Biyani's Think Tank

Concept based notes

Management Accounting

(B.Com. Part-III (Pass & Honors))

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Preface

I am glad to present this book, especially designed to serve the needs of the students. The book has been written keeping in mind the general weakness in understanding the fundamental concepts of the topics. The book is self-explanatory and adopts the "Teach Yourself" style. It is based on question-answer pattern. The language of book is quite easy and understandable based onscientific approach.

Any further improvement in the contents of the book by making corrections, omission and inclusion is keen to be achieved based on suggestions from the readers for which the author shall be obliged.

I acknowledge special thanks to Mr. Rajeev Biyani, *Chairman* & Dr. Sanjay Biyani, *Director* (*Acad*.) Biyani Group of Colleges, who are the backbones and main concept provider and also have been constant source of motivation throughout this Endeavour. They played an active role in coordinating the various stages of this Endeavour and spearheaded the publishing work.

I look forward to receiving valuable suggestions from professors of various educational institutions, other faculty members and students for improvement ofthe quality of the book. The reader may feel free to send in their comments and suggestions to the under mentioned address.

Author

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University of Rajasthan, Jaipur

Accountancy and Business Statistics

Second Paper: Management Accounting (Pass)

Minimum Pass Marks: 36 3 Hours duration

Unit-IV

Management Accounting: Meaning, Nature, Objectives, Scope & functions.

Capital Structure: Determinants and Theories.

Leverages: Operating, Financial and Combines.

Unit-V

Financial Statement Analysis: Meaning, nature, importance and techniques of financial analysis: Comparative Statements, Common Size Statement and Trend Analysis.

Ratio Analysis: Preparation of Income Statement and Balance Sheet on the Basis of Ratio.

(Note – Unit – I, II and III is of Auditing part which is not included in this think tank)

Note: The candidate shall be permitted to use battery operated pocket calculator that should not have more than 12 digits, 6 functions and 2 memories and should be noiseless and cordless.

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University of Rajasthan, Jaipur

Accountancy and Business Statistics

Second Paper: Management Accounting (Honors)

Minimum Pass Marks: 36 3 Hours duration

Note:- There will be five questions in all. The candidate will require to attempt all the questions selecting one question from each unit with an internal choice (either/or).

Unit-1

Introduction: Meaning and Concept of Management Accounting, Relationship of Management Accounting with Cost Accounting and Financial Accounting, Scope of Management Accounting, Functions of Management Accountant.

Unit-II

Capital Structure and Leverage: Meaning and Concept of Capital Structure, Determinants of Capital Structure, Optimum Capital Structure, Capital Structure Theories, EBIT-EBS Analysis, Point of Indifference, Meaning and Concept of Leverage-Financial, Operating and Combined Leverage. Financing Decisions Based on Capital Structure and Leverages.

Unit-III

Working Capital Management Meaning and Concept of Working Capital, Types of working Capital, Factors Affecting working Capital Requirement, Significance of Working Capital, Consequences of Excess and Inadequate working Capital Estimation of working capital Requirement and Salient Features of Tandon Committee.

Unit-IV

Ratio Analysis as Technique of Analysis of Financial Statements Liquidity Ratios, Activity Ratios, Leverage Ratios, Profitability Ratios and Market Value Ratios and Cash Flow Statement (AS-3)

Unit - V

Cost of Capital and Capital Expenditure Decisions

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Content

Chapter-1

Management Accounting: An Introduction

Q.1) Define Management Accounting? State its main characteristics & objectives

Ans. Any form of accounting which enables a business to be conducted more efficiently can be regarded as management accounting?

Accounting to T.G. Rose "Management accounting is the adaptation and analysis of accounting information, and its diagnosis and explanation in such a way as to assist management".

Characteristics of Management Accounting:-

1. Management accounting enables future forecasting.
2. It is selective in nature.
3. Supplies Data, Not Decisions.
4. Integrated system.
5. It is a service functions which provides information to the management for formulating policies.
6. Management Accounting emphasizes, specially, on cause & effect relationship.
7. Emphasis is placed on nature of Cost Elements.
8. Management accounting is a developing subject.

Objectives of Management Accounting

The main objective of management accounting is to provide information for successfully carrying out the managerial duties. The objectives of management accounting are as under:-

1. To assist in planning
2. Helps is organizing.
3. To assist in co-ordination.
4. Helpful in reporting.
5. To assist in decision making.
6. Help in motivating employees.
7. To assure accountability.
8. To assist in controlling performance.
9. To assist in Interpreting financial information.
10. Helps in analysis and interpreting the financial information.

Q.2) What are the tools and techniques used in management Accounting?

Ans.

Following tools and techniques are used in management accounting:-

1. Financial planning
2. Analysis of Financial Statement
3. Historical Cost Accounting.
4. Responsibility Accounting.
5. Control Accounting
6. Revaluation Accounting
7. Decision Accounting
8. Statistical Methods
9. Management Information System
10. Mathematical Techniques
11. Taxation

Q.3) Describe in brief the functions of management accounting?Ans.

Management Accounting helps the management is two ways:-

I. Providing necessary accounting information to management

(a) Measuring: - For helping the management in measuring the work efficiency in different areas it is done on the past and present incidents with context to the future. In standard costing and budgetary any control, standard and actual performance is compared to find out efficiency.

(b) Recording: - In management accounting both the quantitative and qualitative types of data are included and this accounting is done on the basis of assumptions and even those items which cannot be expressed financially are included in management accounting.

(c) Analysis: - The work of management accounting is to collect and analyze the fact related to the managerial problems and then present them in clear and simple way.

(d) Reporting: - For the use of management various reports are prepared. Generally two types of reports are prepared:-

a. Regular Reports
b. Special Reports.

II - Helping in Managerial works and Activities:-

The main functions of management are planning, Organizing, staffing, directing & controlling. Management accounting provides information to the various levels of managers to fulfill the above mentioned responsibilities properly & effectively.

It is helpful in various management functions as under:-

(a) Planning: - Through management accounting we can forecast regarding the sales, purchases, production etc. can be obtained, which helps in making justifiable plans. The tools of management accounting like standard costing, cost –volume–profit, analysis etc. are the tools of managerial costing, help in planning.

(b) Organizing:- In management accounting whole organization is divided into various departments, on the basis of work or production, and then detailed information are prepared to simplify the thing. The budgetary control and establishing cost centre techniques of management accounting helps which result in efficient management.

(c) Staffing:- Merit rating and job evaluation are two important functions to be performed for staffing. Generally only those employs are useful for the organization, whose value of work done by them is more than the value paid to them. Thus by doing cost-benefit analysis management accounting is useful in staffing functions.

(d) Directing:- For proper directing, the essentials are co-ordination, leadership, communications and motivation. In all these tasks management accounting is of great help. By analyzing the financial and non financial motivational factors, management accounting can be an asset to find out the best motivational factor.

Q.4) Explain the scope of management accounting and discus how it serves the management needs?

Ans. Scope of management accounting: - Management accounting has a vast area which includes financial accounting and extends to the functions of a system of cost accountancy, budgetary control and statistical methods. The scope of management accounting includes:-

1. The management accounting is likely to evaluate the variation by reasons and the accountability and to put forward suitable corrective measures.
2. Analyzing and interpreting accounting and other figures to craft it logically and usable to management.
3. Configuration, installation and operation of accounting cost accounting and information systems, as a result it has to utilize these systems to get together the altering needs the of the management functions.
4. Provide system and techniques to estimate the recital of the right managements in the beam of the objectives of the firm.
5. The management accounting presents the history the figures in such a way as to reproduce the trends of events to the management.
6. Providing mean of communicating management plans to the various levels of the organization and assists the management in directing their activities
7. It is support management in decision making by:-

    a. Providing significant accounting data,

b. Analyzing the outcome of alternative proposals on the profits and the situation of the enterprise.

Serve Management Needs:- Management accounting`s main function is to assist the management. It presents comprehensive accounting information to the management to the facilitate them to keep useful control over stores and stock, to increase efficiency of the organization and check wastage and losses. The various advantages resulting by the management from a high – quality system of accounting are as follows:-

1. Management accounting helps in organizational efficiency.
2. Management accounting check and remover wastages.
3. Management accounting formulates comparisons.
4. Helps in price fixing.
5. Management accounting helps in maximizing profitability.
6. Management accounting protects against seasonal fluctuations & trade Cycle.
7. Management accounting helps in growth of National Economy.
8. Management accounting helps in performance appraisal of business.

Q.6) Difference between Financial Management and management Accounting.

Financial Accounting	**Management Accounting**
Objectives: The primary objective of financial accounting in recording business transactions in a systematic way and assess the business results and financial position of a concern.	Objectives: The objective management accounting is to provide necessary information to the management for the efficient execution of its functions.
Scope: The scope of financial accounting is not vast as compared to management accounting	Scope: The scope of management accounting is most wide because financial accounting cost accounting, statistics & other techniques are used in it.

Q.7) Give limitation of management Accounting?

Ans. The main limitations are as follows:-

1. It is based on historical data.
2. Not an alternative to administration.
3. Psychological resistance.
4. Lack of continuity in efforts.
5. Effect of human factor.
6. Lack of Objectivity.
7. Costly installation.
8. Evolutionary stage.
9. Effect of time factor.
10. Lack of knowledge of Related Subjects.

Multiple Choice Questions

Q. Accounting is BEST described as:

(a) The collection and use of financial and non-financial data

(b) The use of financial data

(c) The collection and use of financial data only

(d) The collection of financial data

Q. Which branch of accounting is MOST concerned with the collection of detailed financial data for use in planning and controlling an entity?

(a) Taxation **(b) Management accounting**

(c) Financial accounting (d) Auditing

Q. Which branch of accounting is MOST closely associated with acquiring and deploying the short term and long term finance required by an entity?

(a) Financial management (b) Management accounting

(c) Financial accounting (d) Auditing

Q. Which of the following activities is NOT an accounting function?

(a) Costing (b) Taxation

(c) Management consultancy (d) Auditing

Q. Which of the following functions is managerial accounting intended to facilitate?

(a) Planning (b) Decision making

(c) Controlling **(d) All of above**

Q. Which of the following statements about difference s between financial and managerial accounting is incorrect?

(a) Managerial accounting information is prepared primarily for external parties such as stockholders and creditors ; Financial accounting is directed at internal affairs.

(b) Financial accounting is aggregated ; managerial accounting is focused on products and departments.

(c) Managerial accounting pertains to both pats and future items ; Financial accounting focuses primarily on past transactions and events.

(d) Financial accounting is based on generally accepted practices ; managerial accounting faces no similar constraining factors.

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Chapter-2

Capital Structure.

Q.1) What is meant by capital structure.

Ans. Capital structure means the pattern of capital employed in the firm. It is a financial plan of the firm in which the various sources of capital are mixed in such proportions that those provide a distinct capital structure most suitable for the requirement of the firm.

Capital structure represents the mutual proportion between long term sources of capital which includes equity shares, preference shares, reserve & surplus and long term debts.

According to Weston and Brigham:- "Capital structure is the permanent financing of the firm, represented by long-term debt, preferred stock and net-worth."

Q.2) Define financial structure, Asset structure and capitalization?

Ans. Financial structure:- refers to the way, the company"s assets are financed. It is the entire left hand side of balance sheet which includes all the long term and short-term sources of capital.

Asset Structure:- Asset structure refers to total assets and their components, It includes all types of assets of the company i.e. fixed assets and current assets.

Capitalization:- Capitalization is a quantitative concept indicating the total amount of long-term finance required to carry on the business capitalization comprises a corporation"s ownership capital and its borrowed capital, as represented by its long - Term indebtedness.

It can be presented by the following figure:-

Financial Structure	Asset Structure	Capitalisation
Equity Share Capital Preference Share Capital Debentures	Fixed Assets. Current Assets Current Liabilities	Equity share Capital Preference Share Capital Debentures

Q.3) What factors should be borne in mind in deciding a capital Structure?

Ans. All the factors which affect its capital structure should be considered at the time of its formation. Generally factors affecting capital structure are divided in two categories, namely (A) Internal factors, and (B) External Factors.

Factors Affecting capital Structure	
Internal factors	**External Factors**
Size of business	Capital Market Conditions
Nature of business	Nature of Invertors
Regularity of Income	Policy of financial Institutions
Assets Structure	Taxation Policy
Age of Firm	Government Control
Attitude of Management	Cost of Capital
Freedom of Working	Seasonal Nature
Desire to control	Economic Fluctuations
Future plans	Nature of competition
Period and Purpose of Financing	
Operating Ratio	
Trading on Equity	

Q.4) What is balanced or optimum capital structure? Give essential of Optimum Capital Structure.

Ans. The optimal or the best capital structure implies the most economical and safe ratio between various types of securities. A capital structure of security mix that minimizes the firm`s cost of capital and maximizes firms‟ value is called optimal capital structure.

Essentials of Optimum Capital Structure:-

1. Simplicity:- The capital structure should not complicated. Therefore, it is essential that in the beginning only equity shares or preference shares should be issued and afterwards debentures may be issued

2. Flexibility:- The capital structure should suit to the requirement of the firm in both short-term and long-term.

3. Minimum Cost:- A sound capital structure must ensure the minimum cost of capital therefore, while determining the capital structure, such a mix of different securities should be selected in which the cost in minimum.

4. Minimum Risk:- The capital structure should be heart risky. Therefore, sound capital structure attempts at a perfect trade-off between return and risk.

5. Maximum Return:- The appropriate capital structure would be one that is most profitable to the company. It is possible when the cost of financing is minimum and the firm earns stables and adequate income regularly.

6. Maximum Control:- The capital structure should be designed to preserve the control of the company`s management in the hands of existing shareholders. Therefore, additional funds be raised through debentures and preference shares.

7. Safety:- Debt should be used to the extent that the burden of fixed charges does not create the danger of insolvency.

8. Full Utilization:- The amount of capital should be determined in such a way that neither there should be over capitalization or under capitalization.

9. Adequate Liquidity:- The capital structure should be determined in such a way the it may always provide adequate liquidity.

10. Alternative Rules:- The capital structure should be that which provides different sights to the securities holder such as return, voting power, redemption, transfer etc. are more and more attractive.

11. Fulfill Legal Requirements:- The capital structure should fulfill certain rules framed in companies and other acts regarding the ratios of various types of securities in the capital structure of business concerns.

Q.5) What is meant by point of indifference?

Ans. Point of indifference is a level of earnings before interest and tax where earnings per share remain constant irrespective of the debt equity mix. The policy of trading on equity increases the earnings per shares but it is beneficial to a certain point after which it can proves to be disastrous. Hence till the rate of intent is lower than the return on assets, trading on equity is beneficial, but when both becomes equal which is called the point of indifference, more use of debt capital will be harmful.

Thus with the help of EBIT- EPS analysis keeping in view the point of indifference an optimal capital structure can be determined.

The point of indifference of EBIT can be ascertained by using the following algebraic formula:

$$\frac{(X - R1)\ (1 - T) - PD}{N1} = \frac{(X - R2)\ (1 - T) - PD}{N2}$$

Where,

X = EBIT at Indifference Point PD = Preference Dividend

R1 = Interest in option I R2 = Interest in option II

N1 = No. of Equity Shares in Option I N2 = No. of Equity Shares in Option II

T = Tax Rate

Q.6) Explain the principle of "Trading on Equity"

Discuss its utility to the management and point out its limitations.

Ans. Gesten berg defines trading on equity in these words: "When a person or corporation used borrowed capital as well as owned capital in the regular conduct of its business then it is said to be trading on equity."

Trading on equity is an arrangement under which a company makes use of borrowed capital carrying a fixed rate of interest or dividend in such a way as to increase the return on equity shares. The policy of trading on equity can be adopted only when the management is confident that he will earn profits more than the interest to be paid on debt capital. In other words, trading on equity is advantageous then the rate of interest on debt is less than the average rate of return, otherwise not.

Utility of Trading on Equity:-

The basic philosophy behind trading on Equity is to use debt capital to earn more than their cost and to raise the sate of return on equity share capital. This policy leads higher dividend rate for equity shares, improvement of the goodwill of the firm and increase in the market price of equity shares. All these factors make it easy to get more lean from market at a lower rate of interest.

Limitations of Trading on Equity:

1. The firm should not follow the policy of trading on equity if there is no certainty and stability of income of the firm.

2. Increasing rate of interest of future loans as the risk of successive creditors increases due to prior lien of the existing creditors on the assets of the firm.

3. Sometimes the management, despite of strong financial position or the capacity to raise loans by issuing debentures at favorable terms, does not prefer the policy of trading on equity.

4. There is a limit of carrying on business with the use of borrowed funds. After that limit, there is a fear of over capitalization.

5. There are some legal and contractual difficulties without the fulfillment of those the management cannot follow the policy of trading on equity.

6. There are some other limitations like increasing burden of interest, interference of creditors in management and falling goodwill of the firm.

Q.7) What is the basic difference between capitalization and capital structure ?

Capitalization	**Capital Structure**
Capitalization is a quantitative concept which shows the total amount of money and finance that is required to start any kind of business.	In capital structure the owners of the company decides that what sources of procurement of funds in what proportion should be used to maximize their profit.

Q.8) Define Financial Structure

Ans. Financial Structure refers to the combination of capital structure and short term liabilities / current liabilities. This can also be shown by the following formula :

Financial structure = Capital structure + Current Liabilities

Q.9) How "Trading on Equity" principle can be helpful to increase rate of return? Explain through an example?

Ans. The Trading on equity is the combination of owners funds and long term borrowed funds by which an organization can increase their return on equity share. This statement can be explained with the following example :

Exp.: Suppose the capital structure of a company comprises of equity share capital of Rs 100,000 and 6% debenture of Rs. 200,000.If average rate of return on total capital is 10 % .

Total capital = Equity share cap. + Debt Capital

= 100,000 + 200,000 = 300,000 Rs.

Calculate average rate of return = 300,000 X 10/100 = 30,000 Rs.

Now company earns a profit of Rs. 30,000 and it has to pay 6% interest on debentures . Calculate Interest on Debenture = 200,000 X 6/100 = 12,000 Rs.

Profit after deducting interest = 30,000 – 12,000 = 18,000 Rs.

Now this amount is distributed in equity share holders at rate of 18%. (18,000/100,000 X 100)

So the figures are showing that rate of dividend on equity share is more than the average rate of return.

Q.10) Write the name of different type of trading on equity ? Ans. There are two types of trading on equity :

1. Trading on Thin equity (equity cap.< debt cap.)
2. Trading on Thick equity (equity cap. > Debt Cap.)

Multiple choice Questions

Q. The term " Capital Structure" refers to :

(a) long-termdebt, preferred stock, and common stock equity.

(b) Current assets and current liability

(c) Total assets minus Liability

(d) Shareholders‟ s equity

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Chapter-3

Theories of capital structure

Q.1) Name the theories of capital structure?

Ans. The theories of capital structure are as follows:-

1. Net Income theory.
2. Net Operating Income theory.
3. Traditional theory.
4. Modigliani – Miller theory.

Q.2) Explain the theories of capital structure in brief?

Ans. Net Income (NI) theory:-

This theory was propounded by David Durand. According to this theory a firm can increase the value of the firm and reduce the overall cost of capital by increasing the proportion of debt in its capital structure to the maximum possible extent.

As debt is cheaper source of finance, it results in a decrease in overall cost of capital leading to an increase in the value of the firm as well as market value of equity shares.

Assumptions:

1. The cost of debt is cheaper than the cost of equity

2. Income tax has been ignored.

3. The cost of debt capital and cost of equity capital remains constant i.e. with the increase in debt capital the risk perception of creditors and equity investors does not change]

4. Total value of firm = Market value of Equity + market value of debt.

Or

Total Value of a Firm = S + D

Where :

S = Market value of equity share D = Market value of Debt

Market Value of share (S)

$$S = \frac{E}{Ke} \quad Or \quad \frac{EBIT-I}{Ke}$$

Where;

E = Earnings available for equity shareholders

EBIT = Earnings before interest and Tax

Ke = Cost of Equity Capital.

3. The overall cost of capital or capitalization ratio:

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

Ko = Overall cost of capital V = Value of the firm.

Net Operating Income (NOI) Theory

This theory has also been propounded by David Durand. This theory is just opposite that of Net Income Theory. According to this theory, the total market value of the firm (v) is not affected by the change in the capital structure and the overall cost of capital (Ko) remains fixed irrespective of the debt-equity mix. According to this theory there is nothing like optimum capital structure.

Assumptions:-

1. The split of total capitalization between debt and equity is not essential or irrelevant.
2. At every level of capital structure business risk is constant; therefore, the rate of capitalization also remains constant.
3. The rate of debt capitalization remains constant.
4. There are no corporate taxes.
5. With the use of debt funds which are cheaper, the risk of shareholders increases, which in turn results to increase in the equity capitalization rate. Hence debt capitalization rate remains constant.

Computation:-

$$\text{Value Of the Firm} = \frac{Net\ Operating\ Income}{Overall\ Cost\ of\ Capital}$$

Value of the firm = $\frac{EBIT}{Ko}$

1. Cost of Equity Capital:- Ke = $\frac{EBIT - I}{S}$

I = Interest on debt S = Value of equity share

Modigliani – miller theory:-

This theory was propounded by Franco Modigliani and Merton Miller (generally referred to as M-M) who are Nobel Prize winners in financial economies. They have discussed their theory in two situations:

(i) When there are no corporate taxes

As per Modigliani – Miller According to this approach the market value of the firm and its overall cost of capital are independent of its capital structure.

According to this theory, two identical firms in all respect, except their capital structure, cannot have different market value or cost of capital due to arbitrage processes.

Assumptions:-

1. The capital market is perfect.
2. There is no transaction cost.
3. All the firms can be divided in hom0geneous risk classes.
4. There is no corporate tax.
5. All the profits of the firm are distributed.
6. Individual investors can easily get loans on the same terms and conditions on which any firm gets.

(ii) When Corporate Taxes Exist:-

M-M‟s emphasizes that value of a firm andoverall cost of capital remain constant with the increase of debt in capital structure does not hold good when corporate taxes are exist.

Corporate taxes are reality; therefore, they changed their basic theory in the year 1963.

They accepted this fact that for corporate tax determination of interest is a deductible expenditure than the cost of debt is low. Therefore if any firm uses debt in its capital structure it leads to reduction in the overall cost of capital and increase in the value of the firm. They accepted that the total value of a leveraged firm is high than the non- leveraged firm.

Computation:-

1. Value of Unleveled firm (Vu)

Vu = $\frac{Earning\ after\ tax\ but\ before\ Interest\ After\ tax}{equity\ capitalization\ Rate}$

Vu = $\frac{EBIT\ (1-T)}{Ko}$

2. Value of levered firm (Vl)

Vl = Vu + Dt or $\frac{EBIT\ (1-T)}{Ko} + Dt$

Where D = Amount of Debt, T = Tax Rate

Traditional Theory:-

The traditional theory is a mid-path between Net Income theory and Net Operating Income theory. According to this theory the cost of debt capital is lower than the cost of equity capital, therefore a firm by increasing the proportion of debt capital in its capital structure to a certain limit can reduce its overall cost of capital and can raise the total value of the firm. But after a certain limit the increase in debt capital leads to rise in overall cost of capital due to increase of financial risk and fall in the total value of the firm. A rational or appropriate mix of debt and equity minimizes overall cost of capital and maximises value of the firm. Thus this theory accepts the idea of existence of optimum capital structure. Ezra soloman has explained the effects of changes in capital structure on the overall cost of capital (Ko) and the total value of firm (V) in the following stages:

First Stage : In the beginning the use of debt capital in the capital structure of the firm results in fall of over all cost of capital and increases the total value of the firm because in the first stage cost of equity remains fixed rises slightly and use of debt is favourably treated in capital market.

Second Stage :- In this stage beyond a particular limit of debt in the capital structure, the additional of debt capital will have insignificant or negligible effect on the value of the firm and the overall cost of capital. It is because the increase in cost of equity capital, due to increase in financial risk, offsets the advantage of using low cost of debt. Therefore during this second stage the firm can reach to a point where overall cost of capital is minimum and the total value is maximum.

Third Stage: - If the proportion of debt capital in the capital structure of the firm increases beyond an accepted limit this dead to increase in the over all cost of capital and fall in the total value of the firm because the financial risk rises rapidly which results into higher cost of equity capital which cannot be offset led by low debt capital cost. Hence, the total value of the firm will decrease and the overall cost of capital will increase.

Multiple Choice Questions

Q. Who was propounded the Net Income Theory

(a) Ezra Soloman

(b) David Durand

(c) Franco Modigilani

(d) None of the above

Q. "Net Income Theory" is also known as :

(a) Fixed Ke Theory

(b) Pecking Order Theory

(c) Traditional Theory

(d) All of Above

Q. Who was given "Traditional Theory"

(a) Ezra Soloman

(b) David Durand

(c) Franco Modigilani

(d) None of the above

Q. Which one statement is correct on the behalf of Net Income Theory.

(a) A firm can increase the value of the firm and reduce the overall cost of capital by increasing the proportion of debt in its capital to the maximum possible extent.

(b) Total market value is not affected by the changes in capital structure.

(c) Market value of the firm and its overall cost of capital are independent of its capital structure.

(d) All of Above.

Q. Prefect capital market refers to :

(a) Investors are free to buy or sale securities.

(b) Investors are free only to buy but not to sale.

(c) Investors are free only to sale but not to buy.

(d) None of the above

Q. Which theory is considered as a modern theory?

(a) Pecking order theory

(b) Informative Asymmetry Theory.

(c) Both (a) & (b)

(d) Only (a)

Q. When and Who was given the Pecking Order Theory ?

(a) Stewart Myres in 1984

(b) Ezra Soloman in 1964

(c) Stewart Myres in 1975

(d) David Durand in1981

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Chapter-4

Operating and Financial leverages

Q.1) What do you mean by leverage?

Ans. Leverage is very general concept. Leverage refers to the used of the fixed cost in an attempt to increase or level up profitability.

"Leverage means the employment of assets or funds for which the firm pays a fixed cost or fixed return. The fixed cost or fixed return may be thought of as the fulcrum of a lever."

Q.2) How to calculate earning per share, Explain through the income statement ?
Ans.

Calculation of EPS	
Total Sales	**XXXXX**
Less : Variable cost	
Contribution	**XXXXX**
Less : Fixed cost	
EBIT (Earnings before interest and tax)	**XXXXX**
Less : Interest on debentures	
EBT (Earning after interest but before tax)	**XXXXX**
Less : Tax	
EAT (Earning after interest and tax)	**XXXXX**
Less : Preference share dividend	
Profit available for equity shareholder	**XXXXX**

Now earning per share can be calculated with the help of following formula:

$$\text{Earnings Per share} = \frac{\textit{Profit available for Equity share holder}}{\textit{No.of Equity Share}}$$

Q.3) What is operating leverage? Give the formula of calculating operating leverage and degree of operating leverage?

Ans. Operating leverage is defined as the ability to use fixed operating costs to magnify the effect of changes in sales on its operating profits. If the fixed operating costs are more as compared to variable operating costs, the operating leverage will be high and vice- versa. Thus, the term „Operating leverage" refers to the sensivity of operating profit to changes in sales.

Computation of Operating leverage:-

$$\text{Operating Leverage} = \frac{Contribution}{Operating\ Profit} \text{ Or } \frac{Sales - Variable\ cost}{Contribution - Fixed\ Cost}$$

Degree of Operating Leverage- (DOL)

The degree of operating leverage may be defined as the percentage change in operating profits resulting from a percentage change in sales

On two levels of sales for comparison:-

$$\text{Degree of operating leverage (DOL)} = \frac{percentage\ change\ in\ profits}{Percentage\ change\ in\ sales}$$

On one level of sales:-

$$\text{Degree of operating leverage (DOL)} = \frac{\text{Contribution}}{EBIT}$$

Q.4) What is favorable operating leverage and what is the utility of operating leverage?

Ans. When the profits increase with the increase in sales it is called favorable operating leverage.

Utility of operating leverage:

Operating leverage helps in capital structure decisions and play a vital role in formulation of an optimum capital structure. It is most helpful in long term profit planning as it is useful in taking decisions regarding capital expenditure. It is true to say that operating leverage is basically used in taking capital budgeting decisions.

Q.5) What is meant by „financial leverage"? How it is computed?

Ans. Financial leverage arises from the presence of fixed financ ial costs in the income stream of the firm or due to presence of fixed return securities in the capital structure of the company. Fixed cost securities are debentures and preference share and also long term borrowings.

Thus financial leverage is defined as, „the firm ability to use fixed financial cost to magnify the effect of changes in earnings before interest and tax (EBIT) on firm‟s earnings per share. (EPS)

Financial leverage may be favorable or unfavorable. If the company`s rate of earning is higher than the rate of fixed charges. The firm is considered to have "favorable financial leverage‟. If the firm earns less than the cost of borrowed funds, the firm is said to have an "unfavorable financial leverage‟.

Computation of Financial leverage:-

Financial leverage (FL)= $\frac{Earnings\ before\ interest\ and\ tax}{Earnings\ before\ tax\ but\ after\ interest}$

or Financial leverage (FL) = $\frac{EBIT}{EBT}$

Degree of Financial leverage: (DFL)

(a) On one level of profit:

DFL = $\frac{EBIT\ or\ Operating\ Profit}{EBT}$

(b) On two level of profit for comparison :

DFL = $\frac{\%Change\ in\ EPS}{\%\ Change\ is\ EBIT}$

Q.6) What is combined leverage, give its formula?

Ans. The combined leverage may be defined as the relationship between contribution and the taxable income; it is the combined effect of both the leverage. It can be calculated with help of following formula.

Combined Leverage = Operating Leverage X Financial Leverage.

Or $\frac{Contribution}{EBIT} X \frac{EBIT}{EBT}$ Or $\frac{Contribution}{EBT}$

Degree of Combined Leverage : (DCL)

DCL = DOL x DFL Or

DCL = $\frac{(\%\ Change\ in\ EBIT)}{(\%\ Change\ in\ Sales)} X \frac{(\%\ Change\ in\ EPS)}{(\%\ Change\ in\ EBIT)}$

Or

$$DCL = \frac{(\%\ Change\ in\ EPS)}{(\%\ Change\ in\ Sales)}$$

Q.7) Give difference between operating and financial leverage .

Ans. Difference between operating and Financial leverage

S. No.	**Operating Leverage**	**Financial Leverage**
1.	Establishes relationship between sales and Operating Profits	Relationship between Operating profits and return on owners equity.
2.	Concerned with investment decisions	Concerned with method of finance.
3.	Refers to fixed costs in the operations	Refers to the use of borrowed funds.
4.	Relates to the assets side of Balance sheet.	Relates to the liability side of Balance Sheet.
5.	Involves operating risk of being unable to cover fixed operating cost.	Involves financial risk being unable to cover fixed financial cost.
6.	First stage leverage.	Second stage leverage as financial leverage starts where operating leverage ends.

Key Terms

Operating Leverage : Operating leverage may be defined as the firms ability to use fixed operating cost to magnify the effects of changes in sales on its earning before interest and tax.

Financial Leverage : financial leverage is defined as the firm ability to use d fixed financial charges to magnify the effects of changes in EBIT on the firms earning per share.

Indifference Point: The break even point is the EBIT level where EPS is same for two or more alternatives.

Multiple Choice Questions

Q. Operating Leverage is related to which cost :

(a) Fixed Financial cost (b) Overhead Cost
(c) Fixed operating Cost (d) All of above

Q. is the best example of fixed operating cost ?

(a) Fixed Financial cost (b) Fixed operating cost
(c) Rent on building (d) None of above.

Q. is the best example of fixed financial cost?

(a) Fixed Financial cost (b) Fixed operating cost
(c) Rent on building **(d) None of above.**

Q. financial leverage related to which cost?

(a) Fixed financial cost (b) Fixed operating cost
(c) Both (a) & (b) (d) None of above

Q. Contribution is the difference between :

(a) Sales – Fixed cost **(b) Sales – Variable cost**
(c) Sales - Interest on debentures (d) Sales – Depreciation

Q. If sales volume of a company is 100,000 Rs. and variable cost is 40,000 Rs then what will be the contribution ?

(a) 1,40,000 **(b) 60,000**
(c) 80,000 (d) None of the above

Q. In which condition financial leverage has a positive and or a favourable effect?

(a) Fixed financial cost is higher than the rate of return
(b) Fixed financial cost is less than the rate of return
(c) Fixed financial cost is equal to rate of return
(d) None of above

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Chapter-5

Management of Working Capital

Q.1) What do you understand by working Capital? Explain the concept and determinants of working capital.

Ans. Working capital is a fund needed to fulfill the operating cost of a concern. Each and every business concern should have adequate funds to meet its day-to-day expenses and to finance current asset viz., debtors, receivables and inventories. The funds tied up in current assets are known as working capital funds. The current assets are those assets which are easily converted into cash within a financial year.

Therefore, working capital is also known as circulating capital, „revolving capital,‟ „short-term capital‟, or liquid capital.

Concepts of working capital:- The working capital has following concepts:

1. Quantitative concept /caress working capital concept:- The gross working capital refers to the firm‟s investment in current assets. According to J.S. Milli, "The sum of current assets is the working capital of the business."

From the management point of view, this concept is more appropriate as the management formulates all the plans on the basis of current assets and concentrates his attention on the quantum of current assets and their profitability. Thus, this is a quantitative aspect of working capital which emphasizes more on quantity than its qualities.

2. Qualitative or Net working capital concept: - The net working capital means the difference between current assets and current liabilities. If the amount of current assets and current liabilities is equal, it means that there is no working capital.

The net working capital is a qualitative aspect of working capital and it measures the firm‟s liquidity. It also indicates the extend to which working capital can be financed with ling term funds. This concept is useful only for accountants, investors, creditors or those persons who have interest in the liquidity and financial soundness of the firm.

3. Operating Cycle concept:- The amount of working capital required by a firm depends upon the length of production process and the expenses needed for this purpose The time required to complete the production process right from Purchase of raw material to the realization of sales in cash is called the operating cycle or working capital cycle.

This concept is more appropriate than the qualitative and quantitative approach because in this case the fund required for carrying on the operational activities is treated as working capital. It is also called circulating capital.

Diagram of Operating Cycle.

Determinants of Working capital :- The amount of working capital required depends upon a large number of factors and each factor has his own importance,

They also wary from time to time in order to determine the proper amount of working capital of a firm, the following factors should be kept in mind :-

1. Nature of business
2. Size of business
3. Production process and policies
4. Changes in technologies
5. Requirement of cash
6. Availability of raw material
7. Length of operating Cycle
8. Seasonal Nature of Business
9. Firm`s Credit Policy
10. Terms of Purchase and Sales
11. Business Cycle fluctuations
12. Rate of growth of business
13. Dividend policies
14. Working capital turnover
15. Taxation Policies

Q.2) Name the methods of estimating working capital requirements. Explain the method of calculating working capital by operating cycle and forecasting method?

Ans. Following methods are generally used in estimating working capital :

(i) Operating Cycle Method

(ii) Net Current Assets Forecasting Method
(iii) Projected Balance Sheet Method
(iv) Adjusted Profit and Loss Method
(v) Regression Analysis method

<u>Operating Cycle Method</u> Under this method working capital is estimated by dividing operating expenses incurred during the year by number of operating cycles in a year.

Steps for determining working capital :

Step 1. Calculation of total operating expenses : -

Total operating Expenses = Prime Cost + Factory Expenses + Office and administrative expenses + Selling and distribution expenses for a specific period. (Depreciation and other non-cash and non-operating items are excluded)

Step 2. Calculation of operating Cycle Period –

Operating Cycle = M + W + F + D – C

(a) [M] Material Storage Period = $\frac{Average\ stock\ of\ Raw\ Material}{Daily\ Average\ Consumption}$

Average Stock = $\frac{Opening\ Stock + Closing\ Stock}{2}$

Daily Average Consumption = $\frac{Annual\ consumption\ of\ Raw\ material}{365}$

(b) [W] W/P or Conversion Period = $\frac{Average\ Stock\ of\ work\ in\ progress}{Daily\ Average\ Consumption}$

Daily Average Production Cost = $\frac{Total\ Production\ Cost}{365}$

Total Production or Factory Cost = Prime cost + Factory Expenses + Opening Stock of W.I.P – Closing Stock of W.I.P

(c) [F] Finished Goods Storage Period = $\frac{Average\ stock\ of\ Finished\ Goods}{Daily\ Average\ cost\ of\ Goods\ Sold}$

Daily Average cost of goods sold = $\frac{Total\ cost\ of\ Goods\ sold}{365}$

Cost of goods sold = Production / Factory Cost + Excise Duty + Opening stock of finished goods – closing Stock of finished goods.

(d) [D] Debtors Collection Period = $\frac{Average\ Debtors + B/R}{Credit\ Sales\ per\ day}$

Credit Sales per day = $\frac{Total\ credit\ Sales}{365}$

(e) [C] Creditors payment period = $\frac{Average\ Creditors + B/P}{\text{Credit Purchase per day}}$

Step 3. No. of operating cycles in a year –

No. of operating cycles = $\frac{365}{Operating\ Cycle\ Period}$

Step 4. Requirement of Working capital

Working Capital = $\frac{Total\ Operating\ Expenses}{No.of\ Operating\ cycles\ a\ year.}$

WC = C + $\frac{OC}{N}$ x CS

WC = Working Capital C = Cash Balance
OS = Operating Cycle Period CS = Total Operating Expenses
N = No. of days in a year.

Step 5. Provision for contingencies –After determining the amount of working capital, a certain amount say 5% or 10% may be added to cover contingencies.

Net current assets Forecasting Method

According to this method an estimate of all the current assets is made on monthly basis. This should be followed by an estimate of current liabilities. Difference between the forecasted amount of current assets and current liabilities gives net working capital requirements of the firm. Reserve for contingencies will be added to this figure.

Following factors should be kept in mind while using this method :-

1. Stock of finished goods and debtors should be calculated at cash cost.

2. Calculation of „work- in-progress" depends upon the degree of completion as regard material, labour and overheads. If production cycle is evenly than material period will be taken 100% and 50% in case of labour and overheads.

Working capital can be calculated by forecasting method as follows:

A. For a trading concern :

Statement of Working capital Requirements

Items	Amount
A. Current Assets :	**Format**

Q.3) Who was the chairman of Tandon Committee and when it was constituted?

Ans. Tandon committee was constituted in July, 1974 under the chairmanship of P.L. Tandon.

Q.4) What are the three principles of Tandon Committee? Give any two recommendations of Tandon Committee.

Ans The recommendations were mainly based on the following three principles:

1. The borrowers should have to maintain a reasonable financial discipline and give information to the banks regarding projects.
2. The main function of a banker as a lender is to supplements the borrower`s resources to carry on acceptable level of current assets.
3. The bank should also know the purpose for which loan has been taken.

<u>Recommendations of Tandon Committee:</u>

1. The committee has suggested norms for 15 major industries regarding maximum levels for holding inventory and receivables.
2. The committee introduced the concept of „maximum permissible bank finance‟. The working capital gap should be bridged by the borrower‟s own funds, long term borrowings and partly through bank borrowings.

Q.5) What do you understand by core current assets?

Ans. The term „core current assets‟ refers to the absolute minimum level of investment in raw material, work in-progress, finished goods and stores which are required at all time to carry out the minimum level of business activity. It is also called permanent working capital.

Q.6) What are the significance of Adequate working capital?

Ans. Major significance of working capital is:

1. Prompt payment to suppliers and benefit of cash discount.
2. Adequate Dividend Distribution.
3. Increased Goodwill and Debt Capacity.
4. Easy loans from Banks.
5. Increased Efficiency.
6. Increase in Fixed Assets Productivity.

Q.7) What are the sources of working capital finance?

Ans. Following are main sources through which we can raise finance for working capital :

1. Public Deposits
2. Commercial Bank or Bank credit
3. Trade Credit
4. Commercial Papers
5. Advance from customers

Key Terms

Working Capital: Working capital means a part of total assets of the business changes from one to another form in ordinary courses of business operations.

Gross Working Capital : Gross working capital is a firm`s investment in current assets.

Net Working Capital : Net working capital is the difference between current assets and current liability.

Operating Cycle : Operating cycle is the time duration which is required to complete the production process from procurement of raw material to the relisation of sales is called operating cycle.

Specific Working Capital : Specific working capital is that part of working capital which is required to meet unforeseen conditions like slump , strike , flood ,war etc.

Seasonal Working capital : The part of working capital which is required to meet seasonal demand of the enterprise

Public Deposits : Public deposits means any money received from public including employees, customers etc.by non banking company other than in the form of share and debentures.

Commercial paper : Commercial papers is a promissory note payable to bearer and issued by business firm for a definite period normally 90 days based on discount , to raise short term funds

Multiple Choice Questions

Q. Which of the following point will improve a company`s working capital management position?

(a) An increased level of bad debts

(b) An increase in the stock turnover period

(c) An increase in the length of the production process

(d) An increase in the credit period allowed by suppliers

Q. If current assets are increased from one financial year to another what will be the effect in statement changes in working capital ?

(a) Working capital will also increased.

(b) Working capital will decrease.

(c) Working capital will be equal in both financial year

(d) None of the above.

Q. If current liabilities are increased from one financial year to another what will be the effect in statement changes in working capital?

(a) Working capital will decrease

(b) Working capital will increase

(c) Working capital will be equal in both financial year

(d) None of them.

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Chapter-6

Financial Statements & Techniques of Financial Analysis

Q.1) What do you mean by financial Statements? Give the names of major financial Statements?

Ans. Financial statements refer to the statements that show the financial position and results of business activities at the end of the accounting period. The financial statements of a concern consist of two statements:-

(i) Position Statement or Balance Sheet
(ii) Income Statement or profit and loss Account

Q.2) What are objectives of financial statements? Explain the essential qualities of financial statements?

Ans. The main objective of preparing financial statements are :-

1. To provide financial information regarding assets, liabilities, and owner`s equity to the various interested parties such as management, Investors, Creditors, and Government etc.
2. It measures the financial position of a business concern both in short term and long term.
3. To provide necessary information for optimum utilization of resources of the company.
4. To develop faith among the investors regarding the financial position of the concern.
5. To assist the creditors, investors and other parties in assessment and comparison of the assets and liabilities of the company.
6. To serve as the basis of future operations.

Essential Qualities of Financial Statements

Different users like shareholders, investors financial institutions, workers etc. are interested in financial statements, therefore they must be clear, detailed and purposeful. They must possess the following qualities:-

1. Relevant:- Information which clearly explains the objectives of the concern should only be disclosed in the financial statements.

2. Completeness:- The information should be complete in all respects. For providing complete information use of tables, interpretation, explanation, foot-notes etc. must be done.

3. Understandability:- The information should be given in financial statements in such a way that even the layman can read and understand.

4. Accuracy:- Information provided in financial statements should be reliable and must give accurate position the concern`s present position progress and future strategy.

5. Comparability:- Comparison is the essence of financial statement analysis. Financial statements should be prepared in such a way that current year`s progress can be compared with that of previous year and inter firm comparison is possible.

6. Timeliness:- Financial statements must possess the quality of promptness i.e. as soon as the financial year ends they must be ready and submitted to the parties concerned.

Q.3) State the nature and limitations of financial statements?

Ans. The nature of financial statements as described by the American Institute of certified Public Accountants states that, "financial statements reflect a combination of recorded This implies that data exhibited in financial statement are affected by –

1. Recorded Facts
2. Accounting conventions and postulates
3. Personal Judgment.

Limitations of Financial Statements :

Although Financial Statements have the appearance of completeness, exactness and finality yet they suffer mainly from the following limitations:-

1. Lack of High Accuracy
2. Lack of qualitative information
3. The information is not precise.
4. They are based on historical cost
5. Do not reflect price level changes.
6. Lack of comparability.
7. Hiding the real position or window Dressing.
8. Affected by personal bias and knowledge.

Q.4) Give four names of fictitious assets and intangible fixed assets .

Ans. Fictitious Assets are:-

1. Preliminary expenses
2. Underwriting commission
3. Discount on issue of shares and Debentures.

Intangible fixed Assets are:-

1. Goodwill
2. Patent
3. Trademark
4. Copyright.

Q.5) What is Balance Sheet? Illustrate the forms and contents of a balance sheet.

Ans. Balance sheet is one of the most significant financial statements of the business firm. Balance sheet is a statement of assets, liabilities and owner‟s equity at their respective book values of a business firm as on a specific date

Some important definitions are as follows:-

1. "Balance sheet is a screen picture of the financial position of a going business at a certain moment". - Francis R. Stead.

2. "The Balance Sheet might be defined as the dual financial picture of an enterprise, depicting, on the one hand, properties that is utilized and on the other hand, the sources of those properties." - H.G..Guthmann.

Q.6) What do you mean by „Analysis of Financial Statements‟? Point out the main objective of financial statement Analysis ?

Ans. Analysis of financial statements is the systematic numerical calculating of the relationship between one fact with the other to measure the profitability, operational efficiency and the growth potential of the business.

The main objectives of analysis of financial statements are:-

1. To measure an enterprise`s operating efficiency and profitability.
2. To evaluate operational efficiency.
3. To analyze the financial position of an enterprise.
4. To examine the liquidity and solvency position.
5. To make a comparative study of financial statements with other enterprises.
6. To plan future strategy of an enterprise.
7. Spot weakness in the company`s operations and take corrective actions.

Q.7) Explain the process of financial analysis.

Ans. Process of financial Analysis is:-

1. Determining the objects of Analysis.

2. Study of past financial statements.
3. Collection of Additional information
4. Approximation and Tabulation
5. Established Relationship between elements.
6. Study of Trend
7. Analysis and Interpretation 8.Presentation and Drawing conclusions.

Q.8) Give the name of main techniques of Financial Analysis?

Ans. Techniques of Financial Analysis:-

- Comparative Financial Statements.
- Common Size Financial Statements.
- Trend Analysis
- Financial Ratios.
- Funds flow statement
- Cash Flow Statement
- Break even Analysis.

Q.9) Write short notes on the following:

1. Comparative Statements
2. Common – Size Statements
3. Trend Analysis

Ans

(i) Comparative statements:- Comparative financial statements are those statements which present and summarize related accounting data for a number of years showing changes (Absolute or relative or both) in individual items. Comparative financial statement provides necessary information for the study of financial and operational results over a period of time.

Generally the comparative Balance sheet and comparatively profit and loss account are most commonly used.

(a) Comparative Balance Sheet:-Comparative Balance sheet is a method by which comparison of balance sheet made at different period of time. The original data of two years is shown in the first two columns. The third column contains increase or decrease in various items of the balance sheets. After that in the fourth column percentage increase or decrease is shown.

(b) Comparative Income Statement or profit and loss Account:- In comparative Income statement the change in sales, for a number of accounting periods in absolute figures and percentages is shown.

The comparative income statement also has four columns, first two for original figures of two years and third column for changes in absolute money figures and the fourth for showing relative changes i.e. percentages.

(ii) Common –size statements:- Expressing each monetary item of the financial statement as a percentage of some total of which that item is a part, transforms a financial statement, is called common-size statement.

According to Kennedy and McMullen, "If the balance sheet and income statement data are shown in analytical percentage – that is, percentages of total assets, total liabilities and owner`s equity, and total net sales – a common base for comparison is supplied. The statement in this form are designated as "common size statements."

Common size statement include common-size balance sheet and common size Profit and loss account -

(a) Common Size Balance Sheet:- The Balance Sheet converted into percentage form is called common size balance sheet. For preparing common-size balance sheet percentage of each item is calculated taking some common base. The total of liabilities and assets is taken as base, i.e. the sum of assets and liabilities is taken as 100 and other items are expressed as its percentage.

(b) Common Size Profit and loss Account:- In common size profit and loss Account sales figure is taken as base and other items are expressed as percentage of sales. It is useful in studying the trends in the internal items of profit and loss account. The common size profit and loss account is more useful than common size balance sheet.

(iii) Trend Analysis:- The trend analysis is the method of analyzing financial position of a business on the basis of changes in the items of financial statements of successive years in comparison to a specific date or period of commencement of study. The position of a company cannot be judged only by seeing its present situation, for proper judgment we need part data. Trend analysis is a method by which we can depict general tendency of the data. The following are the methods of trend analysis:-

a. Trend percentages b. Trend Ratios

c. Graphic or Diagrammatic presentation.

Q.10) Distinguish between Horizontal Analysis and Vertical Analysis?

Ans. When financial statement for a number of years are reviewed and analysed, it is called horizontal analysis while establishing mutual relationship between the different components of both the statements for a definite period is called vertical analysis.

Horizontal analysis studies trend of different items from year to year to year while in vertical analysis various items are expressed as percentage to any one item taken as base.

Multiple Choice Question

Q. Which of the following is not a reason financial analysis is useful to investors?

(a) Past performance is often a good indicator of future performance
(b) Investors read financial statements either to monitor their current investments or to plan their future ones
(c) Current position is the base on which future performance must be built
(d) Investors use financial statements analysis to assess the risk associated with their expected returns
(e) Future trends can always be accurately predicted

Q. In relation to a company, creditors are least concerned with:

(a) Its future share price
(b) Its solvency
(c) Its profitability
(d) Its short-term liquidity
(e) Its short-term liquidity

Q. In relation to a company, investors are least concerned with:

(a) Its short-term liquidity
(b) Its solvency
(c) Its future share price
(d) Its profitability
(e) Investors are concerned about all of the above

Q. Which of the following is not true of trend analysis?

(a) It concentrates on the relative size of current assets
(b) It examines the relationships of percentage changes to each other
(c) It concentrates on different geographic segments of production
(d) It examines changes over time
(e) It uses changes in euro amount and percentage terms to identify patterns

Q. Which of the following statements are true in relation to common-size statements analysis? (several possible answers)

(a) It may concentrate on the relative size of current assets
(b) It concentrates on different geographic segments of production
(c) It may concentrate on the gross margin percentage
(d) It uses changes in euro amount and percentage terms to identify patterns
(e) It examines changes over time

Q. The difference between total current assets and total current liabilities is

(a) Operating working capital
(b) Trade working capital
(c) Accounting working capital
(d) None of the above

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Chapter-7

Ratio Analysis

Q.1) What is Ratio Analysis? Give significance or objective of Ratio Analysis?

Ans Ratio analysis is a process of establishing the significant relationship between the items of financial statement to understand the positio n of a firm. It is a most important tools of evaluating and assessing the efficiency and effectiveness of a concern in various areas of operations.

J. Betty Stated that, "Ratio analysis is used to describe significant relationship which exists between figures shown on a balance sheet, in a profit and loss account, in a budgetary control system or in any other part of the accounting organizations"

Objectives of Ratio Analysis:

1. Express Trends
2. Helps in planning & forecasting
3. Measures profitability
4. Measures operational Efficiency
5. Facilitates comparison
6. Knowledge of long-term solvency
7. Measures Liquidity Position
8. Helps in Decision Making & setting standards.

Q.2) Give limitations of Ratio Analysis?

Ans. Limitations of Ratio Analysis:-

1. Single ratio in itself is meaningless; it does not furnish a complete picture.
2. Lack of Qualitative Analysis of the problem.
3. Affected by Window Dressing.
4. Effect of inherent limitations of accounting
5. Difference in Accounting methods and systems
6. Lack of proper standards
7. Future estimates on the basis of part.
8. Effect of personal Ability and Bias of the Analyst
9. Do not reflect price level changes.
10. No Substitute for Sound Judgment.

Q.3) What do you mean by liquidity? Show the calculation of various liquidity ratios.

Ans. Liquidity refers to the firm`s ability to meet its current financial obligations when they arise liquidity ratio studies the firm`s short-term solvency and its ability to pay liabilities.

Some of the principle liquidity ratios are as follows:-

(i) Current Ratio:- Current ratio shown the relationship between current assets and current liabilities. It is also known as working capital ratio.

Formula = Current Ratio = $\frac{CA}{CL}$

Ideal Ratio = 2 : 1

Current assets represent those assets which can be converted into cash within a period of one year, where as current liabilities means obligations. Which are to be paid within a period of one year.

Interpretation: If current ratio is 2 or more it means concern has the ability to meet its current obligations but if ratio is less than 2, this shows that concern has difficult in meeting current obligations.

(ii) Quick Ratio / Liquid Ratio / Acid – Test Ratio: - Liquidity ratio is the measure of the instant debt paying ability of the business enterprise. This ratio established the relationship between quick current assets and liquid current liabilities.

Formula = Quick Ratio = $\frac{QA}{CL}$

Quick Ratio(QA) = Current Assets - (Stock + Prepaid Expenses) Quick Assets = Current Assets – (Stock + Prepaid Expenses)

Ideal Ratio :- 1 : 1

Interpretation:- Liquid Ratio of 1 : 1 is considered satisfactory. This ratio reveals liquidity position of a firm. If this ratio is less than 1:1, financial position of the firm is unsound. A concern having quick ratio of less than one, may not meet its short term obligations, while a concern having quick ratio of more than one, may be able to meet its short term obligations in time.

(iii) Absolute Liquidity Ratio:- This is also known as super quick ratio. Absolute liquidity ratio is the relationship between the absolute liquid or super quick assets to liquid or quick liabilities.

Formula:- Absolute Liquidity Ratio = $\frac{Absolute\ Liquid\ Assets}{Quick\ Liabilities}$

Absolute Liquid Assets = Cash + Bank + Marketable Securities

Quick Liabilities = Current Liabilities – Bank Overdraft.

Ideal Ratio = .5 : 1

Interpretation: If absolute liquid assets are 50% in comparison of quick liabilities it is considered satisfactory because it indicates that firm has enough cash to pay its creditors. It also reveals that the firm should avoid use of short – term loan from bank.

Q.4) What are activity / Efficiency ratio? Explain the various activity ratios.

Ans. Activity Ratios are also known as Turnover Ratios. It is a measure of movement and indicates as to how frequently an account has turned over during a period. An activity ratio is the relationship between sales or cost of goods sold and investment in various assets of the firm. There ratios are always expressed as turnover or in number of times.

The various activity ratios are as follows:-

(i) Stock / Inventory Turnover Ratio: - This ratio tells the rate at which stock is converted into sales and it established a relationship between cost of goods sold and average stock.

Stock Turnover Ratio = $\frac{Cost\ of\ Goods\ Sold}{Average\ Stock}$

Cost of goods sold = Opening Stock + Purchases + Direct Expenses – Closing Stock.

Average Stock = $\frac{Opening\ Stock + Closing\ Stock}{2}$

Interpretation: - The inventory turnover ratio is an index of profitability as a high ratio reflects efficient business activates and on the contrary, a low ratio reflects dull business, over investment in stock and stock of unseal able & obsolete goods.

(ii) Debtors or Receivables Turnover Ratio:- This ratio established the relationship between net credit sales and average debtors to determine the efficiency with which the trade debtors are managed.

Formula: Debtors Turnover Ration = $\frac{Net\ Credit\ Sales}{Average\ Receivables}$

Net Credit Sales = Total Credit Sales – Sales Return

Average Receivables $= \frac{Opening\ Debtors\ \&\ B/R + Closing\ Debtors\ \&\ B/R}{2}$

Interpretation:- A higher ratio indicates the efficiency in collection from debtors and a lower ratio indicates inefficiency of management in collection from debtors. The low ratio increases the chances of Bad-debts.

(iii) Creditors or Payable Turnover Ratio :- This ratio shows the relationship between net credit purchases and average creditors to determine the efficiency with which the creditors are managed.

Formula: Creditors Turnover Ratio $= \frac{Net\ Credit\ Purchases}{Average\ Payables}$

Net Credit Purchases = Total credit Purchases – Purchase return.

Average payables $= \frac{Opening\ Creditors\ B/P + Closing\ Creditors\ \&\ B/P}{2}$

Interpretation:- The lower the ratio, the better is the liquidity position of the firm, and the higher the ratio, the lesser is the liquid position of the firm.

(iv) Total Assets Turnover Ration :- This ratio is calculated by dividing cost of goods sold by total assets employed in business. This ratio indicates how effectively the assets of a business are used.

Formula : Total Assets Turnover Ratio $= \frac{Cost\ of\ goods\ sold\ or\ Net\ Sales}{Total\ Assets}$

* While calculated total assets fictitious assets are excluded.

Interpretation: - This ratio indicates the number of times the assets are turned over in a year in relation to sales. If the ratio is low it indicates that the assets of the organization are not being effectively utilized and high ration indicates intensive utilization of fixed assets.

(v) Fixed Assets Turnover Ratio $= \frac{Sales\ or\ cost\ of\ good\ sold}{Fixed\ assets\ less\ depreciation}$

Interpretation- This ratio is useful for manufacturing concern. A high ratio is a symbol of better performance & a decline would shows under-utilization of fixed assets.

(vi) Current Assets Turnover Ratio : - This is a ratio between current assets and net sales / cost of goods sold.

Formula : Current Assets Turnover Ratio = $\frac{Sales\ or\ Cost\ of\ good\ sold}{Current\ Assets}$

Interpretation : - This ratio is useful for non- manufacturing units which indicates effective use of current assets and over and under investment in the firm.

(vii) Working capital Turnover Ratio : - This ratio shows the relationship between net working capital and net sales / cost of goods sold.

Formula : Working capital Turnover Ratio = $\frac{Net\ sales\ or\ Cost\ of\ goods\ sold}{Net\ working\ capital.}$

Net working capital = Current assets – current Liabilities

Interpretation : Higher sales in comparison to working capital means over- trading and lower sales in comparison to working capital means under-trading

(viii) Capital Turnover Ratio : - This ratio establishes a relationship between capital employed in business and sales / cost of goods sold.

Formula : Capital Turnover Ratio = $\frac{Net\ sales\ or\ Cost\ of\ goods\ sold}{\text{Capital Employed}}$

Capital Employed = Total Assets - Current Liabilities.

Interpretation : - This ratio is a measurement of effective use of capital employed which shows profit earning capacity and managerial efficiency of the business. Higher ratio shows higher profit and lower ratio shows lower profit.

Q.5) What is meant by capital structure ratios? Explain the main capital structure ratios.

Ans. Capital structure or leverage ratios are calculated to judge the long-term solvency or financial position of the firm. These ratios show how much amount in introduced by the owner in business and generally these ratios beneficial to the long-term creditors. The important capital structure ratios are : -

(i) Debt-Equity Ratio: - This ratio indicates the relationship between internal and external sources of funds, which measures the relative proportion of debt and equity in financing the assets of the firm.

Formula : Debt –Equity Ratio $= \dfrac{External\ Equities}{Internal\ Equities\ /\ Shareholders\ fund}$

Or

Debt –Equity Ratio $= \dfrac{Outsiders\ Fund}{Shareholders\ Fund}$

External Equities = Long-term loans + Debentures + current liabilities

Internal Equities = Equity Share capital + preference share capital + reserve & Surplus – fictitious assets.

Interpretation : - A high debt equity ratio indicate that the claim of the Creditors are greater than the of the owners. A high ratio is unfavorable from the firm`s point of view, whereas a low debt-equity ratio provide sufficient safety margin to creditors due to high stake of owners in the company.

(ii) Proprietary Ratio: - This ratio establishes a relationship between shareholder`s fund and total tangible assets.

Formula : Proprietary ratio $= \dfrac{Proprietor`s\ fund}{Total\ Assets}$

Proprietor`s fund/net worth $= \dfrac{Shareholder`s\ fund}{\text{Internal Equities}}$

Classification of Proprietary Ratio : -

(a) Fixed Assets to Proprietary fund Ratio $= \dfrac{fixed\ assets\ (less\ depreciation)}{Proprietors\ fund}$

(b) Current Assets to Proprietary fund Ratio $= \dfrac{Current\ Assets}{Proprietors\ Fund}$

Interpretation - This ratio highlights the general financial strength of the firm. A ratio of 50% is generally considered safe for the creditor. Higher the ratio the more secured is the position of creditors & the lower the ratio the greater risk to the creditors.

(ii) Solvency or Debt to total Assets Ratio - This ratio is calculated to measure the long-term solvency of business. This ratio shows the relationship between total asset and outside liabilities.

Formula : Solvency Ratio $= \dfrac{Total\ Outside\ Liabilities}{Total\ Assets.}$

Interpretation : - This ratio indicates whether the funds of the company are sufficient to meet its total liabilities. If total assets are more than external liabilities, the firm is treated as solvent.

(iv) Fixed Assets Ratio : - This ratio is also called "Capital Employed to fixed Assets Ratio". It shows the relationship between long-term funds and fixed assets.

Formula: Fixed Assets Ratio = $\frac{Long\ term\ funds\ or\ Capital\ Employed}{Total\ Assets.}$

Capital Employed = Shareholders Fund + Long term loans + Debentures.

Interpretation : - This ratio reveals long-term solvency of the business. If this ratio is more than one it shows that long-term funds are used to finance current assets. On the contrary, a ratio of less than one indicates that a part of fixed assets is financed by short-term funds.

(v) Capital Gearing Ratio : -This ratio shows the relationship between fixed cost bearing capital and variable cost bearing capital. It is mainly used to analyze the capital structure of the company.

Formula : Capital Gearing Ratio = $\frac{Fixed\ cost\ bearing\ capital}{Variable\ cost\ bearing\ Capital}$

Fixed cost bearing capital = Preference Share Capital + Debentures

+ Long term loans.

Variable cost bearing Capital = Net worth – Preference Share capital

(vi) Interest Coverage Ratio/Debt Service Ratio : - This ratio is calculated to measure the debt-servicing capacity of a firm. It is determined by dividing the operating profits or net profits before interest and tax by the fixed interest charges.

Formula : Interest Coverage Ratio = $\frac{Net\ Profit\ (before\ interest\ and\ tax)}{Fixed\ Interest\ Charges.}$

Interpretation : - Interest coverage ratio shows the number of times the interest charges are covered by the income out of which they will be paid. Higher the ratio the more beneficial for the lenders, because this ratio measures the margin of safety for the lenders.

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Chapter-8

Cash Flow Analysis

Q.1) What is a cash flow statement? Describe its main uses.

Ans. The cash flow statement reveals the changes in cash poison of the firm. It shows the movement of cash, into and out of the business, by listing the sources of cash receipts and the uses that have been made of cash. Transactions which increase the cash position are termed as „inflows‟ of cash and those which decrease the cash position are termed as „outflows‟ of cash.

Uses or significance of cash Flow Statement

1. Reflects the movement of cash – With the help of this statement the causes for the increase or decrease in cash are analyzed. It also explains the reason why the business has run out of money, despite the fact that the business has made a profit, or it has surplus of cash when the business has incurred a loss.
2. Helpful in Internal financial Management – Cash is the basis of carrying on business operations, the protected cash flow statement for the future period should enable the management to formulate future financial plans and helps in the financial operations of the business.
3. Helpful in controlling – Analysis of cash flow statement helps in controlling the cash balance of business by comparing the projected statement with the actual cash flow statement.
4. Helpful in short – term financial decisions – Forecasting of cash in short – term financial decisions reveals the position of liquidity of the firm and guides the analyst that in such position which transaction should be carried and which should not be carried.
5. Helpful in forecasting – Study of cash flow statements of different years helps in forecasting. This study facilitates focusing on the trend of movement that would have gone undetected otherwise.

Q.2) Distinguish between cash flow statement and funds flow statement.

Ans. Difference between cash flow and fund Flow state

S. No.	Basis	Cash Flow Statement	Funds Flow statement
1	Meaning of fund	Funds mean only cash which is a component of net current assets.	Fund means net working capital.
2	Objective	Objective of cash flow statement is to know about the changes occurred in cash position between two balance sheet dates.	The objective of funds flow statement is to know about the changes occurred in net working capital between two balance sheet dates.
3	Basis of Preparation	Increase in current liability or decrease in current assets (except cash) results in cash or vice-versa	Increase in current liability or decrease in current asset results in a decrease in net working capital or vice-verse
4	Effect of Transaction	Effect of a transaction on cash is considered	Effect of a transaction on net working capital is considered
5	Utility	Cash Flow statement is useful fore short –term analysis.	Funds Flow statement is more useful for long-term analysis.
6	Statement of changes in working capital	No such statement is prepared repeatedly in cash flow statement.	A separate statement for changes in working capital is prepared.
7	Cash balance	Opening & closing balance of cash are shown in cash flow statement	Such balances of cash are shown in statement of working capital.

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Chapter-9

Cost of Capital

Q.1) What is meant by cost of capital? What are the basic features of cost of capital?

Ans. Cost of capital is defined as the minimum rate of return a firm must earn on its investment in order to satisfy investors and to maintain its market value.

Definitions of cost of Capital : -

1. “The cost of capital is the minimum required rate of earnings or the cut- off rate for capital expenditures.” -- Ezra Solomon.

2. “The cost of capital is the rate of return a company must earn on an investment to maintain the value of the company.” -- M.I. Gordon.

<u>Features of cost of capital : -</u>

- Minimum rate of return : It is the minimum required rate of return which the firm should earn on its investment so that it can pay cost of funds.
- Not a cost : In real sense cost of capital is not a cost but its is a rate of return which should be earned by the firm on its investment.
- Reward for Risk : It is a re ward to be received for bearing business and financial risk of an enterprise.

Q.2) Give the significance or importance of cost of capital?

Ans. The importance of cost of capital can be seen under the following heads:-

1. Helpful in capital budgeting process: - The acceptance or rejection of any investment proposal depends upon the cost of capital. A proposal shall not be accepted till its rate of return is greater than the cost of capital.
2. Helpful in capital structure decisions: - When the management of the firm is to decide the optimum capital structure for the company than the cost of capital should be minimized and the value of the firm should be maximized.
3. Helpful in comparative sturdy of sources of finance: - Cost of capital is an important factor is such decision, as the source which bears the minimum cost of capital be selected.
4. Evaluations of financial performance of Top Management: - By comparison of estimated and actual costs, it can be seen how much has the top management been successful in preparation of budgets and implementation of projects.

5. Knowledge of firm`s Expected Income and Inherent Risk: - Investors can know the firm`s expected income and risk inherent there in by cost of capital.
6. Financing and Dividend decisions: - Cost of capital is useful in decisions regarding dividend policy, capitalization of profits and selection of sources of working capital.

Q.3) "Debts is the cheapest source of funds", Elucidate. How is the cost of debt capital computed?

Ans. Debt is the cheapest source of capital for two reasons : -

1. The rate of interest is always lower than the rate of dividend, and
2. Interest is treated as an allowable expense while computing profits of the concern, but dividends are not. This tax should provided by the interest Charges increase the earnings of the shareholders.

Cost of debt capital – Cost of debt is the percentage Rate of interest in relation to net proceeds of the debt.

(a) Cost of Perpetual Debt : - Kd = $\frac{I}{NP} X\, 100\, (1 - t)$

Where, Kd = After tax cost of debt I = Annual Interest charges
NP = Net Proceeds t = Rate of tax.

(b) Cost of redeemable Debt : -

$$Kd = \frac{I(1 - t) + (\frac{(MV - NP)}{N})}{\frac{(MV + NP)}{2}} X\, 100$$

Where :

Kd = After tax cost of debt
I = Annual Interest charges
NP = Net Proceeds
MV = Maturity value on the date of redemption
t = Rate of tax.
N = no. of years to maturity

Q.4) How is the cost of reference share computed?

Ans. Cost of preference share can be computed in the following ways : -

1. In case of irredeemable preference shares –

$$Kp = \frac{D\,P\,S}{NP} X\, 100$$

Kp = After tax cost of preference share capital

D P S = Dividend per share. NP = Net proceeds.

2. In case of redeemable shares –

$$Kp = \frac{D + (\frac{(MV - NP)}{N})}{\frac{(MV + NP)}{2}} X\ 100$$

Where; Kp = After tax cost of preference share capital

D P S = Dividend per share. NP = Net proceeds.
MP = Maturity value of preference shares N = No. of years to maturity

Q.5) Explain the various approaches for computing the cost of equity. Discuss the merits and demerits of each.

Ans. The various approaches for computing the cost of equity are as follows : -

1. Dividend Yield Method – This is also called as Dividend/Price Ratio method. This method is based on this assumption that when an investor makes an investment of his savings in a company, he will get an amount equal to prevalent market rate of return. Therefore, to know the cost of equity shares current rate of dividend per share is dividend by the market price per share. Formula: -

$$Ke = \frac{D\ P\ S}{MP} X\ 100$$

Where, Ke = Cost of Equity share capital

DPS = Current cash Dividend per share MP = Market price per share.

Limitations : -

1. This method does not take into consideration the increase in dividend.
2. This method does not consider the profits earned by the most of retained earnings.
3. It is suitable for those firms where dividend rate is stable because its does not consider the rise in dividend rate.
4. It is very difficult to know the market price of unlisted shares.

2. Earnings Yield Method – This is also called as Earnings/ Price Ratio method. This method is based on this assumption that the market value of share represents the price of invested capital so in this method earnings per share are divided by the market price per share.

Ke = $\frac{EPS}{MP} X\ 100$

Where, Ke = cost of equity share capital

EPS = Earnings per share MP = Market price per share.

Limitations: -

1. In this method there is a difference of opinion about the market value of share and earnings" For earnings , some experts use current earnings and some other experts use average of some part years earnings.
2. It is quite difficult to know the amount of real earnings because the whole earnings of the company is not available for distribution of dividend.
3. The earnings per share is not constant in different years, while the main stress in this method is on its stability.
4. The market value of shares does not remain constant It is always changing.

3. Dividend Yield + Growth in Dividend Method: - This method is based on the assumption that equity shareholder is not just satisfied with present rate of dividend but he expects an increase in it every year. If this does not happen, then he will not like to invest in equity shares. In this method cost of equity capital is calculated with the adjustment of this increase in the present dividend rate. This method is highly suitable in measuring the cost of equity capital in growth firms.

Ke = $\frac{DPS}{MP} X\ 100 + G$

Where,
Ke = Cost of Equity share capital G = Growth rate in Dividend.
DPS = Current cash Dividend per share MP = Market price per share.

Limitations: -

1. The main difficulty in this method is to determine the rate of growth of price appreciation expected by a shareholder when he is willing to pay a certain price for current dividends.

Q.6) What do you understand by Weighted Average Cost of capital?

Ans. Weighted Average cost of capital is the average cost of various sources of financing. It is also called composite cost of capital. Weights being the proportion of each source of funds in the capital structure.

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Chapter-10

Capital Budgeting

Q.1) What do you understand by capital budgeting? Discuss the importance of capital budgeting.

Ans. Capital budgeting is that technique of management in which the planning of capital expenditures of the firm is done in such a way that the objective of the firm is achieved. It includes the long-term planning for financing of fixed assets including land, building, Plant, Machinery etc.

Importance of capital budgeting: -

1. It shows the comparative position of available alternate assets for the replacement of obsolete assets & is also helpful in selection of the best assets
2. It is helpful in appraising the profitability of fixed assets.
3. It is helpful in long term financial planning and policy formulation.
4. It is a good source of information of right time purchase of fixed assets and their financing.
5. It gives the necessary information for cash budgeting, cash budgeting becomes very easy with the help of capital expenditure budget.
6. It is helpful in cost reduction and cost control.
7. The firm can make a sound depreciation and replacement policy.

Q.2) What factors should be considered while taking capital Budgeting Decisions?

Ans. The capital expenditure decisions have their effect for a number of years. They should be taken after considering following factors: -

1. Net investment outlay or total cash outflows – Net investment is the total amount of money to be invested in a project; the net investment includes the purchase price of the assets, transportation charges, establishment expenses etc.
2. Net cash inflows or benefits – In capital expenditure Decisions, after the computation of net investment amount or net cash outflows, the future net cash inflows or benefits are calculated. The Net cash inflow means the „The net profit after tax but before depreciation‟.
3. Project life – Every project has a definite life and in which there is an expectation of earnings. The determination of life is done on the basis of the nature of assets, its use, maintenance and technical changes. The total physical life is expressed by the suppliers of the asset while the economic

life is determined by the users. This can be more or less than the physical life of the asset.

4. Desirable minimum rate of return – This is the minimum rate of return at which the capital investment decision will be taken If return is less, than It will not be accepted.
5. Opportunity Cost – The opportunity cost of investment proposal is the income foregone from the alternative use on account of acceptance of the project.
6. Risk of Obsolescence – The technical developments are very fast, therefore the machines become obsolete and the development of new methods and machines is taking place.

Q.3) Critically examine the various methods of evaluation of capital budgeting techniques.

Ans:- There are various techniques or methods used for the evaluation of capital expenditure decisions as shown below: -

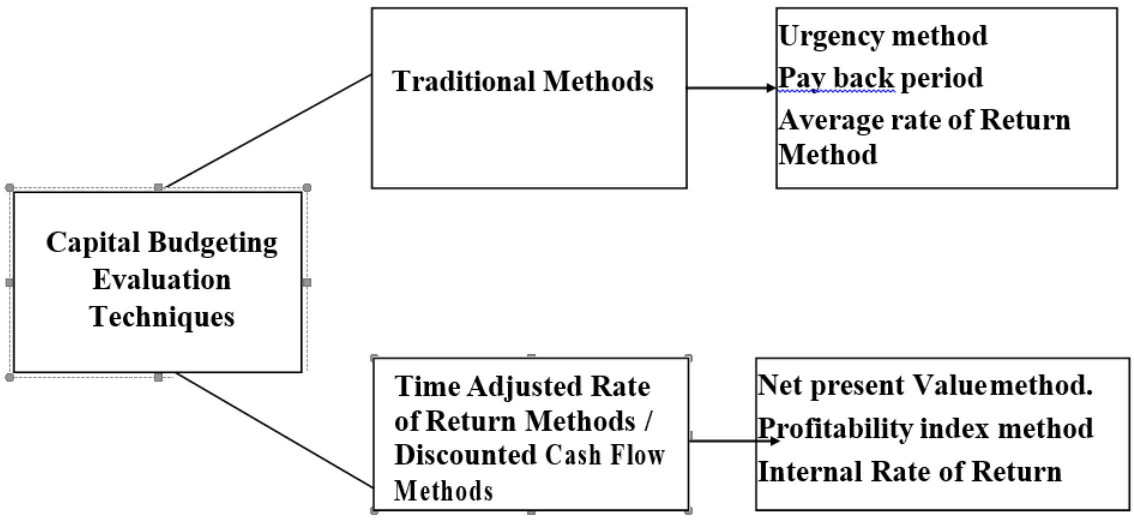

Chart: Techniques of Capital Budgeting

I Traditional Techniques: -

(A) Urgency Method – Under this method, capital projects are accepted on the basis of emergency requirements or crisis conditions. Sometimes the project that cannot be postponed is undertaken first.

(B) Payback Period Method – This method is also called pay-out & pay-off method. The period in which we get the invested amount back is called pay-back period On the basis of net cash inflows, the pay-back period of investment known.

Merits: -

1. Simple
2. Important method for firms having shortage of cash.
3. Risk of obsolescence
4. More accurate estimates.
5. Less Risk
6. Economical

Demerits: -

1. More importance to pay back of invested funds.
2. Does not consider the income received after the pay back period
3. Ignores cost of capital
4. Does not „consider the time factor.
5. Does not consider scrap value.
6. Does not measure risk.
7. More emphasis on cash inflows of initial years.

Suitability: -

1. When firm has limited funds and do not want to raise additional funds.
2. When cash earning capacity is low and the project has been financed by loan which has to be repaid in short period.
3. For projects where there are chances of obsolescence due to industrial & technological development.

Calculation of Pay Back Period

i) When cash inflows are even

Pay back period = $\frac{I}{C}$

I = Initial Investment C = Annual cash Inflow

ii) When cash inflows are uneven

First calculate cumulative cash inflows and then apply the formula:

Pay Back Period = Completed Years + I - $\frac{Cumulative\ Cash\ Inflow\ in\ Completed\ years}{Cash\ Inflow\ in\ Pay\ Back\ Year}$

I = Initial Investment

Improvement in pay Back period

i) Post pay Back Profitability = Total cash Inflow in life – Initial investment

Or

Post pay Back Profitability = Annual Cash inflow (Total life - Pay back period)

ii) Pay Back Reciprocal = $\frac{1}{pay\ back\ period}\ X\ 100$

It is also called "Profitability Rate" or "Time adjusted Rate of return" of the project.

iii) Discounted pay back period – It refers to the number of years required to recover the initial investment from the discounted cash flows. The cash inflows are multiplied by the present Value (or Discount Factor) of rs. 1 & then pay back period is calculated.

iv) Average Rate of Return Method

This is also called as accounting method or return on investment or average rate of return or unadjusted rate of return method.

ARR = $\frac{Average\ Annual\ Income\ after\ Tax\ \&\ Depreciation}{2}\ X\ 100$

Merits: -
1. Simple
2. Consider whole life of project
3. Test of profitability.
4. Considers net income after depreciation
5. More useful for analysis of ling term projects.
6. Best use of wealth.

Demerits: -
1. Does not consider time value of money
2. Profits affected by micro factors are not tested.
3. It is difficult to determine the fair rate on investment
4. Concepts of investment and income are vague.

II Discounted Cash flow Techniques: -

Methods based on time Adjusted Rate of Return

(A) Net present value method: -

This is also called as excess present value method or net gain method. In this method, the cash inflows received in future are discounted with required earning rate to determine their present value. This present value is compared with the cost of the project or investment.

Following steps are taken in this method: -

1. Determine the minimum rate of return – In this method management has to decide the minimum required rate of return on firm`s investment. This rate is used as discount rate for cash flows.
2. Computation of Present Value – With the help of present value tables the firm calculates present values of future cash flows.
3. Computation of Net Present Value : -

NPV = PV of cash inflows – Initial investment or Present value of Cash outflows.

Present Value factor = $\frac{1}{(1+r)^{n}}$

r = Rate of interest or discount rate N = No. of years.

(B) Profitability Index or Benefit – Cost Ratio

The biggest disadvantage of N P V is that in this method those projects cannot be valuated in which there is huge difference in initial capital Investment.

For this profitability Index or Benefit cost Ratio is used We should accept the project if its PI is more than 1 and reject it if it is less than 1.

$$P\,I = \frac{Present\ Value\ of\ Cash\ Inflows}{Present\ Value\ of\ cash\ outflows.}$$

(C) Internal Rate of Return Method: -

In present value method and profitability index method, the expected rate of return is already known, So the present value of future earnings can be calculated quite lazily. If we don`t know the expected rate of return then the future value of cash inflows should be mad equal to the present value of initial investment.

For this purpose the rate used, is also called discounted cash flow rate, internal rate of return, time adjusted Rate, Yield rate etc.

$$I\,R\,R = L\,D\,R + \frac{P1 - Q}{\mathrm{P1 - P2}} \times (H\,D\,R - L\,D\,R)$$

L D R = Lower Discount Rate H D R = Higher Discount Rate
P1 = Present value at L D R P2 = Present value at H D R

Q = Initial investment

A rough estimation of I R R can be done by calculating:

$$\text{P.V. Factor} = \frac{Initial\ Investment}{Average\ Annual\ Cash\ Inflow} X\ 100$$

(D) Terminal Value Method: - This is very simple method. In this method it is assumed that whatever cash inflows are received these are reinvested in other projects on a certain rate of return for the period of present projects‟ life.

Q.4) What is the difference between net present value method and internal rate or return method?

Ans:-

S.No.	Net Present Value	Internal Rate of Return
1.	Interest is a known factor	Interest is unknown factor.
2.	Re- investments assumed at cut – off rate.	It is assumed to be at the I R R.
3.	It attempts to find out the amount which can invest so that its projected earning may be sufficient to repay the amount along with interest.	The object ot king out the maximum rate of interest at which the amount invested could be repaid out of cash inflows from the project.
4.	Cash inflows are discounted at a predetermined rate.	Cash inflows are discounted at a suitable rate by trial & error method

Key Terms

Expansion Project : Expansion project is one that is aimed in increasing the plant capacity for the current product range.

Modernization project : Modernization project is generally used when new technology is introduced and existing technology becomes outdated.

Replacement Project : Replacement project involves some of the old machinery with new machinery of the same capacity.

Net Cash in flow : Net annual cash in flow is refers to the annual profit after tax but before depreciation.

Capital Rationing : Capital rationing is the situation where the firm is not able to finance all the profitable investments due to limited resources or funds.

Multiple Choice Questions

Q. In proper capital budgeting analysis we evaluate incremental cash flows?

(a) Accounting (b) Operating

(c) Before tax (d) Financing

Q. Net annual cash inflow i.e. profit after tax and depreciation is used in which method of capital budgeting?

(a) Pay back period **(b) Average rate of return**

(c) Internal rate of return (d) None of above.

Q. Based on Pay back period which project should be choosen ?

(a) Project A which has a payback period of 2.0 year

(b) Project A which has a payback period of 2.25 year

(c) Project A which has a payback period of 2.5 year

(d) Project A which has a payback period of 3.0 year

Q. What are the decision criteria in profitability index?

(a) Accept the project if its PI is less than 1

(b) Accept the project if its PI is more than 1

(c) Accept the project if its PI is equal to 1

(d) All of the above can be right.

Q. The discount rate at which two projects have identical is referred to as“Fisher`s rate of intersection”.

(a) Present value **(b) Net present value**

(c) IRR`s (d) Profitability Index

Q. What is the decision criteria in mutually exclusive decisions ?

(a) Acceptance of the one alternate proposals result in automatic rejection of all other projects.

(b) Acceptance of one does not prevent the acceptance of the others.

(c) Both (a) & (b) (d) None of the above

Case Studies

Case : 1 Shyam Ltd. has under consideration the following two projects. The are as under:

Particulars	***Project X***	***Project Y***
Investment in Machinery	Rs. 10,00,000	Rs. 15,00,000
Working Capital	Rs. 500,000	Rs.5,00,000
Life of Machinery	4 years	6 years
Scrap value of Machinery	10 %	10 %
Tax rate	50 %	50 %

Projected Net Income Before Depreciation and Tax

Year no.	***Project X***	***Project Y***
1.	8,00,000	15,00,000
2.	8,00,000	9,00,000
3.	8,00,000	15,00,000
4.	8,00,000	8,00,000
5.	-	6,00,000
6.	-	3,00,000

You are required to calculate the ARR and suggest which project is to be preffered?

Case : 2 The following details of A Ltd for the year ended 31st March ,2010 are furnished below :

Operating Leverage 3:1

Financial Leverage 2:1

Interest Changes per annum Rs. 20 Lakh

Corporate tax rate 50%

Variable cost as percentage of sales 60 %

Prepare Income statement of the company.

Case : 3 Himalaya Ltd.`s profit and Loss Account for the year ended 31st March, 2010 is given below. You are required to calculate the working capital requirements under operating cycle method.

Trading and Profit & Loss Account (for the year ended 31st March, 2010)

Particulars	Rs.	Particulars	Rs.
To opening stock :		By Sales	1,00,000
Raw material	10,000	By Closing Stock	
Work- in - progress	10,000	Raw material	11,000
Finished goods	5,000	Work- in - progress	10,500
To purchase (credit)	35,000	Finished goods	8,500
To wages & Mfg. Exp.	15,000		
To Gross profit c/d	55,000		
	1,30,000		1,30,000
To Administrative exp.	15,000	By Gross Profit b/d	55,000
To Selling & Dist. Exp.	10,000		
To Net profit	30,000		
	55,000		55,000

Opening and closing debtors were Rs. 6,500 and rs. 10,500 respectively , whereas opening and closing creditors were Rs. 5,000 and Rs. 10,000 respectively.

Case: 4 Ambani`s company's share is quoted in the market at Rs. 20 currently. The company pays a dividend of Rs. 1 per share and investors expect a growth rate of 5% per year. Compute the following:

(a) The company's cost of capital.

(b) If the anticipated growth rate is 6% per annum, calculate the indicated market price per share.

(c) If the company's cost of capital is 8% and anticipated growth rate is 5% ,

Calculate the indicated market price if the dividend of Rs. 1 per share is to be maintained

Case: 5 from the following information, calculate Interest coverage ratio, and debt to cash flow coverage ratio:

Net Income after Tax	Rs. 1,56,370
Depreciation charges	Rs. 20,000
Tax Rate	50% of net income
5% Mortgage Bonds	Rs. 2, 50,000
Fixed interest charges	Rs. 14,750
Sinking funds Appropriation	5% of outstanding Bonds

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B.Com. (Hons.) (Part III) EXAMINATION - 2018

(10+2+3 Pattern)

(Faculty of Commerce)

(Honours Subject)

ACCOUNTANCY AND BUSINESS STATISTICS

Tenth Paper

[Management Accounting]

Time Allowed : Three Hours

Maximum Marks : - 100

Attempt any five question in all selecting one question from each unit.

प्रत्येक इकाई में से एक प्रश्न करते हुए कुल पाँच प्रश्न हल करने है।

No supplementary answer book will be given to any candidate. Hence the candidates should write the answer precisely in the main answer book only.

All the parts of one question should be answered at one place in the answer book. One complete question should not be answered at difference places in the answer book.

किसी भी परीक्षार्थी को पूरक उत्तर–पुस्तिका नहीं दी जायेगी। अतः परीक्षार्थियों को चाहिए कि वे मुख्य उत्तर पुस्तिका में ही समस्त प्रश्नों के उत्तर लिखे।

किसी भी एक प्रश्न के अन्तर्गत पूछे गये विभिन्न प्रश्नों के उत्तर उत्तर–पुस्तिका में अलग अलग स्थानों पर हल करने के बजाय एक ही स्थान पर हल करे।

UNIT - I / इकाई – I

1. Explain the meaning of Management Accounting. How does it differ from Cost Accounting? Discuss the tools & techniques of management accounting.

प्रबन्ध लेखांकन का अर्थ स्पष्ट कीजिये। यह लागत लेखांकन से किस प्रकार भिन्न है? प्रबन्ध लेखांकन के उपकरण व तकनीकों का वर्णन कीजिये। 5+7+8

OR / अथवा

Define Management Accounting. Discuss the functions and limitations of management accounting.

प्रबन्ध लेखांकन की परिभाषा दीजिये। प्रबन्ध लेखांकन के कार्य एवं सीमाओं का वर्णन कीजिये। 5+7+8

UNIT - II / इकाई II

2. Explain the term 'Leverage'. Distinguish between operating leverage and financial leverage. Explain the effect of financial leverage on the shareholders earning and risk with suitable examples.

उत्तोलक शब्द को समझाइये। परिचालन उत्तोलक एवं वित्तीय उत्तोलक में अन्तर कीजिये। अंशधारियों की आय तथा जोखिम पर वितीय उत्तोलक के प्रभावों की व्याख्या उपयुक्त उदाहरणों सहित कीजिये। 5+7+8

OR / अथवा

K.G. Ltd is planning an expansion programme which will require ₹ 30 crores; and can be funded thro out of the following three options:

(i) Issue further equity shares of ₹ 100 each at 20% premium.

(ii) Raise loan at 10% interest.

(iii) Issue preference shares at 12%

Present paid up capital is ₹ 60 crores, and average annual EBIT is ₹ 12 crores. After expansion, EBIT expected to ₹ 15 crores p.a. Assume Income tax rate at 30%

(a) Calculate EPS under the three financing options indicating the alternative giving the highest retu to the equity shareholders.

(b) Determine the point of indifference between equity shares capital and debt i.e option (i) and (above.

के.जी. लिमिटेड एक विस्तार कार्यक्रम की योजना बना रही है जिसके लिए ₹ 30 करोड़ की आवश्यकता होगी, अ जिसकी पूर्ति नीचे दिये तीन विकल्पों में किसी एक विकल्प से की जायेगी–

(i) ₹ 100 वाले अतिरिक्त समता अंशो का 20% प्रीमियम पर निर्गमन,

(ii) 10% ब्याज पर ऋण जारी करके,

(iii) 12% पर अधिमान अंशों का निर्गमन।

वर्तमान प्रदत पूँजी ₹ 60 करोड़ है तथा औसत वार्षिक ब्याज एवं कर से पूर्व अर्जन ₹ 12 करोड़ है। विस्तार के पश्चा ₹ 15 करोड़ वार्षिक होने की सम्भावना है। आयकर की दर 30% मानिये।

(a) समता अंशधारियों को उच्चतम प्रत्याय देने वाले विकल्प को दर्शाते हुए तीनों वितपूर्ति विकल्पों के अन्तर्गत प्रति अं अर्जनों की गणना कीजिये।

(b) समता अंशपूँजी और ऋण अर्थात विकल्प (i) एवं (ii) के बीच तटस्थता बिन्दु का निर्धारण कीजिये। 12+8

UNIT - III / इकाई – III

3. From the information given below, Calculate working capital requirements by operating cycle method. नीचे दी गयी सूचना से परिचालन चक्रविधि द्वारा कार्यशील पूँजी की गणना कीजिये–

	Balance as on 1st April, 2016	Balance as on 31st March, 2017
Stock of:	₹	₹
Raw-Materials	21,250	26,750
Work-in progress	18,000	20,500
Finished goods	25,000	27,000
Sundry Debtors	17,000	35,000
Creditors		20,350
Purchase of Materials [All credit]		1,25,500
Wages and Manufacturing exp		1,13,500
Administration Expenses		10,000
Selling and Distribution Expenses		5,000
Total sales [All Credit]		3,00,000

Assume 360 days in a year 20

OR / अथवा

Relevant data relating to a company are:

एक कम्पनी से सम्बन्धित समंक इस प्रकार है–

Particulars	Products		Total
	M	N	
Quantity Produced [units]	5000	7000	12000
Prime cost (₹)	50,000	84000	134000
Direct labour hours per unit	1	2	
Machine hours per unit	3	1	
Set ups in the period	10	40	50
Orders handled in the period	15	60	75

Activity Cost Data

Activity	Cost (₹)
Relating to Machine	2,20,000
Relating to Production run set up	20,000
Relating to handling of orders	45,000
	2,85,000

You are required to:

(1) Calculate cost per unit by traditional costing approach using direct labour hour rate to absorb overheads.

(2) Calculate cost per unit by activity based costing approach using suitable cost driver to trace overheads to products.

आपको करना है:

(1) उपरिव्ययों के अवशोषण हेतु प्रत्यक्ष श्रम घण्टा दर का उपयोग करते हुए परम्परागत लागतांकन विधि द्वारा प्रति इकाई लागत की गणना

(2) उत्पादों पर उपरिव्ययों के आबंटन हेतु उपयुक्त लागत चालकों का उपयोग करते हुए क्रिया आधारित लागतांकन पद्धति द्वारा प्रति इकाई लागत की गणना। 8+12

UNIT - IV / इकाई IV

4. From the following details Prepare a Balance sheet of 'A' Ltd with as many details as possible:

निम्नलिखित सूचनाओं से जहां तक सम्भव हो सके अधिक से अधिक विवरण देते हुये 'ए' लिमिटेड का चिट्ठा तैयार कीजिये।

Current Ratio (चालू अनुपात)	1.75 : 1
Liquid Ratio (तरल अनुपात)	1.25 : 1
Cost of Revenue from operation to Closing Stock Ratio (विक्रय की लागत का अन्तिम स्कन्ध पर अनुपात)	9 times
Gross profit Ratio (सकल लाभ अनुपात)	25%
Debtors Collection Period (देनदार संग्रहण अवधि)	1.5 months
Reserves and Surplus to Capital Ratio (संचय एवं अधिक्य का पूँजी पर अनुपात)	0.2 : 1
Capital Galling Ratio i e Long term loan to Capital Ratio (पूँजी दन्तिकरण अनुपात अर्थात दीर्घकालीन ऋण का पूँजी पर अनुपात)	0.6
Fixed Assets turnover on cost of Revenue from operation (विक्रय की लागत पर स्थायी सम्पति आवर्त अनुपात)	1.2 times
Fixed Assets to Net worth (स्थायी सम्पतियों का शुद्ध कीमत पर अनुपात)	1.25 times
Revenue from operation for the year (वर्ष की बिक्री)	₹ 12,00,000

20

OR/अथवा

Following is the Balance Sheet of ABC limited as at 31st March, 2017 and 31st March, 2016:

ए बी सी लिमिटेड का 31 मार्च, 2017 एव 31 मार्च, 2016 का चिट्ठा निम्नलिखित है–

	Note No.	31-3-2017	31-3-2016
I EQUITY AND LIABILITIES		₹	₹
(1) Shareholders' Funds			
(a) Share Capital: Equity Shares		7,00,000	6,00,000
(b) Reserves and Surplus	1	3,51,600	1,50,000
(2) Non-Current Liabilities			
(a) Long term Borrowing: 14% Debenture		1,40,000	—
(3) Current Liabilities			
(a) Trade Payables		1,81,400	1,70,000
(b) Short term provisions	2	1,51,000	1,05,000
		15,24,000	10,25,000
II ASSETS			
(1) Non-current Assets			
(a) Fixed Assets (i) Tangible Assets	3	10,73,000	6,41,800
(2) Current Assets			
(a) Inventories		1,91,400	1,64,800
(b) Trade Receivables		1,71,000	1,50,000
(c) Cash and cash Equivalents: Bank balance		88,600	68,400
		15,24,000	10,25,000

Notes:

	31-3-2017	31-3-2016
(1) Reserves and Surplus	60,000	–
Security Premium	1,30,000	90,000
General Reserve	1,61,600	60,000
Statement of Profit & Loss	3,51,600	1,50,000
(2) Short Term Provisions:		
Provision for Taxation	81,000	45,000
Proposed Dividend	70,000	60,000
	1,51,000	10,50,000
(3) Tangible Fixed Assets:		
Land and Building	7,80,000	4,60,000
Plant and Machinery	2,80,000	1,70,800
Furniture	13,000	11,000
	10,73,000	6,41,800

Additional information :

अतिरिक्त सूचनाएँ

Depreciation written off during the year.

वर्ष में अपलिखित किया गया ह्रास

	₹
Land and Building (भूमि एवं भवन)	1,20,000
Plant and Machinery (संयत्र एवं मशीनरी)	1,00,000
Furniture (फर्नीचर)	2,400

You are required to prepare a cash flow statement as per As - 3

लेखांकन प्रमाप 3 के अनुसार आपको एक रोकड़ प्रवाह विवरण तैयार करना है।

UNIT - V / इकाई V

5. Define cost of Capital. Explain its significance. How will you determining the cost of capital from different sources, Illustrate your answer with the help of suitable examples?

पूँजी की लागत को परिभाषित कीजिये। इसके महत्व को समझाइये। विभिन्न स्त्रोतों से प्राप्त पूँजी की लागत का निर्धारण आप किस प्रकार करेंगे, उपयुक्त उदाहरणों की सहायता से अपना उत्तर दीजिये। 5+5+10

OR/अथवा

Z ltd is considering the purchase of a new machine which will carry out some operations which are at present performed by labour. A and B are alternative models. The following information are available.

	Machine A	Machine B
	₹	₹
Cost of Machine	1,50,000	2,40,000
Estimated life of machine	5 years	6 years
Estimated saving in scrap p.a.	10,000	15,000
Estimated cost of indirect material p.a	6000	8000
Estimated savings in direct wages p.a	90,000	1,20,000
Additional cost of maintenance p.a	7,000	11,000
Additional cost of supervision p.a.	12,000	16,000

Depreciation will be charged on straight line basis. Income tax may be assumed to be 40 %.

Evaluate the alternatives according to:

(a) The pay back period method;

(b) unadjusted return on average investment method;

(c) Net present value index method (cost of capital 8%). The present value of ₹ 1 @ 8% per annum received annually for 5 years is ₹ 3.993 and for 6 years is ₹ 4.623.

ह्रास सीधी रेखा पद्धति पर लगाया जायेगा। आयकर की दर 40% मानी जाय। निम्नांकित विधियों के आधार पर दोनो विकल्पों का मूल्यांकन कीजिये।

(अ) पुनर्भुगतान अवधि विधि;

(ब) औसत विनियोग पर असमायोजित प्रत्याय विधि;

(स) शुद्ध वर्तमान मूल्य सूचकांक विधि (पूँजी की लागत 8 प्रतिशत) 8 प्रतिशत् की दर पर 1 रु वार्षिक 5 वर्ष तक के लिए प्राप्त होता रहने पर वर्तमान मूल्य 3.993 ₹ तथा 6 वर्ष तक के लिए प्राप्त होता रहने पर मूल्य 4.623 रु है। 20

This question paper contains 5 printed pages. Roll No. ....

B.Com. (Hons.) (Pt.-III)

3434-X

100194

B.Com. (Hons.) (Part-III) EXAMINATION, 2019

(10+2+3 Pattern)

(Faculty of Commerce)

(Honours Subject)

ACCOUNTANCY AND BUSINESS STATISTICS - X

[Management Accounting]

Time Allowed : Three Hours Maximum Marks : 100

Attempt any five questions in all selecting one question from each unit.

प्रत्येक इकाई में से एक प्रश्न करते हुए कुल पाँच प्रश्न हल करने हैं।

No supplementary answer-book will be given to any candidate. Hence the candidates should write the answer precisely in the main answer-book only.

किसी भी परीक्षार्थी को पूरक उत्तर-पुस्तिका नहीं दी जायेगी। अतः परीक्षार्थियों को चाहिए कि वे मुख्य उत्तर-पुस्तिका में ही समस्त प्रश्नों के उत्तर लिखें।

All the parts of one question should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book.

किसी भी एक प्रश्न के अन्तर्गत पूछे गये विभिन्न प्रश्नों के उत्तर, उत्तर-पुस्तिका में अलग-अलग स्थानों पर हल करने के बजाय एक ही स्थान पर हल करें।

Write your roll number on question paper before start writing answers of questions.

प्रश्नों के उत्तर लिखने से पूर्व प्रश्न-पत्र पर रोल नम्बर अवश्य लिखें।

UNIT - I / इकाई - I

1. Explain the Functions, Responsibilities and Qualities of a management accountant. 8+8+4

एक प्रबन्ध लेखाकार के कार्य, उत्तरदायित्व तथा गुण बताइये।

OR / अथवा

Explain the term "Management Accounting". How does it differ from Financial Accounting ? Discuss the limitations of management accounting. 4+9+7

''प्रबन्ध लेखांकन'' शब्द को समझाइये। यह वित्तीय लेखांकन से किस प्रकार भिन्न है ? प्रबन्ध लेखांकन की सीमाओं की व्याख्या कीजिए।

UNIT - II / इकाई - II

2. The selected financial data for A, B and C Companies for the year ended 31st March, 2018 are as follows : 20

'ए', 'बी' एवं 'सी' कम्पनियों के 31 मार्च, 2018 को समाप्त वर्ष के लिए चयनित वित्तीय समंक इस प्रकार हैं :

	A	B	C
Variable Expenses as % of Sales	$66\frac{2}{3}\%$	75%	50%
Interest Expenses	₹ 200	₹ 300	₹ 1,000
Degree of Operating Leverages	5	6	2
Degree of Financial Leverages	3	4	2
Income Tax Rate	50%	50%	50%

Prepare Income statement for A, B and C Companies.

'ए', 'बी' एवं 'सी' कम्पनियों का आय विवरण तैयार कीजिए।

OR / अथवा

What is Optimal Capital Structure ? What factors should be born in mind in divising a capital structure ? 4+16

आदर्श पूँजी संरचना से क्या तात्पर्य है ? एक कम्पनी की पूँजी संरचना का निर्धारण करते समय किन-किन घटकों पर विचार किया जाना चाहिए ?

UNIT - III / इकाई - III

3. From the following projections of M/s ABC Limited for the year 2017-18, workout the amount of working capital required : 20

मैसर्स ए बी सी लिमिटेड के वर्ष 2017-18 के निम्न प्रक्षेपणों से आवश्यक कार्यशील पूँजी की राशि ज्ञात कीजिए :

Estimates for 2017-18 :

	₹
Annual Sales	14,40,000
Cost of Production (Including depreciation of ₹ 1,20,000)	12,00,000
Raw Material Purchases	7,05,000
Monthly expenditure in Advance	25,000
Anticipated opening stock of Raw Materials	1,40,000
Anticipated closing stock of Raw Materials	1,25,000
Inventory Norms :	
Raw Material	2 Months
Work-in Progress	15 Days
Finished Goods	1 Month

The company enjoys a credit of 15 days on its purchase and allows one month credit to its debtors, on sales orders the company has received an advance of ₹ 15,000. You may assume that production is carried out evently throughout the year and minimum cash balance desired to be maintained is ₹ 10,000.

कम्पनी को अपने क्रयों पर 15 दिन की उधार प्राप्त है तथा अपने देनदारों को एक माह की उधार देती है। विक्रय आदेशों पर कम्पनी ₹ 15,000 अग्रिम लेती है। आप यह मान सकते हैं कि उत्पादन वर्ष पर्यन्त समान रूप से होता है तथा न्यूनतम रोकड़ शेष ₹ 10,000 रखा जाता है।

OR / अथवा

An Engineering Company gives you the following information relating to two product lines as below : 8+8+4

एक इन्जीनियरिंग कम्पनी दो उत्पाद श्रेणियों से सम्बन्धित निम्न सूचनायें प्रदान करते हैं :

	Product 'X'	Product 'Y'
Number of Unit Produced	200	40
Machine Setup Hours per Product Line	20	20
Direct Labours Hours per Unit	4	4

Total Machine Setup cost ₹ 21,600

You are required to :

(i) Calculate Machine Setup cost of both the product lines using Direct Labour Rate per Hour.

(ii) Allocate Machine Setup cost as per ABC.

(iii) Comment whether allocation of overheads shows the effect of Product Diversity or Volume Diversity.

आपको :

(i) प्रत्यक्ष श्रम घंटा दर विधी का प्रयोग करते हुए दोनों उत्पादों के लिए मशीन सैटअप लागत ज्ञात करना है।

(ii) क्रिया आधारित लागत निर्धारण विधि के अनुसार मशीन सैटअप लागत को आवंटित कीजिये।

(iii) टिप्पणी दीजिये कि क्या उपरिव्ययों का आबंटन उत्पाद या मात्रा डायवर्सिटी पर प्रभाव डालते हैं।

UNIT - IV / इकाई - IV

Following is the Balance Sheet of Mahindra Ltd. as at 31st March, 2018. 20

31 मार्च, 2018 को महेन्द्रा लिमिटेड का चिट्ठा निम्न प्रकार है :

Balance Sheet of Mahindra Ltd. as at 31st March, 2018

Particulars	No.	Current Year 2018
I. Equity and Liabilities :		
(1) Shareholder's Fund		
(a) Paid up share capital		
Equity share capital		1,00,000
(b) Reserves & Surplus		
Capital Reserve		20,000
Surplus A/c		30,000
(2) Non-current Liabilities		
Loan		80,000
(3) Current Liabilities		
(a) Short-term Borrowings (Overdraft)		10,000
(b) Trade Payables		40,000
(c) Other Current Liabilities (Taxation)		20,000
Total		3,00,000
II Assets :		
(1) Non-Current Assets		
(a) Fixed Assets :		
(i) Tangible		1,40,000
(ii) Intangible (Goodwill)		60,000
(2) Current Assets		
(a) Current Investment		10,000
(b) Inventories		30,000
(c) Trade Receivables		30,000
(d) Cash and Equilents		30,000
Total		3,00,000

4+16

You are required to determine the :

आपको निर्धारण करना है :

(1) Debt-Equity Ratio (ऋण-समता अनुपात)

(2) Proprietory Ratio (स्वामित्व अनुपात)

(3) Solvency Ratio (शोधन क्षमता अनुपात)

(4) Fixed Assets to Proprietor's Fund Ratio (स्थायी सम्पत्तियों का स्वामित्व पूँजी अनुपात)

(5) Capital Gearing Ratio (पूँजी दन्तिकरण अनुपात)

Realisable value of Goodwill is Nil.

ख्याति का वसूली मूल्य शून्य है।

OR / अथवा

(A) Extracts from Balance Sheet of a Company :

	1-4-2017	31-3-2018
	₹	₹
Balance of Fixed Assets (At Cost)	5,70,800	6,15,300
Accumulated Depreciation	1,95,700	2,15,600
Balance of profit and loss account	1,62,500	2,92,300

एक कम्पनी के चिट्ठे से उद्धरण :

स्थायी सम्पत्तियों का शेष (लागत पर)	5,70,800	6,15,300
एकत्रित ह्रास की राशि	1,95,700	2,15,600
लाभ-हानी खाते का शेष	1,62,500	2,92,300

Additional Information : During the year a Machine costing ₹ 60,000. Accumulated depreciation thereon ₹ 32,000 was sold for ₹ 30,000. Prepare Fixed Assets Account and Accumulated Depreciation Account and ascertain the amount of sources and uses of funds.

अतिरिक्त सूचना : वर्ष में ₹ 60,000 लागत की एक मशीन जिस पर ₹ 32,000 ह्रास अपलिखित किया जा चुका था, ₹ 30,000 में बेच दी। स्थायी सम्पत्ति खाता तथा एकत्रित ह्रास खाता बनाइये तथा कोषों के स्रोत एवं उपयोग की राशि ज्ञात कीजिये।

(B) Calculate cash flow fro
निम्न से परिचालन क्रियाओं
Profit made during the
निम्न मदों पर विचार करने के

(a) Depreciation
(b) Amortisation of
(c) Transfer to Ger
(d) Profit on Sale o

The following is the p
चालू सम्पत्तियों एवं दायित

Debtor's
Creditor's
Bills Receivab
Prepaid Expe

(C) What is Cash Flow
रोकड़ प्रवाह विवरण क्य

6+7+7 Three Companies A, B ar
However, the capital stru
तीन कम्पनियाँ A, B तथा C ए
प्रत्येक की पूँजी संरचना भिन्न है

Equity Share Capital
(Face Value ₹ 10 Per Sl
Market Value Per Shar
Dividend Per Share
Debentures
(Face Value Per Deben
Market Value Per Deb
Interest Rate

Assume that the curre
income-Tax rate at 5(
company based on ma
यह मानिये कि लाभांश का
प्रत्येक कम्पनी को बाजार

What do you underst
point of view of indus
पूँजी बजटन से आप क्या

This question paper contains 4 printed pages.

Roll No. 162177

B.Com. (Hons.)(Pt. III)

S.No. 300093

3434-X

B.Com (Hons.)(Part-III) EXAMINATION, 2020

(Faculty of Commerce)
(Honours Subject)
ACCOUNTANCY AND BUSINESS STATISTICS
(Three-Year Scheme of 10+2+3 Pattern)
X-Paper
(Management Accounting)

Time Allowed : Three Hours — **Maximum Marks : 100**

समय : 3 घंटे — **अधिकतम अंक : 100**

Attempt any **five** questions in all, selecting **one** questions from each Unit.

प्रत्येक इकाई में से **एक** प्रश्न करते हुए, कुल **पाँच** प्रश्न हल करने हैं।

No supplementary answer book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer book only. All the parts of one questions should be answered at one place in the answer book. One complete question should not be answered at different place in the answer book.

किसी भी परीक्षार्थी को पूरक उत्तर-पुस्तिका नहीं दी जाएगी। अत: परीक्षार्थियों को चाहिए कि वे मुख्य उत्तर-पुस्तिका में ही समस्त प्रश्नों के उत्तर लिखें। किसी भी प्रश्न के अन्तर्गत पूछे गए विभिन्न प्रश्नों के उत्तर उत्तर-पुस्तिका में अलग अलग स्थानों पर हल करने बजाय एक ही स्थान पर हल करें।

UNIT-I/ इकाई-I

1. Explain the term 'Management Accounting' and state its objectives and functions. 4+8+8

'प्रबन्ध लेखांकन' शब्द को समझाइए तथा इसके उद्देश्यों एवं कार्यों को बताइए।

Or/अथवा

Explain the qualities and responsibilities of a Management Accountant. 10+10

एक प्रबन्ध लेखाकार के गुण तथा उत्तरदायित्व बताइए।

UNIT-II/ इकाई-II

2. What do you mean by capital structure ? Explain the factors influencing the capital structure of a company. 4+16

पूँजी संरचना से क्या तात्पर्य है? एक कम्पनी की पूँजी संरचना को प्रभावित करने वाले तत्वों की व्याख्या कीजिए।

Or/अथवा

A firm has sale of ₹ 75,00,000 variable cost ₹ 42,00,000 fixed cost of ₹ 6,00,000, debt of ₹ 45,00,000 at 9% and equity capital of ₹ 55,00,000. Calculate operating, financial and combined leverage. 20

एक फर्म की बिक्री 75,00,000 ₹, परिवर्तनशील लागत 42,00,000 ₹, स्थायी लागत 6,00,000 ₹, 9% ब्याज ऋण 45,00,000 ₹ तथा समता पूँजी 55,00,000 ₹ है। परिचालन, वित्तीय एवं संयुक्त उत्तोलक की गणना कीजिए।

P.T.O.

UNIT-III / इकाई-III

3. From the following particulars you are required to prepare a statement showing the working capital needed of Seema Ltd. to finance a level of activity of 5200 units of output.

निम्नलिखित सूचनाओं से सीमा लिमिटेड के लिए 5200 इकाईयों के उत्पादन स्तर की वित्तपूर्ति हेतु आवश्यक कार्यशील पूँजी का विवरण तैयार करना है:-

Elements of cost	Amount per unit
Raw material	8
Direct Labour	2
Overheads	6
Total cost	16
Profit	4
Selling price	20

(i) Raw materials are in stock on an average one month

(ii) Materials are in process on an average half a month

(iii) Finished goods are in stock on an average 6 weeks

(iv) Credit allowed by creditors is one month

(v) Credit allowed to debtors is two months

(vi) Lag in payment of wages is 1½ weeks

(vii) Assume 52 weeks in a year and 4 weeks in a month cash in hand and at bank is expected to be Rs. 7300 you are informed that production is carried on evenly during the year and wages and overheads accrue evenly. 20

(i) कच्ची सामग्री औसतन एक माह भण्डार में रहती है;

(ii) उत्पादन प्रक्रिया में सामग्री औसतन आधा माह रहती है;

(iii) निर्मित माल औसतन 6 सप्ताह स्टॉक में रहता है;

(iv) लेनदारों द्वारा स्वीकृत उधार एक माह की है;

(v) देनदारों को स्वीकृत उधार दो माह है;

(vi) मजदूरी भुगतान में अन्तराल 1½ सप्ताह है।

(vii) वर्ष में 52 सप्ताह तथा माह में 4 सप्ताह मानिए।

Or/ अथवा

Define activity based costing? Why is it needed? How does a traditional costing differ from activity based costing? 4+8+8

गतिविधि आधारित लागत को परिभाषित कीजिए। इसकी आवश्यकता क्यों है? पारंपरित लागत तथा गतिविधि आधारित लागत में अन्तर बताइए।

S.No.

UNIT-IV/ इकाई-IV

4. From the following information prepare a Balance Sheet of Kalpana Ltd. :

निम्नलिखित सूचना से कल्पना लिमिटेड का चिट्ठा बनाइए:

(i)	Current Ratio	2.5
(ii)	Liquid Ratio	1.5
(iii)	Proprietary Ratio (Fixed Assets/proprietary funds)	0.75
(iv)	Working capital	₹ 60,000
(v)	Reserve and surplus	₹ 40,000
(vi)	Bank overdraft	₹ 10,000
(vii)	There is no long-term loan or fictitious assets.	

20

Or/अथवा

The summarised Balance Sheet of Sanjay Ltd. as at 31-3-2018 and 2019 are given below:

31-3-2018 और 2019 के संजय लिमिटेड का संक्षिप्त चिट्ठा नीचे दिया गया है-

Balance Sheets as on 31-3-2018 and 2019

Particulars	2019	2018
I. Equity and Liabilities	₹	₹
(1) Shareholder's fund		
(a) Paid up share capital	4,50,000	4,50,000
(b) Reserves and surplus:		
(i) General Reserve	3,10,000	3,00,000
(ii) Profit and loss A/C	68,000	56,000
(2) Non-current Liabilities		
Mortgage loan	2,70,000	–
(3) Current Liabilities		
(a) Trade payables	92,000	1,19,000
(b) Provision for Tax	10,000	75,000
	12,00,000	10,00,000
II. Assets		
(1) Non-current assets		
(a) Fixed assets	3,20,000	4,00,000
(b) Investments (Long-term)	60,000	50,000
(2) Current Assets		
(a) Inventories	2,10,000	2,40,000
(b) Trade Receivables	4,55,000	2,10,000
(c) Cash and cash Equivalents	1,55,000	1,00,000
Total	2,60,000	10,00,000

P.T.O.

Additional Information:

(i) Investment costing ₹ 8,000 were sold during the year ₹ 8,500

(ii) Provision for tax made during the year was ₹ 15,000

(iii) During the year, part of the fixed assets costing ₹ 10,000 was sold for ₹ 12,000

(iv) Dividend paid during the year amounted to ₹ 45,000

(v) Depreciation on fixed assets provided ₹ 70,000 you are required to prepare a cash flow statement. 20

अतिरिक्त सूचना:

(i) विनियोग ₹ 8,000 लागत के वर्ष के दौरान ₹ 8,500 में बेचे।

(ii) वर्ष के दौरान ₹ 15,000 का करों का आयोजन किया।

(iii) वर्ष के दौरान स्थायी सम्पत्तियों का एक भाग लागत ₹ 10,000 को ₹ 12,000 में बेचा।

(iv) वर्ष के दौरान ₹ 45,000 लाभांश चुकाया।

(v) स्थायी सम्पत्तियों पर ह्रास ₹ 70,000 लगाया गया। आप रोकड़ प्रवाह विवरण तैयार कीजिए।

UNIT-V / इकाई-V

5. Calculate weighted average cost of capital from the following:

40,000 Equity shares (fully paid up)	₹ 4,00,000
3,000, 6% debentures	₹ 3,00,000
2,000, 6% preference shares	₹ 2,00,000
Retained earnings	₹ 1,00,000

Earning per equity share has been ₹ 1 during the past years and equity share is being sold in the market at per. Assume corporate tax at 50 percent and shareholders tax liability at 25%. 20

निम्नलिखित सूचना से पूँजी की भारित औसत लागत ज्ञात कीजिए :

40,000 समता अंश (पूर्ण प्रदत्त)	₹ 4,00,000
3,000, 6% ऋणपत्र	₹ 3,00,000
2,000, 6% अधिमान अंश	₹ 2,00,000
प्रतिधारित आय	₹ 1,00,000

पिछले वर्षों में प्रति समता अंश आय 1 ₹ रही है। समता अंश बाजार में सम मूल्य पर बिक रहा है। निगम कर की दर 50% मान लीजिए। अंशधारियों का कर दायित्व 25% है।

Or/ अथवा

Define Capital Budgeting. Why is it needed ? Explain the important factors which are considered while taking capital expenditure decision. 4+8+8

पूँजी बजटन को परिभाषित कीजिए। पूँजी बजटन की आवश्यकता क्यों है? पूँजी बजटन की पूँजी व्यय आधारित निर्णयों में महत्वपूर्ण घटक विस्तार से बताइए।

*****

(2)

This question paper contains 6 printed pages. Roll No. 161199

B.Com. (Hons.) (Part-III)

400211

3434–X

B.Com. (Hons.) (Part-III) Examination, 2021

(Faculty of Commerce)

(Honours Subject)

ACCOUNTANCY & BUSINESS STATISTICS

(Three-Year Scheme of 10+2+3 Pattern)

Paper–X

(Management Accounting)

Time Allowed : 3 Hours **Maximum Marks : 100**

समय : 3 घण्टे **अधिकतम अंक : 100**

Attempt **five** questions in all, selecting **one** question from each Unit.

No Supplementary answer-book will be given to any candidate. Hence the candidates should write the answers precisely in the main answer-book only.

All the parts of one question should be answered at one place in the answer-book. One complete question should not be answered at different places in the answer-book.

प्रत्येक इकाई में से **एक** प्रश्न करते हुए, कुल **पाँच** प्रश्न हल करने हैं।

किसी भी परीक्षार्थी को पूरक उत्तर-पुस्तिका नहीं दी जाएगी। अत: परीक्षार्थियों को चाहिए कि वे मुख्य उत्तर-पुस्तिका में ही समस्त प्रश्नों के उत्तर लिखें।

किसी भी प्रश्न के अन्तर्गत पूछे गए विभिन्न प्रश्नों के उत्तर, उत्तर-पुस्तिका में अलग-अलग स्थानों पर हल करने के बजाय एक ही स्थान पर हल करें।

UNIT–I (इकाई–I)

1. Define Management Accounting. How does it differ from Financial Accounting? 10+10

प्रबंध लेखांकन को परिभाषित कीजिए। यह वित्तीय लेखांकन से किस प्रकार भिन्न होता है?

OR/अथवा

Discuss the functions and responsibilities of Management Accountant. What should be the qualification of a Management Accountant? 8+4+8

प्रबंध लेखापाल के कार्यों एवं उत्तरदायित्वों का विवेचन कीजिए। एक प्रबंध लेखापाल में क्या योग्यताएँ होनी चाहिए?

UNIT–II (इकाई–II)

2. What is Optimum Capital Structure? What factor should be borne in mind in deciding a capital structure? 10+10

आदर्श पूँजी संरचना से क्या तात्पर्य है? एक कंपनी की पूँजी संरचना का निर्धारण करते समय किन-किन घटकों पर विचार किया जाना चाहिए?

OR/अथवा

The Parth Limited's capital structure consists 12,000 equity shares of Rs. 10 each and 10% debentures of Rs. 1,60,000. Whereas the total assets of the company are Rs. 4,00,000. The company total asset turnover ratio is 3. Its fixed operating costs are Rs. 2,00,000 and its variable operating costs ratio to sales is 40%. The income tax rate is 30%. Calculate for the company all the three types of leverages. 20

पार्थ लिमिटेड की पूँजी संरचना में 10 रु. वाले 12,000 समता अंश तथा 1,60,000 रु. के 10% ऋणपत्र हैं। जबकि कंपनी की कुल संपत्तियाँ 4,00,000 रु. हैं। कंपनी का कुल संपत्ति आवर्त्त 3 है। इसकी स्थिर परिचालन लागतें 2,00,000 रु. तथा परिवर्तनशील परिचालन लागतों का बिक्री से अनुपात 40% है। आयकर की दर 30% है। कंपनी के लिए तीनों प्रकार के उत्तोलकों की गणना कीजिए।

UNIT–III (इकाई–III)

3. Calculate the operating cycle and the working capital requirement from the following figures :

निम्नलिखित आँकड़ों से परिचालन चक्र तथा आवश्यक कार्यशील पूँजी की गणना कीजिए :

	Balance as at 1st April	Balance as at 31st March
Raw Material (कच्चा माल)	80,000	1,20,000
Work-in-Progress (अर्द्धनिर्मित माल)	20,000	60,000
Finished Goods (निर्मित माल)	60,000	20,000
Sundry Debtors (विविध देनदार)	40,000	40,000
Wages and Manufacturing Expenses (मजदूरी एवं उत्पादन व्यय)	—	2,00,000
Distribution and other Expenses (वितरण एवं अन्य व्यय)	—	40,000
Purchases of Materials (माल का क्रय)	—	4,00,000
Total Sales (कुल विक्रय)	—	10,00,000

(i) The company obtains a credit for 60 days from its suppliers.

(ii) All goods were sold for credit. 20

(i) कंपनी अपने पूर्तिकर्त्ताओं से 60 दिन की उधार प्राप्त करती है।

(ii) समस्त माल उधार बेचा जाता है।

OR/अथवा

What is the concept of "Working Capital"? What factors determine the needs of working capital and how is it measured? 6+6+8

''कार्यशील पूँजी' की विचारधारा क्या है? कार्यशील पूँजी की आवश्यकता को प्रभावित करने वाले तत्त्व कौन-कौन से हैं? इसे कैसे मापा जाता है?

UNIT–IV (इकाई–IV)

4. From the following statements, calculate :

निम्नलिखित विवरणों से गणना कीजिए :

(i) Debt Equity Ratio.

ऋण-समता अनुपात।

(ii) Proprietary Ratio.

स्वामित्व अनुपात।

(iii) Solvency Ratio.

शोधन क्षमता अनुपात।

(iv) Fixed Assets to Net Worth Ratio.

स्थायी संपत्तियों का शुद्ध संपदा से अनुपात।

(v) Current Assets to Net Worth Ratio.

चालू संपत्तियों का शुद्ध संपदा से अनुपात।

(vi) Fixed Assets to Long-term Funds Ratio.

स्थायी संपत्तियों का दीर्घकालीन कोषों से अनुपात।

(vii) Current Ratio.

चालू अनुपात।

Balance Sheet as at ....

Particulars	No.	Current Year
		Rs.
I. EQUITY AND LIABILITIES :		
(1) Shareholder's Fund		
(a) Paid up Share Capital		
Equity Share Capital		75,000
Preference Share Capital		25,000
(b) Reserve and Surplus		84,500
(2) Non-current Liabilities		
7% Debentures		1,00,000
(3) Current Liabilities		22,500
Total		3,07,000
II. ASSETS		
(1) Non-current Assets		
(a) Fixed Assets (Net)		2,19,810
(2) Current Assets		
(a) Inventories		49,460
(b) Trade Receivables		11,710
(c) Cash and Cash Equivalents		26,020
Total		3,07,000

20

OR/अथवा

What is a Cash Flow Statement? Explain fully the techniques of preparing Cash Flow Statement. What is the utility of such statement to Financial Management? 5+10+5

रोकड़ प्रवाह विवरण क्या है? रोकड़ प्रवाह विवरण तैयार करने की विधियों का पूर्ण वर्णन कीजिए। इस विवरण की वित्तीय प्रबंध के लिए क्या उपयोगिता है?

UNIT–V (इकाई–V)

5. Define "Cost of Capital". How will you determine the cost of capital from different sources. 8+12

"पूँजी लागत" की परिभाषा दीजिए। विभिन्न स्रोतों से प्राप्त पूँजी की लागत का निर्धारण आप किस प्रकार करेंगे?

OR/अथवा

Prithu Ltd. are considering two different investment proposals. The details are as under :

पृथु लिमिटेड दो विभिन्न विनियोग प्रस्तावों पर विचार कर रही है। इस संबंध में निम्न सूचनाएँ हैं :

	Proposal-A	Proposal-B
	Rs.	Rs.
Investment Cost	9,500	20,000
Estimated Cash inflows at the end of		
Year-I	4,000	8,000
Year-II	4,000	8,000
Year-III	4,500	12,000

(a) Suggest the most attractive proposal on the basis of Excess Present value method considering future cash inflows are discounted at 12%.

अतिरिक्त वर्तमान मूल्य विधि के आधार पर यह मानते हुए कि भावी रोकड़ अंतर्वाहों को 12 प्रतिशत पर अपलिखित किया जाता है, सर्वाधिक आकर्षक प्रस्ताव का सुझाव दीजिए।

(b) Also find out the Internal Rate of Return of the two proposals.

दोनों प्रस्तावों की आंतरिक प्रत्याय दर भी ज्ञात कीजिए।

The present value of Re. 1 receivable at the end of each period on various rates of discount are :

Year	10%	12%	14%	15%	16%	17%	18%
1	.9091	.8929	.8772	.8696	.8621	.8547	.8475
2	.8265	.7972	.7695	.7561	.7432	.7305	.7182
3	.7513	.7118	.6750	.6575	.6407	.6244	.6086

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