Management** **Lesson Plan**

UNIT I			
S.No	**Lecture Hours**	**Contents**	**References**
1	1	Financial Management – Meaning and Definition	T : A.1 – A.3, W1
2	1	Scope of Financial Management	T : A.4 – A.5
3	1	Finance Function - Approaches of Finance Function : Traditional and Modern approach	R1 : 1.5 – 1.7
4	1	Aims of Finance Function – Maximizing revenue and Minimizing cost	R1 : 1.5 – 1.7
5	1	Need of Financial Management – Estimating the financial requirements, Procurement of funds, Proper utilization of funds, Cash Management , Distribution of dividend	R2 : 3 - 9
6	1	Objectives of Financial Management - Profit Maximization	T : A.1 – A.2
7	1	Objectives of Financial Management - Wealth Maximization.	T : A.2 – A.3
8	1	Profit Maximization Vs Wealth Maximization.	T : A.3 – A.4
9	1	Financial Decision – Investment, Financing and Dividend decision	R2 :11 - 13
10	1	Functions of Finance Manager	R2 : 8 - 10
11	1	Time Value of Money- Present value, Future value, Annuity	R2 : 11 - 15
12	1	Risk – Systematic and Unsystematic Risk	R2 : 20 - 23
13	1	Return - Historical return, Expected return, Absolute return, Holding period return, Annualized return, Arithmetic and Geometric return	R2 : 30 - 37
14	1	Recapitulation and discussion of important questions	
Total Number of hours planned for Unit I			**14**

UNIT II			
1	1	Capital budgeting – Meaning and Definition, Need and Importance of capital budgeting	R3 : 29.1 – 29.10
2	1	Objectives of Capital Budgeting Process and	R3: 29.10 – 29.11
3	1	Steps involved in capital budgeting process	R3: 29.11 – 29.12
4	1	Capital Budgeting Decision – Independent decision, Mutually exclusive decision and Capital rationing decision	R2 : 353 - 356
5	1	Methods of Capital Budgeting – Traditional Methods : Payback Period method and Average Rate of Return Method	R2 : 357 – 369, W2
6	1	Payback Period Method - Meaning, Merits and Limitations	R2 : 369 - 375
7	1	Average Rate of Return Method - Meaning, Merits and Limitations	T : D.158 – D.160
8	1	Discounted Cash flow Methods – Net Present Value Methods , Internal Rate of Return and Profitability Index methods	T : D.160 – D.162, W8
9	1	Net Present Value Method - Meaning, Merits and Limitations	T : D.163 – D.165
10	1	Internal Rate of Return Method - Meaning, Merits and Limitations, When there is equal cash inflows	R1 : 5.21 – 5.22
11	1	Internal Rate of Return Method - When there is unequal cash inflows	R1 : 5.21 – 5.22
12	1	Profitability Index Method - Meaning, Merits and Limitations	R1 : 5.23 – 5.25
13	1	Calculation of PI for selecting the projects	R1 : 5.25 – 5.28
14	1	Recapitulation and discussion of important questions	
Total Number of hours planned for Unit II			**14**
UNIT III			
1	1	Cost of Capital - Meaning and Definition	T: D.300 – D.301, W3
2	1	Basic aspects of cost of capital – Minimum rate of return, Premium for business risk and financial risk.	T: D.301 – D.302
3	1	Significance of cost of capital – Capital structure decision, Capital Budgeting decision and Dividend policy	R2 : 442 - 445
4	1	Classification of cost – Historical cost, Future Cost, Marginal cost, Average cost, Composite cost, Implicit and Explicit cost	R3 : 13.1 – 13.19
5	1	Computation of cost of capital – Specific cost of capital	R1 : 11.7 – 11.8
6	1	Cost of Debt Capital	R1 : 11.8 – 11.9
7	1	Cost of Preference Share Capital	R1 : 11.9 – 11.11

8	1	Cost of Equity Share Capital	R1 : 11.11 – 11.16
9	1	Cost of Retained Earnings	R1 : 11.16 – 11.18
10	1	Computation of Overall cost of capital - Weighted average cost of capital	T : D.319 – D.322, W3
11	1	Computation of Overall cost of capital - Weighted average cost of capital	T : D.322 – D.324
12	1	Computation of specific cost of capital	T : D.325 – D.327
13	1	Computation of overall cost of capital	T : D.328 – D.329
14	1	Recapitulation and discussion of important questions	
Total Number of hours planned for Unit III			**14**
UNIT IV			
1	1	Capital Structure - Meaning and Definition	R2 : 6.48 – 6.57
2	1	Forms of capital structure and Optimal capital structure, Importance of capital structure	R2 : 6.58 – 6.63, W4
3	1	Theories of capital structure – Net Income Approach	R3 : 18.11 – 18.15
4	1	Theories of capital structure – Net Operating Income Approach	R3 : 18.16 – 18.21
5	1	Theories of capital structure – Traditional Approach, MM Approach	R3: 18.21 – 18.27
6	1	Factors determining the capital structure	R3 : 18.27 – 18.32
7	1	Dividend and Dividend policy: Meaning	R3 : 18.33 – 18.38
8	1	The Theory of Irrelevance Residual and MM approach	T : D.352 – D.353
9	1	The Theory of Relevance – Walter's Model	T : D.353 – D.354
10	1	The Theory of Relevance – Gordon's Model	T: D.355 –D.361
11	1	Determinants of dividend policy Types of Dividend Policy	T : D.361 – D.377
12	1	Leverage – Meaning and Definition, Types of Leverage – Financial Leverage	T : D.329 – D.332
13	1	Types of Leverage –Operating and Composite Leverage, ENIT AND EPS analysis	T : D.332 - D.346
14	1	Recapitulation and discussion of important questions	
Total Number of hours planned for Unit IV			**14**
UNIT V			
1	1	Working Capital Management: - Meaning and Definition,	T : D.237 –D.240,

		Concept of working capital	W5
2	1	Classification of working capital – Permanent and Temporary working capital, Importance of Working Capital	R2 : 730 - 737
3	1	Advantages and disadvantages of maintaining adequate working capital	R2 : 737 - 738
4	1	Factors determining working capital requirements – Nature of business, Size of business, Operating cycle and Business cycle	R3 : 20.1 – 20.2
5	1	Factors determining working capital requirements – Turnover ratio, Dividend policy, Taxation, Receivables	R3 : 20.2 – 20.3
6	1	Estimating Working Capital requirements - Trading concern	R3 : 20.3 – 20.5
7	1	Estimating Working Capital requirements - Manufacturing concern	R3 : 20.6 – 20.8
8	1	Cash Management - Motives for holding cash	R3 : 20.8 – 20.9
9	1	Methods of showing cash inflow, Methods of showing cash outflow	R3 : 20.9 – 20.12
10	1	Receivables Management - Objectives and Cost of Credit Extension, benefits, Factors influencing the size of receivables	R1 : 18.6 – 18.24
11	1	Inventory Management – Nature and objectives of inventory management,	R3 : 21.1 – 21. 10, W6
12	1	Techniques of Inventory Management - Stock Level, ABC analysis, Economic Order Quantity	R3 : 21.10 – 21. 30
13	1	Recapitulation and discussion of important questions	**13**
14	1	Discussion of previous ESE question papers	-
15	1	Discussion of previous ESE question papers	-
16	1	Discussion of previous ESE question papers	**3**
Total no. of hours planned for Unit – V and Discussion of previous ESE question papers			**16**

SUGGESTED READINGS:

TExT BOOKS

T - S.N. Maheswari, Financial Management ,Sultan Chand and Sons, New Delhi,10th Edition, 2013

REFERENCES

R1 - Khan and Jain, Financial Management, Tata McGraw Hill Publishers Private Ltd New Delhi, 3rd Edition, 2017

R2 - I.M. Pandey, Financial Management, Vikas Publication House, New Delhi, 10th Edition, 2015

R3 - Shashi K Guptaa and Sharma, Financial Management Theory and Practice, Kalyani Publishers, Ludhiana, 7th Edition 2016

WEBSITES

W1 - http://www.tutor2u.net/business/accounts/finance_management_intro.htm

W2-http://www.cliffsnotes.com/more-subjects/accounting/accounting-principles-ii/capital-budgeting/capital-budgeting-techniques

W3 – http://www.investinganswers.com/financial-dictionary/stock-valuation/cost-capital-112

\W4 - http://www.investopedia.com/terms/w/wacc.asp

W5 - http://bookboon.com/en/working-capital-management-ebook

UNIT-I - Introduction to Financial Management

SYLLABUS

Financial Management - Finance and related disciplines - Scope of Financial Management - Functions of Finance - Traditional and Modern Approach in Finance Decisions, Investment Decision and Dividend Decision - Objectives of Financial Management - Profit Maximization - Wealth Maximization - Organisation of Finance Function - Concept of Time Value of Money - Present Value - Future value - annuity - Risk and Return - Historical return - Expected return - Absolute return - Holding period return - Annualized return - Arithmetic and Geometric return - Systematic Risk - Unsystematic risk – Sources and measures

INTRODUCTION

Business concern needs finance to meet their requirements in the economic world. Any kind of business activity depends on the finance. Hence, it is called as lifeblood of business organization. Whether the business concerns are big or small, they need finance to fulfill their business activities.

In the modern world, all the activities are concerned with the economic activities and very particular to earning profit through any venture or activities. The entire business activities are directly related with making profit. (According to the economics concept of factors of production, rent given to landlord, wage given to labour, interest given to capital and profit given to shareholders or proprietors), a business concern needs finance to meet all the requirements. Hence finance may be called as capital, investment, fund etc., but each term is having different meanings and unique characters. Increasing the profit is the main aim of any kind of economic activity.

MEANING OF FINANCE

Finance may be defined as the art and science of managing money. It includes financial service and financial instruments. Finance also is referred as the provision of money at the time when it is needed. Finance function is the procurement of funds and their effective utilization in business concerns.

The concept of finance includes capital, funds, money, and amount. But each word is having unique meaning. Studying and understanding the concept of finance become an important part of the business concern.

DEFINITION OF FINANCE

According to Khan and Jain,

"Finance is the art and science of managing money".

According to Oxford dictionary,

the word 'finance' connotes 'management of money'. Webster's Ninth New Collegiate Dictionary defines finance as "the Science on study of the management of funds' and the management of fund as the system that includes the circulation of money, the granting of credit, the making of investments, and the provision of banking facilities.

AIMS OF FINANCE FUNCTION

1. Rice in profits:

If the firm wants to maximise its value, it should' increase its profits and revenues. For this purpose increase of sales volume or other activities can be taken up. It is the general feature of any firm to increase profits by proper utilisation of all opportunities and plans. Theoretically, firm gets maximum profits if it is under equilibrium. At that stage the average cost is minimal and the marginal cost and the marginal revenues are equal. Here, we can't say the sales because there must be suitable market for the increased sales. Further, the above costs must also be controlled.

2. Reduction in cost:

Capital and equity funds are utilised for production. So all types of steps should be taken to reduce firm's cost of capital.

3. Sources of funds:

It should be decided by keeping in view the value of the firm to collect funds through issue of shares or debentures.

4. Reduce risks:

There won't be profits without risk. But for this reason if more risk is taken, it may become danger to the existence of the firm. Hence risk should be reduced to minimum level.

5. Long run value:

It should be the feature of financial management to increase the long-run value of the firm. To earn more profits in short time, some firms may do the activities like releasing of low quality goods, neglecting the interests of consumers and employees.

These trials may give good results in the short run. But for increasing the value of the firm in the long run, avoiding; such activities are more essential.

FINANCIAL MANAGEMENT

Financial management is that specialized activity which is responsible for obtaining and affectively utilizing the funds for the efficient functioning of the business and, therefore, it includes financial planning, financial administration and financial control.

Meaning and Definition

Financial management is that managerial activity which is concerned with the planning and controlling of the firm's financial resources. In other words it is concerned with acquiring, financing and managing assets to accomplish the overall goal of a business enterprise (mainly to maximize the shareholder's wealth).

"Financial management is concerned with the efficient use of an important economic resource, namely capital funds" - **Solomon Ezra & J. John Pringle**.

"Financial management is the operational activity of a business that is responsible for obtaining and effectively utilizing the funds necessary for efficient business operations"- **J.L. Massie**.

"Financial Management is concerned with managerial decisions that result in the acquisition and financing of long-term and short-term credits of the firm. As such it deals with the situations that require selection of specific assets (or combination of assets), the selection of specific liability (or combination of liabilities) as well as the problem of size and growth of an enterprise. The analysis of these decisions is based on the expected inflows and outflows of funds and their effects upon managerial objectives"**. – Phillippatus.**.

Nature of Financial Management

- It is an indispensable organ of business management.
- Its function is different from accounting function.
- It is a centralized function.

- Helpful in decisions of top management.
- It applicable to all types of concerns.
- It needs financial planning, control and follow-up.
- It related with different disciplines like economics, accounting, law, information technology, mathematics etc.

SCOPE AND FUNCTIONS OF FINANCIAL MANAGEMENT:

Financial management is one of the important parts of overall management, which is directly related with various functional departments like personnel, marketing and production. Financial management covers wide area with multidimensional approaches. The following are the important scope of financial management.

1. Financial Management and Economics

Economic concepts like micro and macroeconomics are directly applied with the financial management approaches. Investment decisions, micro and macro environmental factors are closely associated with the functions of financial manager. Financial management also uses the economic equations like money value discount factor, economic order quantity etc. Financial economics is one of the emerging area, which provides immense opportunities to finance, and economical areas.

2. Financial Management and Accounting

Accounting records includes the financial information of the business concern. Hence, we can easily understand the relationship between the financial management and accounting. In the olden periods, both financial management and accounting are treated as a same discipline and then it has been merged as Management Accounting because this part is very much helpful to finance manager to take decisions. But nowadays financial management and accounting discipline are separate and interrelated.

3. Financial Management or Mathematics

Modern approaches of the financial management applied large number of mathematical and statistical tools and techniques. They are also called as econometrics. Economic order quantity, discount factor, time value of money, present value of money, cost of capital, capital structure

theories, dividend theories, ratio analysis and working capital analysis are used as mathematical and statistical tools and techniques in the field of financial management.

4. Financial Management and Production Management

Production management is the operational part of the business concern, which helps to multiple the money into profit. Profit of the concern depends upon the production performance. Production performance needs finance, because production department requires raw material, machinery, wages, operating expenses etc. These expenditures are decided and estimated by the financial department and the finance manager allocates the appropriate finance to production department. The financial manager must be aware of the operational process and finance required for each process of production activities.

5. Financial Management and Marketing

Produced goods are sold in the market with innovative and modern approaches. For this, the marketing department needs finance to meet their requirements. The financial manager or finance department is responsible to allocate the adequate finance to the marketing department. Hence, marketing and financial management are interrelated and depends on each other.

6. Financial Management and Human Resource

Financial management is also related with human resource department, which provides manpower to all the functional areas of the management. Financial manager should carefully evaluate the requirement of manpower to each department and allocate the finance to the human resource department as wages, salary, remuneration, commission, bonus, pension and other monetary benefits to the human resource department. Hence, financial management is directly related with human resource management.

The scope of financial management has undergone changes over the years. Until the middle of this century, its scope was limited to procurement of funds. In the modern times, the financial management includes besides procurement of funds ,the three different kinds of decision as well namely investment, financing and dividend .Scope and importance of financial management includes-

- Estimating the total requirements of funds for a given period.
- Raising funds through various sources, both national and international, keeping in mind the cost effectiveness;

- Investing the funds in both long term as well as short term capital needs;
- Funding day-to-day working capital requirements of business;
- Collecting on time from debtors and paying to creditors on time;
- Managing funds and treasury operations;
- Ensuring a satisfactory return to all the stake holders;
- Paying interest on borrowings;
- Repaying lenders on due dates;
- Maximizing the wealth of the shareholders over the long term;
- Interfacing with the capital markets;
- Awareness to all the latest developments in the financial markets;
- Increasing the firm's competitive financial strength in the market; and
- Adhering to the requirements of corporate governance.

The above scope of activities can be grouped in to three functions-

FUNCTIONS OF FINANCIAL MANAGEMENT:

The modern approach to the financial management is concerned with the solution of major problems like investment financing and dividend decisions of the financial operations of a business enterprise. Thus, the functions of financial management can be broadly classified into three major decisions, namely:

(a) Investment decisions,

(b) Financing decisions,

(c) Dividend decisions.

1. **Investment decisions**: These decisions relate to the selection of assets in which funds will be invested by a firm .Funds procured from different sources have to be invested in various kinds of assets. Long term funds are used in a project for various fixed assets and also for current assets.

The investment of funds in a project has to be made after careful assessment of the various projects through capital budgeting .A part of long term fund is also to be kept for financing the working capital requirements.

2. **Financing decision:** These decisions relate to acquiring the optimum finance to meet financial objectives and seeing that fixed and working capital are effectively managed. It includes sources of available funds and their respective cost, capital structure, i.e. a proper balance between equity and

debt capital. It segregate profit and cash flow, financing decisions also call for a good knowledge of evaluation of risk.

3. **Dividend decision-** These decisions relate to the determination as to how much and how frequently cash can be paid out of the profits of an organization as income for its owners/shareholders, and the amount to be retained to support the growth of the organization. The level and regular growth of dividends represent a significant factor in determining a profit making company's market value i.e. the value placed on its shares by the stock market.

All the above three type of decisions are interrelated ,the first two pertaining to any kind of organization while the third relates only to profit making organizations, thus it can be seen that financial management is of vital importance at every level of business activity ,from a sole trader to the largest multinational corporation.

The financing decision relates to the composition of relative proportion of various sources of finance .The sources could be:

1. **Shareholders fund**: Equity share capital, Preference share capital, Accumulated profits.

2. **Borrowing from outside agencies**: Debentures, Loans from Financial Institutions. Whether the companies choose shareholders funds or borrowed funds or a combination of both, each type of fund carries a cost.

APPROACHES TO FINANCIAL MANAGEMENT

Financial management approach measures the scope of the financial management in various fields, which include the essential part of the finance. Financial management is not a revolutionary concept but an evolutionary. The definition and scope of financial management has been changed from one period to another period and applied various innovations. Theoretical points of view, financial management approach may be broadly divided into two major parts.

Traditional Approach

Traditional approach is the initial stage of financial management, which was followed, in the early part of during the year 1920 to 1950. This approach is based on the past experience and the traditionally accepted methods. Main part of the traditional approach is rising of funds for the business concern. Traditional approach consists of the following important area.

- Arrangement of funds from lending body.

- Arrangement of funds through various financial instruments.
- Finding out the various sources of funds.

FUNCTIONAL AREAS OF FINANCIAL MANAGEMENT

- Capital Budgeting
- Working Capital Management
- Dividend Policies
- Acquisitions and Mergers
- . Corporate Taxation
- Determining Financial Needs
- Determining Sources of Funds
- Financial Analysis
- Optimal Capital Structure
- Cost Volume Profit Analysis
- Profit Planning and Control
- Fixed Assets Management
- Project Planning and Evaluation

OBJECTIVE /GOALS OF FINANCIAL MANAGEMENT:

Effective procurement and efficient use of finance lead to proper utilization of the finance by the business concern. It is the essential part of the financial manager. Hence, the financial manager must determine the basic objectives of the financial management. Objectives of Financial Management may be broadly divided into two parts such as:

1. Profit maximization
2. Wealth maximization

Profit Maximization

Main aim of any kind of economic activity is earning profit. A business concern is also functioning mainly for the purpose of earning profit. Profit is the measuring techniques to understand the business efficiency of the concern. Profit maximization is also the traditional and narrow approach, which aims at, maximizes the profit of the concern. Profit maximization consists of the following important features.

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

2. Ultimate aim of the business concern is earning profit, hence, it considers all the possible ways to increase the profitability of the concern

3. Profit is the parameter of measuring the efficiency of the business concern. So it shows the entire position of the business concern.

4. Profit maximization objectives help to reduce the risk of the business.

Favourable Arguments for Profit Maximization

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

(i) Main aim is earning profit.

(ii) Profit is the parameter of the business operation.

(iii) Profit reduces risk of the business concern.

(iv) Profit is the main source of finance.

(v) Profitability meets the social needs also.

Unfavourable Arguments for Profit Maximization

The following important points are against the objectives of profit maximization:

(i) Profit maximization leads to exploiting workers and consumers.

(ii) Profit maximization creates immoral practices such as corrupt practice, unfair trade practice, etc.

(iii) Profit maximization objectives leads to inequalities among the sake holders such as customers, suppliers, public shareholders, etc.

Drawbacks of Profit Maximization

Profit maximization objective consists of certain drawback also:

(i) **It is vague:** In this objective, profit is not defined precisely or correctly. It creates some unnecessary opinion regarding earning habits of the business concern.

(ii) **It ignores the time value of money:** Profit maximization does not consider the time value of money or the net present value of the cash inflow. It leads certain differences between the actual cash inflow and net present cash flow during a particular period.

(iii) **It ignores risk:** Profit maximization does not consider risk of the business concern. Risks may be internal or external which will affect the overall operation of the business concern.

Wealth Maximization

Wealth maximization is one of the modern approaches, which involves latest innovations and improvements in the field of the business concern. The term wealth means shareholder wealth or the wealth of the persons those who are involved in the business concern.

Wealth maximization is also known as value maximization or net present worth maximization. This objective is a universally accepted concept in the field of business.

Favourable Arguments for Wealth Maximization

(i) Wealth maximization is superior to the profit maximization because the main aim of the business concern under this concept is to improve the value or wealth of the shareholders.

(ii) Wealth maximization considers the comparison of the value to cost associated with the business concern. Total value detected from the total cost incurred for the business operation. It provides extract value of the business concern.

(iii) Wealth maximization considers both time and risk of the business concern.

(iv) Wealth maximization provides efficient allocation of resources.

(v) It ensures the economic interest of the society.

Unfavourable Arguments for Wealth Maximization

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

(ii) Wealth maximization is nothing, it is also profit maximization, it is the indirect name of the profit maximization.

(iii) Wealth maximization creates ownership-management controversy.

(iv) Management alone enjoy certain benefits.

(v) The ultimate aim of the wealth maximization objectives is to maximize the profit.

(vi) Wealth maximization can be activated only with the help of the profitable position of the business concern.

Financial Management as the name suggests is management of finance. It deals with planning and mobilization of funds required by the firm. Managing of finance is nothing but managing of money. Every activity of an organization is reflected in its financial statements.

Financial Management deals with activities which have financial implications.

It includes-

- Profit maximization and wealth /value maximization
- Achieving a higher growth rate.
- Attaining a large market share.
- Promoting employee welfare
- Increasing customer satisfaction.
- Improve community life.

Among these, a conflict included in profit maximization and wealth /value maximization objective i.e. - The primary objective of a business is to earn profit, hence the objective of financial management is also **profit maximization**. If profit is given undue importance, a number of problems can arise, such as

- It does not take into account the time pattern of returns.
- It fails to take into account the social consideration to workers, customers etc.
- The term profit is vague – it conveys a different meaning to different people .e.g. total profit, rate of profit etc.

In **wealth maximization** business firm maximize its market value ,it implies that business decision should seek to increase the net present value of the economic profit of the firm .It is the duty of the finance manager to see that the share holders get good return on the share (EPS -Earning per Share). Hence, the value of the share should increase in the stock market. The wealth maximization objective is generally in accord with the interest of the various groups such as owners, employees etc.

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

IMPORTANCE OF FINANCIAL MANAGEMENT

Finance is the lifeblood of business organization. It needs to meet the requirement of the business concern. Each and every business concern must maintain adequate amount of finance for their smooth running of the business concern and also maintain the business carefully to achieve the goal of the business concern. The business goal can be achieved only with the help of effective management of finance. We can't neglect the importance of finance at any time at and at any situation. Some of the importance of the financial management is as follows:

Financial Planning

Financial management helps to determine the financial requirement of the business concern and leads to take financial planning of the concern. Financial planning is an important part of the business concern, which helps to promotion of an enterprise.

Acquisition of Funds

Financial management involves the acquisition of required finance to the business concern. Acquiring needed funds play a major part of the financial management, which involve possible source of finance at minimum cost.

Proper Use of Funds

Proper use and allocation of funds leads to improve the operational efficiency of the business concern. When the finance manager uses the funds properly, they can reduce the cost of capital and increase the value of the firm.

Financial Decision

Financial management helps to take sound financial decision in the business concern. Financial decision will affect the entire business operation of the concern. Because there is a direct relationship with various department functions such as marketing, production personnel, etc.,

Improve Profitability

Profitability of the concern purely depends on the effectiveness and proper utilization of funds by the business concern. Financial management helps to improve the profitability position of the concern with the help of strong financial control devices such as budgetary control, ratio analysis and cost volume profit analysis.

Increase the Value of the Firm

Financial management is very important in the field of increasing the wealth of the investors and the business concern. Ultimate aim of any business concern will achieve the maximum profit and higher profitability leads to maximize the wealth of the investors as well as the nation.

Promoting Savings

Savings are possible only when the business concern earns higher profitability and maximizing wealth. Effective financial management helps to promoting and mobilizing individual and corporate savings.

Nowadays financial management is also popularly known as business finance or corporate finances. The business concern or corporate sectors cannot function without the importance of the financial management.

PROFIT MAXIMIZATION VS WEALTH MAXIMISATION

Profit maximization refers to how much dollar profit the company makes. It is a **short term** approach and a myopic person or business is mostly concerned about short term benefits.

But a short term horizon can fulfill objective of earning profit but may **not help** in creating wealth. It is because wealth creation needs a longer term; therefore financial management emphasizes on wealth maximization rather than profit maximization.

For a business, **it is not necessary that profit should be the only objective**; it may concentrate on various other aspects like increasing sales, capturing more market share, return on capital etc, which will take care of profitability. So, we can say that profit maximization is a **subset** of wealth and being a subset, it will facilitate wealth creation.

Constrains of Profit Maximisation

- It is a short term approach
- It ignores the timing of returns, cash flows, and risk
- Profit max method could not discuss on market share, high sales, and greater stability and so on.
- It could not consider the social responsibility that is one of the most important objectives of many firms.

Wealth maximization is **long term** process. It refers the **value of the company** generally expressed in the **value of the stock.**

- Value maximization says that managers should make all decisions so as to increase the total long run market value of the firm. Total value is the sum of the value of all financial claims on the firm- including **equity, debt, preferred stock and warrants.**
- The executives undertake investing in new projects, maximizing profits from existing products and services, controlling cost, and adding value to the company through process, which reflects in the price of the stock, but always in the increase in Net Asset Value and Equity per Share.
- The wealth of corporate owners is measured by the share price of the stock, which in turn is based on the **timing of returns (cash flows), their magnitude and their risk.** Maximizing share price will maximize owner wealth.
- Cash flow and risk are **the key decision variables** in maximizing owner wealth.
- When investors look at a company they not only look at dollar profit but also profit margins, return on capital, and other indicators of efficiency. Profit maximization does not achieve the objectives of the firm's owners; therefore wealth maximization is better option than profit maximization

Profit Max vs. Wealth Maximisation

1. Profit maximization is short term approach and it refers to how much money the company makes. But Wealth maximization is a long term approach and it refers the value of the company.
2. Profit maximization is a subset of wealth.
3. Profit max ignores timing, cash flows, and risk, but in wealth maximizing those are the key decisions variables.

Stakeholders Wealth

"Stakeholder theory", the asserted main **contender** to value maximization for this objective function, has its root in **sociology**, **organizational behavior**, the **politics of specials interests**, and **managerial self interest.** Here "**asserted contender**" because stakeholder theory is incomplete as a specification for the corporate purpose or objective function. It is incompleteness in not accidental; it serves the **private interests** of those who promote it, including many managers and directors of

corporations. Briefly put, **value maximization** says that managers should make all decisions so as to increase the total long run market value for the firm. Total value is the sum of the value of all financial claims on the firm- **including equity**, **debt, preferred stock**, and **warrants.**

Stakeholder theory, on the other hand, says that managers should make decisions so as **to take account** of the interest **of all the stakeholders in a firm**. And stakeholders include all individuals or group who can substantially affect the welfare of the firm, including not only the financial claimants, but also employees, customers, communities, governmental officials, and under some interpretation the environment, terrorists, blackmailers, and thieves.

SOURCES OF FINANCE

Finance is the lifeblood of business concern, because it is interlinked with all activities performed by the business concern. In a human body, if blood circulation is not proper, body function will stop. Similarly, if the finance not being properly arranged, the business system will stop. Arrangement of the required finance to each department of business concern is highly a complex one and it needs careful decision. Quantum of finance may be depending upon the nature and situation of the business concern. But, the requirement of the finance may be broadly classified into two parts:

Long-term Financial Requirements or Fixed Capital Requirement

Financial requirement of the business differs from firm to firm and the nature of the requirements on the basis of terms or period of financial requirement, it may be long term and short-term financial requirements.

Long-term financial requirement means the finance needed to acquire land and building for business concern, purchase of plant and machinery and other fixed expenditure. Long term financial requirement is also called as fixed capital requirements. Fixed capital is the capital, which is used to purchase the fixed assets of the firms such as land and building, furniture and fittings, plant and machinery, etc. Hence, it is also called a capital expenditure.

Short-term Financial Requirements or Working Capital Requirement

Apart from the capital expenditure of the firms, the firms should need certain expenditure like procurement of raw materials, payment of wages, day-to-day expenditures, etc. This kind of expenditure is to meet with the help of short-term financial requirements which will meet the

operational expenditure of the firms. Short-term financial requirements are popularly known as working capital.

Sources of finance mean the ways for mobilizing various terms of finance to the industrial concern. Sources of finance state that, how the companies are mobilizing finance for their requirements. The companies belong to the existing or the new which need sum amount of finance to meet the long-term and short-term requirements such as purchasing of fixed assets, construction of office building, purchase of raw materials and day-to-day expenses. Sources of finance may be classified under various categories according to the following important heads:

1. Based on the Period

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

LONG TERM SOURCES OF FUNDS:

Companies raise long term funds from the capital markets. Funds available for a period of less than one year are short term funds. With the increase in cross-border transactions, international sources of funds are also available. An effective trade-off between the domestic funds and international funds shall contribute towards increasing profitability and wealth maximization To enable the investments, creation of assets and infrastructure, an organisation require long term sources of funds.

Long-term sources of finance include:

- Equity Shares
- Preference Shares
- Debenture
- Long-term Loans
- Fixed Deposits

1. Equity Share Capital

Equity share capital is a basic source of finance for any Company. It represents the ownership interest in the company. The characteristics of equity share capital are a direct consequence of its position in the company's control, income and assets. Equity share capital does not have any maturity nor there any compulsion to pay dividend on it. The equity share capital provides funds, more or less, on a permanent basis. It also works as a base for creating the debt and loan capacity of the firm.

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

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

Features of Equity Shares

Equity shares consist of the following important features:

1. **Maturity of the shares:** Equity shares have permanent nature of capital, which has no maturity period. It cannot be redeemed during the lifetime of the company.
2. **Residual claim on income:** Equity shareholders have the right to get income left after paying fixed rate of dividend to preference shareholder. The earnings or the income available to the shareholders is equal to the profit after tax minus preference dividend.
3. **Residual claims on assets:** If the company wound up, the ordinary or equity shareholders have the right to get the claims on assets. These rights are only available to the equity shareholders.
4. **Right to control:** Equity shareholders are the real owners of the company. Hence, they have power to control the management of the company and they have power to take any decision regarding the business operation.
5. **Voting rights:** Equity shareholders have voting rights in the meeting of the company with the help of voting right power; they can change or remove any decision of the business concern. Equity shareholders only have voting rights in the company meeting and also they can nominate proxy to participate and vote in the meeting instead of the shareholder.
6. **Pre-emptive right:** Equity shareholder pre-emptive rights. The pre-emptive right is the legal right of the existing shareholders. It is attested by the company in the first opportunity to purchase additional equity shares in proportion to their current holding capacity.
7. **Limited liability:** Equity shareholders are having only limited liability to the value of shares they have purchased. If the shareholders are having fully paid up shares, they have no liability.

Advantages of Equity Share Financing

a. Since equity shares do not mature, it is a permanent source of fund. However, a company, if it so desires, can retire shares through buy-back as per the guidelines issued by the SEBI.

b. The new equity share capital increases the corporate flexibility from the point of view of capital structure planning. One such strategy may be to retire debt financing out of the funds received from the issue of equity capital.

c. Equity share capital does not involve any mandatory payments to shareholders.

d. It may be possible to make further issue of share capital by using a right offering. In general, selling right shares involves no change in the relationship between ownership and control. Existing shareholders can maintain their proportionate holding by exercising their pre-emptive right.

Limitations of Equity Share Financing

a. The equity share capital has the highest specific cost of capital among all the sources. This necessitates that the investment proposals should also have equally high rate of return.

b. Equity dividends are paid to the shareholders out of after-tax profits. These dividends are not tax deductible, rather imply a burden of Corporate Dividend tax on the company.

c. At times, the new issue of equity capital may reduce the EPS and thus may have an adverse effect on the market price of the equity share.

d. Excessive issue of equity share can dilute the ownership of the Company.

2. Preference Share Capital

The preference share capital is also owner's capital but has a maturity period. In India, the preference shares must be redeemed within a maximum period of 20 years from the date of issue.

The rate of dividend payable on preference shares is also fixed. As against the equity share capital, the preference shares have two references:

(i) Preference with respect to payment of dividend, and

(ii) Preference with reference to repayment of capital in case of liquidation of company.

However, the preference share capital represents an ownership interest and not a liability of the company. The preference shareholders have the right to receive dividends in priority over the equity shareholders. Indeed, it is this preference which distinguishes preference shares from equity shares. A dividend need not necessarily be paid on either type of shares. However, if the directors

want to pay equity dividend, then the full dividend due on the preference shares must be paid first. Failure to meet commitment of preference dividend is not a ground for liquidation.

Preference shares may be classified into the following major types:

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

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

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

Irredeemable Preference Shares

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

Participating Preference Shares

Participating preference shares holders have right to participate extra profits after distributing the equity shareholders.

Non-Participating Preference Shares

Non-participating preference shares holders are not having any right to participate extra profits after distributing to the equity shareholders. Fixed rate of dividend is payable to the type of shareholders.

Convertible Preference Shares

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

Non-convertible Preference Shares

There shares, cannot be converted into equity shares from preference shares.

Features of Preference Shares

The following are the important features of the preference shares:

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

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

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

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

The advantages and disadvantages of the preference share capital are as follows:

Advantages of Preference Share Financing

a. The preference shares carry limited voting right though they are a part of the capital. Thus, these do not present a major control or ownership problem as long as the dividends are paid to them.

b. As an instrument of financing, the cost of capital of preference shares is less than that of equity shares.

c. The preference share financing may also provide a hedge against inflation because the fixed financial commitment which is unaffected by the inflation.

d. As there is no legal compulsion to pay preference dividend, a company does not face liquidation or other legal proceedings if it fails to pay the preference dividends.

Limitations of Preference Share Financing

a. The cost of capital of preference shares is higher than cost of debt.

b. Though there is no compulsion to pay preference dividend, yet the non-payment may adversely affect the market price of the equity shares and hence affect the value of the firm.

c. The compulsory redemption of preference shares after 20 years will entail a substantial cash outflow from the company.

d. If the company is not able to earn a return at least equal to the cost of preference share capital, then it may result in decrease in EPS for the equity shareholders.

3. Debentures

A bond or a debenture is the basic debt instrument which may be issued by a borrowing company for a price which may be less than, equal to or more than the face value. A debenture also carries a promise by the company to make interest payments to the debenture-holders of specified amount, at specified time and also to repay the principal amount at the end of a specified period. Since the debt instruments are issued keeping in view the need and cash flow profile of the company as well as the investor, there have been a variety of debt instruments being issued by companies in practice. In all these instruments, the basic features of being in the nature of a loan are not dispensed with and, therefore, these instruments have some or the other common features as follows:

(i) Credit Instrument—A debenture-holder is a creditor of the company and is entitled to receive payments of interest and the principal and enjoys some other rights.

(ii) Interest Rate— In most of the cases, the debt securities promise a rate of interest payable periodically to the debt holders. The rate of interest is also denoted as coupon rate.

(iii) Collateral— Debt issue may or may not be secured and, therefore, debentures or other such securities may be called secured debentures or unsecured debentures.

(iv) Maturity Date— All debt instruments have a fixed maturity date, when these will be repaid or redeemed in the manner specified.

(v) Voting Rights— As the debt holders are creditors of the company, they do not have any voting right in normal situations.

(vi) Face Value—every debt instrument has a face value as well as a maturity value.

(vii) Priority in Liquidation— In case of liquidation of the company, the claim of the debt holders is settled in priority over all shareholders and, generally, other unsecured creditors also.

Types of Debentures

Debentures may be divided into the following major types:

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

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

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

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

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

Non-convertible debentures

Fully convertible debentures

Partly convertible debentures

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

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

Features of Debentures

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

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

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

treated as secured creditors and floating change of Debenture holders are treated as unsecured creditors.

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

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

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

Advantages of Debenture

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

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

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

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

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

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

Disadvantages of Debenture

Debenture finance consists of the following major disadvantages:

- **Fixed rate of interest:** Debenture consists of fixed rate of interest payable to securities. Even though the company is unable to earn profit, they have to pay the fixed rate of interest to debenture holders, hence, it is not suitable to those company earnings which fluctuate considerably.
- **No voting rights:** Debenture holders do not have any voting rights. Hence, they cannot have the control over the management of the company.

- **Creditors of the company:** Debenture holders are merely creditors and not the owners of the company. They do not have any claim in the surplus profits of the company.
- **High risk:** Every additional issue of debentures becomes more risky and costly on account of higher expectation of debenture holders. This enhanced financial risk increases the cost of equity capital and the cost of raising finance through debentures which is also high because of high stamp duty.
- **Restrictions of further issues:** The Company cannot raise further finance through debentures as the debentures are under the part of security of the assets already mortgaged to debenture holders.

4. Lease and Hire Purchase

Instead of procuring funds, and purchasing the equipment, a firm can acquire the asset itself on lease. In this case, the asset is financed by the lessor but the lessee gets the asset for use. In case of hire purchase, the assets are acquired on credit and payments are made as per terms and conditions.

5. Term Loans

This is also an important source of long-term financing. There are different financial institutions (National level as well as State level) which provide financial assistance for taking up projects. These cans be broadly divided into All India Financial Institutions and State level Financial Institutions. The All India Institutions are:-

i) Industrial Finance Corporation of India, (IFCI)

ii) Industrial Credit and Investment Corporation in India (ICICI),

iii) Industrial Development Bank of India (IDBI),

iv) Life Insurance Corporation of India,

v) Industrial Reconstruction Corporation of India,

vi) Unit Trust of India,

vii) National Small Industries Corporation Ltd.(NSIC)

The state level institutions are the State Finance Corporations and the State Industrial Development Corporations.

6. Official Foreign Source of Finance

1. Foreign Collaboration: In India joint participation of foreign and domestic capital has been quite common in recent years. Foreign collaboration could be either in the form of joint participation between private firms, or between foreign firms and Indian Government, or between foreign governments and Indian Government.

2. Bilateral Government Funding Arrangement: Generally, advanced countries provide aid in the form of loans and advances, grants, subsidies to governments of under-developed and developing countries. The aid is provided usually for financing government and public sector projects. Funds are provided at concessional terms in respect of cost (interest), maturity, and repayment schedule.

3. NRI Deposits and Investments: on-resident Indian have always been making a contribution in Indian economy. Government has been making efforts to encourage their deposits and investments. Various schemes have been devised which ensure higher returns; procedures have been simplified to attract investments in primary and secondary market. Tax incentives are given on interest earned and dividends received by NRIs.

4. Loans from International Financial Institutions: International Bank for Reconstruction and Development (IBRD), International Monetary Fund (IMF), Asian Development Bank (ADB),and World Bank have been the major source of external finance to India.

5. External Commercial Borrowing (CEB) : Our country has also been obtaining foreign capital in the form of external commercial borrowings from agencies like US EXIM Bank, ECGC of UK, etc.

7. Non Official Foreign Source of Finance:

Foreign Direct Investment (FDI)

Foreign direct investment is one of the most important sources of foreign investment in developing countries like India. It is seen as a means to supplement domestic investment for achieving a higher level of growth and development. FDI is permitted under the forms of investments.

1. Through financial collaborations / capital / equity participation;
2. Through Joint ventures and technical collaborations;
3. Through capital markets (Euro Issues);
4. Through private placements or preferential allotment.

Capital participation / financial collaboration refers to the foreign partner's stake in the capital of the receiving country's companies while technical collaboration refers to such facilities provided by

foreign partner as licensing, trademarks and patents (against which he gets lump sum fee or royalty payments for specified period); technical services etc.

From investors' point of view, the FDI inflows can be classified into the following groups.

(a) Market seeking: The investors are attracted by the size of the local market, which depends on the income of the country and its growth rate.

(b) Lower cost: Investors are more cost-conscious. They are influenced by infrastructure facilities and labour costs.

(c) Location and other factors: Technological status of a country, brand name, goodwill enjoyed by the local firms, favorable location, openness of the economy, policies of the government and intellectual property protection granted by the government are some of the factors that attract investors to undertake investments.

SHORT TERM FUNDS:

Short term funds are usually required for working capital; to operate the project after it is completed. The working capital consists of the margin to be provided by the entrepreneur and the bulk of the balance is borrowed from a commercial bank or some other source as short term finance. The margin to be provided by the entrepreneur is included in the project cost estimates and is in financed from the various means of financing discussed earlier. The main sources of working capital are:-

1. Commercial banks,
2. The type of debentures issued for meeting working capital requirements are usually then on-convertible debentures.
3. Public Deposit
4. Commercial Paper
5. Supplier' Credit
6. Foreign currency funds etc.

2. Based on Ownership

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

An ownership source of finance include

- Shares capital, earnings
- Retained earnings

● Surplus and Profits

Borrowed capital include

● Debenture

● Bonds

● Public deposits

● Loans from Bank and Financial Institutions.

3. Based on Sources of Generation

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

Internal source of finance includes

● Retained earnings

● Depreciation funds

● Surplus

External sources of finance may be include

● Share capital

● Debenture

● Public deposits

● Loans from Banks and Financial institutions

4. Based in Mode of Finance

Security finance may be include

● Shares capital

● Debenture

Retained earnings may include

● Retained earnings

● Depreciation funds

Loan finance may include

● Long-term loans from Financial Institutions

● Short-term loans from Commercial banks.

The above classifications are based on the nature and how the finance is mobilized from various sources. But the above sources of finance can be divided into three major Classifications:

● Security Finance

- Internal Finance
- Loans Finance

Retained Earnings

Retained earnings are another method of internal sources of finance. Actually is not a method of raising finance, but it is called as accumulation of profits by a company for its expansion and diversification activities.

Retained earnings are called under different names such as; self finance, inter finance, and plugging back of profits. According to the Companies Act 1956 certain percentage, as prescribed by the central government (not exceeding 10%) of the net profits after tax of a financial year have to be compulsorily transferred to reserve by a company before declaring dividends for the year. Under the retained earnings sources of finance, a part of the total profits is transferred to various reserves such as general reserve, replacement fund, reserve for repairs and renewals, reserve funds and secrete reserves, etc.

Advantages of Retained Earnings

Retained earnings consist of the following important advantages:

1. Useful for expansion and diversification: Retained earnings are most useful to expansion and diversification of the business activities.

2. Economical sources of finance: Retained earnings are one of the least costly sources of finance since it does not involve any floatation cost as in the case of raising of funds by issuing different types of securities.

3. No fixed obligation: If the companies use equity finance they have to pay dividend and if the companies use debt finance, they have to pay interest. But if the company uses retained earnings as sources of finance, they need not pay any fixed obligation regarding the payment of dividend or interest.

4. Flexible sources: Retained earnings allow the financial structure to remain completely flexible. The company need not raise loans for further requirements, if it has retained earnings.

5. Increase the share value: When the company uses the retained earnings as the sources of finance for their financial requirements, the cost of capital is very cheaper than the other sources of finance; Hence the value of the share will increase.

6. Avoid excessive tax: Retained earnings provide opportunities for evasion of excessive tax in a company when it has small number of shareholders.

7. Increase earning capacity: Retained earnings consist of least cost of capital and also it is most suitable to those companies which go for diversification and expansion.

Disadvantages of Retained Earnings

Retained earnings also have certain disadvantages:

1. Misuses: The management by manipulating the value of the shares in the stock market can misuse the retained earnings.

2. Leads to monopolies: Excessive use of retained earnings leads to monopolistic attitude of the company.

3. Over capitalization: Retained earnings lead to over capitalization, because if the company uses more and more retained earnings, it leads to insufficient source of finance.

4. Tax evasion: Retained earnings lead to tax evasion. Since, the company reduces tax burden through the retained earnings.

5. Dissatisfaction: If the company uses retained earnings as sources of finance, the shareholder can't get more dividends. So, the shareholder does not like to use the retained earnings as source of finance in all situations.

Functions of Finance Manager

Finance function is one of the major parts of business organization, which involves the permanent, and continuous process of the business concern. Finance is one of the interrelated functions which deal with personal function, marketing function, production function and research and development activities of the business concern. At present, every business concern concentrates more on the field of finance because, it is a very emerging part which reflects the entire operational and profit ability position of the concern. Deciding the proper financial function is the essential and ultimate goal of the business organization. Finance manager is one of the important role players in the field of finance function. He must have entire knowledge in the area of accounting, finance, economics and management. His position is highly critical and analytical to solve various problems related to finance. A person who deals finance related activities may be called finance manager.

Finance manager performs the following major functions:

1. Forecasting Financial Requirements

It is the primary function of the Finance Manager. He is responsible to estimate the financial requirement of the business concern. He should estimate, how much finances required to acquire fixed assets and forecast the amount needed to meet the working capital requirements in future.

2. Acquiring Necessary Capital

After deciding the financial requirement, the finance manager should concentrate how the finance is mobilized and where it will be available. It is also highly critical in nature.

3. Investment Decision

The finance manager must carefully select best investment alternatives and consider the reasonable and stable return from the investment. He must be well versed in the field of capital budgeting techniques to determine the effective utilization of investment. The finance manager must concentrate to principles of safety, liquidity and profitability while investing capital.

4. Cash Management

Present days cash management plays a major role in the area of finance because proper cash management is not only essential for effective utilization of cash but it also helps to meet the short-term liquidity position of the concern.

5. Interrelation with Other Departments

Finance manager deals with various functional departments such as marketing, production, personnel, system, research, development, etc. Finance manager should have sound knowledge not only in finance related area but also well versed in other areas. He must maintain a good relationship with all the functional departments of the business organization.

Importance Of Financial Management

Finance is the lifeblood of business organization. It needs to meet the requirement of the business concern. Each and every business concern must maintain adequate amount of finance for their smooth running of the business concern and also maintain the business carefully to achieve the goal of the business concern. The business goal can be achieved only with the help of effective management of finance. We can't neglect the importance of finance at any time at and at any situation. Some of the importance of the financial management is as follows:

Financial Planning

Financial management helps to determine the financial requirement of the business concern and leads to take financial planning of the concern. Financial planning is an important part of the business concern, which helps to promotion of an enterprise.

Acquisition of Funds

Financial management involves the acquisition of required finance to the business concern. Acquiring needed funds play a major part of the financial management, which involve possible source of finance at minimum cost.

Proper Use of Funds

Proper use and allocation of funds leads to improve the operational efficiency of the business concern. When the finance manager uses the funds properly, they can reduce the cost of capital and increase the value of the firm.

Financial Decision

Financial management helps to take sound financial decision in the business concern. Financial decision will affect the entire business operation of the concern. Because there is a direct relationship with various department functions such as marketing, production personnel, etc.

Improve Profitability

Profitability of the concern purely depends on the effectiveness and proper utilization of funds by the business concern. Financial management helps to improve the profitability position of the concern with the help of strong financial control devices such as budgetary control, ratio analysis and cost volume profit analysis.

Increase the Value of the Firm

Financial management is very important in the field of increasing the wealth of the investors and the business concern. Ultimate aim of any business concern will achieve the maximum profit and higher profitability leads to maximize the wealth of the investors as well as the nation.

Promoting Savings

Savings are possible only when the business concern earns higher profitability and maximizing wealth. Effective financial management helps to promoting and mobilizing individual and corporate savings. Nowadays financial management is also popularly known as business finance or corporate finances. The business concern or corporate sectors cannot function without the importance of the financial management.

The **time value of money** (TVM) is the idea that **money** available at the present **time** is worth more than the same amount in the future due to its potential earning capacity. This core principle of finance holds that, provided **money** can earn interest, any amount of **money** is worth more the sooner it is received.

Time Value of Money

Introduction

Time Value of Money (TVM) is an important concept in financial management. It can be used to compare investment alternatives and to solve problems involving loans, mortgages, leases, savings, and annuities.

TVM is based on the concept that a dollar that you have today is worth more than the promise or expectation that you will receive a dollar in the future. Money that you hold today is worth more because you can invest it and earn interest. After all, you should receive some compensation for foregoing spending. For instance, you can invest your dollar for one year at a 6% annual interest rate and accumulate $1.06 at the end of the year. You can say that the **future value** of the dollar is $1.06 given a 6% **interest rate** and a one-year **period**. It follows that the **present value** of the $1.06 you expect to receive in one year is only $1.

A key concept of TVM is that a single sum of money or a series of equal, evenly-spaced payments or receipts promised in the future can be converted to an equivalent value today. Conversely, you can determine the value to which a single sum or a series of future payments will grow to at some future date.

You can calculate the fifth value if you are given any four of: Interest Rate, Number of Periods, Payments, Present Value, and Future Value. Each of these factors is very briefly defined in the right-hand column below. The left column has references to more detailed explanations, formulas, and examples.

Interest • **Simple** • **Compound**	Interest is a charge for borrowing money, usually stated as a percentage of the amount borrowed over a specific period of time. **Simple interest** is computed only on the original amount borrowed. It is the return on that principal for one time period. In contrast, **compound interest** is calculated each period on the original amount

	borrowed **plus** all unpaid interest accumulated to date. Compound interest is always assumed in TVM problems.
Number of Periods	Periods are evenly-spaced intervals of time. They are intentionally not stated in years since each interval must correspond to a compounding period for a single amount or a payment period for an annuity.
Payments	Payments are a series of equal, evenly-spaced cash flows. In TVM applications, payments must represent all outflows (negative amount) or all inflows (positive amount).
Present Value • **Single Amount** • **Annuity**	**Present Value** is an amount today that is equivalent to a future payment, or series of payments, that has been discounted by an appropriate interest rate. The future amount can be a single sum that will be received at the end of the last period, as a series of equally-spaced payments (an annuity), or both. Since money has time value, the present value of a promised future amount is worth less the longer you have to wait to receive it.
Future Value • **Single Amount** • **Annuity**	**Future Value** is the amount of money that an investment with a fixed, compounded interest rate will grow to by some future date. The investment can be a single sum deposited at the beginning of the first period, a series of equally-spaced payments (an annuity), or both. Since money has time value, we naturally expect the future value to be greater than the present value. The difference between the two depends on the number of compounding periods involved and the going interest rate.
Loan Amortization	A method for repaying a loan in equal installments. Part of each payment goes toward interest and any remainder is used to reduce the principal. As the balance of the loan is gradually reduced, a progressively larger portion of each payment goes toward reducing

	principal.
Cash Flow Diagram	A cash flow diagram is a picture of a financial problem that shows all cash inflows and outflows along a time line. It can help you to visualize a problem and to determine if it can be solved by TVM methods.

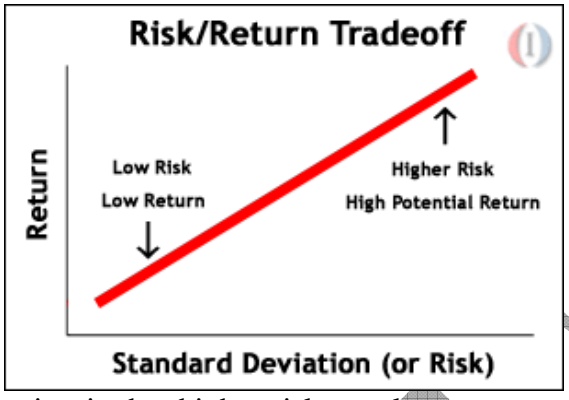
Risk and Return

High levels of uncertainty (high **risk**) are associated with high potential returns. The **risk/return** tradeoff is the balance between the desire for the lowest possible **risk** and the highest possible **return**. Investment **risks** can be divided into two categories: systematic and unsystematic.

The risk/return tradeoff could easily be called the "ability-to-sleep-at-night test." While some people can handle the equivalent of financial skydiving without batting an eye, others are terrified to climb the financial ladder without a secure harness. Deciding what amount of risk you can take while remaining comfortable with your investments is very important.

In the investing world, the dictionary definition of risk is the chance that an investment's actual return will be different than expected. Technically, this is measured in statistics by standard deviation. Risk means you have the possibility of losing some, or even all, of your original investment.

Low levels of uncertainty (low risk) are associated with low potential returns. High levels of uncertainty (high risk) are associated with high potential returns. The risk/return tradeoff is the balance between the desire for the lowest possible risk and the highest possible return. This is demonstrated graphically in the chart below. A higher standard deviation means a higher risk and higher possible return.



A common misconception is that higher risk equals greater return. The risk/return tradeoff tells us that the higher risk gives us the *possibility* of higher returns. There are no guarantees. Just as risk means higher potential returns, it also means higher potential losses.

On the lower end of the scale, the risk-free rate of return is represented by the return on U.S. Government Securities because their chance of default is next to nothing. If the risk-free rate is currently 6%, this means, with virtually no risk, we can earn 6% per year on our money.

The common question arises: who wants to earn 6% when index funds average 12% per year over the long run? The answer to this is that even the entire market (represented by the index fund) carries risk. The return on index funds is not 12% every year, but rather -5% one year, 25% the next year, and so on. An investor still faces substantially greater risk and volatility to get an overall return that is higher than a predictable government security. We call this additional return the risk premium, which in this case is 6% (12% - 6%).

Determining what risk level is most appropriate for you isn't an easy question to answer. Risk tolerance differs from person to person. Your decision will depend on your goals, income and personal situation, among other factors.

Part A (ONE Mark)

Multiple Choice Questions

Online Examination

Part B (2 Marks Questions)

1. Define financial management
2. What is meant by finance function?
3. List out the approaches of finance function?
4. Write any four scope of financial management?
5. List out the objectives of financial management?
6. What are elements involved in maximizing profits?
7. What is meant by financial decision?
8. Draw a chart showing the financial management process?
9. Write any four factions of finance manager?
10. Write the formula for calculating shareholders wealth?
11. Write any four features of equity shares?
12. Give the meaning for the term factoring?
13. List out the three financial decision?
14. List out the approaches of finance function?
15. Write the formula for calculating shareholders current wealth?
16. Draw a chart showing the financial management process?
17. Draw a chart for the classification of corporate securities?
18. Give the meaning for finance function?
19. Write the various types of preference shares?

Part C (6 Marks Questions)

1. Define Financial Management, Discuss the scope of financial management in detail?
2. ." Investment, Financing and dividend decision are all inter related " Comment?
3. Define Financial Management, Discuss the scope of financial management in detail?
4. Explain the characteristics, advantages and limitations of preference shares?
5. " Maximization of profit is regarded as the proper objective of investment decision, but it is not as exclusive as maximizing shareholders wealth" Comment?
6. "Profit Maximization Vs Wealth maximization" Discuss
7. Explain the importance of financial decision?
8. Explain the concept time value of money with suitable illustration?
9. Define risk. Explain the different types of risk with suitable examples?
10. Discuss the different techniques for calculating return in case of bond and shares?

FINANCIAL MANAGEMENT
UNIT I

QUESTIONS	OPTION 1	OPTION 2	OPTION 3	OPTION 4	ANSWER
The appropriate objective of an enterprise is	Maximization of sales	Maximization of	Maximization of	Maximization of	Maximization of owners
_____is the life blood of an enterprises	Finance	production	sales	purchases	Finance
_____ deals with the requirement of	public finance	private finance	business finance	personal finance	public finance
_____ is concerned with the requirement,	public finance	private finance	business finance	personal finance	private finance
Private finance includes ----------	personal finance	business finance	Personal and	Corporate finance	Personal and business
Public finance includes -------	Central government	State government	Central and State	Personal and business	Central and State
The process of raising, providing and	corporate finance	partnership finance	sole trader finance	co-operative finance	corporate finance
Financial management as practiced by	corporate finance	partnership finance	sole trader finance	co-operative finance	corporate finance
_____ refers to that part of the	Financial Management	Human resource	Management	Auditing	Financial Management
_____ focus all the financial activities in	finance function	marketing function	production function	personnel function	finance function
According to traditional approach of	procurement of funds	utilization of funds	Distribution of fund	Retention of fund	procurement of funds
According to modern approach, the finance	procurement of funds	utilization of funds	Procurement and	Distribution of fund	Procurement and
The modern approach considers the basic	Finance decisions	Investment decisions	Dividend decision	Finance, Investment and	Finance, Investment and
The ---------- refers to the kind and	Capital structure	cost of capital	capital budgeting	Leverage	Capital structure
Various sources from which finance may be	share capital	debenture capital	public deposits	Equity share capital,	Equity share capital,
The primary objective of financial	profit maximization	wealth maximization	Sales maximisation	Return maximisation	wealth maximization
The higher the stock price per share the ------	Greater	Lower	Fixed	Flexible	Greater
_____ refers to decision concerning	financial decision	investment decision	production decision	marketing decision	financial decision
The ---------- investment decision is	short term	long term	medium term	Internal source	long term
The ---------- investment decision is	short term	long term	medium term	Internal source	short term
_____ is the process of making	capital budgeting	working capital	cost of capital	leverage	capital budgeting
The decision relates to the disbursement of	Finance decision	Investment decision	Dividend decision	Production decision	Dividend decision
The term ---------- refers to the part of	Interest	Dividend	Premium	Bonus	Dividend
_____ is also called as ploughing back of	Equity share capital	Retained Earnings	Preference share	Debt	Retained Earnings
_____ is also called as common stock	Equity share	Preference share	Debenture	Bond	Equity share
The crucial factor which influences the	solvency	liquidity	profitability	financial position	profitability
Financial forecasting and planning are the	production manager	finance manager	marketing manager	personnel manager.	finance manager
The basic responsibility of the ----------	manager	treasurer	controller	accountant	treasurer
The basic responsibility of the ---------- is	manager	treasurer	controller	accountant	controller
_____ is a internal source of finance	Depreciation	Equity share capital	Preference share	Debenture	Depreciation
The job of a finance manager is confined to -	raising of funds	management of cash	raising of funds and	Raising, Utilisation and	Raising, Utilisation and
Financial decisions involve -------	Investment , finance and	Investment , finance	Investment , finance	Investment , finance and	Investment , finance and
Higher is the risk higher is the ----------	return	risk	cost	sales	return
_____ arises when there is a possibility	return	risk	cost	production	risk
_____ risk arises out of changes in	unsystematic risk	interest rate risk	market risk	purchase power risk	market risk

_____ risk arises out of changes in the	inflation risk	business risk	financial risk	social risk	inflation risk
_____risk is the variability in operating	market risk	business risk	inflation risk	monetary value risk	business risk
The variability in Earnings Per Share due to	market risk	business risk	financial risk	inflation risk	financial risk
_____ is related to the investment in	monetary value risk	inflation risk	deflation risk	business risk	monetary value risk
If an investor invests his money on purchase	Dividend	Interest	Fee	Rent	Interest
_____ can be defined in terms of variability	Return	Risk	Fee	Rent	Risk
Inflation risk is otherwise known as -----	business risk	financial risk	interest rate risk	purchasing power risk	purchasing power risk
_____ represents the difference between	fund flow	cash flow	working capital	ratio	cash flow
The term ---------- refers to the	business risk	financial risk	interest rate risk	purchasing power risk	business risk
A firm voluntarily accept the risks, if tis	avoidance of risk	prevention of risk	retention of risk	transfer of risk	retention of risk
Fixed capital is also known as ----------	fluctuating capital	working capital	block capital	permanent capital	block capital
Financial goals may be stated as	Long term profits	Short term profits	Minimizing risks	Long term as well as	Long term as well as
The primary aim of finance function is to	Proper utilization of	Increasing	Maximizing firms	Acquiring sufficient fund	Acquiring sufficient fund
_____ relates to the determination of	Financing decision	Investment decision	Dividend decision	Capital decision	Investment decision
_____ is concerned with the quantum	Dividend decision	Capital decision	Investment decision	Financing decision	Dividend decision
_____ is concerned with the best	Investment decision	Financing decision	Dividend decision	Capital decision	Financing decision
The first step in the financial management	Financial planning and	Risk and return	Financing decision	Financial Analysis	Financial planning and
Market value of the firm is decided on the	Return	Risk	risk and return	Sales	risk and return
_____ is a short source of finance	Loans and Advances	Equity share capital	Preference share	Debenture	Loans and Advances
_____ is a short source of finance	Commercial Paper	Equity share capital	Preference share	Debenture	Commercial Paper
_____ is a internal source of finance	Retained Earnings	Equity share capital	Preference share	Debenture	Retained Earnings
Functions of the treasurer include -------	obtaining fund	banking relationship	cash management	Obtaining fund and cash	Obtaining fund and cash
Functions of the controller include --------	internal auditing	management	taxation	Auditing, Management	Auditing, Management
Financial management also referred to as ----	corporate finance	soletrader finance	co-operative finance	Public finance	corporate finance
Finance is aimed at ----------	value maximization	service maximization	Wealth	Sales maximisation	Wealth maximisation

UNIT-II- Capital Budgeting

SYLLABUS

Long term investment decisions: Capital Budgeting - Principles and Techniques - Nature and meaning of capital budgeting - Estimation of relevant cash flows and terminal value – Evaluation techniques - Accounting Rate of Return - Net Present Value - Internal Rate of Return and MIRR – Net Terminal Value - Profitability Index Method

INTRODUCTION

The word Capital refers to be the total investment of a company of firm in money, tangible and intangible assets. Whereas budgeting defined by the "**Rowland** and **William**" it maybe said to be the art of building budgets. Budgets are a blue print of a plan and action expressed in quantities and manners.

The examples of capital expenditure:

1. Purchase of fixed assets such as land and building, plant and machinery, good will, etc.
2. The expenditure relating to addition, expansion, improvement and alteration to the fixed assets.
3. The replacement of fixed assets.
4. Research and development project.

Definitions

- According to the definition of **Charles T. Hrongreen,** "capital budgeting is a long-term planning for making and financing proposed capital out lays.
- According to the definition of **G.C. Philippatos,** "capital budgeting is concerned with the allocation of the firms source financial resources among the available opportunities. The consideration of investment opportunities involves the comparison of the expected future streams of earnings from a project with the immediate and subsequent streams of earning from a project, with the immediate and subsequent streams of expenditure".
- According to the definition of **Richard and Green law,** "capital budgeting is acquiring inputs with long-term return".

- According to the definition of **Lyrich,** "capital budgeting consists in planning development of available capital for the purpose of maximizing the long-term profitability of the concern".

It is clearly explained in the above definitions that a firm's scarce financial resources are utilizing the available opportunities. The overall objectives of the company from is to maximize the profits and minimize the expenditure of cost.

Need and Importance of Capital Budgeting

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

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

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

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

CAPITAL BUDGETING PROCESS

Capital budgeting is a difficult process to the investment of available funds. The benefit will attained only in the near future but, the future is uncertain. However, the following steps followed for capital budgeting, then the process may be easier are.

1. Identification of various investments proposals: The capital budgeting may have various investment proposals. The proposal for the investment opportunities may be defined from the top management or may be even from the lower rank. The heads of various departments analyse the various investment decisions, and will select proposals submitted to the planning committee of competent authority.

2. Screening or matching the proposals: The planning committee will analyse the various proposals and screenings. The selected proposals are considered with the available resources of the concern. Here resources referred as the financial part of the proposal. This reduces the gap between the resources and the investment cost.

3. Evaluation: After screening, the proposals are evaluated with the help of various methods, such as payback period proposal, net discovered present value method, accounting rate of return and risk analysis. Each method of evaluation used in detail in the later part of this chapter. The proposals are evaluated by.

(a) Independent proposals

(b) Contingent of dependent proposals

(c) Partially exclusive proposals.

Independent proposals are not compared with another proposals and the same may be accepted or rejected. Whereas higher proposals acceptance depends upon the other one or more proposals. For example, the expansion of plant machinery leads to constructing of new building, additional manpower etc. Mutually exclusive projects are those which competed with other proposals and to implement the proposals after considering the risk and return, market demand etc.

4. Fixing property: After the evolution, the planning committee will predict which proposals will give more profit or economic consideration. If the projects or proposals are not suitable for the concern's financial condition, the projects are rejected without considering other nature of the proposals.

5. Final approval: The planning committee approves the final proposals, with the help of the following:

(a) Profitability

(b) Economic constituents

(c) Financial violability

(d) Market conditions.

The planning committee prepares the cost estimation and submits to the management.

6. Implementing: The competent authority spends the money and implements the proposals. While implementing the proposals, assign responsibilities to the proposals, assign responsibilities for completing it, within the time allotted and reduce the cost for this purpose. The network techniques

used such as PERT and CPM. It helps the management for monitoring and containing the implementation of the proposals.

Performance review of feedback: The final stage of capital budgeting is actual results compared with the standard results. The adverse or unfavourable results identified and removing the various difficulties of the project. This is helpful for the future of the proposals.

KINDS OF CAPITAL BUDGETING DECISIONS

The overall objective of capital budgeting is to maximize the profitability. If a firm concentrates return on investment, this objective can be achieved either by increasing the revenues or reducing the costs. The increasing revenues can be achieved by expansion or the size of operations by adding a new product line. Reducing costs mean representing obsolete return on assets.

METHODS OF CAPITAL BUDGETING OF EVALUATION

By matching the available resources and projects it can be invested. The funds available are always living funds. There are many considerations taken for investment decision process such as environment and economic conditions.

The methods of evaluations are classified as follows:

(A) Traditional methods (or Non-discount methods)

(i) Pay-back Period Methods

(ii) Post Pay-back Methods

(iii) Accounts Rate of Return

(B) Modern methods (or Discount methods)

(i) Net Present Value Method

(ii) Internal Rate of Return Method

(iii) Profitability Index Method

Pay-back Period

The payback period (PBP) is the traditional method of capital budgeting. It is the simplest and perhaps, the most widely used quantitative method for appraising capital expenditure decision Pay-back period is the time required to recover the initial investment in a project.

(It is one of the non-discounted cash flow methods of capital budgeting).

Pay-back period = $\frac{\text{Initial investment}}{\text{Annual cash inflows}}$

Meaning:

It is the number of years required to recover the original cash outlay invested in a project

Decision Rule:

The PBP can be used as a decision criterion to select investment proposal.

- If the PBP is less than the maximum acceptable payback period, accept the project.
- If the PBP is greater than the maximum acceptable payback period, reject the project.

This technique can be used to compare actual pay back with a standard pay back setup by the management in terms of the maximum period during which the initial investment must be recovered. The standard PBP is determined by management subjectively on the basis of a number of factors such as the type of project, the perceived risk of the project etc. PBP can be even used for ranking mutually exclusive projects. The projects may be ranked according to the length of PBP and the project with the shortest PBP will be selected**.**

Merits of Pay-back method

The following are the important merits of the pay-back method:

1. It is easy to calculate and simple to understand.
2. Pay-back method provides further improvement over the accounting rate return.
3. Pay-back method reduces the possibility of loss on account of obsolescence.
4. It is a cost effective method which does not require much of the time of finance executives as well as the use of computers.
5. It is a method for dealing with risk. It favours projects which generates substantial cash inflows in earlier years and discriminates against projects which brings substantial inflows in later years . Thus PBP method is useful in weeding out risky projects.
6. This is a method of liquidity. It emphasizes selecting a project with the early recovery of the investment.

Demerits

1. It ignores the time value of money.
2. It ignores all cash inflows after the pay-back period.

3. It is one of the misleading evaluations of capital budgeting.

Accept /Reject criteria

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

Uses:

The PBP can be gainfully employed under the following circumstances.

1. The PB method may be useful for the firms suffering from a liquidity crisis
2. It is very useful for those firms which emphasizes on short run earning performance rather than its long term growth.

3. The reciprocal of PBP is a good approximation of IRR which otherwise requires trial & error approach**.**

Payback Reciprocal and the Rate of Return:

Payback is considered a good approximation of the rate of return under following two conditions.

1. The life of the project is too large or at least twice the payback period.

2. The project generates constant annual cash inflow.

Though pay back reciprocal is a useful way to estimate the project's IRR but the major limitation of it is all investment project does not satisfy the conditions on which this method is based. When the useful life of the project is not at least twice the PBP, it will always exceed the rate of return. Similarly, if the project is not yielding constant CFAT it cannot be used as an approximation of the rate of return.

Exercise 1

Project cost is Rs. 30,000 and the cash inflows are Rs. 10,000, the life of the project is 5 years. Calculate the pay-back period.

Solution =Rs. 30,000

Rs. 10,000

= 3 Year

The annual cash inflow is calculated by considering the amount of net income on the amount of depreciation project (Asset) before taxation but after taxation. The income precision earned is expressed as a percentage of initial investment, is called unadjusted rate of return. The above problem will be calculated as below

$$\text{Unadjusted rate of return} = \frac{\text{Annual Return}}{\text{Investment}} * 100$$

$$= \frac{\text{Rs. 10,000}}{\text{Rs.30,000}} * 100$$

$$= 33.33\%$$

Exercise 2

A project costs Rs. 20, 00,000 and yields annually a profit of Rs. 3, 00,000 after depreciation @ 12½% but before tax at 50%. Calculate the pay-back period.

Profit after depreciation	3, 00,000
Tax 50%	1, 50,000
	1, 50,000
Add depreciation 20, 00,000 12 ½ %	2, 50,000
Cash inflow	4, 00,000

Solution

$$\text{Pay-back period} = \frac{\text{Investment}}{\text{Cash flow}}$$

$$= \frac{\text{20, 00,000}}{\text{4, 00,000}}$$

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

Uneven Cash Inflows

Normally the projects are not having uniform cash inflows. In those cases the pay-back period is calculated, cumulative cash inflows will be calculated and then interpreted.

Exercise 3

Certain projects require an initial cash outflow of Rs. 25,000. The cash inflows for 6years are Rs. 5,000, Rs. 8,000, Rs. 10,000, Rs. 12,000, Rs. 7,000 and Rs. 3,000.

Solution

Year	Cash Inflows (Rs.)	Cumulative Cash Inflows (Rs.)
1	5000	5000
2	8000	13000
3	10000	23000
4	12000	35000
5	7000	42000
6	3000	45000

The above calculation shows that in 3 years Rs. 23,000 has been recovered Rs. 2,000, is balance out of cash outflow. In the 4th year the cash inflow is Rs. 12,000. It means the pay-back period is three to four years, calculated as follows

Pay-back period = 3 years+2000/12000×12 months

= 3 years 2 months.

Post Pay-back Profitability Method

One of the major limitations of pay-back period method is that it does not consider the cash inflows earned after pay-back period and if the real profitability of the project cannot be assessed. To improve over this method, it can be made by considering the receivable after the pay-back period. These returns are called post pay-back profits.

Exercise 4

From the following particulars, compute:

1. Payback period.
2. Post pay-back profitability and post pay-back profitability index.

(a)	Cash outflow	Rs. 1, 00,000
	Annual cash inflow (After tax before depreciation)	Rs. 25,000
	Estimate Life	6 years
(b)	Cash outflow	Rs. 1, 00,000
	Annual cash inflow (After tax depreciation)	
	First five years	Rs. 20,000
	Next five years	Rs. 8,000
	Estimated life	10 Years
	Salvage value	Rs. 16,000

Solution

(a) (i) Pay-back period = Initial investment

_____

Annual cash inflows

= 1,00,000 /25,000 = 4 Years

(ii) Post pay-back profitability

=Cash inflow (Estimated life – Pay-back period)

=25,000 (6 – 4)

=Rs. 50,000

(iii) Post pay-back profitability index

$$= \frac{50,000}{1,00,000} \times 100$$

= 50%

(b) Cash inflows are equal, therefore payback period is calculated as follows:

(i)

Year	Cash Inflows (Rs.)	Cumulative Cash Inflows (Rs.)
1	20,000	20,0000
2	20,000	40,000
3	20,000	60,000
4	20,000	80,000
5	20,000	100000
6	8,000	1,08,000
7	8,000	1,16,000
8	8,000	1,24,000
9	8,000	1,32,000
10	8,000	1,40,000

(ii) Post pay-back profitability.

= Cash inflow (estimated life – pay-back period)

= 8,000 (10–5)

= 8000×5 = 40,000

(iii) Post pay-back profitability index

$$= \frac{40,000}{\quad} \times 100$$

1, 00,000

=40%

Accounting Rate of Return or Average Rate of Return

Average rate of return means the average rate of return or profit taken for considering the project evaluation. This method is one of the traditional methods for evaluating the project proposals:

- **Meaning:**

The ARR is the ratio of the average after tax profit divided by the average investment.

- **Decision Rule:**

The ARR can be used as a decision criterion to select investment proposal.

- If the ARR is higher than the minimum rate established by the management, accept the project.
- If the ARR is less than the minimum rate established by the management, reject the project.

The ranking method can also be used to select or reject the proposal using ARR. It will rank a project number one if it has highest ARR and lowest rank would be given to the project with lowest ARR.

- **Merits**

1. It is easy to calculate and simple to understand.

2. It is based on the accounting information rather than cash inflow.

3. It is not based on the time value of money.

4. It considers the total benefits associated with the project.

- **Demerits**

1. It ignores the time value of money.

2. It ignores the reinvestment potential of a project.

3. Different methods are used for accounting profit. So, it leads to some difficulties in the calculation of the project.

- **Accept/Reject criteria**

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

❖ **Use:**

The ARR can better be used as performance evaluation measure and control devise but it is not advisable to use as a decision making criterion for capital expenditures of the firm as it is not using cash flow information

NET PRESENT VALUE

Net present value method is one of the modern methods for evaluating the project proposals. In this method cash inflows are considered with the time value of the money. Net present value describes as the summation of the present value of cash inflow and present value of cash outflow. Net present value is the difference between the total present value of future cash inflows and the total present value of future cash outflows.

❖ **Meaning:**

The NPV is the difference between the present value of future cash inflows and the present value of the initial outlay, discounted at the firm's cost of capital. The procedure for determining the present values consists of two stages. The first stage involves determination of an appropriate discount rate. With the discount rate so selected, the cash flow streams are converted into present values in the second stage.

❖ **Decision Rule:**

The present value method can be used as an accept-reject criterion. The present value of the future cash streams or inflows would be compared with present value of outlays. The present value outlays are the same as the initial investment.

- If the NPV is greater than 0, accept the project.
- If the NPV is less than 0, reject the project.

❖ **Merits**

1. It recognizes the time value of money.

2. It considers the total benefits arising out of the proposal.

3. It is the best method for the selection of mutually exclusive projects.

4. It helps to achieve the maximization of shareholders' wealth.

❖ **Demerits**

1. It is difficult to understand and calculate.

2. It needs the discount factors for calculation of present values.

3. It is not suitable for the projects having different effective lives.

❖ **Accept/Reject criteria**

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

❖ **Use:**

NPV is very much in use capital budgeting practice being a true profitability measure

Exercise 6

From the following information, calculate the net present value of the two project and suggest which of the two projects should be accepted a discount rate of the two.

	Project X	**Project Y**
Initial Investment	Rs. 20,000	Rs. 30,000
Estimated Life	5 years	5 years
Scrap Value	Rs. 1,000	Rs. 2,000

The profits before depreciation and after taxation (cash flows) are as follows:

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Project x	5,000	10,000	10,000	3,000	2,000
Project y	20,000	10,000	5,000	3,000	2,000

NOTE: The following are the present value factors @ 10% p.a.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Factor	.909	.826	.751	.683	.621	.564

Solution

Year	Cash inflows		Present Value of Rs. 1 @ 10%	Present Value of Net Cash inflows	
	Project X Rs.	Project Y Rs.		Project X Rs.	Project Y Rs.
1	5000	20000	.909	4,545	18,180
2	10000	10000	.826	8,260	8,260
3	10000	5000	.751	7,510	3,755
4	3000	3000	.683	2,049	2,049
5	2000	2000	.621	1,242	1,242
Scrap Value	1000	2000	.621	621	1,245
Total present value Initial Investments				24,227 20,000	34,728 30,000
Net present value				4,227	4,728

Project Y should be selected as net present value of project Y is higher.

Profitability Index (PI):

Profitability Index (PI) or Benefit-cost ratio (B/C) is similar to the NPV approach. PI approach measures the present value of returns per rupee invested. It is observed in short coming of NPV that, being an absolute measure, it is not a reliable method to evaluate projects requiring different initial investments. The PI method provides solution to this kind of problem**.**

- **Meaning:**

It is a relative measure and can be defined as the ratio which is obtained by dividing the present value of future cash inflows by the present value of cash outlays.

- **Decision Rule:**

Using the PI ratio,

- Accept the project when PI>1
- Reject the project when PI<1
- May or may not accept when PI=1, the firm is indifferent to the project.

❖ **Merits:**

- PI considers the time value of money as well as all the cash flows generated by the project.
- At times it is a better evaluation technique than NPV in a situation of capital rationing especially. For instance, two projects may have the same NPV of Rs. 20,000 but project A requires an initial investment of Rs. 1, 00,000 whereas B requires only Rs. 50,000. The NPV method will give identical ranking to both projects, whereas PI will suggest project B should be preferred. Thus PI is better than NPV method as former evaluate the worth of projects in terms of their relative rather than absolute magnitude.
- It is consistent with the shareholders' wealth maximization.

❖ **Demerits:**

Though PI is a sound method of project appraisal and it is just a variation of the NPV, it has all those limitation of NPV method too.

- When cash outflow occurs beyond the current period, the PI is unsuitable as a selection criterion.
- It requires estimation of cash flows with accuracy which is very difficult underever changing world.
- It also requires correct estimation of cost of capital for getting correct result.

❖ **Use:**

It is useful in evaluating capital expenditures projects being a relative measure

- When the projects are mutually exclusive and it has different cash outlays, different cash flow pattern or unequal lives, it may not give unambiguous results.

INTERNAL RATE OF RETURN

Internal rate of return is time adjusted technique and covers the disadvantages of the traditional techniques. In other words it is a rate at which discount cash flows to zero.

❖ **Meaning:**

The internal rate of return (IRR) is the discount rate that equates the NPV of an investment opportunity with Rs.0 (because the present value of cash inflows equals the initial investment). It is the compound annual rate of return that the firm will earn if it invests in the project and receives the given cash inflows

It is expected by the following ratio:

$$\frac{\text{Cash inflow}}{\text{Investment initial}}$$

Steps to be followed:

Step1. Find out factor

Factor is calculated as follows:

$$\frac{\text{Cash outlay (or) initial investment}}{\text{Cash inflow}}$$

Step 2. Find out positive net present value

Step 3. Find out negative net present value

Step 4. Find out formula net present value

Formula

$$\text{IRR} = \text{Base factor} + \frac{\text{Positive Net Present Value}}{\text{Difference in positive And negative net present Value}} \times \text{DP}$$

Base factor = Positive discount rate

DP = Difference in percentage

❖ **Decision Rule:**

When IRR is used to make accept-reject decisions, the decision criteria are as follows:

- If the IRR is greater than the cost of capital, accept the project. (r >k)

- If the IRR is less than the cost of capital, reject the project. (r<k)

❖ **Merits**

1. It consider the time value of money.
2. It takes into account the total cash inflow and outflow.
3. It does not use the concept of the required rate of return.
4. It gives the approximate/nearest rate of return.

❖ **Demerits**

1. It involves complicated computational method.
2. It produces multiple rates which may be confusing for taking decisions.
3. It is assume that all intermediate cash flows are reinvested at the internal rate of return.

❖ **Accept/Reject criteria**

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

❖ **Comparison of NPV and IRR:**

Both NPV and IRR will give the same results (i.e. acceptance or rejections) regarding an investment proposal in following two situations.

- When the project under consideration involve conventional cash flow. I.e. when an initial cash outlays is followed by a series of cash inflows.
- When the projects are independent of one another i.e., proposals the acceptance of which does not preclude the acceptance of others and if the firm is not facing a problem of funds constraint.

The reasons for similarity in results in the above cases are simple. In NPV method a proposal is accepted if NPV is positive. NPV will be positive only when the actual rate of return on investment is more than the cut off rate. In case of IRR method a proposal is accepted only when the IRR is higher than the cut off rate. Thus, both methods will give consistent results since the acceptance or rejection of the proposal under both of them is based on the actual return being higher than the required rate i.e.

- NPV will be positive only if r > k,
- NPV will be negative only if r < k,
- NPV would be zero only if r = k

RISK AND UNCERTAINLY IN CAPITAL BUDGETING

Capital budgeting requires the projection of cash inflow and outflow of the future. The future in always uncertain, estimate of demand, production, selling price, cost etc., cannot be exact.

For example: The product at any time it become obsolete therefore, the future in unexpected. The following methods for considering the accounting of risk in capital budgeting.

Various evaluation methods are used for risk and uncertainty in capital budgeting are as follows:

(i) Risk-adjusted cut off rate (or method of varying discount rate)

(ii) Certainly equivalent method.

(iii) Sensitivity technique.

(iv) Probability technique

(v) Standard deviation method.

(vi) Co-efficient of variation method.

(vii) Decision tree analysis.

(i) Risk-adjusted cut-off rate (or Method of varying)

This is one of the simplest method while calculating the risk in capital budgeting increase cut of rate or discount factor by certain percentage an account of risk.

Statistical Techniques for Risk Analysis:

(a) Probability Assignment

(b) Expected Net Present Value

(c) Standard Deviation

(d) Coefficient of Variation

(e) Probability Distribution Approach

(f) Normal Probability Distribution

(a) Probability Assignment:

The concept of probability is fundamental to the use of the risk analysis techniques. It may be defined as the likelihood of occurrence of an event. If an event is certain to occur, the probability of its occurrence is one but if an event is certain not to occur, the probability of its occurrence is zero. Thus, probability of all events to occur lies between zero and one.

The classical view of probability holds that one can talk about probability in a very large number of times under independent identical conditions. Thus, the probability estimate, which is based on a large number of observations, is known as an objective probability. But this is of little use in analyzing investment decisions because these decisions are non-repetitive in nature and hardly made under independent identical conditions over time. The another view of probability holds that it makes a great deal of sense to talk about the probability of a single event without reference to the repeatability long run frequency concept. Therefore, it is perfectly valid to talk about the probability of sales growth will reach to 4%, the probability of rain tomorrow or fifteen days hence. Such probability assignments that reflect the state of belief of a person rather than the objective evidence of a large number of trials are called personal or subjective probabilities.

(b) Expected Net Present Value:

Once the probability assignments have been made to the future cash flows, the next step is to find out the expected net present value. It can be found out by multiplying the monetary values of the possible events by their probabilities.

(c) Standard Deviation:

The assignment of probabilities and the calculation of the expected net present value include risk into the investment decision, but a better insight into the risk analysis of capital budgeting decision is possible by calculating standard deviation and coefficient of variation.

Standard deviation (σ) is an absolute measure of risk analysis and it can be used when projects under consideration are having same cash outlay. Statically, standard deviation is the square root of

variance and variance measures the deviation about expected cash flow of each of the possible cash flows.

(d) Coefficient of Variation:

If the projects to be compared involve different outlays/different expected value, the coefficient of variation is the correct choice, being a relative measure. The higher the coefficient of variation, the riskier the project. Project Y is having higher coefficient so it is riskier than the project X. It is a better measure of the uncertainty of cash flow returns than the standard deviation because it adjusts for the size of the cash flow.

(e) Probability Distribution Approach:

The researcher has discussed the concept of probability for incorporating risk in capital budgeting proposals. The concept of probability for incorporating risk in evaluating capital budgeting proposals. The probability distribution of cash flows over time provides valuable information about the expected value of return and the dispersion of the probability distribution of possible returns which helps in taking accept-reject decision of the investment decision.

The application of this theory in analyzing risk in capital budgeting depends upon the behaviour of the cash flows, being (i) independent, or (ii) dependent. The assumption that cash flows are independent over time signifies that future cash flows are not affected by the cash flows in the preceding or following years. When the cash flows in one period depend upon the cash flows in previous periods, they are referred to as dependent cash flows.

(i) **Independent Cash Flows over Time**: The mathematical formulation to determine the expected values of the probability distribution of NPV. Where 1 *CF* is the expected value of net CFAT in period t and I is the risk free rate of interest.

(ii) **Dependent Cash Flows26:** If cash flows are perfectly correlated, the behavior of cash flows in all periods is alike. This means that if the actual cash flow in one year is α standard deviations to the left of its expected value, cash flows in other years will also be α standard deviations to the left of their respective expected values.

(f) Normal Probability Distribution:

The normal probability distribution can be used to further analyze the risk in investment decision. It enable the decision maker to have an idea of the probability of different expected values of NPV, that is, the probability of NPV having the value of zero or less, greater than zero and within the range of two values for example, within the range of Rs. 2000 and Rs. 3000 etc. If the probability of having NPV zero or less is low, eg. .01, it means that the risk in the project is negligible. Thus, the normal probability distribution is an important statistical technique in the hands of decision makers for evaluating the riskiness of a project.

The area under the normal curve, representing the normal probability distribution, is equal to 1 (0.5 on either side of the mean). The curve has its maximum height at its expected value i.e. its mean. The distribution theoretically runs from minus infinity to plus infinity. The probability of occurrence beyond 3σ is very near to zero (0.26 percent).

For any normal distribution, the probability of an outcome falling within plus or minus.

1σ from the mean is 0.6826 or 68.26 per cent,

2σ from the mean is 95.46 per cent,

3σ from the mean is 99.74 per cent.

CONVENTIONAL TECHNIQUES FOR RISK ANALYSIS:

(a) Payback

(b) Risk-adjusted Discount Rate

(c) Certainty Equivalent

(a) Payback Period:

Payback as a method of risk analysis is useful in allowing for a specific types of risk only, i.e., the risk that a project will go exactly as planned for a certain period will then suddenly stop generating returns, the risk that the forecasts of cash flows will go wrong due to lower sales, higher cost etc. This method has been already discussed in detail above so it has not been repeated here.

(b) Risk Adjusted Discount Rate Method:

The economic theorists have assumed that to allow for risk, the businessmen required a premium over and above an alternative which is risk free. It is proposed that risk premium be incorporated into the capital budgeting analysis through the discount rate. i.e. If the time preference

for the money is to be recognized by discounting estimated future cash flows, at some risk free rate, to their present value, then, to allow for the riskiness of the future cash flow a risk premium rate may be added to risk free discount rate. Such a composite discount would account for both time preference and risk preference.

Decision Rule:

- The risk adjusted approach can be used for both NPV & IRR.
- If NPV method is used for evaluation, the NPV would be calculated using risk adjusted rate. If NPV is positive, the proposal would qualify for acceptance, if it is negative, the proposal would be rejected.
- In case of IRR, the IRR would be compared with the risk adjusted required rate of return. If the 'r' exceeds risk adjusted rate, the proposal would be accepted, otherwise not.

Merits:

• It is simple to calculate and easy to understand.

• It has a great deal of intuitive appeal for risk-averse businessman.

• It incorporates an attitude towards uncertainty.

Demerits:

- The determination of appropriate discount rates keeping in view the differing degrees of risk is arbitrary and does not give objective results.
- Conceptually this method is incorrect since it adjusts the required rate of return. As a matter fact it is the future cash flows which are subject to risk.
- This method results in compounding of risk over time, thus it assumes that risk necessarily increases with time which may not be correct in all cases.
- The method presumes that investors are averse to risk, which is true in most cases. However, there are risk seeker investors and are prepared to pay premium for taking risk and for them discount rate should be reduced rather than increased with increase in risk.
- Thus, this approach can be best described as a crude method of incorporating risk into capital budgeting.

(c) Certainty Equivalent Approach:

This approach to incorporate risk in evaluating investment projects, overcomes weaknesses of the RADR approach. Under this approach riskiness of project is taken into consideration by adjusting the expected cash flows and not discount rate. This method eliminates the problem arising out of the inclusion of risk premium in the discounting process.

Decision Rule:

- If NPV method is used, the proposal would be accepted if NPV of CE cash flows is positive, otherwise it is rejected.
- If IRR is used, the internal rate of return which equates the present value of CE cash inflows with the present value of the cash outflows, would be compared with risk free discount rate.
- If IRR is greater than the risk free rate, the investment project would be accepted otherwise it would be rejected.

Merits:

- It is simple to calculate.
- It is conceptually superior to time-adjusted discount rate approach because it incorporates risk by modifying the cash flows which are subject to risk.

Demerits:

- This method explicitly recognizes risk, but the procedure for reducing the forecast of cash flows is implicit and likely to be inconsistent from one investment to another.
- The forecaster expecting reduction that will be made in his forecast, may inflate them in anticipation. This will no longer give forecasts according to "best estimate".
- If forecast have to pass through several layers of management, the effect may be to greatly exaggerate the original forecast or to make it ultra conservative.
- By focusing explicit attention only on the gloomy outcomes, chances are increased for passing by some good investments.

These techniques attempts to incorporate risk but major shortcomings are that specifying the appropriate degree of risk for an investment project is beset with serious operational problems and they cannot be applied to various projects over time.

Other Techniques:

(a) Sensitivity Analysis

(b) Scenario Analysis

(c) Break Even Analysis

(d) Simulation Analysis

(e) Decision Tree Approach

Sensitivity Analysis:

While evaluating any capital budgeting project, there is a need to forecast cash flows. The forecasting of cash flows depends on sales forecast and costs. The Sales revenue is a function of sales volume and unit selling price. Sales volume will depend on the market size and the firm's market share. The NPV and IRR of a project are determined by analysing the after-tax cash flows arrived at by combining various variables of project cash flows, project life and discount rate. The behavior of all these variables are very much uncertain. The sensitivity analysis helps in identifying how sensitive are the various estimated variables of the project. It shows how sensitive is a project's NPV or IRR for a given change in particular variables.

The more sensitive the NPV, the more critical is the variables.

Steps:

The following three steps are involved in the use of sensitivity analysis.

1. Identify the variables which can influence the project's NPV or IRR.
2. Define the underlying relationship between the variables.
3. Analyze the impact of the change in each of the variables on the projects NPV or IRR.

The Project's NPV or IRR can be computed under following three assumptions in sensitivity analysis.

1. Pessimistic (i.e. the worst),
2. Expected (i.e. the most likely)
3. Optimistic (i.e. the best)

Merits:

- The sensitivity analysis has the following advantages:
- It compels the decision maker to identify the variables affecting the cash flow forecasts which helps in understanding the investment project in totality.
- It identifies the critical variables for which special actions can be taken.
- It guides the decision maker to concentrate on relevant variables for the project.

Demerits:

The sensitivity analysis suffers from following limitations:

- The range of values suggested by the technique may not be consistent. The terms 'optimistic' and 'pessimistic' could mean different things to different people.
- It fails to focus on the interrelationship between variables. The study of variability of one factor at a time, keeping other variables constant may not much sense. For example, sales volume may be related to price and cost. One can not study the effect of change in price keeping quantity constant.

(b) Scenario Analysis:

In sensitivity analysis, typically one variable is varied at a time. If variables are interrelated, as they are most likely to be, it is helpful to look at some plausible scenarios, each scenario representing a consistent combination of variables.

Procedure:

The steps involved in scenario analysis are as follows:

1. Select the factor around which scenarios will be built. The factor chosen must be the largest source of uncertainty for the success of the project. It may be the state of the economy or interest rate or technological development or response of the market.
2. Estimate the values of each of the variables in investment analysis (investment outlay, revenues, costs, project life, and so on) for each scenario.
3. Calculate the net present value and/or internal rate of return under each scenario.

Evaluation:

- Scenario analysis may be regarded as an improvement over sensitively analysis because it considers variations in several variables together.
- It is based on the assumption that there are few well-delineated scenarios. This may not be true in many cases. For example, the economy does not necessarily lie in three discrete states, viz., recession, stability, and boom. It can in fact be anywhere on the continuum between the extremes. When a continuum is converted into three discrete states some information is lost.
- Scenario analysis expands the concept of estimating the expected values. Thus in a case where there are 10 inputs the analyst has to estimate 30 expected values (3 x 10) to do the scenario analysis.

(c) Break-even Analysis:

In sensitivity analysis one may ask what will happen to the project if sales decline or costs increase or something else happens. A financial manager will also be interested in knowing how much should be produced and sold at a minimum to ensure that the project does not 'lose money'. Such an exercise is called break even analysis and the minimum quantity at which loss is avoided is called the break-even point. The breakeven point may be defined in accounting terms or financial terms.

Accounting Break-even Analysis

Suppose a company is considering setting up a new plant near Mumbai. The capital budgeting committee has given following projections.

(d) Simulation analysis:

Sensitivity analysis and Scenario analysis are quite useful to understand the uncertainty of the investment projects. But both the methods do not consider the interactions between variables and also, they do not reflect on the probability of the change in variables. The power of the computer can help to incorporate risk into capital budgeting through a technique called Monte Carlo simulation. The term

"Monte Carlo" implies that the approach involves the use of numbers drawn randomly from probability distributions. It is statistically based approach which makes use of random numbers and pre assigned probabilities to simulate a project's outcome or return. It requires a sophisticated computing package to operate effectively. It differs from sensitivity analysis in the sense that instead

of estimating a specific value for a key variable, a distribution of possible values for each variable is used.

The simulation model building process begins with the computer calculating a random value simultaneously for each variable identified for the model like market size, market growth rate, sales price, sales volume, variable costs, residual asset values, project life etc. From this set of random values a new series of cash flows is created and a new NPV is calculated. This process is repeated numerous times, perhaps as many as 1000 times or even more for very large projects, allowing a decision-maker to develop a probability distribution of project NPVs. From the distribution model, a mean (expected) NPV will be calculated and its associated standard deviation will be used to guage the project's level of risk. The distribution of possible outcome enables the decision-maker to view a continuum of possible outcomes rather than a single estimate.

Merits:

- An increasingly popular tool of risk analysis, simulation offers certain advantages:
- It facilitates the analysis and appraisal of highly complex, multivariate investment proposals with the help of sophisticated computer packages.
- It can cope up with both independence and dependence amongst variables. It forces decision-makers to examine the relationship between variables.

Demerits:

- Simulation is not always appropriate or feasible for risk evaluation.
- The model requires accurate probability assessments of the key variables. For example, it may be known that there is a correlation between sales price and volume sold, but specifying with mathematical accuracy the nature of the relationship for model purposes may be difficult.
- Constructing simulated financial models can be time-consuming, costly and requires specialized skills, therefore. It is likely to be used to analyse very important, complex, and large-scale projects.
- It focuses on a project's standalone risk. It ignores the impact of diversification, i.e., how a project's stand-alone risk will correlate with that of other projects within the firm and affect the firm's overall corporate risk.

- Simulation is inherently imprecise. It provides a rough approximation of the probability distribution of net present value (or any other criterion of merit).
- Due to its imprecision, the simulated probability distribution may be misleading when a tail of the distribution is critical.•
- A realistic simulation model, likely to be complex, would most probably be constructed by a management scientist, not the decision maker. The decision maker, lacking understanding of the model, may not use it.
- To determine the net present value in a simulation run the risk-free discount rate is used. This is done to avoid prejudging risk which is supposed to be reflected in the dispersion of the distribution of net present value. Thus the measure of net present value takes a meaning, very different from its usual one, which is difficult to interpret.

(e) Decision-tree Approach:

Sometimes cash flow is estimated under different managerial options with the help of decision-tree approach. A decision tree is a graphic presentation of the present decision with future events and decisions. The sequence of events is shown in a format that resembles the branches of a tree.

Steps in constructing decision tree:

The first step in constructing a decision tree is to define a proposal. It may be concerning either a new product or an old product entering a new market. It may also be an abandonment option or a continuation option, expansion option or no-expansion option, etc.

Second step is identifying various alternatives. For example, if a firm is launching a new product, it must chalk out the demand possibilities and on that basis it identifies different alternatives-whether to have a large factory or a medium-size or only a small

- Plant. Each of the alternatives will have varying consequences on the cash flow.

The third step is to lay out the decision tree showing the different alternatives through different branches. And finally, the estimates of cash flow with probabilities in each branch are made.

Merits:

- Decision tree analysis gives the clarity of sequential investment decisions.
- It gives a decision maker to visualize assumptions and alternatives in graphic form

which is easier to understand than the analytical form. It helps in eliminating the unprofitable branches and determines optimum decision at various decision points.

Demerits:

• The decision tree becomes more and more complicated if he includes more and more alternatives. It becomes more complicated if the analysis includes interdependent variables which are dependent on one another.

• It becomes very difficult to construct decision tree if the number of years expected life of the project and the number of possible outcomes for each year are large.

Risk

A basic assumption of traditional cost of capital analysis is that the firm's business and financial risk are unaffected by the acceptance and financing of projects.

Business risk is related to the response of the firm's earnings before interest and taxes, or operating profits, to changes in sales. When the cost of capital is used to evaluate investment alternatives, it is assumed that acceptance of the proposed projects will not affect the firm's business risk. The types of projects accepted by a firm can greatly affect its business risk.

If a firm accepts a project that is considerably more risky than average, suppliers of funds to the firm are quite likely to raise the cost of funds. This is because of the decreased probability of the fund suppliers. Receiving the expected returns on their money. A long-term lender will charge higher interest on loans if the probability of receiving periodic interest from the firm and ultimately regaining the principal is decreased. Common stockholders will require the firm to increase earnings as compensation for increases in the uncertainty of receiving dividend payments or ably appreciation in the value of their stock. In analyzing the cost of capital it is assumed that the business risk of the firm remain sun changed (i.e., that the projects accepted do not affect the variability of the firm's sales revenues). This assumption eliminates the need to consider changes in the cost of specific sources of financing resulting from changes in business risk. The definition of the cost of capital developed in this chapter is valid only for projects that do not change the firm's business risk.

Financial risk is affected by the mixture of long-term financing, or the capital structure, of the firm. Firms with high levels of long-term debt in proportion to their equity are more risky than firms maintaining lower ratios of long-term debt to equity. It is the contractual fixed-payment obligations associated with debt financing that make a firm financially risky. The greater the amount

of interest and principal (or sinking fund) payments a firm must make in a given period, the higher the operating profits required to cover these charges. If a firm fails to generate sufficient revenues to cover operating charges, it may be forced into bankruptcy.

As a firm's financial structure shifts toward suppliers of funds recognize a more highly levered position the increased financial risk associated with the firm. They compensate for this increased risk by charging higher rates of interest or requiring greater returns, In short they react in much the same way as they would to increasing business risks. Frequently the funds supplied to a firm by lenders will change its financial structure, and the charge for the funds will be based on the changed financial structure. In the analysis of the cost of capital in this chapter, however, the firm's financial structure is assumed to remain fixed. This assumption is necessary in order to isolate the costs of the various forms of financing. If the firm's capital structure were not held constant, it would be quite difficult to find its cost of capital, since the selection of a given source of financing would change the costs of alternate sources of financing. The assumption of a constant capital structure implies that when a firm raises funds to finance a given project these funds are raised in the same proportions as the firm exists financing. The awkwardness of this assumption is obvious since in reality a firm raises funds in lumps, .it does not raise a mixture of small amounts of various types of funds.. For example, in order to raise Rs. l million a firm may sell bonds, preferred stock, or common stock in the amount of Rs. l million; or, it may sell Rs. 400,000 worth of bonds, Rs. 100,000 worth of preferred stock, and Rs. 500,000 worth of common stock. Most firms will use the former strategy, but our analysis of cost of capital is based on the assumption that the firm will follow the latter strategy. More sophisticated approaches for measuring the cost of capital when a firm's capital structure is changing rare available.

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If a firm accepts a project that is considerably more risky than average, suppliers of funds to the firm are quite likely to raise the cost of funds. This is because of the decreased probability of the fund suppliers. Receiving the expected returns on their money. A long-term lender will charge higher interest on loans if the probability of receiving periodic interest from the firm and ultimately regaining the principal is decreased. Common stockholders will require the firm to increase earnings as compensation for increases in the uncertainty of receiving dividend payments or ably appreciation in the value of their stock. In analyzing the cost of capital it is assumed that the business risk of the firm remain sun changed (i.e., that the projects accepted do not affect the variability of the firm. sales revenues). This assumption eliminates the need to consider changes in the cost of specific sources of financing resulting from changes in business risk. The definition of the cost of capital developed in this chapter is valid only for projects that do not change the firm's business risk.

Financial risk is affected by the mixture of long-term financing, or the capital structure, of the firm. Firms with high levels of long-term debt in proportion to their equity are more risky than firms maintaining lower ratios of long-term debt to equity. It is the contractual fixed-payment obligations associated with debt financing that make a firm financially risky. The greater the amount of interest and principal (or sinking fund) payments a firm must make in a given period, the higher the operating profits required to cover these charges. If a firm fails to generate sufficient revenues to cover operating charges, it may be forced into bankruptcy.

As a firm's financial structure shifts toward suppliers of funds recognize a more highly levered position the increased financial risk associated with the firm. They compensate for this increased risk by charging higher rates of interest or requiring greater returns, In short they react in much the same way as they would to increasing business risks. Frequently the funds supplied to a firm by lenders will change its financial structure, and the charge for the funds will be based on the changed financial structure. In the analysis of the cost of capital in this chapter, however, the firms financial structure is assumed to remain fixed. This assumption is necessary in order to isolate the costs of the various forms of financing. If the firms capital structure were not held constant, it would be quite difficult to find its cost of capital, since the selection of a given source of financing would change the costs of alternate sources of financing. The assumption of a constant capital structure implies that when a firm raises funds to finance a given project these funds are raised in the same proportions as the firms existing financing. The awkwardness of this assumption is obvious since in reality a firm

raises funds in .lumps, .it does not raise a mixture of small amounts of various types of funds. For example, in order to raise Rs. l million a firm may sell bonds, preferred stock, or common stock in the amount of Rs. l million; or, it may sell Rs. 400,000 worth of bonds, Rs. 100,000 worth of preferred stock, and Rs. 500,000 worth of common stock. Most firms will use the former strategy, but our analysis of cost of capital is based on the assumption that the firm will follow the latter strategy. More sophisticated approaches for measuring the cost of capital when a firms capital structure is changing rare available.

Part A (ONE Mark)

Multiple Choice Questions

Online Examination

Part B (2 Marks Questions)

1. What is the need of capital budgeting?
2. Give the meaning of capital rationing?
3. A project cost of Rs.5,00,000 and yields annually a profit of Rs.80,000 after depreciation @ 12 p.a. but before tax of 50%. Calculate the pay back period
4. Determine the payback period for a project which requires a cash outlay of Rs.20,000 and generates cash inflow of Rs.4,000, Rs.7000, Rs.8000 and Rs.5000 in the I, II, III and IV year respectively
5. Write the formula for calculating Profitability Index?
6. Write the meaning for the term capital rationing?
7. Which project will be selected under pay back period method

	A	**B**
	(Rs.)	**(Rs.)**
Investment	50000	50000
Cash inflows		
1 year	25000	30000
2 year	25000	40000

8. Write any two limitations of capital rationing?
9. Draw a chart showing the capital budgeting process?
10. Determine the payback period for a project which requires a cash outlay of Rs.10,000 and generates cash inflow of Rs.2,000, Rs.4000, Rs.3000 and Rs.2000 in the I, II, III and Iv year respectively
11. Write the formula for calculating average rate of return?
12. List out the discounted cash flow methods in capital budgeting?

Part C (6 Marks Questions)

1. "Capital budgeting is long term planning for making and financing proposed capital outlay" Explain?
2. From the following information calculate the NPV and Profitability index of the two projects and suggest which of the two projects should be accepted assuming a discount rate of 10%

	Project X	**Project Y**
Initial Investment	Rs.20,000	Rs.30,000
Estimated Life	5 Years	5 Years
Scrap Value	Rs.1,000	Rs.2,000

The profits before depreciation and after taxes are as follows.

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Project X (Rs)	5,000	10,000	10,000	3,000	2,000
Project Y (Rs)	20, 000	10,000	5,000	3,000	2,000
Discounting factor @ 10%	.909	.826	.751	.683	.621

3. Explain the term capital budgeting? Discuss the significance and methods of capital budgeting with suitable illustration?
4. Rank the following projects in order of their desirability according to the Payback Period Method and Profitability Index Method

Project	**Initial Outlay (Rs.)**	**Annual Cash flow (Rs.)**	**Life in Years**
A	10000	2500	5
B	8000	2600	7
C	4000	1000	15
D	10000	2400	20
E	5000	1125	15
F	6000	2400	6
G	2000	1000	2

5. A Company has a investment opportunity costing Rs.40,000 with the following expected cashflow after taxes

YEAR	CASHFLOW (Rs.)
1	7000
2	7000
3	7000
4	7000
5	7000
6	8000
7	10000
8	15000
9	10000
10	4000

Using 10% as the cost of capital determine the following

1. Payback Period Method
2. NPV (10%)
3. Profitability Index (10%)

Year	1	2	3	4	5	6	7	8	9	10
Discounting factor @ 10%	.909	.826	.751	.683	.621	.564	.513	.466	.424	.385

6. Give a comparative description of various methods of making investment proposal?

7. Explain the term capital budgeting? Examine its need and importance in detail?

8. Assuming required rate of return of 10% p.a evaluate the investment proposal A and B as under

a. Rate of return Method

b. Payback period Method

c. Discounted payback period Method

d. Profitability Index Method

	Proposal A	**Proposal B**
Cost of Investment (in Rs.)	20,000	28,000

Life scrap value	4 years	5 years
Net Income (after depreciation and tax)		
Year	**(Rs.)**	**(Rs.)**
1	500	-
2	2000	3400
3	3300	3400
4	2500	3400
5	-	3400

Depreciation is provided under the straight line method.

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Discounting factor @ 10%	.909	.826	.751	.683	.621

9. Explain the capital budgeting process with suitable chart?

10. "NPV Vs PI" Justify

FINANCIAL MANAGEMENT
UNIT II

QUESTIONS	OPTION 1	OPTION 2	OPTION 3	OPTION 4	ANSWER
Capital budgeting is also known as _____	Cost of capital	Capital structure	Investment decision making	Dividend decision	Investment decision making
_____ is also known as capital expenditure decision.	Capital budgeting	Capital structure	Investment decision making	Dividend decision	Capital budgeting
_____ is also known as analysis of capital expenditure.	Cost of capital	Capital budgeting	Investment decision making	Dividend decision	Capital budgeting
_____is the process of making investment decision in capital expenditure	Working capital management	Cost of capital	Capital structure	Capital budgeting	Capital budgeting
_____ related to independent projects which do not compete with one another	Capital structure decision	Accept reject decision	Mutually exclusive project decision	Capital rationing decision	Accept reject decision
_____related to proposal which compete with one another	Mutually exclusive project	Accept reject decision	Capital structure decision	Capital rationing decision	Mutually exclusive project
_____method is also called as pay out period method	Accounting rate of return	Net present ratio	Rate of return	Pay back period	Pay back period
_____ Method is also called as pay off period method.	Pay back period	Net present ratio	Accounting rate of return	Rate of return	Pay back period
Pay back period =	Cash inflow/cash outlay	Profit/cash outlay	EBIT/EBT	Cash outlay of the project/annual cash inflow	Cash outlay of the project/annual cash inflow
A project cost Rs 50000 and yields an annual cash inflow of Rs10000 for 7 yrs. Calculate the pay back period.	6 yrs	5 yrs	5 1/2 yrs	7 yrs	5 yrs
Determine the pay back period for a project which require a cash outlay of Rs 10000 and generates cash inflows of Rs 2,000, Rs 4,000, Rs 3000 and Rs 2000 in the first, second, third and fourth years respectively	3 yrs 5months	3 yrs 7 months	3 yrs 6 months	3 yrs	3 yrs 6 months
A project costs Rs100000 and yield an annual cash inflow of Rs 20000 for 8 yrs. Calculate the pay back period	5 yrs	4 yrs	7 yrs	6 yrs	5 yrs
_____ is also known as accounting rate of return	Pay back period method	Rate of return method	NPV method	Internal rate of return method	Rate of return method
The _____ method taken into account the profitability and also the time value of money	NPV	Pay back period	Accounting rate of return	Rate of return	NPV
The discounted cash flow method take into account _____	Profitability	Time value of money	Profitability and time value of money	Cash inflow	Profitability and time value of money

NPV =	Net present valuation	Net prescribed value	Net present value	Net profit value	Net present value
_____ method is also known as time adjusted rate of return.	Pay back period	Average rate of return	NPV	Internal rate of return	Internal rate of return
_____ Method is also known as discounted cash flow.	Internal rate of return	Average rate of return	NPV	Pay back period	Internal rate of return
_____ Method is also known as the discounted rate of return	Internal rate of return	Average rate of return	Improvement in payback method	Pay back period	Internal rate of return
_____ Method is also known as yield method.	Internal rate of return	Average rate of return	NPV	Pay back period	Internal rate of return
_____method is also known as trial and error yield method.	Internal rate of return	Average rate of return	NPV	Pay back period	Internal rate of return
IRR =	Investment realized return	Internal rate of return	Internal realized return	Investment rate of return	Internal rate of return
The _____ can be defined as that rate of discount at which present value of cash inflow is equal to the present value of cash outflow.	NPV	Accounting rate of return	Profitability index	Internal rate of return	Internal rate of return
_____ method is also called as benefit-cost ratio	Internal rate of return	NPV	Pay back period	Profitability index	Profitability index
_____ method is also called as desirability factor	Profitability index	NPV	Pay back period	Internal rate of return	Profitability index
_____ method reveals the relationship between present value of cash inflow and present value of cash outflow.	pay back period	average rate of return	accounting rate of return	profitability index	profitability index
Profitability index =	present value of cash outflow/ present value of cash inflow	cash inflow /cash outflow	cash outflow/ cash inflow	present value of cash inflow/ present value of cash outflow	present value of cash inflow/ present value of cash outflow
Risk adjusted discounted rate is also known as _____	Method of varying discount rate	sensitivity technique	Profitability technique	Discount trend analysis	Method of varying discount rate
In calculating pay back period method, earnings means -------	Profit before depreciation and after taxes	Profit after depreciation	Profit before tax	Profit after depreciation and taxes	Profit before depreciation and after taxes
Cost of acquisation of permanent asset is an example of -------	Capital Expenditure	Revenue Expenses	Revenue Loss	Capital loss	Capital Expenditure
Cost of alternation in fixed asset is an example of -------	Capital Expenditure	Revenue Expenses	Revenue Loss	Capital loss	Capital Expenditure
Cost of replacement of permanent asset is an example of -------	Capital Expenditure	Revenue Expenses	Revenue Loss	Capital loss	Capital Expenditure
Research and development project cost is an example of -------	Capital Expenditure	Revenue Expenses	Revenue Loss	Capital loss	Capital Expenditure
Cost of Machinery is an example of -------	Capital Expenditure	Revenue Expenses	Revenue Loss	Capital loss	Capital Expenditure
_____ invovlves non flexible and long term commitments of funds	Capital Expenditure	Revenue Expenses	Revenue Loss	Capital loss	Capital Expenditure
_____ involves planning and controlling of capital expenditure	Capital budgeting	Capital structure	Investment decision making	Dividend decision	Capital budgeting

_____ is also known as Planning capital expenditure	Capital budgeting	Capital structure	Investment decision making	Dividend decision	Capital budgeting
_____ is a complex process	Capital budgeting	Capital structure	Investment decision making	Dividend decision	Capital budgeting
There are ---------- procedures in the capital budgeting process	Two	Three	Five	Seven	Seven
_____ is the first step in capital budgeting process	Identification of investment proposals	screening the proposals	Evaluation of proposals	Fixing priporities	Identification of investment proposals
_____ is the second step in capital budgeting process	Identification of investment proposals	screening the proposals	Evaluation of proposals	Fixing priporities	screening the proposals
_____ is the third step in capital budgeting process	Identification of investment proposals	screening the proposals	Evaluation of proposals	Fixing priporities	Evaluation of proposals
_____ is the fourth step in capital budgeting process	Identification of investment proposals	screening the proposals	Evaluation of proposals	Fixing priporities	Fixing priporities
_____ is the fifth step in capital budgeting process	Identification of investment proposals	screening the proposals	Final approval	Fixing priporities	Final approval
_____ is the sixth step in capital budgeting process	Identification of investment proposals	screening the proposals	Evaluation of proposals	Implementing proposal	Implementing proposal
_____ is the seventh step in capital budgeting process	Identification of investment proposals	Performance review	Evaluation of proposals	Fixing priporities	Performance review
_____ is the traditional method of capital budgeting	Internal rate of return	NPV	Pay back period	Profitability index	Pay back period
_____ is the traditional method of capital budgeting	Internal rate of return	NPV	Rate of return	Profitability index	Rate of return
_____ is the traditional method of capital budgeting	Internal rate of return	NPV	Accounting	Profitability index	Accounting
_____ is the time adjusted method of capital budgeting	Internal rate of return	Rate of return	Accounting	Pay back period	Internal rate of return
_____ is the time adjusted method of capital budgeting	NPV	Rate of return	Accounting	Pay back period	NPV
_____ is the time adjusted method of capital budgeting	Profitability index	Rate of return	Accounting	Pay back period	Profitability index
_____ method takes into account the earnings expected from their investment over their whole life	Internal rate of return	NPV	Rate of return	Profitability index	Rate of return
_____ refers to the situtation where a firm is not in a position to invest in all profitable projects due to constraints on the availability of fund	Capital budgeting	Capital structure	Investment decision making	Capital Rationing	Capital Rationing
Capital budgeting decisions generally involves ---------- of funds	Large investment	Investment	Short investment	Medium investment	Large investment
Capital budgeting decision may be classified in to ------	Two	Three	Four	Five	Three
_____ method takes in to account the return receivable beyond the pay back period	Post pay back profitability	Pay back reciprocal	Post pay back period	Discounted pay back	Post pay back profitability
_____ method takes in to account the internal rate of return	Post pay back profitability	Pay back reciprocal	Post pay back period	Discounted pay back	Pay back reciprocal
_____ method takes in to account the life of the project beyond the pay back period	Post pay back profitability	Pay back reciprocal	Post pay back period	Discounted pay back	Post pay back period
_____ method takes in to account the time value of money	Post pay back profitability	Pay back reciprocal	Post pay back period	Discounted pay back	Discounted pay back

UNIT-III- Cost of Capital

SYLLABUS

Cost of Capital - Explicit and Implicit costs - Measurement of cost of capital - Cost of debt - Cost of perpetual debt - Cost of Equity Share - Cost of Preference Share - Cost of Retained Earning - Computation of overall cost of capital based on Historical and Market weights

INTRODUCTION

Cost of capital is an integral part of investment decision as it is used to measure the worth of investment proposal provided by the business concern. It is used as a discount rate in determining the present value of future cash flows associated with capital projects. Cost of capital is also called as cut-off rate, target rate, hurdle rate and required rate of return. When the firms are using different sources of finance, the finance manager must take careful decision with regard to the cost of capital; because it is closely associated with the value of the firm and the earning capacity of the firm.

Cost of Capital is the rate that must be earned in order to satisfy the required rate of return of the firm's investors. It can also be defined as the rate of return on investments at which the price of a firm's equity share will remain unchanged. Each type of capital used by the firm (debt, preference shares and equity) should be incorporated into the cost of capital, with the relative importance of a particular source being based on the percentage of the financing provided by each source of capital. Using of the cost a single source of capital as the hurdle rate is tempting to management, particularly when an investment is financed entirely by debt. However, doing so is a mistake in logic and can cause problems.

Meaning of Cost of Capital

Cost of capital is the rate of return that a firm must earn on its project investments to maintain its market value and attract funds. Cost of capital is the required rate of return on its investments which belongs to equity, debt and retained earnings. If a firm fails to earn return at the expected rate, the market value of the shares will fall and it will result in the reduction of overall wealth of the shareholders.

Definitions

The following important definitions are commonly used to understand the meaning and concept of the cost of capital.

- According to the definition of **John J. Hampton** " Cost of capital is the rate of return the firm required from investment in order to increase the value of the firm in the marketplace".
- According to the definition of **Solomon Ezra,** "Cost of capital is the minimum required rate of earnings or the cut-off rate of capital expenditure".
- According to the definition of James C. Van Horne, Cost of capital is "A cut-off rate for the allocation of capital to investment of projects. It is the rate of return on a project that will leave unchanged the market price of the stock".
- According to the definition of William and Donaldson, "Cost of capital may be defined as the rate that must be earned on the net proceeds to provide the cost elements of the burden at the time they are due".

Assumption of Cost of Capital

Cost of capital is based on certain assumptions which are closely associated while calculating and measuring the cost of capital. It is to be considered that there are three basic concepts:

1. It is not a cost as such. It is merely a hurdle rate.
2. It is the minimum rate of return.
3. It consist of three important risks such as zero risk level, business risk and financial risk.

Cost of capital can be measured with the help of the following equation.

$$K = rj + b + f.$$

Where,

K = Cost of capital.

rj = The riskless cost of the particular type of finance.

b = the business risk premium.

f = The financial risk premium.

CLASSIFICATION OF COST OF CAPITAL

Cost of capital may be classified into the following types on the basis of nature and usage:

- Explicit and Implicit Cost.
- Average and Marginal Cost.
- Historical and Future Cost.
- Specific and Combined Cost.

❖ FUTURE COST AND HISTORICAL COST

Future cost of capital refers to the expected cost of funds to be raised to finance aproject. In contrast, historical cost represents cost incurred in the past in acquiring funds. In financial decisions future cost of capital is relatively more relevant and significant. While evaluating viability of a project, the finance manager compares expected earnings from the project with expected cost of funds to finance the project .Like wise, in taking financing decisions, attempt of the finance manager is to minimize future cost of capital and not the costs already defrayed. This does not imply that historical cost is not relevant at all. In fact, it may serve as a guideline in predicting future costs and in evaluating the past performance of the company.

❖ COMPONENT COST AND COMPOSITE COST

A company may contemplate to raise desired amount of funds by means of different sources including debentures, preferred stock, and common stocks. These sources constitute components of funds. Each of these components of funds involves cost to the company. Cost of each component of funds is designated as component or specific cost of capital. When these component costs are combined to determine the overall cost of capital, it is regarded as composite cost of capital, combined cost of capital or weighted cost of capital, the composite cost of capital, thus, represents the average of the costs of each sources of funds employed by the company. For capital budgeting decision, composite cost of capital is relatively more relevant even though the firm may finance one proposal with only one source of funds and another proposal with another source. This is for the fact that it is the overall mix of financing over time which is materially significant in valuing firm as an ongoing overall entity.

❖ AVERAGE COST AND MARGINAL COST

Average cast represents the weighted average of the costs of each source of funds employed by the enterprise, the weights being the relative share of each source of funds in the capita! structure. Marginal cost of capital, by contrast refers to incremental cost associated with new funds raised by the firm. Average cost is the average of the component marginal costs, while the marginal cost is the specific concept used to comprise additional cost of raising new funds. In financial decisions the marginal cost concept is most significant.

❖ EXPLICIT COST AND IMPLICIT COST

Cost of capital can be either explicit cost or implicit. The explicit cost of any source of capital is the discount rate that equates the present value of the cash inflows that are incremental to the taking of the financing opportunity with the present value of its incremental cash outlay. Thus, the explicit cost of capital is the internal rate of return of the cash flows of financing opportunity. A series of each flows are associated with a method of financing. At the time of acquisition of capital, cash inflow occurs followed by the subsequent cash outflows in the form, of interest payment, repayment of principal money or payment of dividends. Thus, if a company issues 10 per cent perpetual debentures worth Rs. 10,00,000, there will be cash inflow to the firm of the order of 10,00,00. This will be followed by the annual cash outflow of Rs. 1,00,000. The rate of discount, that equates the present value of cash inflows with the present value of cash outflows, would be the explicit cost of capital.

The technique of determination of the explicit cost of capital is similar to the one used to ascertain IRR, with one difference, in the case of computation of the IRR, the cash outflows occur at the beginning followed by subsequent cash inflows while in the computation of the IRR, the cash outflows occur at the beginning followed by subsequent cash inflows, while in the computation of explicit cost of capital, cash inflow takes place at the beginning followed by a series of cash inflow subsequently.

The explicit cost of an interest bearing debt will be the discount rate that equates the present value of the contractual future payments of interest and principal with the net amount of cash received today. The explicit cost of capital of a gift is minus 100 percent, since no cash outflow will occur in future. Similarly, explicit cost of retained earnings which involve no future flows to or from the firm is minus 100 per cent. This should not tempt one to infer that the retained earnings is cost

free. As we shall discuss in the subsequent paragraphs, retained earnings do cost the firm. The cost of retained earnings is the opportunity cost of earning on investment elsewhere or in the company itself. Opportunity cost is technically termed as implicit cost of capital. It is the rate of return on other investments available to the firm or the shareholders in addition to that currently being considered. Thus, the implicit cost of capital may be defined as the rate of return associated with the best investment opportunity for the firm and its Shareholders that will be foregone if the project presently under consideration by the firm were accepted. In this connection it may be mentioned that explicit costs arise when the firm raises funds for financing the project. It is in this sense that retained earnings have implicit cost. Other forms of capital also have implicit costs once they are invested, Thus in a sense, explicit costs may also be viewed as opportunity costs. This implies that a project should be rejected if it has a negative present value when its cash flows are discounted by the explicit cost of capital.

It is clear thus that the cost of capital is the rate of return a firm must earn on its investments for the market value of the firm to remain unchanged. Acceptance of projects with a rate of return below the cost of capital will decrease the value of the firm; acceptance of projects with a rate of return above the cost of capital will increase the value of the firm. The objective of the financial manager is to maximize the wealth of the firm's owners. Using the cost of capital as a basis for accepting or rejecting investments is consistent with this goal.

IMPORTANCE OF COST OF CAPITAL

Computation of cost of capital is a very important part of the financial management to decide the capital structure of the business concern.

Importance to Capital Budgeting Decision

Capital budget decision largely depends on the cost of capital of each source. According to net present value method, present value of cash inflow must be more than the present value of cash outflow. Hence, cost of capital is used to capital budgeting decision.

Importance to Structure Decision

Capital structure is the mix or proportion of the different kinds of long term securities. A firm uses particular type of sources if the cost of capital is suitable. Hence, cost of capital helps to take decision regarding structure**.**

Importance to Evolution of Financial Performance

Cost of capital is one of the important determine which affects the capital budgeting, capital structure and value of the firm. Hence, it helps to evaluate the financial performance of the firm.

Importance to Other Financial Decisions

Apart from the above points, cost of capital is also used in some other areas such as, market value of share, earning capacity of securities etc. hence; it plays a major part in the financial management.

COMPUTATION OF COST OF CAPITAL

Computation of cost of capital consists of two important parts:

1. Measurement of specific costs
2. Measurement of overall cost of capital

Measurement of Cost of Capital

It refers to the cost of each specific sources of finance like:

- Cost of equity
- Cost of debt
- Cost of preference share
- Cost of retained earnings.

Cost of Equity

Cost of equity capital is the rate at which investors discount the expected dividends of the firm to determine its share value. Conceptually the cost of equity capital (Ke) defined as the "Minimum rate of return that a firm must earn on the equity financed portion of an investment project in order to leave unchanged the market price of the shares".

Cost of equity can be calculated from the following approach:

- Dividend price (D/P) approach
- Dividend price plus growth (D/P + g) approach
- Earning price (E/P) approach
- Realized yield approach

Dividend Price Approach

The cost of equity capital will be that rate of expected dividend which will maintain the present market price of equity shares. Dividend price approach can be measured with the help of the following formula

Ke = D/NP or D/MP

Where,
Ke = Cost of equity capital
D = Expected Dividend per share
Np = Net proceeds of an equity share.
MP= Market price per share

Exercise 1

A company issues 10,000 equity shares of Rs. 100 each at a premium of 10%. The company has been paying 20% dividend to equity shareholders for the past five years and expects to maintain the same in the future also. Compute the cost of equity capital. Will it make any difference if the market price of equity share is Rs. 160?

Solution

Ke = D/NP

= 20/110*100

= 18.18%

If the market price of equity share is Rs.160

Ke = D/MP

= 20/160*100

= 12.5%

Dividend Price Plus Growth Approach

The cost of equity is calculated on the basis of the expected dividend rate per share plus growth in dividend. It can be measured with the help of the following formula:

$$\mathbf{Ke = \frac{D}{NP} + G}$$

Where,
Ke = Cost of equity capital

D = Dividend per equity share

g = Growth in expected dividend

Np = Net proceeds of an equity share

Exercise 2

(a) A company plans to issue 10000 new shares of Rs. 100 each at a par. The floatation costs are expected to be 4% of the share price. The company pays a dividend of Rs. 12 per share initially and growth in dividends is expected to be 5%. Compute the cost of new issue of equity shares**.**

(b) If the current market price of an equity share is Rs. 150. Calculate the cost of existing equity share capital

Solution

a) Ke = D/NP+G

=10/100-5+5%

=15.53%

b) Ke = D/MP+G

=10/150+5%

=11.67%

Earning Price Approach

Cost of equity determines the market price of the shares. It is based on the future earning prospects of the equity. The formula for calculating the cost of equity according to this approach is as follows.

Ke = EPS/NP

Where,

Ke = Cost of equity capital

EPS = Earnings per share

Np = Net proceeds of an equity share

Exercise 4

A firm is considering an expenditure of Rs. 60 lakhs for expanding its operations.

The relevant information is as follows:

Number of existing equity shares =10 lakhs

Market value of existing share =Rs.60

Net earnings =Rs.90 lakhs

Compute the cost of existing equity share capital and of new equity capital assuming that new shares will be issued at a price of Rs. 52 per share and the costs of new issue will be Rs. 2 per share.

Solution

Cost of existing equity share capital:

Ke = EPS/MP

Earnings Per Share (EPS)

= RS.90/10

=RS.9

Ke = 9/60*100

= 15%

Cost of New equity capital:

Ke = EPS/NP

= 9/52-2*100

= 9/50*100

= 18%

Realized Yield Approach

It is the easy method for calculating cost of equity capital. Under this method, cost of equity is calculated on the basis of return actually realized by the investor in a company on their equity capital.

This method of computing cost of equity share capital is based upon the following assumptions:

1. The firm will remain in the same risk class over the period
2. The shareholders expectation are based upon the past realised yield
3. The market price of shares does not change significantly

Cost of Debt

Cost of debt is the after tax cost of long-term funds through borrowing. Debt may be issued at par, at premium or at discount and also it may be perpetual or redeemable.

Debt Issued at Par

Debt issued at par means, debt is issued at the face value of the debt. It may be calculated with the help of the following formula.

$$K_{db} = I/P$$

Where,

K_{db} = Cost of debt capital

P = Principal

I = Interest rate

Debt Issued at Premium or Discount

If the debt is issued at premium or discount, the cost of debt is calculated with the help of the following formula.

$$K_{db} = I/NP$$

Where,

K_{db} = Cost of debt capital

I = Annual interest payable

Np = Net proceeds of debenture

The after tax cost of debt may be calculated as

$$K_{db=I/NP\ (1-t)}$$

Exercise 5

(a) A Ltd. issues Rs. 10, 00,000, 8% debentures at par. The tax rate applicable to the company is 50%. Compute the cost of debt capital.

(b) B Ltd. issues Rs. 1, 00,000, 8% debentures at a premium of 10%. The tax rate applicable to the company is 60%. Compute the cost of debt capital.

(c) A Ltd. issues Rs. 1, 00,000, 8% debentures at a discount of 5%. The tax rate is 60%, compute the cost of debt capital.

(d) B Ltd. issues Rs. 1,00,000, 9% debentures at a premium of 10%. The costs of floatation are 2%. The tax rate applicable is 50%. Compute the cost of debt-capital.

In all cases, we have computed the after-tax cost of debt as the firm saves on account of tax by using debt as a source of finance.

(a) K_{db} **= I/NP (1-t)**

= 8000/100000(1-.5)

=0.08 (0.5)

=0.04

= 4%

(b) K_{db} **= I/NP (1-t)**

= 8000/110000(1-.6)

= 0.029

= 2.9%

(c) K_{db} **= I/NP (1-t)**

= 8000/95000(1-.6)

=0.084 (.4)

= 0.033

=3.36%

(d) K_{db} **= I/NP (1-t)**

= 9000/108000(1-.5)

=0.833 (.5)

=0.416

=4.16%

Cost of Perpetual Debt and Redeemable Debt

It is the rate of return which the lenders expect. The debt carries a certain rate of interest.

$$Kdb = \frac{I + 1/n (P-NP)}{½ (P+NP)}$$

Where,

I = Annual interest payable P = Par value of debt

Np = Net proceeds of the debenture n = Number of years to maturity

Kdb = Cost of debt before tax.

Cost of debt after tax can be calculated with the help of the following formula:

$$K_{da} = K_{db} \times (1-t)$$

Where,

Kda = Cost of debt after tax

Kdb = Cost of debt before tax

t = Tax rate

Exercise 6

A company issues Rs. 20,00,000, 10% redeemable debentures at a discount of 5%.The costs of floatation amount to Rs. 50,000. The debentures are redeemable after 8years. Calculate before tax and after tax. Cost of debt assuring a tax rate of 50%.

Solution

$$Kdb = \frac{I + 1/n\ (P-NP)}{\frac{1}{2}\ (P+NP)}$$

$$= \frac{2{,}00{,}000+1/8(20,\ 00{,}000-18{,}70{,}000)}{\frac{1}{2}(20,\ 00{,}000+18{,}70{,}000)}$$

(NP=Rs.20,00,000 -100,000 (discount)-50,000 cost of Floatation)

$$= \frac{2{,}00{,}000+16250}{1935000}$$

$$= \frac{216250}{1935000}$$

= 0.1117

=11.17%

After –Tax cost of debt, $K_{da}=K_{db}(1-t)$

= 11.17 (1-.5)

= 11.17*.5

=5.585

Cost of Preference Share Capital

Cost of preference share capital is the annual preference share dividend by the net proceeds from the sale of preference share. There are two types of preference shares irredeemable and redeemable. Cost of redeemable preference share capital is calculated with the help of the following formula:

$$K_p=D/NP$$

Where,

K_p = Cost of preference share

Dp = Fixed preference dividend

Np = Net proceeds of an equity share

Cost of irredeemable preference share is calculated with the help of the following formula:

$$K_{pr} = \frac{D+MP-NP/n}{½ (MV+NP)}$$

Where,

Kp = Cost of preference share

Dp= Fixed preference share

P = Par value of debt

Np = Net proceeds of the preference share

n = Number of maturity period.

Exercise 7

XYZ Ltd. issues 10,000, 10% preference shares of Rs. 100 each. Cost of issue is Rs. 2 per share. Calculate cost of preference capital if these shares are issued (a) at par, (b) at a premium of 10% and (c) of a debentures of 5%.

Solution

Cost of Preference capital, K_P = D/NP

(a) **Kp** = 1,00,000/10,00,000-20,000*100

=10.2%

(b) **Kp** =1,00,000/10,00,000+1,00,000-20,000*100

=9.26%

(c) **Kp** =1,00,000/10,00,000-50,000-20,000*100 = 10.75%

Cost of Retained Earnings

Retained earnings is one of the sources of finance for investment proposal; it is different from other sources like debt, equity and preference shares. Cost of retained earnings is the same as the cost of an equivalent fully subscripted issue of additional shares, which is measured by the cost of equity capital.

$$K_r=D/Np+G$$

K_r=Cost of retained earnings

D=Expected Dividend

Np=Net Proceeds of share issue

G= Rate of growth

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

$$K_r=K_e (1-t) (1-b)$$

Where,

Kr=Cost of retained earnings

Ke=Cost of equity

t=Tax rate

b=Brokerage cost

Exercise 10

A firm's Ke (return available to shareholders) is 10%, the average tax rate of shareholders is 30% and it is expected that 2% is brokerage cost that shareholders will have to pay while investing their dividends in alternative securities. What is the cost of retained earnings?

Solution

Cost of Retained Earnings, Kr = Ke (1 – t) (1 – b)

Kr = 10% (1–0.5) (1–0.02)

= 10%×0.5×0.98

= 4.9%

Measurement of Overall Cost of Capital

It is also called as weighted average cost of capital and composite cost of capital. Weighted average cost of capital is the expected average future cost of funds over the long run found by weighting the cost of each specific type of capital by its proportion in the firms capital structure.

The computation of the overall cost of capital (Ko) involves the following steps.

(a) Assigning weights to specific costs.

(b) Multiplying the cost of each of the sources by the appropriate weights.

(c) Dividing the total weighted cost by the total weights.

The overall cost of capital can be calculated with the help of the following formula;

$$Ko = KdWd + KpWp + Ke\ We + Kr\ Wr$$

Where,

Ko = Overall cost of capital

Kd = Cost of debt

Kp = Cost of preference share

Ke = Cost of equity

Kr = Cost of retained earnings

Wd= Percentage of debt of total capital

Wp = Percentage of preference share to total capital

We = Percentage of equity to total capital

Wr = Percentage of retained earnings

Weighted average cost of capital is calculated in the following formula also**:**

$$Kw = \frac{\sum XW}{\sum W}$$

Where,

K_w = Weighted average cost of capital

X = Cost of specific sources of finance

W = Weight, proportion of specific sources of finance

The key factor affecting financing Costs

Since the cost of capital is measured under the assumption that both the firm's asset structure and its capital (financial) structure are fixed, the only factor that affects the various specific costs of financing is the supply and demand forces operating in the market for long-term funds. In other words, as a firm raises long-term funds at different points in time, the only factor affecting their cost is the riskless cost of the particular type of financing.

Since the firm's business and financial risk are assumed to be constant, the changing cost of each type of capital, j, over time should be affected only by changes in the supply of and demand for each type of funds, j. The cost of each type of capital to a given firm compared to the cost to another firm (i.e., the inter firm comparison) can differ because of differences in the degree of business and financial risk associated with each firm, since the riskless cost of the given type of funds remains constant. Different business and financial risk premiums are associated. With different levels of business and financial risk. These premiums are a function of the business risk, b, and financial risk, f, of a firm. For intra firm (i.e., time series) comparisons, the only differentiating factor is the cost of the type of financing; since business and financial risk are assumed to be constant an example may help to clarify these points.

Factors determining the cost of capital

There are several factors that impact the cost of capital of any company. This would mean that the cost of capital of any two companies would not be equal. Rightly so as these two companies would not carry the same risk.

General economic conditions:

These include the demand for and supply of capital within the economy, and the level of expected inflation. These are reflected in the riskless rate of return and is common to most of the companies.

Market conditions:

The security may not be readily marketable when the investor wants to sell; or even if a continuous demand for the security does exist, the pricemay vary significantly. This is company specific.

A firm's operating and financing decisions: Risk also results from the decisions made within the company. This risk is generally divided into two classes:

- Business risk is the variability in returns on assets and is affected by the company's investment decisions.
- Financial risk is the increased variability in returns to the common stockholders as a result of using debt and preferred stock.

Amount of financing required:

The last factor determining the company's cost of funds is the amount of financing required, where the cost of capital increases as the financing requirements become larger. This increase may be attributable to one of the two factors:

As increasingly larger public issues are increasingly floated in the market, additional flotation costs (costs of issuing the security) and under pricing will affect the percentage cost of the funds to the firm.

As management approaches the market for large amounts of capital relative to the firm's size, the investors' required rate of return may rise. Suppliers of capital become hesitant to grant relatively large amounts of funds without evidence of management's capability to absorb this capital into the business.

Generally, as the level of risk rises, a larger risk premium must be earned to satisfy company's investors. This, when added to the risk-free rate, equals the firm's cost of capital.

LEVERAGE

Financial decision is one of the integral and important parts of financial management in any kind of business concern. A sound financial decision must consider the board coverage of the

financial mix (Capital Structure), total amount of capital (capitalization) and cost of capital (Ko). Capital structure is one of the significant things for the management, since it influences the debt equity mix of the business concern, which affects the shareholder's return and risk. Hence, deciding the debt-equity mix plays a major role in the part of the value of the company and market value of the shares. The debt equity mix of the company can be examined with the help of leverage. The concept of leverage is discussed in this part. Types and effects of leverage is discussed in the part of EBIT and EPS.

Meaning of Leverage

The term leverage refers to an increased means of accomplishing some purpose. Leverage is used to lifting heavy objects, which may not be otherwise possible. In the financial point of view, leverage refers to furnish the ability to use fixed cost assets or funds to increase the return to its shareholders.

Definition of Leverage

James Horne has defined leverage as, "the employment of an asset or fund for which the firm pays a fixed cost or fixed return.

Types of Leverage

Leverage can be classified into three major headings according to the nature of the finance mix of the company.

- Financial Leverage
- Operating Leverage
- Composite Leverage

The company may use finance or leverage or operating leverage, to increase the EBIT and EPS.

OPERATING LEVERAGE

The leverage associated with investment activities is called as operating leverage. It is caused due to fixed operating expenses in the company. Operating leverage may be defined as the company's ability to use fixed operating costs to magnify the effects of changes in sales on its earnings before interest and taxes. Operating leverage consists of two important costs viz., fixed cost and variable cost. When the company is said to have a high degree of operating leverage if it employs a great amount of fixed cost and smaller amount of variable cost. Thus, the degree of

operating leverage depends upon the amount of various cost structure. Operating leverage can be determined with the help of a break even analysis.

Operating leverage can be calculated with the help of the following formula:

OL = C / OP

Where,
OL = Operating Leverage
C = Contribution
OP = Operating Profits

Degree of Operating Leverage

The degree of operating leverage may be defined as percentage change in the profits resulting from a percentage change in the sales. It can be calculated with the help of the following

Formula:

DOL = Percentage change in profits / Percentage change in sales

Uses of Operating Leverage

Operating leverage is one of the techniques to measure the impact of changes in sales which lead for change in the profits of the company.

- If any change in the sales, it will lead to corresponding changes in profit. Operating leverage helps to identify the position of fixed cost and variable cost.
- Operating leverage measures the relationship between the sales and revenue of the company during a particular period.
- Operating leverage helps to understand the level of fixed cost which is invested in the operating expenses of business activities.
- Operating leverage describes the overall position of the fixed operating cost.

FINANCIAL LEVERAGE

Leverage activities with financing activities is called financial leverage. Financial leverage represents the relationship between the company's earnings before interest and taxes (EBIT)or operating profit and the earning available to equity shareholders.

Financial leverage is defined as "the ability of a firm to use fixed financial charges to magnify the effects of changes in EBIT on the earnings per share". It involves the use of funds obtained at a fixed cost in the hope of increasing the return to the shareholders.

"The use of long-term fixed interest bearing debt and preference share capital along with share capital is called financial leverage or trading on equity".

Financial leverage may be favourable or unfavourable depends upon the use of fixed cost funds. Favourable financial leverage occurs when the company earns more on the assets purchased with the funds, then the fixed cost of their use. Hence, it is also called as positive financial leverage.

Unfavourable financial leverage occurs when the company does not earn as much as the funds cost. Hence, it is also called as negative financial leverage.

Financial leverage can be calculated with the help of the following formula:

FL = OP / PBT

Where,

FL = Financial leverage

OP = Operating profit (EBIT)

PBT = Profit before tax.

Degree of Financial Leverage

Degree of financial leverage may be defined as the percentage change in taxable profit as aresult of percentage change in earnings before interest and tax (EBIT). This can be calculatedby the following formula

DFL= Percentage Change in EPS / Percentage Change in EBIT

Or

DFL = EBIT/EBT(or,EBIT-I)

Alternative Definition of Financial Leverage

According to **Gitmar**, "financial leverage is the ability of a firm to use fixed financial changes to magnify the effects of change in EBIT and EPS".

FL = EBIT /EPS

Where,

FL = Financial Leverage

EBIT = Earning Before Interest and Tax

EPS = Earning Per share.

Uses of Financial Leverage

- Financial leverage helps to examine the relationship between EBIT and EPS.
- Financial leverage measures the percentage of change in taxable income to the percentage change in EBIT.
- Financial leverage locates the correct profitable financial decision regarding capital structure of the company.
- Financial leverage is one of the important devices which is used to measure the fixed cost proportion with the total capital of the company.
- If the firm acquires fixed cost funds at a higher cost, then the earnings from those assets, the earning per share and return on equity capital will decrease.

DISTINGUISH BETWEEN OPERATING LEVERAGE AND FINANCIAL LEVERAGE

Operating Leverage	Financial Leverage
➢ Operating leverage is associated with investment activities of the company. ➢ Operating leverage consists of fixed operating expenses of the company ➢ It represents the ability to use fixed operating cost ➢ Operating leverage can be calculated by ➢ A percentage change in the profits resulting from a percentage change in the sales is called as degree of operating leverage ➢ . Trading on equity is not possible while the company is operating leverage ➢ Operating leverage depends upon fixed cost and variable cost ➢ Tax rate and interest rate will not affect the operating leverage	➢ Financial leverage is associated with financing activities of the company. ➢ Financial leverage consists of operating profit of the company. ➢ It represents the relationship between EBIT. and EPS. ➢ Financial leverage can be calculated by ➢ A percentage change in taxable profit is the result of percentage change in EBIT. ➢ Trading on equity is possible only when the company uses financial leverage. ➢ Financial leverage depends upon the operating profits ➢ Financial leverage will change due to tax rate

COMBINED LEVERAGE

When the company uses both financial and operating leverage to magnification of any change in sales into a larger relative changes in earning per share. Combined leverage is also called as composite leverage or total leverage. Combined leverage express the relationship between the revenue in the account of sales and the taxable income.

Combined leverage can be calculated with the help of the following formulas:

$$\mathbf{CL = OL \times FL}$$

Where,

CL = Combined Leverage

OL = Operating Leverage

FL = Financial Leverage

Degree of Combined Leverage

The percentage change in a firm's earning per share (EPS) results from one percent change in sales. This is also equal to the firm's degree of operating leverage (DOL) times its degree of financial leverage (DFL) at a particular level of sales.

Degree of contributed coverage = Percentage change in EPS/ Percentage change in sales

Exercise 4

Kumar Company has sales of Rs. 5, 00,000. Variable cost of Rs. 3,00,,000 and fixed cost of Rs. 1,00,000 and long term loans of Rs.4,00,000 at 10% rate of interest. Calculate combined leverage.

Solution

(i) Operating Leverage = Contribution / Earning before interest and tax

=Rs.2,00,000 /1,00,000

=2

(ii) Financial Leverage = Sales-Variable cost-Fixed cost

_____

Sales-Variable cost-Fixed cost – Interest

= Rs.5,00,000-Rs.3,00,000-Rs.1,00,000

_____

Rs.5,00,000-Rs.3,00,000-Rs.1,00,000-Rs.40,000

= Rs.1,00,000/Rs.60,000

=5/3

(iii) Combined Leverage = Operating Leverage * Financial Leverage

=2/1*5/3

=10/3

WORKING CAPITAL LEVERAGE

One of the new models of leverage is working capital leverage which is used to locate the investment in working capital or current assets in the company. Working capital leverage measures the sensitivity of return in investment of charges in the level of current assets.

WCL = Percentage Change in ROI

_____

Percentage Change is WC

If the earnings are not affected by the changes in current assets, the working capitalleverage can be calculated with the help of the following formula.

$$WCL = \frac{CA}{TA \pm DCA}$$

Where,

CA = Current Assets

TA = Total Assets

DCA = Changes in the level of Current Assets

Exercise 7

The following information is available for two companies

	A Ltd	B Ltd
Fixed Assests	Rs.2,00,000	8,00,000
Current Assets	Rs.8,00,000	Rs.2,00,000

Total Assets	Rs.10,00,000	10,00,000
Earning Before Interest and Tax	Rs.1,00,000	1,00,000

You are required to compare the sensitivity earning of the two companies for a 25% change in the level of their current assets.

Solution:

$$\text{WCL (A.Ltd)} = \frac{8,00,000}{10,00,000-2,00,000}$$

$$= 1.0$$

$$\text{WCL (B.Ltd)} = \frac{2,00,000}{10,00,000-50,000}$$

$$=0.21$$

WCL of the two companies, we can say that the sensitivity of earnings for changes in the level of current assets of A.Ltd is greater than that of B.Ltd.

Part A (ONE Mark)

Multiple Choice Questions

Online Examination

Part B (2 Marks Questions)

1. Define cost of capital
2. List out any two significance of cost of capital"
3. X Ltd issues Rs.50,000 8% debentures at par. The tax rate applicable to the company is 50%. Compute Cost of debt capital?
4. A company issues 10000, 10% preference shares of Rs.100 each. Cost of issue is Rs.2 per share. Calculate cost of preference capital if these shares are issued at par,
5. The shares of a company are selling at Rs.40 per share and it had paid a dividend of Rs.4 per share last year. The investors market expects a growth rate of 5 percent per year. Compute the cost of equity capital
6. A Company issues 1000, 7% preference shares of Rs.100 each at a premium of 10% redeemable after 5 years at par. Compute cost of preference capital
7. A company issues 1000 equity shares of Rs.100 each at a premium of 10%. The company has been paying 20% dividend to equity shareholders. Compute the cost of equity capital
8. Write the formula for calculating after tax cost of debt for redeemable debenture?
9. Write a short note on historical cost
10. What is meant by explicit cost?
11. Give the meaning for implicit cost?

Part C (6 Marks Questions)

1. A Company has equity share capital of Rs.5,00,000 divided into shares of Rs.100 each. It wishes to raise further Rs.3,00,000 for expansion cum modernization plans. The Company plans the following financial schemes

(a) All common stocks

(b) Rs.1,00,000 in common stocks and Rs.2,00,000 in preference capital with the rate of dividend at 8%

(c) Rs2,00,000 in preference capital with the rate of dividend at 7% and Rs.1,00,000 in debt @ 5% rate of interest.

The company's existing earnings before interest and tax (EBIT) are Rs.1,50,000, The corporate rate of tax is 50% You are required to determine the EPS in each plan and Comment on the implication of financial leverage

2. What is the importance of cost of capital? Discuss the problems in determining it?

3. The following items have been extracted from the liabilities side of the Balance Sheet of XYZ Company as on 31st December 2012

4,00,000 Equity Shares of Rs.10 each Rs.40,00,000

Reserves and Surplus Rs.60,00,000

15 % Non – Convertible Debentures Rs.20,00,000

14 % Long Term Loans Rs.60,00,000

Other information about the company as relevant is given below

Year Ended	DPS (Rs.)	EPS (Rs.)	Market Price (Rs.)
31.12.2012	4.00	7.50	50.00
31.12.2011	3.00	6.00	40.00
31.12.2010	4.00	4.50	30.00

You are required to calculate the weighted average cost of capital using book value weights E/p as the basis of cost of equity capital. Assume 30% tax rate.

4. Define cost of capital. Explain the significance of cost of capital?

5. A firm has the following capital structure and after tax cost for the different sources of funds used.

Sources of funds	Book value (Rs.)	After tax cost (%)	Market Value (Rs.)
Debt capital	15,00,000	5	15,50,000
Preference share capital	12,00,000	10	15,15,000
Equity share capital	18,00,000	12	19,50,000
Retained earnings	15,00,000	-	-

You are required to calculate weighted average cost of capital using book value and market value

6. A company has the following amounts and specific cost for each type of capital

Sources	Book Value (Rs.)	Market Value (Rs.)	Specific Cost (%)
Debt	4,00,000	3,80,000	5
Preference share capital	1,00,000	1,10,000	5
Equity share capital	6,00,000	12,00,000	13
Retained Earnings	2,00,000	-	-
	13,00,000	16,90,000	

Determine weighted average cost of capital

Using Book Value weights

Using Market Value weights

7. Explain the different classification of cost with suitable examples?

8. Discuss the problems in determining cost of capital?

9. Explain the significance of cost of capital with suitable illustration?

10. Describe the different methods of computing cost of capital?

FINANCIAL MANAGEMENT
UNIT III

QUESTIONS	OPTION 1	OPTION 2	OPTION 3	OPTION 4	ANSWER
The_____ is the minimum rate of	Capital	Cost of Capital	Capital	Working Capital	Cost of Capital
_____ is the weighted average cost of various source of finance used by a firm	Capital Structure	Capital Budgeting	Cost of Capital	Working Capital	Cost of Capital
Higher the risk involved in a firm higher is the _____	Capital Structure	Capital Budgeting	Working Capital	Cost of Capital	Cost of Capital
_____ is the minimum required rate of earnings or the cut-off rate of capital expenditure	Cost of Capital	Capital Budgeting	Working Capital	Capital Structure	Cost of Capital
_____ for a firm may be defined as the cost of obtaining funds	Cost of Capital	Capital Budgeting	Working Capital	Capital Structure	Cost of Capital
_____ concept can be used as a basis for evaluating the performance of the firm	Capital Structure	Cost of Capital	Capital Budgeting	Working Capital	Cost of Capital
_____ is not a cost as such	Capital Structure	Capital Budgeting	Working Capital	Cost of Capital	Cost of Capital
_____ are book cost which are related to the past	Future Cost	Explicit Cost	Historical Cost	Implicit Cost	Historical Cost
_____ are estimated cost for the future	Future Cost	Explicit Cost	Historical Cost	Implicit Cost	Future Cost

_____ refers to the cost of specific source of capital	Explicit Cost	Specific Cost	Historical Cost	Implicit Cost	Specific Cost
_____ is combined cost of various source of Capital	Future Cost	Explicit Cost	Composite cost	Historical Cost	Composite cost
_____ is the weighted average cost of Capital	Future Cost	Explicit Cost	Historical Cost	Composite cost	Composite cost
In Capital structure decision, the _____ should be given consideration	Cost of Debt	Cost of Preference Capital	Cost of Equity Capital	Weighted average cost of Capital	Weighted average cost of Capital
_____ is the discount rate which equates the present value of cash inflow with the present value of cash out flow	Explicit Cost	Specific Cost	Historical Cost	Implicit Cost	Explicit Cost
_____ also known as the opportunity cost	Implicit Cost	Specific Cost	Historical Cost	Implicit Cost	Implicit Cost
_____ is the Cost of the opportunity foregone in order to take up a particular project	Implicit Cost	Specific Cost	Historical Cost	Implicit Cost	Implicit Cost
An _____ refers to the combined cost of Various source of Capital	Explicit Cost	Specific Cost	Average Cost	Implicit Cost	Average Cost
Cost of capital is symbolically denoted by --------	A	B	C	K	K

_____refers to the average cost of capital which has to be incurred to obtain additional funds required by a firm	Explicit Cost	Specific Cost	Marginal Cost	Implicit Cost	Marginal Cost
---------- is the rate of interest payable on Debt	Cost of Debt	Cost of Equity	Cost of Preference Capital	Marginal Cost	Cost of Debt
Cost of Debt = _____	Interest	Interest/ Net Proceeds	Investment/Interest	Earnings/ Net Interest	Interest/ Net Proceeds
X Ltd., issues Rs. 50,000 @ 8 % debenture @ par. The tax rate applicable to the Company is 50%. Compute the Cost of Debt Capital	4 %	6 %	8 %	10 %	4 %
Y Ltd., issues 50,000 @ 8 % Debenture, premium of 10 %. The tax rate applicable to the company is 60 %. Compute the Cost of Debt Capital	1.15 %	2.91 %	3.18 %	4.20 %	2.91 %
Z Ltd., issues 50,000 @ 8 % Debenture, Discount 5 %, the tax rate is 50%.. Compute the Cost of Debt Capital	3.18 %	2.16 %	4.21 %	4.01 %	4.21 %

The _____ is a function of dividend expected by its investors	Cost of Preference Capital	Cost of capital	Cost of debt	Marginal Cost	Cost of Preference Capital
Cost of Preference Capital = _____	Earnings	Dividend	Dividend / Net Proceeds	EBIT / Net Proceeds	Dividend / Net Proceeds
A Company issues 10,000 @ 10 % Preference Shares of Rs. 100 each Cost of issue Rs. 2 per share. Calculate Cost of Preference Capital	10.2 %	10.75 %	13.5 %	9.26 %	10.2 %
A Company issues 10,000 @ 10 % Preference Shares of Rs. 100 each Cost of issue Rs. 2 per share Calculate Cost of Preference Capital at a Premium of 10 %	10.2 %	9.26 %	13.5 %	10.75 %	9.26 %
A Company issues 10,000 @ 10 % Preference Shares of Rs.100 each Cost of issue Rs.2 per share Calculate Cost of Preference Capital at a discount of 5 %	13.5 %	9.26 %	10.75 %	10.2%	10.75 %
Dividend Yield method = _____	Net Proceeds / Dividend	Interest / Net Proceeds	Dividend / Market Price	EBIT / 100	Dividend / Market Price
Earnings Yield method = _____	Dividend / Net Proceed	EPS / Market Price	Dividend / Market Price	EBIT /100	EPS / Market Price

_____ is also known as trading on equity	Operating Leverage	Composite Leverage	Financial Leverage	Working Capital Leverage	Financial Leverage
Degree of Financial Leverage = _____	EBIT / EBT	Contribution / Profit	Contribution / Sales	EBT / EBIT	EBIT / EBT
Operating Leverage = _____	EBIT / EBT	Contribution / Operating Profit	Contribution / Sales	EBT / EBIT	Contribution / Operating Profit
Break Even Point = _____	EBIT / EBT	Contribution / Profit	Fixed Cost / Contribution	EBT / EBIT	Fixed Cost / Contribution
Profit Volume Ratio = _____	EBIT / EBT	Contribution / Profit	EBT / EBIT	Contribution / Sales	Contribution / Sales
Operating Profit = _____	Sales – Total Cost	Contribution / Profit	EBT / EBIT	Contribution / Sales	Sales – Total Cost
_____ measures the sensitivity of return on investment of changes in the level of Current Assets	Operating Leverage	Working Capital Leverage	Financial Leverage	Composite Leverage	Working Capital Leverage
Working Capital Leverage =	EBIT/EBT	Contribution / Profit	Percentage Change in ROI / Percentage	EBT / EBIT	Percentage Change in ROI / Percentage
Contribution = _____	Sales – Total Cost	Sales – Fixed Cost	Sales – Explicit Cost	Sales – Variable Cost	Sales – Variable Cost

A Company is highly geared when ---	It raises finance by only equity capital	More debentures are issued than preference shares	More debentures are issued than equity capital	More preference shares are issued than equity capital	More debentures are issued than equity capital
Capital gearing is the ratio between -----	Equity capital and debenture	Equity capital and preference capital	Equity capital and fixed interest securities	Debentures and preference capital	Equity capital and fixed interest securities
Trading on equity means ---------	Trading in equity share of small face value	A relatively smaller equity capital than borrowed capital	Transaction between the company and its minority share holders	Restricted transaction on equity shares and stock exchange	A relatively smaller equity capital than borrowed capital
In a highly geared company --------	Only ordinary capital is raised	Only debentures are issued	Major part of finance is raised by debentures	Major part of finance is raised by equity capital	Major part of finance is raised by debentures
Leverage implies that ----------	The return on equity share capital exceeds the interest on	Return on borrowed capital	Return on equity capital	The return on borrowed capital exceeds the return on equity share capital	The return on equity share capital exceeds the interest on borrowed capital
Which of the following is not a function of money?	It is a medium of exchange	It increases purchasing power	It is standard measure of value	It is hedge against inflation	It increases purchasing power

Cost of retained earnings is denoted as ----------	Kre	Kr	Ke	K	Kr
_____ refers to firms ability to use fixed cost asset of funds to increase the return to its owner	Leverage	Capital Structure	Capital Budgeting	Cost of Capital	Leverage
Point of indifference relates the ------	EPS and net profit	EBIT and tax level	Net profit and earnings	Gross and net profit	EBIT and tax level
The importance of stock price determinants of investment was substained by ---------	JR hicks	Million Friedman	JM keynes	Miller	Million Friedman
Fat money is that which is ----------	Accepted by overseas bank only	Decreased as money by the government	Accepted temporarily lien of gold	Backed by gold or silver	Decreased as money by the government
Which of the following is not an example of near money ?	Treasury bill	Equity share	Bill of exchange	Bonds and debentures	Equity share
A stock variable is measured -------	During a month	During a year	At a time	During a period	At a time
The fixed cost includes --------	Salaries of staff	Depreciation cost	Expenses of land maintenance	Salary, Depreciation and Land Maintentance	Salary, Depreciation and Land Maintentance
The biggest stock exchange of India is ----------	Mumbai	Delhi	Calcutta	Madras	Mumbai
Ploughing back of profit means ------	Earning of black money	Reinvestment of earnings	Unclaimed dividends	Transferring a part of profit to reserve	Reinvestment of earnings

A Company can trade on equity when it has issued ----------	Only equity capital	Only preference capital	Equity and preference capital	Debenture preference and equity capital	Debenture preference and equity capital
Composite leverage is a combination of ---------	Financial and operating leverage	Financial and working capital leverage	Financial and trading on equity	Operating and working capital leverage	Financial and operating leverage
_____ occurs when a firm has a fixed cost	Financial Leverage	Operating Leverage	Composite Leverage	Working Capital Leverage	Operating Leverage
Cost of Equity capital is denoted as -----	Kre	Kr	Ke	K	Ke

UNIT-IV- Capital Structure

SYLLABUS

Capital Structure - Approaches to Capital Structure Theories - Net Income approach - Net Operating Income approach - Modigliani-Miller (MM) approach - Traditional approach - Capital Structure and Financial Distress - Trade-Off Theory - Dividend Policy Decision - Dividend and Capital - The Irrelevance of dividend - General, MM hypothesis - Relevance of dividend - Walter's Model - Gordon's Model - Leverage Analysis - Operating and Financial Leverage - EBIT / EPS analysis - Combined Leverage

Capital is the major part of all kinds of business activities, which are decided by the size, and nature of the business concern. Capital may be raised with the help of various sources. If the company maintains proper and adequate level of capital, it will earn high profit and they can provide more dividends to its shareholders.

Meaning of Capital Structure

Capital structure refers to the kinds of securities and the proportionate amounts that makeup capitalization. It is the mix of different sources of long-term sources such as equity shares, preference shares, debentures, long-term loans and retained earnings. The term capital structure refers to the relationship between the various long-term source financing such as equity capital, preference share capital and debt capital. Deciding the suitable capital structure is the important decision of the financial management because it is closely related to the value of the firm. Capital structure is the permanent financing of the company represented primarily by long-term debt and equity.

Definition of Capital Structure

The following definitions clearly initiate, the meaning and objective of the capital structures.

- According to the definition of **Gerestenbeg,** "Capital Structure of a company refers to the composition or make up of its capitalization and it includes all long-term capital resources".

- According to the definition of **James C. Van Horne,** "The mix of a firm's permanent long-term financing represented by debt, preferred stock, and common stock equity".
- According to the definition of **Presana Chandra,** "The composition of a firm's financing consists of equity, preference, and debt".
- According to the definition of **R.H. Wessel,** "The long term sources of fund employed in a business enterprise".

FINANCIAL STRUCTURE

The term financial structure is different from the capital structure. Financial structures hows the pattern total financing. It measures the extent to which total funds are available to finance the total assets of the business.

Financial Structure = Total liabilities

Or

Financial Structure = Capital Structure + Current liabilities.

The following points indicate the difference between the financial structure and capital structure.

FINANCIAL STRUCTURES	CAPITAL STRUCTURES
1. It includes both long-term and short-term sources of funds 2. It means the entire liabilities side of the balance sheet. 3. Financial structures consist of all sources of capital 4. It will not be more important while determining the	1. It includes only the long-term sourcesof funds. 2. It means only the long-term liabilities of the company. 3. It consists of equity, preference and retained earning capital. 4. It is one of the major determinations of value of the firm. the value of the firm

OPTIMUM CAPITAL STRUCTURE

Optimum capital structure is the capital structure at which the weighted average cost of capital is minimum and thereby the value of the firm is maximum.

Optimum capital structure may be defined as the capital structure or combination of debt and equity that leads to the maximum value of the firm.

Objectives of Capital Structure

Decision of capital structure aims at the following two important objectives:

1. Maximize the value of the firm.
2. Minimize the overall cost of capital.

Forms of Capital Structure

Capital structure pattern varies from company to company and the availability of finance. Normally the following forms of capital structure are popular in practice.

- Equity shares only.
- Equity and preference shares only.
- Equity and Debentures only.
- Equity shares, preference shares and debentures.

FACTORS DETERMINING CAPITAL STRUCTURE

The following factors are considered while deciding the capital structure of the firm.

Leverage

It is the basic and important factor, which affect the capital structure. It uses the fixed cost financing such as debt, equity and preference share capital. It is closely related to the overall cost of capital.

Cost of Capital

Cost of capital constitutes the major part for deciding the capital structure of a firm. Normally long-term finance such as equity and debt consist of fixed cost while mobilization. When the cost of capital increases, value of the firm will also decrease. Hence the firm must take careful steps to reduce the cost of capital.

(a) Nature of the business: Use of fixed interest/dividend bearing finance depends upon the nature of the business. If the business consists of long period of operation, it will apply for equity than debt, and it will reduce the cost of capital.

(b) Size of the company: It also affects the capital structure of a firm. If the firm belongs to large scale, it can manage the financial requirements with the help of internal sources. But if it is small size, they will go for external finance. It consists of high cost of capital.

(c) Legal requirements: Legal requirements are also one of the considerations while dividing the capital structure of a firm. For example, banking companies are restricted to raise funds from some sources.

(d) Requirement of investors: In order to collect funds from different type of investors, it will be appropriate for the companies to issue different sources of securities.

Government policy

Promoter contribution is fixed by the company Act. It restricts to mobilize large, long term funds from external sources. Hence the company must consider government policy regarding the capital structure.

CAPITAL STRUCTURE THEORIES

Capital structure is the major part of the firm's financial decision which affects the value of the firm and it leads to change EBIT and market value of the shares. There is a relationship among the capital structure, cost of capital and value of the firm. The aim of effective capital structure is to maximize the value of the firm and to reduce the cost of capital.

There are two major theories explaining the relationship between capital structure, cost of capital and value of the firm.

1. **Tradition al Approach**
2. **Modern Approach**
   - Net Income Approach
   - Net Operating Income Approach
   - Modigliani-Miller Approach

1. Traditional Approach

It is the mix of Net Income approach and Net Operating Income approach. Hence, it is also called as intermediate approach. According to the traditional approach, mix of debt and equity capital can increase the value of the firm by reducing overall cost of capital up to certain level of

debt. Traditional approach states that the Ko decreases only within the responsible limit of financial leverage and when reaching the minimum level, it starts increasing with financial leverage.

Assumptions

Capital structure theories are based on certain assumption to analysis in a single and convenient manner:

- There are only two sources of funds used by a firm; debt and shares.
- The firm pays 100% of its earning as dividend.
- The total assets are given and do not change.
- The total finance remains constant.
- The operating profits (EBIT) are not expected to grow.
- The business risk remains constant.
- The firm has a perpetual life.
- The investors behave rationally.

Net Income (NI) Approach

Net income approach suggested by the Durand. According to this approach, the capital structure decision is relevant to the valuation of the firm. In other words, a change in the capital structure leads to a corresponding change in the overall cost of capital as well as the total value of the firm.

According to this approach, use more debt finance to reduce the overall cost of capital and increase the value of firm.

Net income approach is based on the following three important assumptions:

1. There are no corporate taxes.
2. The cost debt is less than the cost of equity.
3. The use of debt does not change the risk perception of the investor.

$$V = S+B$$

Where

V = Value of firm

S = Market value of equity

B = Market value of debt

Net Operating Income (NOI) Approach

Another modern theory of capital structure, suggested by **Durand**. This is just the opposite to the Net Income approach. According to this approach, Capital Structure decision is irrelevant to the valuation of the firm. The market value of the firm is not at all affected by the capital structure changes.

According to this approach, the change in capital structure will not lead to any change in the total value of the firm and market price of shares as well as the overall cost of capital.

NI approach is based on the following important assumptions;

- The overall cost of capital remains constant;
- There are no corporate taxes;
- The market capitalizes the value of the firm as a whole;

Value of the firm (V) can be calculated with the help of the following formula

$$V = \mathbf{EBIT / K_o}$$

Where,

V = Value of the firm

EBIT = Earnings before interest and tax or Net Operating Income

Ko = Overall cost of capital

Modigliani and Miller Approach

Modigliani and Miller approach states that the financing decision of a firm does not affect the market value of a firm in a perfect capital market. In other words MM approach maintains that the average cost of capital does not change with change in the debt weighted equity minor capital structures of the firm.

Modigliani and Miller approach is based on the following important assumptions:

• There is a perfect capital market.

• There are no retained earnings.

• There are no corporate taxes.

• The investors act rationally.

• The dividend payout ratio is 100%.

• The business consists of the same level of business risk.

Value of the firm can be calculated with the help of the following formula:

$$V = EBIT / K_o * (1-t)$$

Where

EBIT = Earnings before interest and tax

Ko = Overall cost of capital

t = Tax rate

INTRODUCTION

The term dividend refers to that part of profits of a company which is distributed by the company among its shareholders. It is the reward of the shareholders for investments made by them in the shares of the company. The investors are interested in earning the maximum return on their investments and to maximize their wealth. A company, on the other hand, needs to provide funds to finance its long-term growth. If a company pays out as dividend most of what it earns, then for business requirements and further expansion it will have to depend upon outside resources such as issue of debt or new shares. Dividend policy of a firm, thus affects both the long-term financing and the wealth of shareholders. As a result, the firm's decision to pay dividends must be reached in such a manner so as to equitably apportion the distributed profits and retained earnings.

Since dividend is a right of Shareholders to participate in the profits and surplus of the company for their investment in the share capital of the company, they should receive fair amount of the profits. The company should, therefore, distribute a reasonable amount as dividends (which

should include a normal rate of interest plus a return for the risks assumed) to its members and retain the rest for its growth and survival.

Meaning of Dividend

Dividend refers to the business concerns net profits distributed among the shareholders. It may also be termed as the part of the profit of a business concern, which is distributed among its shareholders.

According to the Institute of Chartered Accountant of India, dividend is defined as"a distribution to shareholders out of profits or reserves available for this purpose".

TYPES OF DIVIDEND/FORM OF DIVIDEND

Dividend may be distributed among the shareholders in the form of cash or stock. Hence, Dividends are classified into:

A. Cash dividend

B. Stock dividend

C. Bond dividend

D. Property dividend

Cash Dividend

If the dividend is paid in the form of cash to the shareholders, it is called cash dividend. It is paid periodically out the business concerns EAIT (Earnings after interest and tax). Cash dividends are common and popular types followed by majority of the business concerns.

Stock Dividend

Stock dividend is paid in the form of the company stock due to raising of more finance. Under this type, cash is retained by the business concern. Stock dividend may be bonus issue. This issue is given only to the existing shareholders of the business concern.

Bond Dividend

Bond dividend is also known as script dividend. If the company does not have sufficient funds to pay cash dividend, the company promises to pay the shareholder at a future specific date with the help of issue of bond or notes.

Property Dividend

Property dividends are paid in the form of some assets other than cash. It will distribute under the exceptional circumstance. This type of dividend is not published in India.

DIVIDEND DECISION

Dividend decision of the business concern is one of the crucial parts of the financial manager, because it determines the amount of profit to be distributed among shareholders and amount of profit to be treated as retained earnings for financing its long term growth. Hence, dividend decision plays very important part in the financial management.

Dividend decision consists of two important concepts which are based on the relationship between dividend decision and value of the firm.

Dividend Theories

Irrelevance of Dividend

- Solomon Approach
- MM Approach

Relevance of Dividend

- Walter's Model
- Gordon's Model

Irrelevance of Dividend

According to professors **Soloman, Modigliani and Miller**, dividend policy has no effect on the share price of the company. There is no relation between the dividend rate and value of the firm. Dividend decision is irrelevant of the value of the firm. Modigliani and Miller contributed a major approach to prove the irrelevance dividend concept.

Modigliani and Miller's Approach

According to MM, under a perfect market condition, the dividend policy of the company is irrelevant and it does not affect the value of the firm."Under conditions of perfect market, rational investors, absence of tax discrimination between dividend income and capital appreciation, given the firm's investment policy, its dividend policy may have no influence on the market price of shares".

Assumptions

MM approach is based on the following important assumptions:

1. Perfect capital market.
2. Investors are rational.

3. There are no taxes.

4. The firm has fixed investment policy.

5. No risk or uncertainty.

Proof for MM approach

MM approach can be proved with the help of the following formula

$$P_o = \frac{D_1 + P_1}{(1+K_e)}$$

Where,

P_o = Prevailing market price of a share.

K_e = Cost of equity capital.

D_1 = Dividend to be received at the end of period one.

P_1 = Market price of the share at the end of period one.

P1 can be calculated with the help of the following formula.

P1 = Po (1+Ke) – D1

The number of new shares to be issued can be determined by the following formula:

M × P1 = I – (X – nD1)

Where,

M = Number of new share to be issued.

P1 = Price at which new issue is to be made.

I = Amount of investment required.

X = Total net profit of the firm during the period.

nD1= Total dividend paid during the period.

ILLUSTRATION :

X Company Ltd., has 100000 shares outstanding the current market price of the shares Rs. 15 each. The company expects the net profit of Rs. 2, 00,000 during the year and it belongs to a rich class for which the appropriate capitalisation rate has been estimated to be 20%. The company is considering dividend of Rs. 2.50 per share for the current year. What will be the price of the share at the end of the year?

(i) if the dividend is paid and

(ii) if the dividend is not paid.

Solution

$$P_o = \frac{D_1+P_1}{(1+K_e)}$$

(i) If the dividend is paid

Po = Rs.15

Ke = 20%

D1 = 2.50

P1 = ?

$$15 = \frac{2.50+P_1}{1+20\%}$$

$$15 = \frac{2.50+P_1}{1.2}$$

$2.50 + P1 = 15 \times 1.2$

P1 = 18 – 2.50

P1 = Rs. 15.50

(ii) If the dividend is not paid

Po = 15

Ke = 20%

D1 = 0

P_1 = ?

$$15 = \frac{0 + P_1}{1 + 20\%}$$

$$15 = \frac{0 + P_1}{1.20}$$

$0 + P_1 = 15 \times 1.20$

P_1 = Rs. 18.

ILLUSTRATION :

Z Ltd., has risk allying firm for which capitalization rate is 12%. It currently has outstanding 8,000 shares selling at Rs. 100 each. The dividend for the current financial year is Rs. 7 per share. The company expects to have a net income of Rs. 69,000 and has a proposal formatting new investments of Rs. 1, 60,000. Show that under the MM hypothesis the payment of dividend does not affect the value of the firm. (a) Value of the firm when dividends are paid. Price of the shares at the end of the current financial year.

(a) Value of the firm when dividends are paid. Price of the shares at the end of the current financial year.

$P_1 = P_o (1+K_e) – D1$

$= 100 (1 + .12) – 7$

$= 100 \times 1.12 – 7$

P_1 = Rs. 105

(b) Number of shares to be issued.

$$S = \frac{I - (TE - nD)}{P_1}$$

$$= \frac{1,60,000 - (69000 - (8000*7)}{105}$$

$$= \frac{1,60,000 - (69000 - (8000*7)}{105}$$

$$= \frac{1,47,000}{105}$$

= 1400 Shares

The MM hypothesis explained in another firm also assumes that investment required by the firm on account of payment of dividends is finance out of the new issue of equity shares.

$$S = \frac{I - (TE - nD)}{P_1}$$

S = Value of the firm can be calculated as follows

$$nP_o = \frac{(N+S)\, M_1 - (I - TE)}{1 + Ke}$$

nP_o = Value of the firm

TE = Total Earnings

M_1 = Market Price at the end of the period

K_e = Cost of capital

D = Dividend paid at the end of the year (or) period

N = Number of shares outstanding at the beginning of the period.

$$nP_o = \frac{(N+S)\,M_1 - (I - TE)}{1 + Ke}$$

$$= \frac{(8000+1400*105 - (160000-69000)}{1+ 12\%}$$

$$= \frac{9400*105 - 91000}{1.12}$$

= 8,00,000

Criticism of MM approach

- MM approach consists of certain criticisms also. The following are the major criticisms ofMM approach.
- MM approach assumes that tax does not exist. It is not applicable in the practical life of the firm.
- MM approach assumes that, there is no risk and uncertain of the investment. It is also not applicable in present day business life.

- MM approach does not consider floatation cost and transaction cost. It leads to affect the value of the firm.
- MM approach considers only single decrement rate, it does not exist in real practice.
- MM approach assumes that, investor behaves rationally. But we cannot give assurance that all the investors will behave rationally.

RELEVANCE OF DIVIDEND

According to this concept, dividend policy is considered to affect the value of the firm. Dividend relevance implies that shareholders prefer current dividend and there is no direct relationship between dividend policy and value of the firm. Relevance of dividend concept is supported by two eminent persons like Walter and Gordon.

Walter's Model

Prof. James E. Walter argues that the dividend policy almost always affects the value of the firm. Walter model is based in the relationship between the following important factors:

• Rate of return I

• Cost of capital (k)

According to the Walter's model, if r > k, the firm is able to earn more than what the shareholders could by reinvesting, if the earnings are paid to them. The implication of r > k is that the shareholders can earn a higher return by investing elsewhere.

If the firm has r = k, it is a matter of indifferent whether earnings are retained or distributed.

Another feature of Walter's formula is that it provides an added or reduced Weight to the retained earnings portion of the capitalization earnings formula. The factors 'r' and 'k' are placed in front of retained earnings to change its weighted value under different situations as discussed below:

1. Growth Firms

In growth firms internal rate of return is greater than the normal rate(r > k). Therefore, r/k factor will greater than 1. Such firms must reinvest retained earnings since existing alternative investments offer a lower return than the firm is able to secure. Each rupee of retained earnings will have a higher weighting in Walter's formula than a comparable rupee of dividends. Thus, large the firm retains, higher the value of the firm. Optimum dividend payout ratio for such a firm will be zero.

2. Normal Firm

Normal firms comprise those firms whose internal rate of return is equal to normal capitalization (r=k). These firms earn on their investments rate of return equal to market rate of return. For such firms dividend policy will have no effect on the market value per share in the Walter's model. Accordingly, retained earnings will have the same weighted value as dividends. In this case the market value per share is affected by the payout ratio.

3. Declining Firms

Firms which earn on their investments less than the minimum rate required are designated as declining firms. The management of such firms would like to distribute its earnings to the stockholders so that they may either spend it or invest elsewhere to earn higher return than earned by the declining firms. Under such a situation each rupee of retained earnings will receive lower weight than dividends and market value of the firm will tend to be maximum when it does not retain earnings at all.

4. Evaluation of the Walter's Model

Professor Walter has endeavoured to show in an erudite manner the effects of dividend policy on value of equity shares under different situations of a firm. However, the basic premises on which edifice of the theory are laid down are unrealistic and therefore, conclusions drawn from the Walter's model are hardly true for real life situations. Thus, for instance assume that a firm finances its investment opportunities only by means of internal sources and no external financing is resorted to for this purpose. Under such a situation, either the value of the firm's investment or dividend or both will be sub-optimum. In its attempt to maximize the value of the firm, the management should go on making investments so long as return of investment is equal to the cost of capital. This is the optimum level of investment; the remaining amount should be raised from external sources. On the contrary, Walter argues that value of the firm is maximized by retaining all the profits because magnitude of investments financed by retained earnings may be less than the optimum level of investment

Assumptions

Walters's model is based on the following important assumptions:

1. The firm uses only internal finance.

2. The firm does not use debt or equity finance.

3. The firm has constant return and cost of capital.

4. The firm has 100 recent payout.

5. The firm has constant EPS and dividend.

6. The firm has a very long life.

Walter has evolved a mathematical formula for determining the value of market share

$$P = \frac{D + r/Ke\,(E - D)}{Ke}$$

Where,

P = Market price of an equity share

D = Dividend per share

r = Internal rate of return

E = Earning per share

Ke = Cost of equity capital

ILLUSTRATION :

From the following data, calculate the MP of a share of ABC Ltd., under

(i) Walter'sformula; and

(ii) (ii) Dividend growth model.

EPS = Rs. 10 DPS = Rs. 6

Ke = 18% r = 25%

Retention ratio (b) = 45%

Solution:

(i) Walter's Model

EPS = Rs. 10 DPS = Rs. 6

Ke = 18% r = 25%

Retention ratio (b) = 45%

Solution:

(i) Walter's Model

$$P = \frac{D + r(EPS - DPS)}{Ke}$$

$$= \frac{6 + .25(10-6)}{.18}$$

$$= \frac{6 + 5.56}{.18}$$

$$= \frac{11.56}{.18}$$

$$= RS.64.22$$

(ii) Dividend Growth Model

$$P = \frac{E(1-b)}{Ke - br}$$

$$= \frac{10(1-.45)}{.18 * (.45*.25)}$$

$$= \frac{10 * 0.55}{0.18 * 0.1125}$$

$$= \frac{5.5}{0.0675}$$

= Rs.81.48

Criticism of Walter's Model

The following are some of the important criticisms against Walter model: Walter model assumes that there is no extracted finance used by the firm. It is not practically applicable. There is no possibility of constant return. Return may increase or decrease, depending upon the business situation. Hence, it is applicable. According to Walter model, it is based on constant cost of capital. But it is not applicable in the real life of the business.

Gordon's Model

Myron Gorden suggests one of the popular model which assume that dividend policy of a firm affects its value, and it is based on the following important assumptions:

1. The firm is an all equity firm.
2. The firm has no external finance.
3. Cost of capital and return are constant.
4. The firm has perpetual life.
5. There are no taxes.
6. Constant relation ratio (g=br).
7. Cost of capital is greater than growth rate (Ke>br).

Gordon's model can be proved with the help of the following formula:

$$P = \frac{E(1-b)}{Ke - br}$$

Where,

P = Price of a share

E = Earnings per share

1 – b = D/p ratio (i.e., percentage of earnings distributed as dividends)

Ke = Capitalization rate

br = Growth rate = rate of return on investment of an all equity firm.

ILLUSTRATION :

Raja company earns a rate of 12% on its total investment of Rs. 6,00,000 in assets. It has 6,00,000 outstanding common shares at Rs. 10 per share. Discount rate of the firm is10% and it has a policy of retaining 40% of the earnings. Determine the price of its share using Gordon's Model. What shall happen to the price of the share if the company has pay out of 60% (or) 20%?

Solution

According to Gordon's Model, the price of a share is

$$P = \frac{E(1-b)}{Ke - br}$$

Given: E = 12% of Rs. 10=Rs. 1.20

r = 12%=0.12

K = 10%=0.10

t = 10%=0.10

b = 40%=0.40

$$= \frac{1.20\ (1-.40)}{10 - (.40*.12)}$$

$$= \frac{1.20\ (.60)}{.10 - 0.048}$$

$$= \frac{0.72}{0.052}$$

= Rs.13.85

If the firm follows a policy of 60% payout then b=20% =0.20

The price is

$$P = \frac{\mathbf{1.20\ (1-.20)}}{\mathbf{.10 - (.2*.12)}}$$

= 0.05

r=4% =0.04, D =25% of 10=2.50

$$= \frac{5}{0.12} = \text{Rs.}41.67$$

If payout ratio is 50%, D=50% of 10=Rs. 5

r=12%=0.12, D=50% of 10 = Rs. 5

$$= \frac{5+5}{0.12} = \text{Rs.}83.33$$

r = 8% = 0.08, D = 50% of 10 = 5

$$= \frac{5+3.33}{0.12} = \text{Rs.}69.42$$

r = 4% = 0.04, D = 50% of 10 = 5

$$= \frac{6.67}{0.12} = \text{Rs.}55.58$$

C. If payout ratio is 75%

D = 75% of 10 = 7.50

(i) r = 12% = 0.12, D = 75% of 10 = 7.50

$$= \frac{7.50+2.50}{0.12} = \text{Rs.}83.33$$

(ii) r = 8% = 0.8, D = 75% of 10 = 7.50

$$= \frac{7.50+1.67}{0.12}$$

$$= \frac{9.17}{0.12} = \textbf{Rs.76.42}$$

(iii) r = 4% = 0.04, D = 75% of 10 = 7.50

$$= \frac{7.50+0.83}{0.12}$$

$$= \frac{8.33}{.12} = \textbf{Rs.69.42}$$

If the payout is 20% the value of b=0.60 and the price of the share is

$$= \frac{1.20\ (1-0.60)}{0.10 - (.80 * .12)}$$

$$= \frac{0.48}{0.0004} = \textbf{Rs.120}$$

Criticism of Gordon's Model

Gordon's model consists of the following important criticisms:

- Gordon model assumes that there is no debt and equity finance used by the firm. It is not applicable to present day business.
- Ke and r cannot be constant in the real practice.
- According to Gordon's model, there are no tax paid by the firm. It is not practically applicable.

FACTORS DETERMINING DIVIDEND POLICY

- **Profitable Position of the Firm**

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

- **Uncertainty of Future Income**

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

- **Legal Constrains**

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

- **Liquidity Position**

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

- **Sources of Finance**

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

- **Growth Rate of the Firm**

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

- **Tax Policy**

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

- **Capital Market Conditions**

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

TYPES OF DIVIDEND POLICY

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

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

Regular Dividend Policy

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

Stable Dividend Policy

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

- Constant dividend per share
- Constant payout ratio
- Stable rupee dividend plus extra dividend.

Irregular Dividend Policy

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

No Dividend Policy

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

FACTORS AFFECTING DIVIDEND POLICY:

There is a controversy amongst financial analysts regarding impact of dividends on market price of a company's shares. Some argue that dividends do not have any impact on such price while others hold a different opinion. However, preponderance of evidence suggests that dividend policies do have a significant effect on the value of the firm's equity shares in the stock exchange. Having accepted this premise, it will now be appropriate to consider those factors which affect the dividend policy of a firm.

The factors affecting the dividend policy are both external as well as internal.

External factors

1. **General state of economy** - The general state of economy affects to a great extent the management's decision to retain or distribute earnings of the firm. In case of uncertain economic and business conditions, the management may like to retain the whole or a part of the firm's earnings to

build up reserves to absorb shocks in the future. Similarly in periods of depression, the management may also withhold-dividends payment to retain a large part of its earnings to preserve the firm's liquidity position. In periods of prosperity the management may not be liberal in dividend payments though the earning power of a company warrants it because of availability of larger profitable investment opportunities similarly in periods of inflation, the management may withhold dividend payments in order to retain larger proportion of the earnings for replacement of worn-out assets.

2. **Legal restrictions** - A firm may also be legally restricted from declaring and paying dividends. For example, in India, the companies Act, 1956 has put several restrictions regarding payments and declaration of dividends. Some of these restrictions are as follows :

(i) Dividends can only be paid out of

(a) The current profits of the company,

(b) The past accumulated profits or

(c) Money provided by the Central or State Governments for the payment of dividends in pursuance of the guarantee given by the Government. Payment of dividend out of capital is illegal.

(ii) A company is not entitled to pay dividends unless (a) it has provided for present as well as all arrears of depreciation, (b) a certain percentage of net profits of that year as prescribed by the central Government not exceeding 10%, has been transferred to the reserves of the company.

(iii) Past accumulated profits can be used for declaration of dividends only as per the rules framed by the Central Government in this behalf. Similarly, the Indian Income Tax Act also lays down certain restrictions on payment of dividends. The management has to take into consideration all the legal restrictions before taking the dividend decision otherwise it may be declared as ultra vires.

Internal factors

The following are the internal factors which affect the dividend policy of a firm:

1. Desire of the shareholders - Of course, the directors have considerable liberty regarding the disposal of the firm's earnings, but the shareholders are technically the owners of the company and, therefore, their desire cannot be overlooked by the directors while deciding about the dividend policy.

Shareholders of a firm expect two forms of return from their investment in a firm:

(i) Capital gains - The shareholders expect an increase in the market value of the equity shares held by them over a period of time. Capital gain refers to the profit resulting from the sale of capital investment i.e., the equity shares in case of shareholders. For example, if a shareholder purchases a share for 40 and later on sells it for 60 the amount of capital gain is a sum of 20.

(ii) Dividends - The shareholders also expect a regular return on their investment from the firm. In most cases the shareholders' desire to get dividends takes priority over the desire to earn capital gains because of the following reasons:

(a) Reduction of uncertainty - Capital gains or a future distribution of earnings involves more uncertainty than a distribution of current earnings.

(b) Indication of strength - The declaration and payment of cash dividend carries an information content that the firm is reasonably strong and healthy.

(c) Need for current income - Many shareholders require income from the investment to pay for their current living expenses. Such shareholders are generally reluctant to sell their shares to earn capital gain.

2. Financial needs of the company - The financial needs of the company are to be considered by the management while taking the dividend decision. Of course, the financial needs of the company may be in direct conflict with the desire of the shareholders to receive large dividends. However, a prudent management should give more weight age to the financial needs of the company rather than the desire of the shareholders. In order to maximize the shareholders' wealth, it is advisable to retain earnings in the business only when company has better profitable investment opportunities as compared to the shareholders. However, the directors must retain some earnings, whether or not profitable investment opportunity exists, to maintain the company as a sound and solvent enterprise.

3. Desire of control - Dividend policy is also influenced by the desire of shareholders or the management to retain control over the company. The issue of additional equity shares for procuring funds dilutes control to the detriment of the existing equity shareholders who have a dominating voice in the company. At the same time, recourse to long-term loans may entail financial risks and may prove disastrous to the interests of the shareholders in times of financial difficulties.

In case of a strong desire for control, the management may be reluctant to pay substantial dividends and prefer a smaller dividend pay out ratio. This is particularly true in case of companies

which need funds for financing profitable investment opportunities and an outside group is seeking to gain control over the company.

However, where the management is strongly in control of the company either because of substantial shareholdings or because of the shares being widely held, the firm can afford to have a high dividend pay out ratio.

3. **Liquidity position** - The payment of dividends results in cash outflow from the firm. A firm may have adequate earnings but it may not have sufficient cash to pay dividends. It is, therefore, important for the management to take into account the cash position and the overall liquidity position of the firm before and after payment of dividends while taking the dividend decision. A firm may not, therefore, be in a position to pay dividends in cash or at a higher rate because of insufficient cash resources. Such a problem is generally faced by growing firms which need constant funds for financing their expansion activities.

Part A (ONE Mark)

Multiple Choice Questions

Online Examination

Part B (2 Marks Questions)

1.What is optimal capital structure?

2.Name the theories of capital structure?

3.What do you mean by right issue?

4.What is meant by relevance concept of dividend?

5.Write the formula for Gordon's Model?

6.What is meant by optimal capital structure?

7.Name the two main theories of dividend?

8.What do you mean by bonus issue?

9.Write any four determinants of dividend policy?

10. What is meant by capital gearing?

11. Write any two forms of dividend?

12. Write the formula for Waltert's Model?

13. Calculate the Operating Leverage.

    Sales Rs.500

    Variable Cost Rs.200

    Fixed Cost Rs.150

    Interest Rs.50

13. Define Leverage

14. Calculate the Financial Leverage.

    Sales Rs.6000

Variable Cost Rs.1250

Fixed Cost Rs.1250

Interest Rs.400

15. Write the formula for calculating financial leverage?

16. A firm has sales of Rs.20,00,000, Variable cost of Rs.14,00,000 and Fixed cost of Rs.4,00,000 and Debt Rs.10,00,000 at 10% rate of interest. Calculate the composite leverage

Part C (6 Marks Questions)

1. Define capital structure and explain the factors determining the capital structure?
2. The following information is available in respect of a firm

   Capitalisation rate 10%

   EPS Rs.50

   Assume rate of return on investment

   1.12%

   2.8%

   3.10%

   Show the effect of dividend policy on market price of shares applying Walter's formula when dividend payout ratio is (i) 0% (ii) 20% (iii) 40% (iv) 60% (v) 100%

3. Explain the factors determining the capital structure of an organization in detail?
4. Explain the various factors which influence the dividend decision of a firm?
5. What is meant by capital structure? Discuss the major determinants of capital structure?
6. The following information is available in respect of the rate of return on investment and the cost of capital and earnings per share of ABC Ltd

   Rate of return on investment = (i) 15% (ii) 12% (iii) 10%

   Cost of capital = 12%

   Earnings per share = Rs.10

   Determine the value of the shares using Gordon's Model assuming the following

E/P ratio **Retention Ratio**

(a)	100	0
(b)	80	20
(c)	40	60

7. Explain the theories of capital structure in detail?

8.The following information is available in respect of return on investment, the cost of capital and earnings per share of XYZ Ltd

r = 10%

E = Rs.40

Determine the value of its shares using Gordon's Model, assuming the following

	D/p Ratio	**Retention Ratio**	**Cost of equity**
(a)	20	80	20
(b)	40	60	18
(c)	60	40	16
(d)	80	20	14

8. Define Leverage. Discuss the different types of leverage with suitable illustration?

9. Explain the concept trading on equity with suitable example?

10. Explain the relevance and irrelevance concept theories with suitable illustration?

FINANCIAL MANAGEMENT
UNIT IV

QUESTIONS	OPTION 1	OPTION 2	OPTION 3	OPTION 4	ANSWER
When will the company have to plan about its capital structure?	During Incorporation	During replacement	during modernization	During winding up	During Incorporation
The difference between long term financial management and short term financial management is ----------	Interest	Timing of cash	Cost of capital	Capital budgeting	Timing of cash
---------- comprises of fixed assets and other non-current assets	fixed capital	working capital	Current liabilities	Current Assets	fixed capital
Pattern of capital structure include ----------	Equity shares only	Preference shares only	Equity and preference shares	Equity shares, preference shares and long term debt	Equity shares, preference shares and long term debt
The use of long term fixed interest bearing debt and preference share capital along with equity shares is called ----------	operating leverage	financial leverage	combined leverage	Working capital leverage	financial leverage
Traditional approach of capital structure is also known as ----------	older approach	intermediate approach	modern approach	walter approach	intermediate approach
---------- refers to the relationship between equity capital and long term debt	capital gearing	capital structure	capital budgeting	cost of capital	capital gearing
The irrelevance concept of dividend includes ----------	Residual approach	MM approach	Walters Approach	Residual and MM approach	Residual and MM approach
According to residual approach, ---------- has no effect on the wealth of the shareholders.	Dividend decision	Finance decision	Investment decision	Financial decision	Dividend decision
According to residual approach, dividend decision is merely a part of ---------	Dividend decision	Finance decision	Investment decision	Financial decision	Finance decision
According to MM theory, the assumptions are ----------	no risk	perfect capital market	No Tax	No risk and perfect capital market	No risk and perfect capital market
The relevance concept of dividend include ----	Walter approach	Gordens approach	Walter and Gordens approach	MM approach	Walter and Gordens approach
The irrelevance concept of dividend include ----	MM approach	Residual approach	Gorden approach	Walter approach	MM approach
The advocate of theory of relevance concept was ----------	James walter	Modigliani	Miller	Walter	James walter

Walter model based on the relationship between the firms ----------	Return on investment	Capital	Risk	Income	Return on investment
Walter model based on the relationship between the firms ----------	Profit	Capital	Risk	Cost of capital	Cost of capital
Assumption of Walters model include ----------	r and k are constant	long life	no tax	r and k are constant and long life	r and k are constant and long life
Determinants of dividend policy include --------	Legal restrictions	Nature of the industry	Age of the company	Legal restrictions, Nature of the industry and Age of the company	Legal restrictions, Nature of the industry and Age of the company
Legal provisions of dividend policy is laid down in ---------- act	Companies Act	Partnership Act	Sale of goods Act	Contract Act	Companies Act
Desire and type of shareholder are the factors determining ---------- policy	Finance	Interest	Dividend	Profit	Dividend
Taxation policy of government economic policies are the factors which are influencing ----- policy	Finance	Interest	Dividend	Profit	Dividend
---------- policy can be maintained by companies by long standing and stable earning.	Regular dividend	Stable dividend	Irregular dividend	Flexible dividend	Regular dividend
EPS Expand ----------	Earnings Per Share	Earnings per Shareholder	Expectation per share	Expectation Per security.	Earnings Per Share
DPS Expand ----------‘	Determinants Per Share	Dividend per share	Dividend per security	Determinants per security	Dividend per share
Consistency or lack of variability in the stream of dividend payments are called --------- policy.	Regular dividend	Stable dividend	Irregular dividend	Flexible dividend	Stable dividend
---------- policy is most suitable to concerns whose earnings are expected to remain stable over a number of years.	Constant dividend per share	Constant pay out ratio	Fixed Dividend Per share	Flexible Pay out ratio	Constant dividend per share
Irregular dividend policy is suitable if the company has ----------	uncertainty of earnings	unsuccessful business operations	Sucessful business operations	Regular earnings	unsuccessful business operations
Dividend paid in the ordinary course of business are known as ----------	profit dividend	liquidation dividend	cash dividend	Stock dividend	profit dividend
Dividends paid out of capital are known as ----	profit dividend	liquidation dividend	cash dividend	Stock dividend	liquidation dividend
Payment of dividend in the form of cash is known as ----------	cash dividend	scrip dividend	property dividend	stock dividend	cash dividend

Bond dividend is otherwise known as ----------	cash dividend	scrip dividend	property dividend	stock dividend	scrip dividend
---------- dividend are paid on the form of some assets other than cash.	cash dividend	scrip dividend	property dividend	stock dividend	property dividend
The issue of bonus shares to the existing shareholders is known as ----------	cash dividend	scrip dividend	property dividend	stock dividend	stock dividend
A ---------- promises to pay the shareholder at a future specific date .	cash dividend	property dividend	bond dividend	stock dividend	bond dividend
---------- dividend policy is most suitable to the firm having fluctuating earnings from year to year.	Stable rupee divided plus extra dividend	constant payout ratio	constant dividend per share	Bond Dividend per share	Stable rupee divided plus extra dividend
The forms of stable dividend policy are --------	Constant payout ratio	Bond Dividend per share	constant dividend per share	Constant dividend per share and constant pay out ratio	Constant dividend per share and constant pay out ratio
The ---------- position of the company is an important consideration in paying dividend.	Liquidity	solvency	Profitability	Variability	Liquidity
---------- refers to the payment of dividend regularly to the shareholders.	stability of dividend	no dividend	excess dividend	additional dividend other than prescribed	stability of dividend
Dividend policy of a firm affects both the long term financing and _____	owners wealth	creditors wealth	shareholders wealth	Debtors wealth	shareholders wealth
_____ dividend is a visual method of paying dividend.	Bond	cash	other than cash	stock	other than cash
According to _____ model the dividend decision is relevant	traditional	net income	modern	MM	MM
Right issue is also known as_____ right	equity	preference.	deffered	Pre - emptive	Pre - emptive
The notice to accept right shares should not be less than _____ days	15	20	25	30	15
_____ aftects the liquidity position of the company	cash dividend	Stock dividend	interest	dividend	Stock dividend

Property dividends are paid in the form of some assets other than _____	stock	shares	Cash	Bills Receivable	Cash
_____ means the issue of bonus shares to the existing shareholders of the company	Stock dividend	cash dividend	scrip dividend	Bond dividend	Stock dividend
_____ means reducing the par value of the shares by increasing the number of shares proportionately	preference shares	equity shares	promoters shares	Stock spilit	Stock spilit
Which of the following are the consumptions of MM approach of dividend theory?	Perfect capital market	No floation cost	No Transaction cost	No floation and transcation cost and perfect capital market	No floation and transcation cost and perfect capital market
EPS =	Total earnings/ no. of shares	EAIT / No. of equity shares	income after taxes/ no of debentures	shares / income	EAIT / No. of equity shares
Established companies which have sufficient reserves can afford to pay _____ dividend.	stable	irregular	Liberal	less	Liberal
The industries with steady demand of their products can follow a _____ dividend pay out ratio.	Higher	lower	constant	no dividend	Higher
The industries with cyclical demand of their production can follow a _____ dividend pay out ratio.	higher	constant	Lower	no dividend	Lower
Companies were allowed to pay dividend upto _____ of their profits.	33%	12%	15%	17%	33%
The companies were allowed to pay dividend upto _____ on the paid up share capital.	15%	20%	25%	12%	12%
Capilal requirement of a company is classified as _____	Fixed capital	Working capital	Fixed and working capital	Operating capital	Fixed and working capital
Finance is classified on the basis of period is_____	Short term	Medium term	Long term	Short term , Medium term and Long term source of finance	Short term , Medium term and Long term source of finance

Owned capital include_____	Share capital	Bonds	Loans	Public deposists	Share capital
Raising of finance through outside sources is called_____	External financing	Internal financing	Short term financing	Shareholders financing	External financing
Raising of finance within an organization is called ----------	external finance	outside finance	Internal finance	creditorship finance	Internal finance
Ownership securities are also called as_____	creditorship securities	Capital stock	Loan	securites	Capital stock

UNIT-V- Working Capital Management

SYLLABUS

Working Capital Management - Determination of Working Capital - Management of Cash - Preparation of Cash Budgets - Cash management technique - Receivables Management - Objectives - Credit Policy - Cash Discount - Debtors Outstanding and Ageing Analysis - Costs - Collection Cost - Capital Cost - Default Cost - Delinquency Cost - Inventory Management - Techniques - ABC Analysis - Minimum Level - Maximum Level - Reorder Level - Safety Stock - EOQ

Working capital management is also one of the important parts of the financial management. It is concerned with short-term finance of the business concern which is a closely related trade between profitability and liquidity. Efficient working capital management leads to improve the operating performance of the business concern and it helps to meet the short term liquidity. Hence, study of working capital management is not only an important part of financial management but also are overall management of the business concern. Working capital is described as the capital which is not fixed but the more common uses of the working capital is to consider it as the difference between the book value of current assets and current liabilities.

MEANING OF WORKING CAPITAL

Capital of the concern may be divided into two major headings.

- Fixed Capital
- Working Capital

Fixed capital means that capital, which is used for long-term investment of the business concern. For example, purchase of permanent assets. Normally it consists of non-recurring in nature.

Working Capital is another part of the capital which is needed for meeting day to day requirement of the business concern. For example, payment to creditors, salary paid to workers, purchase of raw materials etc., normally it consists of recurring in nature. It can be easily converted into cash. Hence, it is also known as short-term capital.

Definitions

- According to the definition of **Mead, Baker and Malott,** "Working Capital means Current Assets".
- According to the definition of **J.S.Mill,** "The sum of the current asset is the working capital of a business".
- According to the definition of **Weston and Brigham,** "Working Capital refers to a firm's investment in short-term assets, cash, short-term securities, accounts receivables and inventories".
- According to the definition of **Bonneville,** "Any acquisition of funds which increases the current assets, increase working capital also for they are one and the same".
- According to the definition of **Shubin,** "Working Capital is the amount of funds necessary to cover the cost of operating the enterprises".
- According to the definition of **Genestenberg,** "Circulating capital means current assets of a company that are changed in the ordinary course of business from one form to another, for example, from cash to inventories, inventories to receivables, receivables to cash".

CONCEPT OF WORKING CAPITAL

Working capital can be classified or understood with the help of the following two important Concepts.

- Gross Working Capital
- Net Working Capital

Gross Working Capital

Gross Working Capital is the general concept which determines the working capital concept. Thus, the gross working capital is the capital invested in total current assets of the business concern. Gross Working Capital is simply called as the total current assets of the concern.

GWC = CA

Net Working Capital

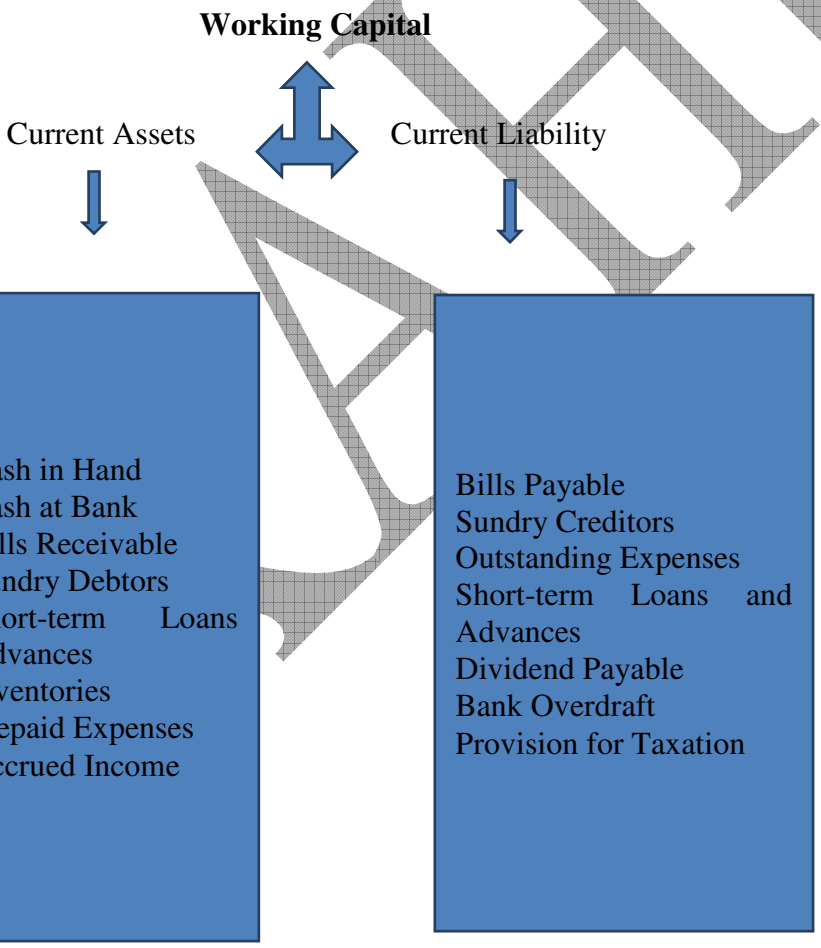
Net Working Capital is the specific concept, which considers both current assets and current liability of the concern.Net Working Capital is the excess of current assets over the current liability of the concern during a particular period.

If the current assets exceed the current liabilities it is said to be positive working capital; it is reverse, it is said to be Negative working capital.

NWC = C A – CL

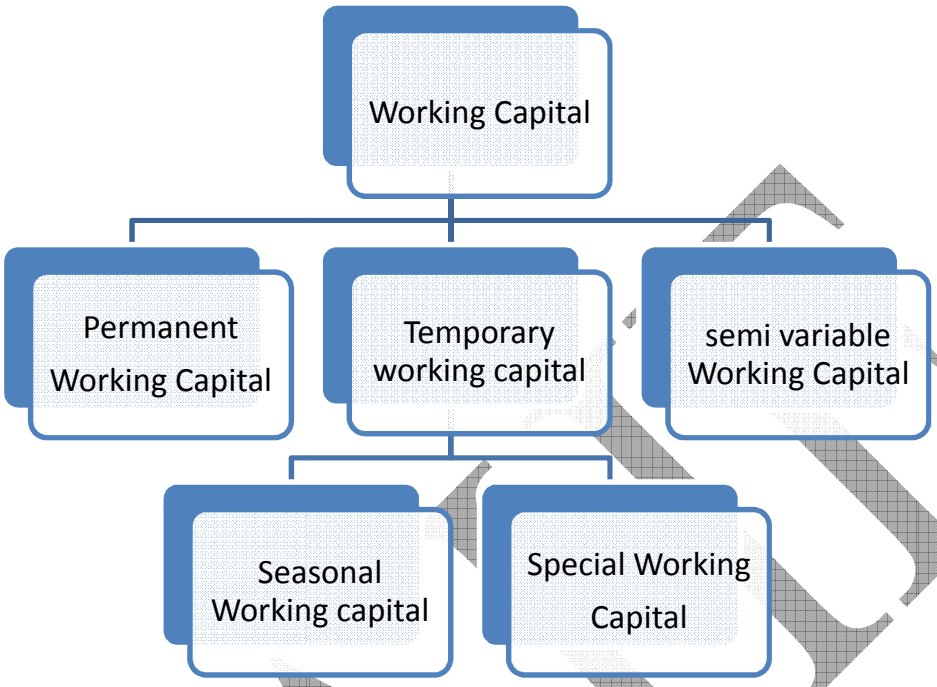
Component of Working Capital

Working capital constitutes various current assets and current liabilities. This can be illustrated by the following chart.



TYPES OF WORKING CAPITAL

Working Capital may be classified into three important types on the basis of time.



Permanent Working Capital

It is also known as Fixed Working Capital. It is the capital; the business concern must maintain certain amount of capital at minimum level at all times. The level of Permanent Capital depends upon the nature of the business. Permanent or Fixed Working Capital will not change irrespective of time or volume of sales.

Temporary Working Capital

It is also known as variable working capital. It is the amount of capital which is required to meet the Seasonal demands and some special purposes. It can be further classified into Seasonal Working Capital and Special Working Capital. The capital required to meet the seasonal needs of the business concern is called as Seasonal Working Capital. The capital required to meet the special exigencies such as launching of extensive marketing campaigns for conducting research, etc.

Semi Variable Working Capital

Certain amount of Working Capital is in the field level up to a certain stage and after that it will increase depending upon the change of sales or time.

NEEDS OF WORKING CAPITAL

Working Capital is an essential part of the business concern. Every business concern must maintain certain amount of Working Capital for their day-to-day requirements and meet the short-term obligations. Working Capital is needed for the following purposes.

1. Purchase of raw materials and spares: The basic part of manufacturing processes, raw materials. It should purchase frequently according to the needs of the business concern. Hence, every business concern maintains certain amount as Working Capital to purchase raw materials, components, spares, etc.

2. Payment of wages and salary: The next part of Working Capital is payment of wages and salaries to labour and employees. Periodical payment facilities make employees perfect in their work. So a business concern maintains adequate the amount of working capital to make the payment of wages and salaries.

3. Day-to-day expenses: A business concern has to meet various expenditures regarding the operations at daily basis like fuel, power, office expenses, etc.

4. Provide credit obligations: A business concern responsible to provide credit facilities to the customer and meet the short-term obligation. So the concern must provide adequate Working Capital.

Working Capital Position/ Balanced Working Capital Position.

A business concern must maintain a sound Working Capital position to improve the efficiency of business operation and efficient management of finance. Both excessive and inadequate Working Capital leads to some problems in the business concern.

A. Causes and effects of excessive working capital.

(i) Excessive Working Capital leads to unnecessary accumulation of raw materials, components and spares.

(ii) Excessive Working Capital results in locking up of excess Working Capital.

(iii) It creates bad debts, reduces collection periods, etc.

(iv) It leads to reduce the profits.

B. Causes and effects of inadequate working capital

(i) Inadequate working capital cannot buy its requirements in bulk order.

(ii) It becomes difficult to implement operating plans and activate the firm's profit target.

(iii) It becomes impossible to utilize efficiently the fixed assets.

(iv) The rate of return on investments also falls with the shortage of Working Capital.

(v) It reduces the overall operation of the business.

The important ones are discussed in brief as given below:

i. **Nature of Enterprise**

The nature and the working capital requirements of an enterprise are interlinked. While a manufacturing industry has a long cycle of operation of the working capital, the same would be short in an enterprise involved in providing services. The amount required also varies as per the nature; an enterprise involved in production would require more working capital than a service sector enterprise.

ii. **Manufacturing/Production Policy**

Each enterprise in the manufacturing sector has its own production policy, some follow the policy of uniform production even if the demand varies from time to time, and others may follow the principle of 'demand-based production in which production is based on the demand during that particular phase of time. Accordingly, the working capital requirements vary for both of them.

iii. **Operations**

The requirement of working capital fluctuates for seasonal business. The working capital needs of such businesses may increase considerably during the busy season and decrease during the slack season. Ice creams and cold drinks have a great demand during summers, while in winters the sales are negligible.

iv. **Market Condition**

If there is high competition in the chosen product category, then one shall need to offer sops like credit, immediate delivery of goods etc. for which the working capital requirement will be high. Otherwise, if there is no competition or less competition in the market then the working capital requirements will be low.

v. **Availability of Raw Material**

If raw material is readily available then one need not maintain a large stock of the same, thereby reducing the working capital investment in raw material stock. On the other hand, if raw material is not readily available then a large inventory/stock needs to be maintained, thereby calling for substantial investment in the same.

vi. **Growth and Expansion**

Growth and expansion in the volume of business results in enhancement of the working capital requirement. As business grows and expands, it needs a larger amount of working capital. Normally, the need for increased working capital funds precedes growth in business activities.

vii. **Price Level Changes**

Generally, rising price level requires a higher investment in the working capital. With increasing prices, the same level of current assets needs enhanced investment.

viii. **Manufacturing Cycle**

The manufacturing cycle starts with the purchase of raw material and is completed with the production of finished goods. If the manufacturing cycle involves a longer period, the need for working capital would be more. At times, business needs to estimate the requirement of working capital in advance for proper control and management. The factors discussed above influence the quantum of working capital in the business. The assessment of working capital requirement is made keeping these factors in view. Each constituent of working capital retains its form for a certain period and that holding period is determined by the factors discussed above. So for correct assessment of the working capital requirement, the duration at various stages of the working capital cycle is estimated. Thereafter, proper value is assigned to the respective current assets, depending on its level of completion each constituent of the working capital is valued on the basis of valuation enumerated above for the holding period estimated. The total of all such valuation becomes the total estimated working capital requirement.

The assessment of the working capital should be accurate even in the case of small and micro enterprises where business operation is not very large. We know that working capital has a very close relationship with day-to-day operations of a business. Negligence in proper assessment of the working capital, therefore, can affect the day-to-day operations severely. It may lead to cash crisis

and ultimately to liquidation. An inaccurate assessment of the working capital may cause either under-assessment or over-assessment of the working capital and both of them are dangerous.

FACTORS DETERMINING WORKING CAPITAL REQUIREMENTS

Working Capital requirements depends upon various factors. There are no set of rules or formula to determine the Working Capital needs of the business concern. The following are the major factors which are determining the Working Capital requirements.

- **Nature of business:** Working Capital of the business concerns largely depend upon the nature of the business. If the business concerns follow rigid credit policy and sell goods only for cash, they can maintain lesser amount of Working Capital. A transport company maintains lesser amount of Working Capital while a construction company maintains larger amount of Working Capital.
- **Production cycle:** Amount of Working Capital depends upon the length of the production cycle. If the production cycle length is small, they need to maintain lesser amount of Working Capital. If it is not, they have to maintain large amount of Working Capital.
- **Business cycle:** Business fluctuations lead to cyclical and seasonal changes in the business condition and it will affect the requirements of the Working Capital. In the booming conditions, the Working Capital requirement is larger and in the depression condition, requirement of Working Capital will reduce. Better business results lead to increase the Working Capital requirements.
- **Production policy:** It is also one of the factors which affects the Working Capital requirement of the business concern. If the company maintains the continues production policy, there is a need of regular Working Capital. If the production policy of the company depends upon the situation or conditions, Working Capital requirement will depend upon the conditions laid down by the company.

- **Credit policy:** Credit policy of sales and purchase also affect the Working Capital requirements of the business concern. If the company maintains liberal credit policy to collect the payments from its customers, they have to maintain more Working Capital. If the company pays the dues on the last date it will create the cash maintenance in hand and bank.
- **Growth and expansion:** During the growth and expansion of the business concern, Working Capital requirements are higher, because it needs some additional Working Capital and incurs some extra expenses at the initial stages.
- **Availability of raw materials:** Major part of the Working Capital requirements are largely depend on the availability of raw materials. Raw materials are the basic components of the production process. If the raw material is not readily available, it leads to production stoppage. So, the concern must maintain adequate raw material; for that purpose, they have to spend some amount of Working Capital.
- **Earning capacity:** If the business concern consists of high level of earning capacity, they can generate more Working Capital, with the help of cash from operation. Earning capacity is also one of the factors which determines the Working Capital requirements of the business concern.

COMPUTATION (OR ESTIMATION) OF WORKING CAPITAL

Working Capital requirement depends upon number of factors, which are already discussed in the previous parts. Now the discussion is on how to calculate the Working Capital needs of the business concern. It may also depend upon various factors but some of the common methods are used to estimate the Working Capital.

A. Estimation of components of working capital method

Working capital consists of various current assets and current liabilities. Hence, we have to estimate how much current assets as inventories required and how much cash required to meet the

short term obligations. Finance Manager first estimates the assets and required Working Capital for a particular period.

B. Percent of sales method

Based on the past experience between Sales and Working Capital requirements, a ratio can be determined for estimating the Working Capital requirement in future. It is the simple and tradition method to estimate the Working Capital requirements. Under this method, first we have to find out the sales to Working Capital ratio and based on that we have to estimate Working Capital requirements. This method also expresses the relationship between the Sales and Working Capital.

C. Operating cycle

Working Capital requirements depend upon the operating cycle of the business. The operating cycle begins with the acquisition of raw material and ends with the collection of receivables.

Operating cycle consists of the following important stages:

1. Raw Material and Storage Stage, (R)
2. Work in Process Stage, (W)
3. Finished Goods Stage, (F)
4. Debtors Collection Stage, (D)
5. Creditors Payment Period Stage. (C)

O = R + W + F + D–C

Each component of the operating cycle can be calculated by the following formula:

R =Average Stock of Raw Material / Average Raw Material Consumption per Day

W= Average Work in Process Inventory / Average Cost of Production per Day

F = Average Finished Stock Inventory / Average Cost of Goods Sold Per Day

D = Average Book Debts / Average Credit Sales per Day

C = Average Trade Creditors / Average Credit Purchase Per Day

WORKING CAPITAL MANAGEMENT POLICY

Working Capital Management formulates policies to manage and handle efficiently; for that purpose, the management established three policies based on the relationship between Sales and Working Capital.

1. Conservative Working Capital Policy.
2. Moderate Working Capital Policy.
3. Aggressive Working Capital Policy.

1. Conservative working capital policy: Conservative Working Capital Policy refers to miinimize risk by maintaining a higher level of Working Capital. This type of Working Capital Policy is suitable to meet the seasonal fluctuation of the manufacturing operation.

2. Moderate working capital policy: Moderate Working Capital Policy refers to the moderate level of Working Capital maintenance according to moderate level of sales. It means one percent of change in Working Capital that is Working Capital is equal to sales.

3. Aggressive working capital policy: Aggressive Working Capital Policy is one of the high risky and profitability policies which maintain low level of Aggressive Working Capital against the high level of sales, in the business concern during a particular period.

SOURCES OF WORKING CAPITAL

Working Capital requirement can be normalized from short-term and long-term sources. Each source will have both merits and limitations up to certain extract. Uses of Working Capital may be differing from stage to stage.

The above sources are also classified into internal sources and external sources of working capital.

Internal sources such as:

- Retained Earnings
- Reserve and Surplus
- Depreciation Funds etc.

External sources such as:

- Debentures and Public Deposits

• Loans from Banks and Financial Institutions

• Advances and Credit

• Financial arrangements like Factoring, etc.

Determining the Finance Mix

Determining the finance mix is an important part of working capital management. Under this decision, the relationship among risk, return and liquidity are measured and also which type of financing is suitable to meet the Working Capital requirements of the business concern. There are three basic approaches for determining an appropriate Working Capital finance mix.

1. Hedging or matching approach
2. Conservative approach
3. Aggressive approach.

Hedging Approach

Hedging approach is also known as matching approach. Under this approach, the business concern can adopt a financial plan which matches the expected life of assets with the expected life of the sources of funds raised to finance assets. When the business follows matching approach, long-term finance shall be used to fixed assets and permanent current assets and short-term financing to finance temporary or variable assets.

Conservative Approach

Under this approach, the entire estimated finance in current assets should be financed from long-term sources and the short-term sources should be used only for emergency requirements. This approach is called as "Low Profit – Low Risk" concept

Aggressive Approach

Under this approach, the entire estimated requirement of current assets should be financed from short-term sources and even a part of fixed assets financing be financed from short- term sources. This approach makes the finance mix more risky, less costly and more profitable.

WORKING CAPITAL AND BANKING COMMITTEE

Banking finance to working capital requirements is a very important part of the business concern. Banks provide finance to business concerns to meet the requirements.

To regulate and control bank finance, RBI constitute committees. These committees submit reports with findings and recommendations to formulate the finance policy of the banks.

INVENTORY MANAGEMENT

Introduction

Inventories constitute the most significant part of current assets of the business concern.

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

Meaning

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

Kinds of Inventories

Inventories can be classified into five major categories.

A. Raw Material

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

B. Work in Progress

These include those materials which have been committed to production process but have not yet been completed.

C. Consumables

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

D. Finished Goods

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

E. Spares

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

OBJECTIVES OF INVENTORY MANAGEMENT

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

The major objectives of the inventory management are as follows:

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

Techniques of Inventory Management

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

Inventory Management Technique

- Techniques Based on Order Quantity of Inventories
  - Stock Level
  - Minimum Level
  - Re-order Level
  - Maximum Level
  - Danger Level

- ❖ Average Stock Level
- ❖ Lead Time
- ❖ Safety Stock
- ❖ Economic Order Quantity (EOQ)

- ➢ Techniques Based On The Classification Of Inventories
  - ❖ A-B-C analysis
  - ❖ VED Analysis
  - ❖ HML Analysis
- ➢ Techniques Based on the Records
  - ❖ Inventory Budget
  - ❖ Inventory Report

A. Techniques based on the order quantity of Inventories

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

- ❖ **Stock Level**

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

- ❖ **Minimum Level**

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

- ❖ **Re-order Level**

Re-ordering level is fixed between minimum level and maximum level. Re-order level is the level when the business concern makes fresh order at this level.

Re-order level=maximum consumption × maximum Re-order period.

- **Maximum Level**

It is the maximum limit of the quantity of inventories, the business concern must maintain. If the quantity exceeds maximum level limit then it will be overstocking.

Maximum level = Re-order level + Re-order quantity

– (Minimum consumption × Minimum delivery period)

- **Danger Level**

It is the level below the minimum level. It leads to stoppage of the production process.

- **Lead Time**

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

- **Safety Stock**

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

- **Economic Order Quantity (EOQ)**

EOQ refers to the level of inventory at which the total cost of inventory comprising ordering cost and carrying cost. Determining an optimum level involves two types of cost such as ordering cost and carrying cost. The EOQ is that inventory level that minimizes the total of ordering of carrying cost.

B. Techniques Based On the Classification of Inventories

- **A-B-C analysis**

It is the inventory management techniques that divide inventory into three categories based on the value and volume of the inventories; 10% of the inventory's item contributes to 70% of value of

consumption and this category is known as A category. About 20% of the inventory item contributes about 20% of value of consumption and this category is called category B and 70% of inventory item contributes only 10% of value of consumption and this category is called C category.

- **Aging Schedule of Inventories**

Inventories are classified according to the period of their holding and also this method helps to identify the movement of the inventories. Hence, it is also called as, FNSD analysis—where,

F = Fast moving inventories
N = Normal moving inventories
S = Slow moving inventories
D = Dead moving inventories
This analysis is mainly calculated for the purpose of taking disposal decision of the inventories.

- **VED Analysis**

This technique is ideally suited for spare parts in the inventory management like ABC analysis. Inventories are classified into three categories on the basis of usage of the inventories.
V = Vital item of inventories
E = Essential item of inventories
D = Desirable item of inventories

- **HML Analysis**

Under this analysis, inventories are classified into three categories on the basis of the value of the inventories.
H = High value of inventories

M = Medium value of inventories

L = Low value of inventories

C. Techniques On The Basis Of Records

A. Inventory budget

It is a kind of functional budget which facilitates the estimated inventory required for the business concern during a particular period. This budget is prepared based on the past experience.

B. Inventory reports

Preparation of periodical inventory reports provides information regarding the order level, quantity to be procured and all other information related to inventories. On the basis of these reports, Management takes necessary decision regarding inventory control and Management in the business concern.

- **Valuation of Inventories**

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

1. First in First out Method (FIFO)
2. Last in First out Method (LIFO)
3. Highest in First out Method (HIFO)
4. Nearest in First out Method (NIFO)
5. Average Price Method
6. Base Stock Method
7. Standard Price Method
8. Market Price Method

CASH MANAGEMENT

Business concern needs cash to make payments for acquisition of resources and services for the normal conduct of business. Cash is one of the important and key parts of the current assets.

Cash is the money which a business concern can disburse immediately without any restriction. The term cash includes coins, currency, cheques held by the business concern and balance in its bank accounts. Management of cash consists of cash inflow and outflows, cash flow within the concern and cash balance held by the concern etc.

Motives for Holding Cash

1. **Transaction motive**

It is a motive for holding cash or near cash to meet routine cash requirements to finance transaction in the normal course of business. Cash is needed to make purchases of raw materials, pay expenses, taxes, dividends etc.

2. **Precautionary motive**

It is the motive for holding cash or near cash as a cushion to meet unexpected contingencies. Cash is needed to meet the unexpected situation like, floods strikes etc.

3. **Speculative motive**

It is the motive for holding cash to quickly take advantage of opportunities typically outside the normal course of business. Certain amount of cash is needed to meet an opportunity to purchase raw materials at a reduced price or make purchase at favorable prices.

4. **Compensating motive**

It is a motive for holding cash to compensate banks for providing certain services or loans. Banks provide variety of services to the business concern, such as clearance of cheque, transfer of funds etc.

CASH MANAGEMENT TECHNIQUES

Managing cash flow constitutes two important parts:

A. Speedy Cash Collections.

B. Slowing Disbursements.

SPEEDY CASH COLLECTIONS

Business concern must concentrate in the field of Speedy Cash Collections from customers.

For that, the concern prepares systematic plan and refined techniques. These techniques aim at, the customer who should be encouraged to pay as quickly as possible and the payment from customer without delay. Speedy Cash Collection business concern applies some of the important techniques as follows:

- **Prompt Payment by Customers**

Business concern should encourage the customer to pay promptly with the help of offering discounts, special offer etc. It helps to reduce the delaying payment of customers and the firm can avoid delays from the customers. The firms may use some of the techniques for prompt payments like billing devices, self-address cover with stamp etc.

- **Early Conversion of Payments into Cash**

Business concern should take careful action regarding the quick conversion of the payment into cash. For this purpose, the firms may use some of the techniques like postal float, processing float, bank float and deposit float.

- **Concentration Banking**

It is a collection procedure in which payments are made to regionally dispersed collection centre's, and deposited in local banks for quick clearing. It is a system of decentralized billing and multiple collection points.

- **Lock Box System**

It is a collection procedure in which payers send their payment or cheques to a nearby post box that is cleared by the firm's bank. Several times that the bank deposits the cheque in the firms account. Under the lock box system, business concerns hire a post office lockbox at important collection centers where the customers remit payments. The local banks are authorized to open the box and pick up the remittances received from the customers. As a result, there is some extra savings in mailing time compared to concentration bank.

SLOWING DISBURSEMENT

An effective cash management is not only in the part of speedy collection of its cash and receivables but also it should concentrate to slowing their disbursement of cash to the customers or

suppliers. Slowing disbursement of cash is not the meaning of delaying the payment or avoiding the payment. Slowing disbursement of cash is possible with the help of the following methods:

1. **Avoiding the early payment of cash**

The firm should pay its payable only on the last day of the payment. If the firm avoids early payment of cash, the firm can retain the cash with it and that can be used for other purpose.

2. **Centralized disbursement system**

Decentralized collection system will provide the speedy cash collections. Hence centralized disbursement of cash system takes time for collection from our accounts as well as we can pay on the date.

Cash Management Models

Cash management models analyse methods which provide certain framework as to how the cash management is conducted in the firm. Cash management models are the development of the theoretical concepts into analytical approaches with the mathematical applications. There are three cash management models which are very popular in the field of finance.

1. Baumol model

The basic objective of the Baumol model is to determine the minimum cost amount of cash conversion and the lost opportunity cost. It is a model that provides for cost efficient transactional balances and assumes that the demand for cash can be predicated with certainty and determines the optimal conversion size.

Total conversion cost per period can be calculated with the help of the following formula:

2. Miller-Orr model

This model was suggested by Miller Orr. This model is to determine the optimum cash balance level which minimizes the cost of management of cash.

3. Orgler's model

Orgler model provides for integration of cash management with production and other aspects of the business concern. Multiple linear programming is used to determine the optimal cash management.

Orgler's model is formulated, based on the set of objectives of the firm and specifying the set of constrains of the firm.

FUNCTIONS OF CASH MANAGEMENT:

Cash management is concerned with minimizing unproductive cash balances, investing temporarily excess cash advantageously and to make the best possible arrangements for meeting planned and unexpected demands on the firm's cash.

Cash Management must aim to reduce the required level of cash but minimize the risk of being unable to discharge claims against the company as they arise. All these aims and motives of cash management largely depend upon the efficient and effective functioning of cash management. Cash management functions can be studied under five heads, namely, cash planning, managing cash flow, controlling cash flow, optimizing the cash level and investing idle cash. All these functions are discussed below in details:

1. Cash Planning

Good planning is the very foundation of attaining success. For any management decision, planning is the foremost requirement. "Planning is basically an intellectual process, a menfal pre-disposition to do things in an orderly way, to think before acting and to act in the light of facts rather than of a guess." 16 Cash planning is a technique, which comprises of planning for and controlling of cash. It is a management process of forecasting the future need of cash, its available resources and various uses for a specified period. Cash planning, thus, deals at length with formulation of necessary cash policies and procedures in order to carry on business continuously and on sound lines. A good cash planning aims at providing cash, not only for regular but also for irregular and abnormal requirements.

2.Managing Cash Flows The heading simply suggests an idea of managing properly the flow of cash coming inside the business i.e. cash inflow and cash moving out of the business i.e. cash outflow. These two are said to be properly managed only, if a firm succeeds in accelerating the

rate of cash inflow together with minimizing the cash outflow. As observed expediting collections, avoiding unnecessary inventories, improving control over payments etc. contribute to better management of cash. Whereby, a business can conserve cash and thereof would require lesser cash balance for its operations.

3. Controlling the Cash Flows As forecasting is not an exact science because it is based on certain assumptions. Therefore, cash planning will inevitably be at variance with the results actually obtained. For this reason, control becomes an unavoidable function of cash management. Moreover, cash controlling becomes essential as it increases the availability of usable cash from within | the enterprise. As it is obvious that greater the speed of cash flow cycle, I greater would be the number of times a firm can convert its goods and ' services into cash and so lesser will be the cash requirement to finance the desired volume of business during that period. Furthermore, every enterprise is in possession of some hidden cash, which if traced out substantially decreases the cash requirement of the enterprise.

4. Optimizing the Cash Level A financial manager should concentrate on maintaining sound liquidity position i.e. cash level. All his efforts relating to planning, managing and controlling cash should be diverted towards maintaining an optimum level of cash. The foremost need of maintaining optimum level of cash is to meet the necessary requirements and to settle the obligations well in time. Optimization of cash level may be related to establishing equilibrium between risk and the related profit expected to be earned by the company.

5.Investing Idle Cash Idle cash or surplus cash refers to the excess of cash inflows over cash outflows, which do not have any specific operations or any other purpose to solve currently. Generally, a firm is required to hold cash for meeting working needs facing contingencies and to maintain as well as develop goodwill of bankers.

The problem of investing this excess amount of cash arise simply because it contributes nothing towards profitability of the firm as idle cash precisely earns no returns. Further permanent disposal of such cash is not possible, as the concern may again need this cash after a short while. But, if such cash is deposited with the bank, it definitely would earn a nominal rate of interest paid by the bank. A much better returns than the bank interest can be expected if a company deploys idle cash in marketable securities. There are not yet another group of enterprise that neither invests in marketable securities nor willing to get interest instead do they prefer to deposit excess cash for improving relations with banks by helping them in meeting bank requirements for compensating balances for services and loans.

GENERAL PRINCIPLES OF CASH MANAGEMENT:

Harry Gross has suggested certain general principles of cash management that, essentially add efficiency to cash management. These principles reflecting cause and effect relationship having universal applications give a scientific outlook to the subject of cash management. While, the application of these principles in accordance with the changing conditions and business environment requiring high degree of skill and tact which places cash management in the category of art. Thus, we can say that cash management like any other subject of management is both science and art for it has well-established principles capable of being skilfully modified as per the requirements. The principles of management are follows as –

1. **Determinable Variations of Cash Needs** A reasonable portion of funds, in the form of cash is required to be kept aside to overcome the period anticipated as the period of cash deficit. This period may either be short and temporary or last for a longer duration of time. Normal and regular payment cf cash leads to small reductions in the cash balance at periodic intervals. Making this payment to different employees on different days of a week can equalize these reductions. Another technique for balancing the level of cash is to schedule i

cash disbursements to creditors during that period when accounts receivables collected amounts to a large sum but without putting the goodwill at stake.

2. **Contingency Cash Requirement** There may arise certain instances, which fall beyond the forecast of the management. These constitute unforeseen calamities, which are too difficult to be provided for in the normal course of the business. Such contingencies always demand for special cash requirements that was not estimated and provided for in the cash budget. Rejections of wholesale product, large amount of bad debts, strikes, lockouts etc. are a few among these contingencies. Only a prior experience and investigation of other similar companies prove helpful as a customary practice. A practical procedure is to protect the business from such calamities like bad-debt losses, fire etc. by way of insurance coverage.
3. **Availability of External Cash** Another factor that is of great importance to the cash management is the availability of funds from outside sources. There resources aid in providing credit facility to the firm, which materialized the firm's objectives of holding minimum cash balance. As such if a firm succeeds in acquiring sufficient funds from external sources like banks or private financers, shareholders, government agencies etc., the need for rnaintaining cash reserves diminishes.
4. **Maximizing Cash Receipts** Every financial manager aims at making the best possible use of cash receipts. Again, cash receipts if tackled prudently results in minimizing cash requirements of a concern. For this purpose, the comparative cost of granting cash discount to customer and the policy of charging interest expense for borrowing must be evaluated on continuous basis to determine the futility of either of the alternative or both of them during that particular period for maximizing cash receipts. Yet, the under mentioned techniques proved helpful in this context: -

(A)Concentration Banking: Under this system, a company establishes banking centers for collection of cash in different areas. Thereby, the company instructs its customers of adjoining areas to send their payments to those centers. The collection amount is then deposited with the local bank by these centers as early as possible. Whereby, the collected funds are transferred to the company's central bank accounts operated by the head office.

(B)Local Box System: Under this system, a company rents out the local post offices boxes of different cities and the customers are asked to \ forward their remittances to it. These remittances are picked by the authorized lock bank from these boxes to be transferred to the company's central bank operated by the head office.

(C)Reviewing Credit Procedures: It aids in determining the impact of slow payers and bad-debtors on cash. The accounts of slow paying customers should be reviewed to determine the volume of cash tied up. Besides this, evaluation of credit policy must also be conducted for introducing essential amendments. As a matter of fact, too strict a credit policy involves rejections of sales. Thus, curtailing the cash inflow. On the other hand, too lenient, a credit policy would increase the number of slow payments and bad debts again decreasing the cash inflows.

(D)Minimizing Credit Period: Shortening the terms allowed to the customers would definitely accelerate the cash inflow side-by-side revising the discount offered would prevent the customers from using the credit for financing their own operations profitably.

(E)Others: Introducing various procedures for special handling of large to very large remittances or foreign remittances such as, persona! pick up of large sum of cash using airmail, special delivery and simitar techniques to accelerate such collections.

5. Minimizing Cash Disbursements

The motive of minimizing cash payments is the ultimate benefit derived from maximizing cash receipts. Cash disbursement can be brought under control by preventing fraudulent practices, serving time draft to creditors of large sum, making staggered payments to creditors and for payrolls etc.

6. Maximizing Cash Utilization

Although a surplus of cash is a luxury, yet money is costly. Moreover, proper and optimum utilization of cash always makes way for achievement of the motive of maximizing cash receipts and minimizing cash payments. At times, a concern finds itself with funds in excess of its requirement, which lay idle without bringing any return to it. At the same time, the concern finds it unwise to dispose it, as the concern shall soon need it. In such conditions, efforts should be made in investing these funds in some interest bearing securities. There are certain basic strategies suggested by Gitman, which prove evidently helpful in managing cash if employed by the cash management. They

are: "Pay accounts payables as late as possible without damaging the firm's credit rating, but take advantage of the favourable cash discount, if any. Turnover, the inventories as quickly as possible, avoiding stock outs that might result in shutting down the productions line or loss of sales. Collect accounts receivables as early as possible without losing future loss sales because of high-pressure collections techniques. Cash discounts, if they are economically justifiable, may be used to accomplish this objective

RECEIVABLE MANAGEMENT

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

The objective of receivable management is to promote sales and profit until that point is reached where the return on investment in further funding receivables is less than the cost of funds raised to finance that additional credit.

The costs associated with the extension of credit and accounts receivables are identified as follows:

Collection Cost

This cost incurred in collecting the receivables from the customers to whom credit sales have been made.

Capital Cost

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

Administrative Cost

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

Default Cost

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

Factors Considering the Receivable Size

Receivables size of the business concern depends upon various factors. Some of the important factors are as follows:

1. Sales Level

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

2. Credit Policy

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

3. Credit Terms

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

4. Credit Period

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

5. Cash Discount

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

6. Management of Receivable

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

Part A (ONE Mark)

Multiple Choice Questions

Online Examination

Part B (2 Marks Questions)

1. Draw a chart showing the different kinds of working capital?
2. Write any four examples for current asset?
3. Give the meaning of gross working capital?
4. List out the various tools of inventory management?
5. Write any two importance of working capital?
6. What is the formula for calculating working capital?
7. Define working capital
8. Give the meaning of net working capital?
9. What is the nature of cash?
10. What is meant by factoring?
11. Name the various kinds of working capital?
12. Write any four examples for current liabilities?

Part C (6 Marks Questions)

1. "Efficient cash management will aim at maximizing the cash inflow and showing cash outflow" Discuss?
2. Godrej Company sells goods in the home market and earns a gross profit of 20% on sales. Its annual figures are as follows:

Particulars	Amount (Rs)
Sales	3,00,000
Materials used	1,08,000
Wages	96,000
Manufacturing Expenses	1,20,000
Administrative Expenses	30,000
Depreciation	12,000
Selling Expenses	18,000
Income tax payable in two installments of which first installment falls in the next year	30,000

Additional Information

(i) Credit given by suppliers - 2 months

(ii) Credit allowed to customers - 1 month

(iii) Lag in payment of wages - 1/2 month

(iv) Lag in payment of Administrative expenses - 1 month

(v) Selling expenses are paid quarterly in advance.

(vi) Raw materials and finished goods are in stock for 1 month.

(vii) Cash balance estimated to be maintained at Rs.30,000

You are required to prepare a statement of working capital requirements.

3. Prepare an estimate of working capital requirement for the following information of a trading concern

Projected annual sales 2,00,000 units

Selling price Rs.10 per unit

% age of net profit on sales 20%

Average credit period allowed to customers 6 weeks

Average credit period allowed by suppliers 4 weeks

Average stock holding in terms of sales requirements 14 weeks

Allow 10% for contingencies

4. Define the term working capital. Explain the need and the factors which are determining the working capital requirements?
5. Prepare an estimate of working capital requirement for the following information of a trading concern

   Projected annual sales 1,00,000 units

   Selling price Rs.8 per unit

   % age of net profit on sales 25%

   Average credit period allowed to customers 8 weeks

   Average credit period allowed by suppliers 4 weeks

   Average stock holding in terms of sales requirements 12 weeks

   Allow 10% for contingencies
6. Describe the need and various factors influencing working capital?
7. Define the term working capital. What factors would you take into consideration in estimating the working capital needs of a concern?
8. A proforma cost sheet of a company provides the following particulars

   Elements of cost

   Materials 40%

   Direct Labour 20%

   Overheads 20%

   The following further particulars are available

   a. It is proposed to maintain a level of activity of 2,20,000 units
   b. Selling price is Rs.12 per unit
   c. Raw materials are expected to remain in stores for a average period of 1 month
   d. Materials will be in process, on average half a month
   e. Finished goods are required to be in stock for an average period of 1 month
   f. Credit allowed to debtors is 3 months
   g. Credit allowed by suppliers is 2 month

   You may assume that sales and production follow a consistent pattern

   You are required to prepare a statement of working capital requirements.

9. Explain the techniques of inventory management with suitable example?

10. Discuss the advantages of maintaining adequate working capital in a manufacturing concern?

FINANCIAL MANAGEMENT
UNIT V

QUESTIONS	OPTION 1	OPTION 2	OPTION 3	OPTION 4	ANSWER
What do you mean by working capital management?	management of current assets	management of current liabilities	Management of debt	Management of current asset and	Management of current asset and
Working capital needs of a firm are influenced by ---------	Nature of management	climatic conditions	Production policy	Operating cycle	Production policy
What is the level of investment in current assets under flexible policy?	Medium	Low	High	Fixed	High
What is matching principle of working capital management?	Cost = Profit	Cost = expense	Maturity of source of finance = maturity of assets being financed	Sales = Cost	Maturity of source of finance = maturity of assets
Which current asset is vital to the daily operations of business?	Inventory	cash	Bills receivables	Debtors	cash
Which is the principal tool of cash management?	Bank deposit	Cash budget	Lock box system	production budget	Cash budget
Which is the principal method of short term cash forecasting?	Fund flow method	Cash flow method	Receipts and payments method	Income and Expenditure Method	Cash flow method
What do you mean by net float?	Balance in the books of the bank is higher than the books of the	Balance in the books of the bank is equal to the books of the firm	Balance in the books of the bank is lower than the books of the firm	Bank balance	Balance in the books of the bank is lower than the
Commercial papers are --------	Secured securities	unsecured securities	partly secured and partly unsecured	Long term securities	Secured securities
Working capital management encompass ----------problem	Availability of ample funds	To decide upon optimal mix of funds	To find internal source of funds	Availability of cash	Availability of ample funds
What is circulating capital?	Working capital	Share capital	deposits in the bank	Current assets	Working capital
Which is not considered as current asset ?	Wages out standing	Debtors receivable	Furniture	Work in Progress	Furniture
Net working capital can be ---------	Positive	Negative	Fixed	Positive or Negative	Positive or Negative

Positive working capital arises when -----	Current Assets exceeds Current Liabilities	Current Liabilities exceeds Current Assets	Current Assets equal Current Liabilities	Fixed assets equals Fixed Liabilities	Current Assets exceeds Current Liabilities
Which equation is correct ?	WC = Current asset - Current Liabilities	WC = Fixed asset - Fixed Liabilities	WC = Current Liabilities - Fixed asset	WC = Current Liabilities - Current Assets	WC = Current asset - Current Liabilities
Net working capital indicates ----------	Liquidity position	current assets position	Current liabilities positions	Financial position	Liquidity position
The changes in the level of working capital occur due to ----------	Policy changes	Changes in the technology	Changes production	Changes in policy and technology	Changes in policy and technology
Current asset policy is the relationship between current assets and ----------	Current liabilities	sales volume	Inventory	working capital	Current liabilities
Working capital requirement is determined by ----------	nature of the business	Product policy	Dividend policy	Nature of business and product and dividend policy	Nature of business and product and dividend policy
Growth industries require ----------	Less working capital	Less fixed assets	More working capital	More fixed assets	More working capital
Non payment of dividend ----------	Increases working capital	Increases current liability	Decreases working capital	Decreases current liability	Increases current liability
Trade credit is ---------	Source of finance	current liability	Fixed asset	Current asset	current liability
Which is the cheapest source of long term working capital ----------	Issue of shares	Retained profits	Term loans	Public deposit	Retained profits
Which is not an internal source of working capital?	Depreciation of funds	Provision for taxation	accrued expense	Loan from Managing Director	Loan from Managing Director
_____ is a sources of working capital	Credit papers	Public deposits	Debtors	Creditors	Debtors
Which of the following can be considered as a source of working capital?	Security from employee	Accrued expenses	Customers credit	Accrued income	Accrued expenses
The relationship of current assets and cash and bank balance is called --------	Bank ratio	Current ratio	Cash ratio	Debt ratio	Current ratio

Cash ratio shows the availability of ------ balances to meet the current assets	cash	Bank	Overdraft	Loan	cash
The source of short term finance is -------	bank credit	issue of preference shares	issue of equity shares	issue of debenture	bank credit
Medium term finance sources are --------	public deposit	issue of debentures	bank loan	issue of preference shares	issue of debentures
Long term finance sources include -----	issue of shares	bank credit	factoring	accruals	issue of shares
Owned capital of a company may be in the form of --------	share capital	bonds	debentures	deposits	share capital
Internal sources of finance is ----------	retained earnings and depreciation	shares	debentures	loans	retained earnings and depreciation
An example of current asset is ----------	plant	Machinery	furniture	Bills receivable	Bills receivable
Retained earnings or ploughing back of profit are ----------	internal financing	external financing	Shareholders fund	Debt financing	internal financing
---------- refers to the credit extended by the suppliers of goods in the	factoring	trade credit	bank deposit	accruals	trade credit
---------- means more capital than actually required.	over capitalization	under capitalization	capitalization	capital	over capitalization
---------- represents unsecured promissory notes issued by firms to raise	factoring	trade credit	bank deposit	commercial paper.	commercial paper
---------- are those expenses which have been incurred but not yet due.	outstanding expenses	outstanding income	accured expenses	accrued income	accured expenses
The borrower is required to transfer the physical possession of the property of goods to the bank as security is called as ----------	pledge	hypothecation	mortgage	factoring	pledge
---------- is the amount of funds necessary to cover the cost of operating the enterprises.	fixed capital	working capital	capital	Flexible capital	working capital

Gross working capital is equal to investment in ----------	current liability	current asset	fixed liability	fixed asset	current asset
An example of current asset is ----------	plant	Machinery	furniture	debtors	debtors
An example for current liability is ---------	Bills payable	bills receivable	prepaid expenses	loan	Bills payable
Bank overdraft is an example for --------	current liability	current asset	fixed liability	fixed asset	current liability
The main sources of short term working capital are ----------	trader credit	advances	deferred income	trade credit, advances and deferred income	trade credit, advances and deferred income
Current ratio is the relationship between current asset and ----------	current liability	current asset	fixed liability	fixed asset	current liability
---------- is the most important tool in cash management	cash budget.	flexible budget	master budget	production budget	cash budget.
Cash management models include --------	operating cycle model	inventory model	operating cycle model and inventory model	cash model	operating cycle model and
---------- is used on stock exchange transactions when a broker wants to	Badla financing	overdraft	commercial paper	factoring.	Badla financing
An example of current asset is ----------	plant	Machinery	furniture	stock	stock
An example of current asset is ----------	plant	Machinery	furniture	Short term investment	Short term investment
An example of current asset is ----------	plant	Machinery	furniture	cash	cash
An example of current liability is ----------	plant	Machinery	furniture	Outstanding expenses	Outstanding expenses
An example of current liability is ----------	plant	Machinery	furniture	Sundry creditor	Sundry creditor
In a manufacturing concern, working capital cycle starts with ----------	Purchase of raw materials	Work in process	Finished goods	Bills receivable	Purchase of raw materials

In a manufacturing concern, working capital cycle ends with ----------	Purchase of raw materials	Work in process	Finished goods	realisation of cash	realisation of cash
_____ refers to alternate expansion and contraction in general business activity	Working capital cycle	Business cycle	operating cycle model and inventory model	Trade cycle	Business cycle
EOQ -	Economic Order Quantity	Economic Order Quality	Earliest Order Quantity	Economic Offer Quantity	Economic Order Quantity
_____ is the cost which cccur at the time of puchasing or ordering of materials	Carrying cost	Ordering cost	Fixed cost	Variable cost	Ordering cost

KARPAGAM ACADEMY OF HIGHER EDUCATION

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Coimbatore-641021
Department of Management

Name: **Dr.M.NANDHINI**
Department: **Management**
Subject Code: **17BAU303A** Semester: **III** Year: **2017-2020 Batch**
Subject: **FINANCIAL MANAGEMENT**

ASSIGNMENT TITLE

S.No.	REGISTER NUMBER	NAME OF THE STUDENT	ASSIGNMENT TITLE
1	17BAU002	Abinaya.D	Financial Management - Importance
2	17BAU003	Abisha.J	Financial Management – Scope
3	17BAU004	Aishwarya.S	Finance Function
4	17BAU005	Akshay K Ajay	Financial Decision
5	17BAU006	Anto William . P	Financial Management – Objectives
6	17BAU007	Aravind Kumar. P	Profit Maximization Vs Wealth Maximization
7	17BAU008	Aravind. M	Functions of Finance manager
8	17BAU009	Balaji. P	Financial Management process
9	17BAU010	Elavarasan. K	Time Value of Money
10	17BAU011	Govarthini. S	Compounding Technique
11	17BAU012	Immanuvel. G	Present Value Technique
12	17BAU013	Jegadheesh Kumar. S	Systematic Risk
13	17BAU014	Kannan. M	Unsystematic Risk
14	17BAU015	Kowsika. V	Return
15	17BAU016	Kumar. C	Capital Budgeting – Importance
16	17BAU017	Manikandan. G	Capital Budgeting Process
17	17BAU018	Manikandan. M	Capital Budgeting Decision
18	17BAU019	Marimuthu. M	Payback period Method
19	17BAU020	Mohammed Ameen . B	Rate of Return Method
20	17BAU021	Nagoor mohideen. S	Net Present Value
21	17BAU022	Nagulan. R. V	Internal Rate of Return Method
22	17BAU023	Natarajan. S	Profitability Index Method
23	17BAU024	Naveen. N	NPV Vs IRR
24	17BAU025	Naveeth.R	NPV Vs PI
25	17BAU026	Pandiyan. S	Cost of Capital – Significance
26	17BAU027	Prabhakaran. D	Problems in determining cost of capital
27	17BAU028	Pradeesh. P	Cost of Debt
28	17BAU029	Praveenkumar. P	Cost of Preference Share capital
29	17BAU030	Rajagopal. P	Cost of Equity share capital

30	17BAU031	Rajeshwari . K	Cost of Retained Earnings
31	17BAU032	Ramasamy Ahilan	Weighted Average cost of capital
32	17BAU033	Riyazuddin. B	Capital Structure – Importance
33	17BAU034	Ruban Raj Kumar. K	Optimal Capital Structure
34	17BAU035	Sakthivel. E	Factors determining capital structure
35	17BAU036	Santhosh. N	MM Approach
36	17BAU037	Saranya.G	Net Income Approach
37	17BAU038	Sheik Arfath. R	Net Operating Income Approach
38	17BAU039	Sindhuja. R	EBIT and EPS Analysis
39	17BAU040	Sivaram. C	Leverage – Importance
40	17BAU042	Sruthi. R	Leverage – Financial leverage
41	17BAU043	Swathi. J	Operating Leverage
42	17BAU044	Tarun Kumar. R	Combined Leverage
43	17BAU045	Tony Akash. G. J	**LONG ABSENT**
44	17BAU046	Vasunthara. S	Working Capital Leverage
45	17BAU047	Venkatesh. A	Point of Indifference
46	17BAU048	Vennila. R	Working Capital management – Concept
47	17BAU049	Vetriselvan. K	Working Capital – Types
48	17BAU050	Vidhya Shree. G	Advantages of Adequate working capital
49	17BAU051	Vignesh. R	Danger of maintaining surplus working capital
50	17BAU052	Vignesh.C	Factors determining working capital requirements
51	17BAU053	Vigneshwaran. M	Estimating working capital requirements – Trading Concern and Manufacturing Concern
52	17BAU054	Vinodkumar. P	Cash Management
53	17BAU055	Vinoth kumar. P	Inventory Management

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[17BAU303A]

KARPAGAM ACADEMY OF HIGHER EDUCATION
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COIMBATORE – 641 021
(For the candidates admitted from 2017 onwards)
I INTERNAL EXAMINATION – JULY 2018

THIRD SEMESTER

II BBA

FINANCIAL MANAGEMENT

Date: **Maximum: 50 Marks**
Time: 2 Hours

PART – A (20 X1 = 20 Marks)

ANSWER ALL THE QUESTIONS

1. The appropriate objective of an enterprise is _____
   a. Maximization of sales b. Maximization of wealth c. Maximization of profit
   d. Maximization of production
2. _____ is the life blood of enterprises
   a. Finance b. Production c. Sales d. Purchase
3. The process of raising, providing and administering the funds used in a corporate enterprise is termed as _____
   a. Corporate Finance b. Partnership Finance c. Sole trader finance d. Finance
4. _____ refers to that part of the management activity which is concerned with planning and controlling of firms financial resources.
   a. Financial management b. HRM c. Management d. Auditing
5. _____ focus all the financial activities in an organization.
   a. Finance b. Marketing c. Production d. Personnel
6. There are _____ approaches in finance function
   a. Two b. Three c. Four d. Five
7. Financial decision deals with _____
   a. Financing decision b. Investment decision c. Dividend decision
   d. Investment decision, Financing decision and Dividend decision
8. According to traditional approach of finance function deals only with _____
   a. Procurement of fund b. Utilization of fund c. Allocation of fund d. Management
9. The term _____ refers to the part of profit of a company which is distributed by it among its shareholders.
   a. Interest b. Dividend c. Return d. Premium

10. Financial forecasting and planning are the function of _____
    a. Production Manager b. Finance Manager c. Marketing Manager d Sales Manager
11. Higher is the risk higher is the _____
    a. Return b. Uncertainty c. Cost d. Sales
12. The length of the time needed to regain the original investment will be considered in _____
    a. Internal Rate of Return Method b. Discount Cash Flow Method c. Pay back Period Method
    d. Net Present Value Method.
13. A project cost Rs. 5,00,000 and it yields an annual cash flow of Rs. 1,00,000 for 6 years. Calculate the pay-back period?
    a. 6 years b. 7 years c. 5 years d. 4 years

14. There are _____ stages in capital budgeting process
    a. 3 b. 7 c. 5 d. 9

15. In pay-back period method, earning means _____
    a. Profit before tax b. Profit before depreciation and after tax c. Profit after depreciation
    d. Profit after depreciation and taxes.

16. The term _____ refers to long – term planning for proposed capital outlays and their financing.

    a. Cost of Capital b. Capital Structure c. Capital Budgeting d. Dividend Policy.
17. If an investor invests his money in debenture ha can receive _____
    a. Dividend b. Interest c. Fee d. Premium

18. There are _____ methods of capital budgeting decision
    a.4 b.3 c.5 d. 2

19. Internal sources of finance is _____
    a. Retained Earnings b. shares c. debentures d. loans

20. In Rate of Return method, earning means _____
    a. Profit before tax b. Profit before depreciation and after tax c. Profit after depreciation

    d. Profit after depreciation and taxes.

PART – B (3 X 2 = 6 Marks)

ANSWER ALL THE QUESTIONS

21. Draw a chart depicting the financial management process?
22. Define Capital budgeting
23. Calculate the future value of money using compounding technique after 5 years
    Amount Invested Rs. 2,000
    Rate of Interest 10%

PART – C (3 X 8 = 24 Marks)

ANSWER ALL THE QUESTIONS

24. a. In what way wealth maximization objective is superior to the profit maximization objective? Explain.

Or

b. "The finance manager should take into consideration the time value of money in order to take correct financial decisions" – Elucidate.

25. a. "Capital Budgeting is long – term planning for making and financing proposed capital outlays" Explain.

Or

b. "Finance function is concerned with allocating funds to specific assets and obtaining the best mix of financing in relation to the overall valuation of the firm" Discuss.

26. a."Investment, Financing and Dividend decision are all inter related" Comment?

Or

b. Explain the different kinds of risk with suitable example?

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Department: **Management**
Subject Code: **17BAU303A** Semester: **III** Year: **2017-20 Batch**
Subject: **FINANCIAL MANAGEMENT**

ANSER KEY
PART – A

S.No	ANSWER
1	Maximization of Wealth
2	Finance
3	Corporate Finance
4	Financial Management
5	Finance
6	Two
7	Investment, Financing and Dividend Decision
8	Procurement of Fund
9	Dividend
10	Finance Manager

S.No	ANSWER
11	Return
12	Payback period
13	5Years
14	7
15	Profit before Depreciation and After Tax
16	Capital budgeting
17	Interest
18	3
19	Retained Earnings
20	Profit After Depreciation and Tax

PART – B

21. Draw a chart depicting the financial management process?

Financial Planning and control – Financial Decision – Investment, Financing and Divide3nd Decision – Risk Return Relationship – Market price - Shareholders wealth

22. Define Capital budgeting

"Capital Budgeting is a long term planning for making and financing proposed capital outlay"

23. Calculate the future value of money using compounding technique

Future Value – Rs. 3,200

PART – C

24. a. In what way wealth maximization objective is superior to the profit maximization objective? Explain.

The essential difference between the maximization of profits and the maximization of wealth is that the profits focus is on short-term earnings, while the wealth focus is on increasing the overall value of the business entity over time. These differences are substantial, as noted below:

- Planning duration. Under profit maximization, the immediate increase of profits is paramount, so management may elect not to pay for discretionary expenses, such as advertising, research, and maintenance. Under wealth maximization, management always pays for the discretionary expenditures.
- Risk management. Under profit maximization, management minimizes expenditures, so it is less likely to pay for hedges that could reduce the organization's risk profile. A wealth-focused company would work on risk mitigation, so its risk of loss is reduced.
- Pricing strategy. When management wants to maximize profits, it prices products as high as possible in order to increase margins. A wealth-oriented company could do the reverse, electing to reduce prices in order to build market share over the long term.
- Capacity planning. A profit-oriented business will spend just enough on its productive capacity to handle the existing sales level and perhaps the short-term sales forecast. A wealth-oriented business will spend more heavily on capacity in order to meet its long-term sales projections.

24. b. "The finance manager should take into consideration the time value of money in order to take correct financial decisions" – Elucidate.

Time value of money principle also applies when comparing the worth of money to be received in future and the worth of money to be received in further future. In other words, TVM principle says that the value of given sum of money to be received on a particular date is more than same sum of money to be received on a later date.

Few of the basic terms used in time value of money calculations are:

Present Value

When a future payment or series of payments are discounted at the given rate of interest up to the present date to reflect the time value of money, the resulting value is called present value.
Read further: Present Value of a Single Sum of Money and Present Value of an Annuity

Future Value

Future value is amount that is obtained by enhancing the value of a present payment or a series of payments at the given rate of interest to reflect the time value of money.
Read further: Future Value of a Single Sum of Money and Future Value of an Annuity

Interest

Interest is charge against use of money paid by the borrower to the lender in addition to the actual money lent.

25. a. "Capital Budgeting is long – term planning for making and financing proposed capital outlays" Explain.

Capital budgeting usually involves calculation of each project's future accounting profit by period, the cash flow by period, the present value of cash flows after considering time value of money, the number of years it takes for a project's cash flow to pay back the initial cash investment, an assessment of risk, and various other factors.

Capital is the total investment of the company and budgeting is the art of building budgets.

FEATURES OF CAPITAL BUDGETING

1) It involves high risk

2) Large profits are estimated

3) Long time period between the initial investments and estimated returns

CAPITAL BUDGETING PROCESS:

A) Project identification and generation:

The first step towards capital budgeting is to generate a proposal for investments. There could be various reasons for taking up investments in a business. It could be addition of a new product line or expanding the existing one. It could be a proposal to either increase the production or reduce the costs of outputs.

B) Project Screening and Evaluation:

This step mainly involves selecting all correct criteria's to judge the desirability of a proposal. This has to match the objective of the firm to maximize its market value. The tool of time value of money comes handy in this step.

Also the estimation of the benefits and the costs needs to be done. The total cash inflow and outflow along with the uncertainties and risks associated with the proposal has to be analyzed thoroughly and appropriate provisioning has to be done for the same.

C) Project Selection:

There is no such defined method for the selection of a proposal for investments as different businesses have different requirements. That is why, the approval of an investment proposal is done based on the selection criteria and screening process which is defined for every firm keeping in mind the objectives of the investment being undertaken.

Once the proposal has been finalized, the different alternatives for raising or acquiring funds have to be explored by the finance team. This is called preparing the capital budget. The average cost of funds has to be reduced. A detailed procedure for periodical reports and tracking the project for the lifetime needs to be streamlined in the initial phase itself. The final approvals are based on profitability, Economic constituents, viability and market conditions.

D) Implementation:

Money is spent and thus proposal is implemented. The different responsibilities like implementing the proposals, completion of the project within the requisite time period and reduction of cost are allotted. The management then takes up the task of monitoring and containing the implementation of the proposals.

E) Performance review:

The final stage of capital budgeting involves comparison of actual results with the standard ones. The unfavorable results are identified and removing the various difficulties of the projects helps for future selection and execution of the proposal

25. b. "Finance function is concerned with allocating funds to specific assets and obtaining the best mix of financing in relation to the overall valuation of the firm" Discuss.

Finance function is the most important of all business functions. It remains a focus of all activities. It is not possible to substitute or eliminate this function because the business will close down in the absence of finance. The need for money is continuous.

It starts with the setting up of an enterprise and remains at all times. The development and expansion of business rather needs more commitment for funds. The funds will have to be raised from various sources. The sources will be selected in relation to the implications attached with them. The receiving of money is not enough, its utilisation is more important.

The money once received will have to be returned also. If its use is proper then its return will be easy otherwise it will create difficulties for repayment. The management should have an idea of using the money profitably. It may be easy to raise funds but it may be difficult to repay them. The inflows and outflows of funds should be properly matched.

Approaches to Finance Function:

A number of approaches are associated with finance function but for the sake of convenience, various approaches are divided into two broad categories:

1. The Traditional Approach

2. The Modern Approach

26. a."Investment, Financing and Dividend decision are all inter related" Comment?

The following explanation will help in understanding each finance function in detail

Investment Decision

One of the most important finance functions is to intelligently allocate capital to long term assets. This activity is also known as capital budgeting. It is important to allocate capital in those long term assets so as to get maximum yield in future. Following are the two aspects of investment decision

a. Evaluation of new investment in terms of profitability
b. Comparison of cut off rate against new investment and prevailing investment.

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

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

Financial Decision

Financial decision is yet another important function which a financial manger must perform. It is important to make wise decisions about when, where and how should a business acquire funds. Funds can be acquired through many ways and channels. Broadly speaking a correct ratio of an equity and debt has to be maintained. This mix of equity capital and debt is known as a firm's capital structure.

A firm tends to benefit most when the market value of a company's share maximizes this not only is a sign of growth for the firm but also maximizes shareholders wealth. On the other hand the use of debt affects the risk and return of a shareholder. It is more risky though it may increase the return on equity funds.

A sound financial structure is said to be one which aims at maximizing shareholders return with minimum risk. In such a scenario the market value of the firm will maximize and hence an optimum capital structure

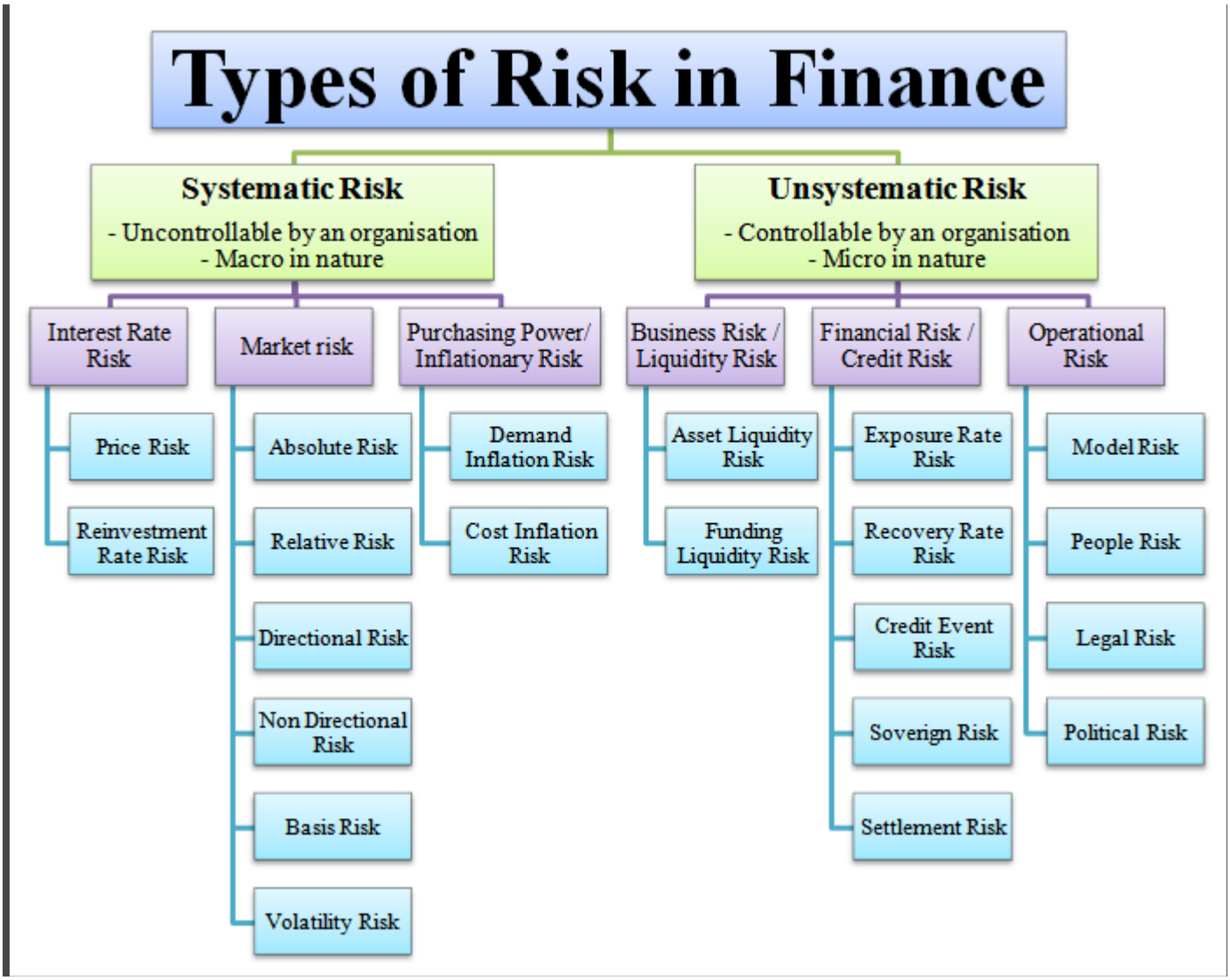
would be achieved. Other than equity and debt there are several other tools which are used in deciding a firm capital structure.

Dividend Decision

Earning profit or a positive return is a common aim of all the businesses. But the key function a financial manger performs in case of profitability is to decide whether to distribute all the profits to the shareholder or retain all the profits or distribute part of the profits to the shareholder and retain the other half in the business.

It's the financial manager's responsibility to decide a optimum dividend policy which maximizes the market value of the firm. Hence an optimum dividend payout ratio is calculated. It is a common practice to pay regular dividends in case of profitability Another way is to issue bonus shares to existing shareholders.

26. b. Explain the different kinds of risk with suitable example?



Reg. No.....

[11BBU503]

KARPAGAM UNIVERSITY

(Under Section 3 of UGC Act 1956)
COIMBATORE – 641 021
(For the candidates admitted from 2011 onwards)

BBM DEGREE EXAMINATION, NOVEMBER 2013

Fifth Semester

BUSINESS MANAGEMENT (COMPUTER APPLICATIONS)

FINANCIAL MANAGEMENT

Time: 3 hours Maximum : 100 marks

PART – A (15 x 2 = 30 Marks)
Answer ALL the Questions

1. Define financial management.
2. What is profit maximization?
3. Explain Liquidity?
4. What is cost of capital?
5. What is weighted average cost of capital?
6. What is operating leverage?
7. Explain capital structure.
8. Define dividend policy?
9. What is a bonus share?
10. What is Net Working Capital?
11. What is Operating Cycle?
12. What are the objectives of cash management?
13. What is Pay-back period of method?
14. Define Internal Rate of Return.
15. What is Cut-off-rate?

PART B (5 X 14= 70 Marks)
Answer ALL the Questions

16. a. Explain the meaning of financial management and what are its objectives?

Or

b. Explain in brief the various financial institutions providing Long term financing.

17. a. What is weighted average cost of capital? And what are the steps involved in calculation of weighted average cost of capital?

Or

b. Write Short notes on
i) Operating Leverage ii) Financial Leverage iii) Composite Leverage

18. a. X Ltd is expecting an annual EBIT of Rs.1 lakh. The company has Rs.4.0 lakhs in 10% debentures. The cost of equity capital or capitalisation rate is 12.5%. You are required to calculate the total value of the firm. Also state the over all cost of capital.

Or

b. Compute the marker price of XY Ltd's share under Walter model
Earnings per share Rs.5,
Dividend per share Rs.3,
Cost of capital 15%
Internal rate of return 16%

19. a. A cost sheet of a company provides the following particulars
Raw materials 40%; Labour 10%; Overheads 30%,
The following details are also available,
a) Raw materials remain in stores for 6weeks,
b) processing time - 4 weeks,
c) Finished goods are in stock for 5 weeks,
d) Period of credit allowed to debtors 10 weeks,
e) Lag in payment of wages 2 weeks,
f) Period of credit allowed by creditors 4 weeks,
g) selling price Rs.50 per unit,
h) Production in units 13,000 per annum.
Prepare an estimate of working capital.

Or

b. LG Ltd is engaged in customer retailing. You are required to forecast their working capital requirements from the following information.
Projected annual sales Rs.6,50,000,
% of NP to cost of sales 25%,
Average credit allowed to debtors 10 weeks,
Average credit allowed by creditors 4 weeks,
Average stock carrying (in terms of sales requirement) 8 weeks
Add 20% to allow for contingencies.

20. a. Calculate pay back period for a project which requires a cash outlay of Rs. 10,000 and generate cash inflows of Rs.2,000, Rs.4,000, Rs.3,000 and Rs. 2,000 in the first, second, third and fourth year respectively.

Or

b. Project X initially cost of Rs.25,000. It generates the following cash inflows:

Year	Cash Inflow	present value of Re.1 at 10%
1	9,000	0.909
2	8,000	0.826
3	7,000	0.751
4	6,000	0.683
5	5,000	0.621

Taking the cut-off rate as 10%, suggest whether the project should be accepted or not.

Reg. No.....

[13BAU401]

KARPAGAM UNIVERSITY

(Under Section 3 of UGC Act 1956)
COIMBATORE - 641 021
(For the candidates admitted from 2013 onwards)

BBA DEGREE EXAMINATION, APRIL 2015

Fourth Semester

BUSINESS ADMINISTRATION

FINANCIAL MANAGEMENT

Time: 3 hours Maximum : 60 marks

PART – A (10 x 2 = 20 Marks)
Answer any TEN Questions

1. Define the term Financial Management.
2. State the significance of Financial Management.
3. List out any four Short term sources of finance.
4. Consider the data of Moon Limited:
   Price = Rs.4,50,000; Variable Cost =Rs.3,00,000; Interest = Rs.20,000; Fixed Cost Rs.1,00,000 and Tax = 50 %. Calculate Finance Leverage.
5. From the following data, calculate Combined Leverage.
   Sales 1,00,000 units at Rs.2 per unit; Variable cost per unit @ Re.0.70, Fixed cost Rs.1,00,000 ; Interest charges Rs.3,600.
6. Define the term "Cost of Debt".
7. What is meant by Capital Structure?
8. Define: "Dividend Policy".
9. What do you mean by "Cash Dividend"?
10. What is "Net Working Capital"?
11. State the motives for holding cash.
12. Define: Accounts Receivables.
13. What is Capital Budgeting?
14. What do you mean by Average Rate of Return?
15. A project costs Rs.10,00,000 and yields an annual cash inflow of Rs.2,00,000 for 10 years. Calculate its Pay-back period.

PART B (5 X 8= 40 Marks)
Answer ALL the Questions

16. a. Describe the functions of Financial Management.

Or

b. Explain the sources from which a large sized industrial enterprise can raise capital for its various requirements.

17. a. Narrate the significance of cost of capital.

Or

b. From the following capital structure of Lotus Ltd. , calculate the overall cost of capital, using (i) book value weights and (ii) market value weights.

Source	Book Value Rs.	Market Value Rs.
Equity Share capital (Rs.10 per share)	45,000	90,000
Retained Earning	15,000	-
Preference Share Capital	10,000	10,000
Debentures	30,000	30,000

The after-tax cost of different sources of finance is as follows:
Equity share capital = 14 %; Retained Earnings = 13 %; Preference Share capital = 10 % and 10 % Debentures= 5 %

18. a. Elucidate the characteristics of optimal capital structure.

Or

b. As a finance manager, which factors will you consider while devising a dividend policy of a company?

19. a. Explain the various factors influencing working capital.

Or

b. Enumerate the basic problems in cash management.

20. **Compulsory : -**

From the following information, calculate the net present value of the two projects and suggest which of the two projects should be accepted assuming a discount rate of 10 %.

	Project X	Project Y
Initial Investment	Rs.20,000	Rs.30,000
Estimated Life	5 Years	5 years
Scrap Value	Rs.1,000	Rs.2,000

The profits before depreciation and after taxes are as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Project X (Rs.)	5,000	10,000	10,000	3,000	2,000
Project Y (Rs.)	20,000	10,000	5,000	3,000	2,000
PV factor @ 10 %	0.909	0.826	0.751	0.683	0.621

Reg. No.....

[14BAU401]

KARPAGAM UNIVERSITY

Karpagam Academy of Higher Education
(Established Under Section 3 of UGC Act 1956)
COIMBATORE – 641 021
(For the candidates admitted from 2014 onwards)

BBA DEGREE EXAMINATION, APRIL 2016

Fourth Semester

BUSINESS ADMINISTRATION

FINANCIAL MANAGEMENT

Time: 3 hours Maximum : 60 marks

PART – A (20 x 1 = 20 Marks) (30 Minutes)
(Question Nos. 1 to 20 Online Examinations)

PART B (5 x 8 = 40 Marks) (2 ½ Hours)
Answer ALL the Questions

21. a. What is finance function? What are its aims?

Or

b. Explain the relationship between finance function and other functions.

22. a. Ramsri Industries Ltd issued 5,000 12% debentures of Rs.100 each at par. The tax rate is 40%. Calculate before tax and after tax cost of debt.

Or

b. Calculate operating leverage for Sri ram Ltd.from the following information:
No. of units produced Rs. 50,000
Selling price per unit Rs. 50
Variable cost per unit Rs. 20
Fixed cost per unit at current level of sales Rs.15. What will be the new operating leverage, if the variable cost is Rs. 30 per unit.

23. a. The earnings per share of a company are Rs.10. The rate of capitalization is 10% and the retained earnings can be employed to yield a return of 20%. The company is considering a payout of a) 20% b) 40% and c) 60%. Which of these would maximize the wealth of the shareholders as per Walter's model?

Or

b. The following information relates to Titan Ltd.
Rate of return (r) = 10% Earning per share (E) Rs. 20
Ascertain the market price per share in the following cases, using Gordon's model.

	Dividend payout(1-b)%	Retention(b)%	Cost of equity %(k)
1.	40	60	18
2.	60	40	16
3.	80	20	14

24. a. Nathan wishes to commence a new trading business and gives the following information:
i. Total estimated sales p.a. Rs. 6, 00, 000
ii. His fixed expenses are estimated at Rs.1, 000 per month and variable expenses equal to 5% of his turnover.
iii. He expects to fix a sale price for each product which will be 25% in excess of his cost of purchase.
iv. He expects to turnover his stock 4 times in a year.
v. The sales and purchases will be evently spread throughout the year. All sales will be for cash but he expects one month's credit for purchases.
Calculate: (1) his estimated profit for the year.
(2) his average working capital requirements.

Or

b. From the following you are required to calculate (a) Debtors turnover (b) Average age of debtors

	2013	2014
Net Sales	Rs. 18, 00,000	15, 00,000
Debtors at the beginning	Rs. 1, 72,000	1, 60,000
Debtors at the end	Rs. 2, 34,000	1, 72,000

25. a. A project cost Rs.5, 00,000 and yields annually a profit Rs 80,000 after depreciation at 12% p.a. but before tax of 50%. Calculate payback period.

Or

b. Project X initially costs Rs.25, 000. It generates the following cash inflows:

Year	Cash inflows	present Value of Re. 1 at 10%
1	Rs. 9,000	0.909
2	Rs. 8,000	0.826
3	Rs. 7,000	0.751
4	Rs. 6,000	0.683
5	Rs. 5,000	0.621

Taking the cut-off rate as 10%, suggest whether the project should accepted or not

Reg. No.....

[15BAU401]

KARPAGAM UNIVERSITY

Karpagam Academy of Higher Education
(Established Under Section 3 of UGC Act 1956)
COIMBATORE – 641 021
(For the candidates admitted from 2015 onwards)

BBA DEGREE EXAMINATION, APRIL 2017

Fourth Semester

BUSINESS ADMINISTRATION

FINANCIAL MANAGEMENT

Time: 3 hours Maximum : 60 marks

PART – A (20 x 1 = 20 Marks) (30 Minutes)
(Question Nos. 1 to 20 Online Examinations)

PART B (5 x 8 = 40 Marks) (2 ½ Hours)
Answer ALL the Questions

21. a. "Maximization of profit is regarded as the proper objective of investment decision, but it is not as exclusive as maximizing shareholders wealth" Comment?

Or

b. Explain the term loan? How does it differ from debenture borrowing?

22. a. Define the firm's Cost of Capital. Explain the opportunity cost of capital?

Or

b. Describe the importance and determination of weighted average cost of capital?

23. a. Explain the theories of capital structure in detail?

Or

b. Explain the various factors which influence the dividend decision of a firm?

24. a. Prepare an estimate of working capital requirement from the following information of a trading concern

Projected annual sales 2,75,000 units
Selling price Rs.15 per unit
% age of net profit on sales 25 %
Average credit period allowed to customers 8 weeks

Average credit period allowed by suppliers 6 weeks
Average stock holding in terms of sales requirements 14 weeks
Allow 10% for contingencies

Or

b. Define the term working capital. Explain the need and factors which are determining the working capital requirements?

25. a. Discuss the significance and methods of capital budgeting with suitable illustration?

Or

b. Equipment A has a cost of Rs. 75,000 and net cash flow of Rs. 20,000 per year for six years. A substitute equipment B would cost Rs. 50,000 and generate net cash flow of Rs. 14,000 per year for six years. The required rate of return of both equipments is 11 percent. Calculate the PI and NPV for the equipments. Which equipment should be accepted and why?

Year	1	2	3	4	5	6	7	8	9	10
Discounting factor@ 10%	.909	.826	.751	.683	.621	.564	.513	.466	.424	.385

Register No.: …….

[17BAU303A]

KARPAGAM ACADEMY OF HIGHER EDUCATION
(Deemed to be University)
(Established Under Section 3 of UGC Act, 1956)
COIMBATORE – 641 021
(For the candidates admitted from 2017 onwards)
II INTERNAL EXAMINATION – AUGUST 2018

THIRD SEMESTER

II BBA

FINANCIAL MANAGEMENT

Date: 16.08.18 **Maximum: 50 Marks**
Time: 2 Hours

PART – A (20 X1 = 20 Marks)

ANSWER ALL THE QUESTIONS

1. Cost of Equity share capital =
   a. Dividend b. Dividend/ Net Proceeds c. Investment/Interest d. Earnings/Interest
2. Overall cost of capital is also known as _____
   a. Weighted average cost of capital b. Explicit Cost c. Historical Cost d Implicit Cost
3. _____is the Cost of the opportunity foregone in order to take up a particular project
   a. Future Cost b. Explicit Cost c. Historical Cost d. Implicit Cost
4. _____ is not a cost as such
   a. Fixed Capital b. Working Capital c. Cost of capital d. Circulating capital
5. _____ is denoted as K
   a. Capital Structure b Cost of Capital c Capital Budgeting d. Working Capital
6. _____ refers to the cost of specific source of capital
   a. Explicit Cost b. Specific Cost c. Historical Cost d. Implicit Cost
7. The_____ is the minimum rate of return expected by an investor
   a. Capital Structure b. Cost of Capital c. Capital Budgeting d. Working Capital
8. _____ are book cost which are related to the past
   a. Future Cost b. Explicit Cost c. Historical Cost d. Implicit Cost
9. Cost of debt is denoted as _____
   a. K_e b. K_d c. K_r d. K_p
10. _____ is combined cost of various source of Capital
    a. Overall Cost b. Explicit Cost c. Historical Cost d. Implicit Cost
11. Earnings Per Share = _____
    a. Total earnings / No., of shares b. EAIT / No. of equity shares c. Income taxes / No. of debentures d. Shares / Income
12. Earnings Yield method = _____
    a. Dividend / Net sales b. Interest / Net Proceeds c. EPS / Market Price d. EBIT / 100
13. Low gear company means _____
    a. More Equity b. Low equity c. More Debenture d. More retained earnings

14. IRR -
    a. Internal Rate of Return b. Investment Rate of Return c. Incremental Rate of Return
    d. Internal Revised Return
15. In NPV, earning means _____
    a. Profit before tax b. Profit before depreciation and after tax c. Profit after depreciation
    d. Profit after depreciation and taxes.

16. DPS -
    a. Discount Per share b. Dual Per Share c. Dividend Per Share d. Declare Per Share

17. _____ method is also known as benefit cost ratio

    a. Profitability Index b. IRR c. NPV d. Rate of Return

18. The _____ method taken into account the profitability and also the time value of money
    a.NPV b. Pay back period c. Accounting rate of return d. Rate of return
19. _____ are estimated cost for the future
    a. Future Cost b. Explicit Cost c. Historical Cost d. Implicit Cost
20. _____ is the rate of interest payable on Debt
    a. Cost of Debt b. Cost of Equity c. Cost of Preference Capital d. Marginal Cost

PART – B (3 X 2 = 6 Marks)

ANSWER ALL THE QUESTIONS

21. A company issues 10,000, 10% preference shares of Rs.100 each. Cost of issue is Rs.2 per share. Calculate cost of preference capital, if these shares are issued at par.
22. Define cost of capital
23. A Ltd issues Rs.50,000, 7% debentures at par. The tax rate applicable to the company is 30%. Compute Cost of debt capital

PART – C (3 X 8 = 24 Marks)
ANSWER ALL THE QUESTIONS

24. a. A Company has a investment opportunity costing Rs.55,000 with the following expected cash flow after taxes

YEAR	CASH FLOWS (Rs.)
1	12,000
2	10,000
3	15,000
4	12,000
5	11,000
6	8,000
7	10,000
8	15,000
9	10,000
10	14,000

Using 10 % as the cost of capital determine the following

1. NPV

Year	1	2	3	4	5	6	7	8	9	10
Discounting factor @ 10%	.909	.826	.751	.683	.621	.564	.513	.466	.424	.385

Or

b. Discuss the significance of cost of capital with suitable illustration?

25. a. "The equity cost is free." Do you agree? Give reasons.

Or

b. A firm has the following capital structure and after tax cost for the different sources of funds used.

Sources of funds	**Book value (Rs.)**	**After tax cost (%)**	**Market Value (Rs.)**
Debt	18,00,000	8	19,50,000
Preference share capital	14,00,000	10	16,15,000
Equity share capital	16,00,000	11	17,50,000
Retained earnings	12,00,000	-	-

You are required to calculate weighted average cost of capital using book value and market value.

26. a Discuss the problems in determining the cost of capital?

Or

b. From the following information calculate the Profitability index of the two projects and suggest which project should be accepted assuming a discount rate of 10%

	Project X	**Project Y**
Initial Investment	Rs.50,000	Rs.60,000
Estimated Life	5 Years	5 Years
Scrap Value	Rs.1,000	Rs.2,000

The profits before depreciation and after taxes are as follows.

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Project X (Rs)	19,000	14,000	18,000	13,000	12,000
Project Y (Rs)	20, 000	19,000	21,000	13,000	10,000
Discounting factor @ 10%	.909	.826	.751	.683	.621

Register No.: …….

[17BAU303A]

KARPAGAM ACADEMY OF HIGHER EDUCATION
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(Established Under Section 3 of UGC Act, 1956)
COIMBATORE – 641 021
(For the candidates admitted from 2017 onwards)
II INTERNAL EXAMINATION – AUGUST 2018

THIRD SEMESTER

II BBA

FINANCIAL MANAGEMENT

Date: 16.08.18 **Maximum: 50 Marks**
Time: 2 Hours

PART – A (20 X1 = 20 Marks)

ANSWER ALL THE QUESTIONS

1. Cost of Equity share capital =
   a. Dividend b. Dividend/ Net Proceeds c. Investment/Interest d. Earnings/Interest
2. Overall cost of capital is also known as _____
   a. Weighted average cost of capital b. Explicit Cost c. Historical Cost d Implicit Cost
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   a. Future Cost b. Explicit Cost c. Historical Cost d. Implicit Cost
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    a. Total earnings / No., of shares b. EAIT / No. of equity shares c. Income taxes / No. of debentures d. Shares / Income
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    a. Dividend / Net sales b. Interest / Net Proceeds c. EPS / Market Price d. EBIT / 100
13. Low gear company means _____
    a. More Equity b. Low equity c. More Debenture d. More retained earnings

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    a. Internal Rate of Return b. Investment Rate of Return c. Incremental Rate of Return
    d. Internal Revised Return
15. In NPV, earning means _____
    a. Profit before tax b. Profit before depreciation and after tax c. Profit after depreciation
    d. Profit after depreciation and taxes.

16. DPS -
    a. Discount Per share b. Dual Per Share c. Dividend Per Share d. Declare Per Share

17. _____ method is also known as benefit cost ratio

    a. Profitability Index b. IRR c. NPV d. Rate of Return

18. The _____ method taken into account the profitability and also the time value of money
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19. _____ are estimated cost for the future
    a. Future Cost b. Explicit Cost c. Historical Cost d. Implicit Cost
20. _____ is the rate of interest payable on Debt
    a. Cost of Debt b. Cost of Equity c. Cost of Preference Capital d. Marginal Cost

PART – B (3 X 2 = 6 Marks)

ANSWER ALL THE QUESTIONS

21. A company issues 10,000, 10% preference shares of Rs.100 each. Cost of issue is Rs.2 per share. Calculate cost of preference capital, if these shares are issued at par.
22. Define cost of capital
23. A Ltd issues Rs.50,000, 7% debentures at par. The tax rate applicable to the company is 30%. Compute Cost of debt capital

PART – C (3 X 8 = 24 Marks)
ANSWER ALL THE QUESTIONS

24. a. A Company has a investment opportunity costing Rs.55,000 with the following expected cash flow after taxes

YEAR	CASH FLOWS (Rs.)
1	12,000
2	10,000
3	15,000
4	12,000
5	11,000
6	8,000
7	10,000
8	15,000
9	10,000
10	14,000

Using 10 % as the cost of capital determine the following

1. NPV

Year	1	2	3	4	5	6	7	8	9	10
Discounting factor @ 10%	.909	.826	.751	.683	.621	.564	.513	.466	.424	.385

Or

b. Discuss the significance of cost of capital with suitable illustration?

25. a. "The equity cost is free." Do you agree? Give reasons.

Or

b. A firm has the following capital structure and after tax cost for the different sources of funds used.

Sources of funds	**Book value (Rs.)**	**After tax cost (%)**	**Market Value (Rs.)**
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Preference share capital	14,00,000	10	16,15,000
Equity share capital	16,00,000	11	17,50,000
Retained earnings	12,00,000	-	-

You are required to calculate weighted average cost of capital using book value and market value.

26. a Discuss the problems in determining the cost of capital?

Or

b. From the following information calculate the Profitability index of the two projects and suggest which project should be accepted assuming a discount rate of 10%

	Project X	**Project Y**
Initial Investment	Rs.50,000	Rs.60,000
Estimated Life	5 Years	5 Years
Scrap Value	Rs.1,000	Rs.2,000

The profits before depreciation and after taxes are as follows.

	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Project X (Rs)	19,000	14,000	18,000	13,000	12,000
Project Y (Rs)	20, 000	19,000	21,000	13,000	10,000
Discounting factor @ 10%	.909	.826	.751	.683	.621

KARPAGAM ACADEMY OF HIGHER EDUCATION

(Deemed to be University)
(Established under section 3 of UGC Act 1956)
Coimbatore-641021
Department of Management

Name: **Dr.M.NANDHINI**
Department: **Management**
Subject Code: **17BAU303A** Semester: **III** Year: **2017-20 Batch**
Subject: **FINANCIAL MANAGEMENT**

ANSER KEY
PART – A

S.No	ANSWER
1	Dividend/ Net Proceeds
2	Weighted average cost of capital
3	Implicit Cost
4	Cost of capital
5	Cost of capital
6	Specific cost
7	Cost of capital
8	Historical cost
9	K_d
10	Overall Cost

S.No	ANSWER
11	EAIT / No. of equity shares
12	EPS / Market Price
13	More Equity
14	Internal Rate of Return
15	Profit before depreciation and after tax
16	Dividend Per Share
17	Profitability Index
18	NPV
19	Future Cost
20	Cost of Debt

PART – B

21. Calculation of Cost of preference Share capital

Cost of preference Share capital = 10.20%

22. Define Cost of capital

"Cost of capital is the minimum rate of return or cut-off rate expected by the investor"

23. Calculation of Cost of Debt capital

Cost of Debt capital = 4.9%

PART – C

24. a. Computation of NPV

NPV = Present value of cash inflows – Present value of cash outflows

NPV = Rs.71,722 – Rs.55,000

NPV = + 16,722

24. b. Discuss the significance of cost of capital with suitable illustration?

SIGNIFICANCE OF COST OF CAPITAL

- Investment Evaluation
- Designing Debt Policy
- Project Appraisal
- Capital structure decision
- Evaluating financial performance

25. a. "The equity cost is free." Do you agree? Give reasons.

Cost of equity refers to a shareholder's required rate of return on an equity investment. It is the rate of return that could have been earned by putting the same money into a different investment with equal risk.

- Dividend Yield method
- Dividend Yield Plus Growth Rate method
- Earnings Yield method
- Realised Yield Method

25. b. Computation of Weighted Average cost of capital

Using Book Value Weights – 9.87%

Using market Value weights – 9.59%

26. a Discuss the problems in determining the cost of capital?

Problems in determining the cost of capital

- Conceptual Controversies Regarding the Relationship between the Cost of Capital and the Capital Structure
- Historic Cost and Future Cost
- Problems in Computation of Cost of Equity
- Problems in Computation of Cost of Retained Earnings
- Problems in Assigning Weights

26. b. Calculation of Profitability Index

Profitability Index = Present value of cash inflows / Present value of cash outflows

PROJECT X – 1.19

PROJECT Y – 1.09

Register No.: …….

[17BAU303A]

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COIMBATORE – 641 021
(For the candidates admitted from 2017 onwards)
III INTERNAL EXAMINATION – SEPTEMBER 2018

THIRD SEMESTER

II BBA

FINANCIAL MANAGEMENT

Date: 9.10.18 - AN **Maximum: 50 Marks**
Time: 2 Hours

PART – A (20 X1 = 20 Marks)

ANSWER ALL THE QUESTIONS

1. _____ is a combination of debt and equity
   a. Capital budgeting b. Capital Structure c. Retained earnings d. Cost of Capital
2. Leverage can be classified into _____
   a. Two b. Four c. Three d. five
3. Working capital management can be classified into _____
   a. Three b. Four c. Five d. Six
4. Safety stock is also called as _____
   a. Minimum inventory b. Buffer stock c. Reserve stock d. Maximum stock
5. Operating Profit = _____
   a. Sales – Total Cost b. Contribution / Profit c. EBT / EBIT d. Contribution / Sales
6. Trading on equity is also known as _____
   a. Financial Leverage b. Operating Leverage c. Combined Leverage
   d. Working Capital leverage
7. _____ is a short term source of finance
   a. Issue of shares and debentures b. Issue of Shares c. Issue of debentures
   d. Factoring
8. Traditional approach in theories of capital structure is also known as _____
   a. Older approach b. Intermediate approach c. Modern approach d. Walter approach
9. Net Working Capital =
   a. Current Assets – Current Liabilities b. Net Current assets c. Net Current Liabilities
   d. Net Fixed capital
10. _____ plays a vital role in managing the day to day expenses
    a. Capital b. Working Capital c. Capital budgeting d. Leverage
11. _____ will assess the ability or efficiency of the firm
    a. Cost of capital b. Budgeting c. Working capital d. Leverage
12. _____ refers to the way in which the firm's assets are financed.
    a. Leverage b. Cost of Capital c. Trading on Equity d. Financial Structure.
13. _____ refers to the firm's investment in total current assets.

a. Working Capital b. Gross Working Capital c. Net Working Capital
d. Permanent Working Capital

14. _____ is the level of inventory at which total cost of inventory consisting of acquisition/ordering and carrying cost is minimal.
a. EOQ b. Re-Order Level c. Danger Level d. Average Stock Level.
15. Working capital is also called as _____
a. Circulating capital b. Fixed capital c. Flexible capital d. Capital
16. Dividend decision concept can be classified as_____
a. Relevance concept b. Irrelevance concept c. Budgeting d. Relevance and Irrelevance concept
17. Net working capital can be _____
a. Positive b. Negative c. Positive or Negative d. Zero
18. Ownership securities is also called as _____
a. Creditor ship securities b. Capital stock c. Bond d. Loan
19. Which is the principal tool of cash management?
a. Bank deposit b. Cash budget c. Production budget d. Lock box system
20. Payment of dividend in the form of cash is known as _____
a. Cash dividend b. Bond dividend c. Property dividend d. Scrip dividend

PART – B (3 X 2 = 6 Marks)

ANSWER ALL THE QUESTIONS

21. Calculate the Financial Leverage

Sales Rs.6000

Variable Cost Rs.1250

Fixed Cost Rs.1250

Interest Rs.400

22. Write a short note on Gross working capital
23. What is meant by right issue?

PART – C (3 X 8 = 24 Marks)
ANSWER ALL THE QUESTIONS

24. a. Explain the various factors which influence the dividend decision of a firm?

Or

b. A Company has equity share capital of Rs.5,00,000 divided into shares of Rs.100 each. It wishes to raise further Rs.3,00,000 for expansion cum modernization plan. The Company plans the following financial schemes

(a) All common stocks

(b) Rs.2,00,000 in common stocks and Rs.1,00,000 in preference capital with the rate of dividend at 8%

(c) Rs2,00,000 in preference capital with the rate of dividend at 7% and Rs.1,00,000 in debt @

5% rate of interest.

The company's existing earnings before interest and tax (EBIT) are Rs.2,70,000, The corporate rate of tax is 30%. You are required to determine the EPS in each plan and Comment on the implication of financial leverage

25. a. Explain the theories of capital structure in detail?

Or

b. Discuss the objectives and advantages of maintaining adequate working capital?

26. a Define the term working capital. Explain the need and the factors which are determining the working capital requirements?

Or

b. The following information is available in respect of the rate of return on investment and the cost of capital and earnings per share of ABC Ltd

Rate of return on investment = (i) 15% (ii) 12% (iii) 10%

Cost of capital = 12%

Earnings per share = Rs.10

Determine the value of the shares using Gordon's Model assuming the following

	E/P ratio	**Retention Ratio**
(a)	80	20
(b)	100	0
(c)	40	60

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Department of Management

Name: **Dr.M.NANDHINI**
Department: **Management**
Subject Code: **17BAU303A** Semester: **III** Year: **2017-20 Batch**
Subject: **FINANCIAL MANAGEMENT**

ANSWER KEY
PART – A

S.No	ANSWER
1	Capital Structure
2	Three
3	Three
4	Buffer stock
5	Sales – Total Cost
6	Financial Leverage
7	Factoring
8	Intermediate approach
9	Current Assets – Current Liabilities
10	Working Capital

S.No	ANSWER
11	Cost of capital
12	Leverage
13	Gross Working Capital
14	EOQ
15	Circulating Capital
16	Relevance and Irrelevance concept
17	Positive or Negative
18	Capital stock
19	Cash Budget
20	Cash Dividend

PART – B

21. **Calculate the Financial Leverage**

    Financial Leverage = 1.12

22. **Write a short note on Gross working capital**

    The total of current asset is known as gross working capital

23. **What is meant by right issue?**

    A rights issue is a dividend of subscription rights to buy additional securities in a company made to the company's existing security holders. When the rights are for equity securities, such as shares, in a public company, it is a non-dilutive pro rata way to raise capital.

PART – C

24. a. Explain the various factors which influence the dividend decision of a firm?

1. Growth and Profitability
2. Liquidity
3. Managerial Control
4. Legal constraints
5. Access to the Capital Market

24. b. Calculation of EPS

PLAN I – Rs.23.65

PLAN II – Rs.24.68

PLAN III - Rs.28.59

25. a. Explain the theories of capital structure in detail?

Net Income Approach

Net Operating Approach

Traditional Approach

MM Approach

25. b. Discuss the objectives and advantages of maintaining adequate working capital?

Objectives of Working Capital

1. The management wants maximum productivity and profits in the employment of capital. This is possible by striving to maintain a correct ratio between working capital and fixed capital.

2. The management has another objective and that is to maintain a smooth and rapid flow of funds in order to enhance the efficiency of working capital or profitability of the firm.

3. If cash receipts and cash outlay synchronize, there is no need to maintain a cash reserve. In business; it would be a miracle to have perfect coincidence and co-ordination between receipts and payments. Hence, firms must have sufficient cash reserve to meet all normal as well as abnormal cash needs.

26. a Define the term working capital. Explain the need and the factors which are determining the working capital requirements?

Working capital or circulating capital indicates circular flow, of cash (cash-flow cycle), i.e., a sort of a revolving fund starting with cash used to pay for raw materials, labour and operating expenses and when finished products are ready for sale, the cash is recovered through sale of these, goods (on cash or on credit).

1. General Type of Business
2. Size of the Business Unit
3. Terms of Purchase and Terms of Sale
4. Turnover of Inventories
5. Process of Manufacture
6. Importance of Labour
7. Proportion of Raw Material to Total Costs
8. Cash Requirements
9. Seasonal Variations
10. Banking Connections
11. Growth and Expansion

26. b. Determine the value of the shares

RETENTION RATIO IS 20% - Rs.14.33

RETENTION RATIO IS 0% - Rs.10.14

RETENTION RATIO IS 60% - Rs.16.58