**CMR TECHNICAL CAMPUS**

Kandlakoya (v), Medchal Road, Hyderabad -501401

**Contents of Course file**

Subject:: ***Managerial Economics & Financial Analysis***

Year: **III– B.Tech,II SEM** Branch:IT

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1. **Department Vision & Mission**

**Vision**

To provide knowledge about the principles of financial and management accounting as applicable to insurance, of the taxation and regulation of insurance and of the principles underlies insurer’s investment policies.

**Mission**

Explain the basic accounting functions in life and general insurance companies

• Apply accounting principles to record and report typical insurance transactions

• Recognize the importance of management accounting, budgeting, and cost accounting in relation to insurance company operations, planning, and control ;

• Explain how to conduct and interpret financial statement analysis using financial ratios

1. **List of PEOs and Pos**

**Program Educational Objectives**

* Students will understand the importance of management & economics; familiarize themselves with economic terminology; develop some insight into economic issues & acquire some knowledge in solving economical problems.
* They understand the concept of DEMAND elasticity of tha product & apply the various measures of elasticity to real world situations. Identify a wide range of demand estimation and forecasting methods & apply these methods in demand estimation and forecasting which is for minimizing risk & maximizing profits..
* Familiarize with the concepts and rules relevant for production decision analysis;

understand the economics of production; understand the set of conditions required for efficient production to familiarize you with the process of determination of costs, particularly in a manufacturing concern .

* Can come to know how determine the price for output in various markets.
* Enhances entrepreneur skills who need to understand the advantages and disadvantages of various types of businesses so that they can choose the one that best suits their needs.

Students gets some knowledge about significance of accounting in our daily life(both in personal and professional life) **&** Understand how debits and credits are determined from transactions and events.

* The finance function reports on these internal control systems through the preparation of financial statements, such as income statements, balance sheets.

**Program Outcomes**

***CO1:*** An understanding of economics & the economic environment of business is an important element in building a foundation for success in any business career

***CO2:*** With a good financial management system, you will know not only how your business is doing financially, but why. And you will be able to use it to make decisions to improve the operation of your business.

***CO3:*** Create ability to identify the strengths and weaknesses of the different methods of forecasting & students can be able to solve the demand estimation and forecasting problems for minimizing risk & production plans.

***CO4:*** If your plan is a plan to be presented to outsiders, then you need to explain the type of business you’re in. You’ll be expected to explain the general state of your industry and the nature of the business, especially if your plan is going outside your company to banks or investors. And if your plan is for your own management purposes, you should still be very sure—whether you have to prove it to others or not—thus you know your market

***CO5:*** Internal control systems through the preparation of financial statements, such as income statements, balance sheets & get ability to assess the assets & liabilities of an enterprise.

**Mapping of Course Objectives, Course Outcomes with PEOs and Pos**

**POS**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **P**  **E**  **O**  **S** |  | **a** | **b** | **c** | **d** | **e** |
| **I** | **X** |  |  |  |  |
| **II** | **X** |  | **X** | **X** |  |
| **III** |  |  | **X** |  |  |
| **IV** |  |  |  | **X** |  |
| **V** |  |  |  | **X** | **X** |
| **VI** |  | **X** |  |  | **X** |

* 1. **Syllabus Copy**

**UNIT-I INTRODUCTION AND DEMAND ANALYSIS**

Definition, Nature and Scope of Managerial Economics–Demand Analysis: Demand Determinants, Law Demand

And It Exceptions. Definition, types, measurement and significance of elasticity of demand. Demand forecasting,

Factors governing demand forecasting, methods of demand forecasting (survey methods, statistical methods,

Expert opinion method, test marketing, control experiments, judgmental approach to demand forecasting).

**UNIT –II PRODUCTION AND COST ANALYSIS**

Prod**uction** Function – Isoquants and Is costs, MRTS, Least Cost Combination of Inputs, Cobb-Douglas Production function, Laws of Returns, Internal and External Economies of Scale.  Cost Analysis: Cost concepts, Opportunity cost, Fixed vs. Variable costs, Explicit costs Vs. Implicit costs, Out of pocket costs vs. Imputed costs. Break-even Analysis (BEA)-Determination of Break-Even Point (simple problems)- Managerial Significance and limitations of BEA

**UNIT – III MARKETS AND NEW ECONOMIC ENVIRONMENT**

Types of competition and markets, Features of perfect competition, Monopoly an Monopolistic competition. Price-Output Determination in case of Perfect Competition and Monopoly. Objectives and Policies of Pricing-Methods of Pricing. Business features and evaluation of different forms of business organization. Sole proprietorship, Joint Stock Company, public enterprises and their types, new economic environment changing business environment in post-liberalization scenario.

**UNIT** – I**V CAPITAL BUDGETIN**

Capital and its Significance, Types of Capital, Estimation of Fixed and Working capital requirements, Methods and sources of rating capital. Tracing forecast, capital budgeting, cash budget features of capital budgeting and proposals, Methods of Capital Budgeting: Payback Method, Accounting Rate of Return (ARR) and Net Present Value Method (simple problems)

**UNIT – V INTRODUTION TO FINANCIAL ACCOUNTING AND FINANCIAL ANALYSIS**

Accounting concepts and conventions-IFRS –Double- Entry Book Keeping, Journal, Ledger, Trial Balance- Final Accounts (Trading Account, Profit and Loss Account and Balance Sheet with simple adjustments). Financial Analysis through ratios: Computation, Analysis and Interpretation of Liquidity Ratios (Current Ratio and quick ratio), Activity Ratios (Inventory turnover ratio and Debtor Turnover ratio), Capital structure Ratios (Debt- Equity ratio, Interest Coverage ratio), and Profitability ratios (Gross Profit Ratio, Net Profit ratio, Operating Ratio, P/E Ratio and EPS), Du Pont chart.

1. **Individual Time table**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **DAY/**  **TIME** | **9.10-10.10** | **10.10-11.00** | | **11.00-11.50** | | **11.50-12.40** | **12.40-01.20** | **01.20-02.10** | **2.10-3.00** | **3.00-3.50** |
| **MON** |  |  | |  | | **III-A** |  | **III-D** |  |  |
| **TUE** | **III-A** |  |  | | **III-C** | |  | **III-B** |  |
| **WED** | **III-D** |  | **III-B** | | |  | **III-C** |  | **III-A** |
| **THU** | **III-B** |  |  | | |  |  |  | **III-D** |
| **FRI** |  |  |  | |  | |  | **III-C** |  |
| **SAT** | **III-C** |  | |  | | **III-D** | **III-B** |  | **III-A** |

Mrs.A.ARCHANA III -1IA ,B,C&D WL = 16

1. **(9) *SUBJECT (LESSON) PLAN***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **S.NO** | **Topic (JNTU syllabus)** | **Sub-Topic** | **NO. OF LECTURES REQUIRED** | **Suggested Books** | **Remarks** |
|  |  | **UNIT – I** |  |  |  |
| 1 | **INTRODUCTION AND DEMAND ANALYSIS** | Introduction, introduction to economics, | **L1** | **T1** |  |
|  | micro economics, macro economics, management, the manager | **L2** | **T1** |  |
| 2 | Managerial economics nature and scope of ME. | **L3** | **T1** |  |
| 3 | The main areas of ME, linkages with other disciplines. | **L4** | **T1** |  |
| 4 | Introduction of Demand analysis: Demand determinants. | **L5** | **T1** |  |
| 5 | Law of demand and its exceptions | **L6** | **T1** |  |
| 6 |  | Definition, types of elasticity of demand. | **L7** | **T1** |  |
| 7 | Measurement and significance of elasticity of demand. | **L8** | **T1** |  |
| 8 | Demand forecasting, factors governing demand forecasting. | **L9** | **T1** |  |
| 9 | Methods of demand forecasting | **L10,L11** | **T1** |  |
|  |  | **UNIT – II** |  |  |  |
| 10 | **PRODUCTION AND COST ANALYSIS** | Production function, isoquants and iso-costs. | **L12,L13** | **T1** |  |
| 11 | MRTS,least cost combination of inputs. | **L14** | **T1** |  |
| 12 | Cobb-Dougles production function. | **L15** | **T1** |  |
| 13 | Laws of returns, internal and external economies of scale | **L16,L17** | **T1** |  |
| 14 | Cost analysis: cost concepts, opportunity cost, fixed costs vs variable costs | **L18** | **T1** |  |
| 15 | Explicit costs vs implicit costs, out of pocket costs vs imputed costs | **L19,L20** | **T1** |  |
| 16 | Break even analysis(BEA),Determination of break even point | **L21,L22** | **T1** |  |
| 17 | Managerial significance and limitations of BEA | **L23** | **T1** |  |
|  |  | **UNIT – III** |  |  |  |
| 18 | **MARKETS AND NEW ECONOMIC ENVIRONMENT** | Types of competition, Features of perfect competition. | **L24** | **T1** |  |
| 19 | Monopoly and Monopolistic Competition | **L25,L26,L27** | **T1** |  |
| 20 | Price-Output Determination in case of perfect competition and Monopoly | **L28,L29** | **T1** |  |
| 21 | Objectives and Policies of Pricing-Methods of Pricing: cost plus pricing, Managerial cost pricing sealed Bid Pricing, | **L30,L31** | **T1** |  |
| 22 | Market Skimming Pricing, Penetration Pricing, Going Rate Pricing,Limit pricing | **L32,** | **T1** |  |
| 23 |  | Characteristic features of Business, Features and evaluation of sole proprietorship. | **L33** | **T1** |  |
| 24 | Partnership | **L34** | **T1** |  |
| 25 | Joint Stock Company | **L35,L36** | **T1** |  |
| 26 | Public Enterprises and their types | **L37** | **T1** |  |
| 27 | Changing Business Environment in Post-liberalization scenario. | **L38,L39,L40** | **T1** |  |
|  |  | **UNIT – IV** |  |  |  |
| 28 | **CAPITAL BUDGETING** | Capital and its significance, Types of Capital. | **L41** | **T1,R1** |  |
| 29 | Estimation of Fixed and Working capital requirements. | **L42** | **T1,R1** |  |
| 30 | Methods and sources of raising finance. | **L43** | **T1,R1** |  |
| 31 | Nature and Scope of capital Budgeting, features of capital budgeting proposals. | **L44** | **T1,R1** |  |
| 32 | Methods of capital budgeting, Payback Method | **L45,L46** | **T1,R1** |  |
| 33 | Accounting Rate of Return(ARR)method | **L47** | **T1,R1** |  |
| 34 | Net Present Value Method & IRR method( simple problems) | **L48** | **T1,R1** |  |
|  |  | **UNIT – V** |  |  |  |
| 35 | **INTRODUCTION TO FINANCIAL ACCOUNTING AND FINANCIAL ANALYSIS** | Double-EntryBook Keeping.Acconting concepts and conventions | **L49, L50** | **T1,R1** |  |
| 36 | Journal, Ledger. | **L51 ,L52** | **T1,R1** |  |
| 37 | Trial Balance. | **L53 ,L54** | **T1,R1** |  |
| 38 | Final Accounts | **L55 ,L56** | **T1,R1** |  |
| 39 |  | Computation, Analysis and Interpretation of Liquidity Ratios | **L57 ,L58** | **T1,R1** |  |
| 40 | Activity ratios | **L59 ,L60** | **T1,R1** |  |
| 41 | Capital structure ratios | **L61 ,L62** | **T1,R1** |  |
| 42 | Profitability ratios | **L63 ,L64** | **T1,R1** |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Lecture No.** | | **UNIT** | | **JNTUH Topic** | **Objective of each Topic** | | | **Course Outcome** | | | **Method of Teaching** | | | |
|  |  | |  | | | | | | | | | | | |
| L1,L2,L3,L4,L5,L6  L7,L8,L9,L10,L11 | **I**  **Definition, Nature and Scope of Managerial Economics–Demand Analysis: Demand Determinants, Law of Demand and its exceptions**.  Definition, types, measurement and significance of elasticity of demand.  Demand forecasting, factors governing demand forecasting, methods of demand forecasting (survey methods, statistical methods, expert opinion method, test marketing, control experiments, judgmental approach to demand forecasting | | | | | 1.Understand the nature and scope of managerial economics &familiarize yourself with economic terminology  2. develop some insight into economic issues; 3.understand the concept of trade-offs or policy  options facing society today.  4.Identify different demand curves  5.Understand the concept of elasticity; define various kinds of elasticities.  6. apply the various measures of elasticity to real world situations 7.identify a wide range of demand estimation and forecasting methods; | | | CO-1 | | | M1 | |
| M1,M4 | |
| L12,L13,L14,L15,L16,L17,L18,L19,L20,L21,L22,L23 |  | | Production and Cost Analysis: Prod**uction** Function – Isoquants and Isocosts, MRTS Least Cost Combination of Inputs, Cobb-Douglas Production function, Laws of Returns, Internal and External Economies of Scale.  Cost Analysis: Cost concepts, Opportunity cost, Fixed vs. Variable costs, Explicit costs Vs. Implicit costs, Out of pocket costs vs. Imputed costs. Break-even Analysis (BEA)-Determination of Break-Even Point (simple problems)- Managerial Significance and limitations of BEA  Markets &Pricing Policies:Market Structures:Types of competetions,Features of perfectcompetition,Monopoly and Monopolistic competition.Price-Output Determination in case of Perfect Competetion and Monopoly.  Objectives and Policies of Pricing-Methods of Pricing:Cost plus pricing, Marginal cost pricing, sealed bid pricing,  Going rate pricing,  Limit pricing,Market skimming pricing, Penetration pricing.  Characteristic features of Business, Features and evaluation of Sole Proprietorship, Partnership, Joint Stock Company, Public Enterprises and their types, Changing Business Environment in Post-liberalization scenario | | | | 1.To give awareness on the economics of production; & understand the set of conditions required for efficient production &  2.To familiarize you with the process of determination of costs, particularly in a manufacturing concern  3.To explain how the costing techniques are useful in the process of managerial decision-making.  4..How determine the price and output in various markets.  5.We know the various pricing methods.  6.explain the significance of business environment in the real business & acquire the knowledge of various components like economic, political and legal dimensions of business environment  7.identify broad categories of human activities describe what is business list the features and objectives of business explain the nature of business organization  8.describe the various forms of business organizations | | |  | | | M1 ,M4 | |
| L24,L25,l26,L27,L28,L29,L30,L31,L32 |  | | M1,M4 | |
| L33,L34,L35,L36,L37,L38,L39,L40 |  | | M1,M2,M4 | |
| L41,L42,L43,L44,L45,L46,L47,L48 |  | | Capital budgeting : Capital and its significance, Types of Capital, Estimation of Fixed and Working capital requirements, Methods and sources of raising finance. Nature and scope of capital budgeting, features of capital budgeting proposals, Methods of Capital Budgeting: Payback Method, Accounting Rate of Return (ARR) and Net Present Value Method | | | | 1.significance of and need for working capital  2. Explain the importance of cash flows in capital budgeting decisions and try to explain the basic principles for measuring the same. | | |  | | | M1 | |
| L49L50  L51  L52  L53  L54  L55  L56 |  | | Introduction to Financial Accounting and analysis: Double-Entry Book Keeping, Journal, Ledger, Trial Balance- Final Accounts (Trading Account, Profit and Loss Account and Balance Sheet with simple adjustments)..  Financial Analysis through ratios: Computation, Analysis and Interpretation of Liquidity Ratios (Current Ratio and quick ratio), Activity Ratios (Inventory turnover ratio and Debtor Turnover ratio), Capital structure Ratios (Debt- Equity ratio, Interest Coverage ratio), and Profitability ratios (Gross Profit Ratio, Net Profit ratio, Operating Ratio). | | | | 1.Understand the meaning and significance of accounting  2.Understand how debits and credits are determined from transactions and events.  3.observe the points to be taken care of while recording a transaction in the journal.  4.Preparation of Trading Account, profit Loss Account and Balance Sheet with adjustments and interpretation of result  5.provide a board classification of ratios  6.identify ratios which are appropriate for control of activities | | |  | | | M1 | |
| L57  L58  L59  L60  L61  L62  L63  L64 |  | |  | | | M1 | |

**NOTE : 1.** Any Subject in a Semester is suppose to be completed in 55 to 65 periods.

2. Each Period is of 50 minutes.

3. Each unit duration & completion should be mentioned in the Remarks Coloumn.

4. List of Suggested books can be marked with Codes like T1, T2,….. R1, R2 etc.,.

**Detailed Lecture Plan**

|  |  |
| --- | --- |
| M1 : Lecture Method | M6 : Tutorial |
| M2 : Demo Method | M7 : Assignment |
| M3 : Guest Lecture | M8 : Industry Visit |
| M4 : Presentation /PPT | M9 : Charts |

**METHODS OF TEACHING:**

**COURSE OUTCOMES:**

|  |  |
| --- | --- |
| **CO-1** | Managerial Economics shares how to apply the economic theory with business practice for the purpose of facilitating decision making and forward planning by management |
| **CO-2** | Managerial Economics deals with Micro economics which helps in estimation the DEMAND & COST Relationship so as to decide the price of the commodity & estimate the quantity of production. |
| **CO-3** | It forecasts DEMAND which is a key driver for both success & failure of business |
| **CO-4** | Financial Analysis Deals with facts. There is no place for IMAGINATIONS, POSSIBILITIES, & EXPECTATIONS in accounting |
| **CO-5** | People who has a basic knowledge in financial analysis can come to know what are there owns & to whom they owe with the help of balance sheet. |
| **Co-6** | Budgeting shows how to use the capital effectively & efficiently. |

1. **Session Execution Log**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Slno** | **Unit** | **Scheduled Completion date** | **Actual Completed Date** | **Remarks** |
| **1** | **UNIT-I** | **14/12/15 to 30/12/15** | **22/12/15** | **Because of low attendance classes**  **Had been repeated** |
| **2** | **UNIT-2** | **11/1/16to25/1/16** | **25/01/16** | **Completed on time** |
| **3** | **UNIT-3** | **27/1/16to16/2/16** | **16/01/16** | **Discussed topics had repeated**  **& also it was a big unit.** |
| **4** | **UNIT-4** | **17/2/16to9/3/16** | **15/3/16** | **Applied teaching method-4 (PPT)** |
| **5** | **UNIT-5** | **16/3/16to30/3/16** | **30/3/16** | **Completed on time** |

**Assignment Questions**

**UNIT-I**

1. Define Managerial Economics.

2. Explain its Nature & scope of ME

3. Explain the role of a Managerial Economist in a Business Firm.

4. Define ‘Demand’ and explain the factors that influence the demand of a product.

5. State the ‘Law of Demand’. What are the various factors that determine the demand for a Mobile Phone?

6. What is meant by ‘Elasticity of Demand’? How do you measure it? (very Imp)

7. Explain the concept of Cross Elasticity of Demand. Illustrate your answer with Examples.

8.Explain the various steps involved in demand forecasting.

**UNIT-II**

1. Define production Function. Discuss in detail the different types of production functions.
2. Explain the following with reference to production function
   * Marginal Rate of Technical Substitution(MRTS)
   * Variable Proportions of Factors.
3. Define ‘Cost’. How are costs classified? Explain any five important cost concepts useful for managerial decisions.

4. Discuss the role and importance of cost analysis in managerial decisions.

5. a) State and explain Break-Even analysis and explain its importance.

b) What are its limitations? Use suitable diagrams.

6. You are required to calculate.

* + 1. Margin of Safety
    2. Total sales
    3. Variable cost from the following figures;

Fixed costs Rs. 12, 000

Profit Rs. 1, 000

Break-Even Sales Rs.60, 000

**UNIT-III**

* 1. Define Market and explain how markets are classified?

2. How can a Monopolist attain equilibrium position under conditions of monopoly?

3. What are the features of Monopolistic Competition? How can a firm attain equilibrium position?

4. a) What are the different types of Business organizations?

b) What are the features of Sole trading form of Organization?

5. a) What are the salient features Partnership firm

b) Explain Different kinds of partners.

c) What are the advantages and limitations of partnership firm?

6. a) What do you mean by Joint Stock Company? What are the salient features?

b) Describe the advantages and disadvantages of Joint Stock Companies?

7. a) Analyses the Formation of Joint Stock Company?

b) What are the different types of companies?

.

**UNIT IV**

1. What are the components of Working capital? Explain each of them.
2. a) What is the important of capital?

b) What factors determine the working capital requirements of company?

1. a) Describe the institutions providing long term finances.

b) What are the different market situations in imperfect competition?

1. a) What is the importance of Capital budgeting?

b) How do the discounting models differ from non-discounting models?

1. Explain the right procedure for Capital Budgeting decision
2. What are the merits and limitations of Pay Back Period? How does Discounting approach overcome the limitations of Pay back method?
3. What do you understand by time value of money? How is it helpful in Capital Budgeting?
4. Examine the following three proposals and evaluate them based on
   1. PBP Method
   2. ARR Method. (ARR on original Investment)

Initial Investment is Rs.10, 00,000/- each for all the three projects.

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Cash inflows (Rs.)** | | |
| **Project-A** | **Project-B** | **Project-B** |
| 1. | 5,00,000 | 6,00,000 | 2,00,000 |
| 2. | 5,00,000 | 2,00,000 | 2,00,000 |
| 3. | 2,00,000 | 2,00,000 | 6,00,000 |
| 4. | ------- | 3,00,000 | 4,00,000 |

1. Determine the Pay Back Period for the information given below
   1. The project cost is Rs. 20,000
   2. The life of the project is 5 years
   3. The cash flows for the 5 years are Rs.10,000, Rs.12,000; Rs.13,000; Rs.11,000; and Rs. 10,000 respectively and
   4. Tax rate is 20%
2. Calculate the Net present value (NPV) of the two projects X and Y. Suggest which of the two projects should be accepted assuming a discount rate of 10%

|  |  |  |
| --- | --- | --- |
| Item | Project-A | Project-B |
| Initial Investment | Rs. 80,000 | Rs. 1,20,000 |
| Life Period | 5 Years | 5 Years |
| Scrap Value | Rs.4,000 | Rs.8,000 |
| (Annual Cash Inflows) | (CFAT) | (CFAT) |
| Year: 1 | Rs.24,000 | Rs.70,000 |
| ,, 2 | Rs.36,000 | Rs.50,000 |
| ,, 3 | Rs.14,000 | Rs.24,000 |
| ,, 4 | Rs.10,000 | Rs.8,000 |
| ,, 5 | Rs.8,000 | Rs.8,000 |

1. A Company has at hand two proposals for consideration. The cost of the proposals in both the cases is Rs. 5, 00,000 each. A discount factor of 12% may be used to evaluate the proposals. Cash inflows after taxes are as under.

|  |  |  |
| --- | --- | --- |
| **Year** | Proposals **X**(Rs.) | Proposals **Y**(Rs.) |
| 1 | 1,50,000 | 50,000 |
| 2 | 2,00,000 | 1,50,000 |
| 3 | 2,50,000 | 2,00,000 |
| 4 | 1,50,000 | 3,00,000 |
| 5 | 1,00,000 | 2,00,000 |

Which one will you recommend under NPV method?

1. Conceder the case of the company with the following two investment alternatives each costing Rs.9 lakhs. The details of the cash inflows;

|  |  |  |
| --- | --- | --- |
| Year | Rs. in Lakhs | |
| Project-1 | Project-2 |
| 1 | 3 | 6 |
| 2 | 5 | 4 |
| 3 | 6 | 3 |

The cost of capital is 10% per year. Which project will you choose under NPV method?

1. The following are the details pertaining to a company which is considering to acquire a fixed asset:

Project A: Cost of the proposal: Rs.42, 000, Life 5 years, Average after Tax

Cash inflow Rs.14000. (constant)

Project B: Cost of the proposal Rs.45000, Life 5 years

Annual cash inflows 1st year Rs. 28,000, 2nd year Rs.12, 000, 3rd year

Rs.10, 000 4th Rs.10, 000 and 5th year Rs. 10,000. Determine IRR. Which project

do you recommend?

1. Mahesh Enterprises is considering of purchasing a CNC Machine. The following are the earnings after tax from the two alternative proposals under consideration each costing Rs. 8, 00,000. Select the better one, if the company wishes to operate at 10% rate of return.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Proposal I | 80000 | 240000 | 320000 | 480000 | 320000 |
| Proposal II | 240000 | 320000 | 400000 | 240000 | 160000 |
| Present value of Re @ 10% | 0.909 | 0.826 | 0.751 | 0.683 | 0.620 |

**UNIT- V**

1. Give a brief account on the important records of Accounting under Double Entry System and discuss briefly the scope of each?
2. Explain the purpose of preparing the following accounts/statements and also elaborate the various items that appear in each of them.

a) Trading Account

b) Profit & Loss Account

c) Balance Sheet

1. Explain the following concepts and illustrate their treatment with imaginary data.

a) Depreciation

b) Prepaid expenses

c) Reserve for bad and Doubtful debts

d) Income received in advance

1. Explain the following adjustments and illustrate suitably with assumed data.

a) Closing stock

b) Outstanding expenses

c) Prepaid Income

d) Bad debts

1. (a) Define the concepts ‘Accounting’, Financial Accounting and Accounting System’.

(b) Explain the main objectives of Accounting and its important functions.

1. What is three columnar cash book? What is Contra Entry? Illustrate
2. What do you understand by Double Entry Book Keeping? What are its advantages?
3. What is Trial Balance? Why it is prepared?
4. What are the different Concepts and Conventions of Financial Accounting?

**Illustration: I**

Journalize the following transactions and prepare a cash ledger.

1. Ram invests Rs. 10, 000 in cash.
2. He bought goods worth Rs. 2000 from shyam.
3. He bought a machine for Rs. 5000 from Lakshman on account.
4. He paid to Lakshman Rs. 2000
5. He sold goods for cash Rs.3000
6. He sold goods to A on account Rs. 4000
7. He paid to Shyam Rs. 1000
8. He received amount from A Rs. 2000

**Illustration II**

Journalize the following transactions and post them into Ledgers

Jan 1. Commenced business with a capital of Rs. 10000

,, 2. Bought Furniture for cash Rs. 3000

,, 3. Bought goods for cash from ‘B’ Rs. 500

,, 4. Sold goods for cash to A Rs. 1000

,, 5. Purchased goods from C on credit Rs.2000

,, 6. Goods sold to D on credit Rs. 1500

,, 8. Bought machinery for Rs. 3000 paying Cash

,, 12. Paid trade expenses Rs. 50

,, 18. Paid for Advertising to Apple Advertising Ltd. Rs. 1000

,, 19. Cash deposited into bank Rs. 500

,, 20. Received interest Rs. 500

,, 24. Paid insurance premium Rs. 200

,, 30. Paid rent Rs. 500

,, 30. Paid salary to P Rs.1000

**Illustration-III**

During January 2003 Narayan transacted the following business.

|  |  |  |
| --- | --- | --- |
| Date | Transactions | Amount |
| 2003  Jan.1  ,, 2  ,, 3  ,, 4  ,, 5  ,, 6  ,, 7  ,, 8  ,, 9  ,, 10  ,, 11  ,, 12 | Commenced business with cash  Purchased goods on credit from Shyam  Received goods from Murthy as advance for goods ordered by him  Paid Wages  Goods returned to shyam  Goods sold to Kamal  Goods returned by Kamal  Paid into Bank  Goods sold for Cash  Bought goods for cash  Paid salaries  Withdrew cash for personal use | 40000  30000  3000  500  200  10000  500  500  750  1000.  700  1000 |

Journalize the above transactions and prepare cash Account

**Illustration- IV**

Record the following transactions in the suitable form of Cash book

|  |  |  |
| --- | --- | --- |
| 2004 Jan 1 | Started business with cash | 20000 |
| 2 | Paid for purchases of Machinery from M/s Ram and Co | 3000 |
| 3 | Paid insurance premium | 200 |
| 5 | Paid rent for the month of Dec 2003 | 500 |
| 8 | Paid cash for purchase of goods | 3000 |
| 10 | Sold goods for cash | 4000 |
| 12 | Drew cash for personal use | 200 |
| 14 | Paid to Arun Rs.400 for full settlement of Rs.500 |  |
| 15 | Received Cash from Karuna Rs. 1000 in full settlement of Rs. 1050 |  |

Also prepare Cash Account

**Illustration V:**

From the following list of balances prepare a Trial Balance as on 30-6-2003

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  | Rs. |  |  | Rs. |
| i | Opening Stock | 1800 | xiii | Plant | 750 |
| ii | Wages | 1000 | xiv | Machinery tools | 180 |
| iii | Sales | 12000 | xv | Lighting | 230 |
| iv | Bank loan | 440 | xvi | Creditors | 800 |
| v | Coal coke | 300 | xvii | Capital | 4000 |
| vi | Purchases | 7500 | xviii | Misc. receipts | 60 |
| vii | Repairs | 200 | xix | Office salaries | 250 |
| viii | Carriage | 150 | xx | Office furniture | 60 |
| ix | Income tax | 150 | xxi | Patents | 100 |
| x | Debtors | 2000 | xxii | Goodwill | 1500 |
| xi | Leasehold premises | 600 | xxiii | Cash at bank | 510 |
| xii | Cash in hand | 20 |  |  |  |

Illustration

VI Prepare a Trial Balance from the following Data for the year 2003.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Rs. |  | Rs. |
| Freehold property | 10800 | Discount received | 150 |
| Capital | 40000 | Returns inwards | 1590 |
| Returns outwards | 2520 | Office expenses | 5100 |
| Sales | 80410 | Bad debts | 1310 |
| Purchases | 67350 | Carriage outwards(sales exp) | 1590 |
| Depreciation on furniture | 1200 | Carriage inwards | 1450 |
| Insurance | 3300 | Salaries | 4950 |
| Opening stock | 14360 | Book debts | 11070 |
| Creditors for expenses | 400 | Cash at bank | 2610 |
| Creditors | 4700 |  |  |

**Illustration: VII**

The following is the Trial Balance of Abhiram, was prepared on 31st March 2006. Prepare Trading and Profit& Loss Account and Balance Sheet.

|  |  |  |
| --- | --- | --- |
|  | Debit Rs. | Credit Rs. |
| Capital | ------ | 22000 |
| Opening stock | 10000 | ------ |
| Debtors and Creditors | 8000 | 12000 |
| Machinery | 20000 | ------- |
| Cash at Bank | 2000 | ------- |
| Bank overdraft | ------ | 14000 |
| Sales returns and Purchases returns | 4000 | 8000 |
| Trade expenses | 12000 | ------- |
| Purchases and Sales | 26000 | 44000 |
| Wages | 10000 | ------- |
| Salaries | 12000 | ------- |
| Bills payable | ------- | 10600 |
| Bank deposits | 6600 | ------- |
| TOTAL | 110600 | 110600 |

Closing Stock was valued at Rs.60, 000

**Illustration VIII**

Prepare Trading and Profit &Loss A/C for the year ended 31.12.2001 and a Balance Sheet as on that date from the following Trial Balance.

|  |  |  |
| --- | --- | --- |
|  | Dr, Rs. | Cr, Rs. |
| Furniture | 6500 |  |
| Plant and machinery | 60000 |  |
| Buildings | 75000 |  |
| Capital |  | 125000 |
| Bad debts | 1750 |  |
| Reserve for bad debts |  | 3000 |
| Sundry debtors | 40000 |  |
| Sundry creditors |  | 24000 |
| Stock(1.1.2001) | 34600 |  |
| Purchases | 54750 |  |
| Sales |  | 154500 |
| Bank over draft |  | 28500 |
| Sales returns | 2000 |  |
| Purchase returns |  | 1250 |
| Advertising | 4500 |  |
| Interest | 1180 |  |
| Commission received |  | 3750 |
| Cash in hand | 6500 |  |
| Salaries | 33000 |  |
| General expenses | 7820 |  |
| Car expenses | 9000 |  |
| Taxes and insurance | 3500 |  |
|  | 340000 | 340000 |

Closing stock valued at Rs. 50000

**Illustration VIII**

The following figures have been extracted from the records of Fancy Stores a proprietary concern as on 31.12.2003.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Rs. |  | Rs. |
| Furniture | 15000 | Insurance | 6000 |
| Capital A/C | 54000 | Rent | 22000 |
| Cash in hand | 3000 | Sundry debtors | 60000 |
| Opening stock | 50000 | Sales | 600000 |
| Fixed deposits | 134600 | Advertisement | 10000 |
| Drawings | 5000 | Postages and telephone | 3400 |
| Provision for bad debts | 3000 | Bad debts | 2000 |
| Cash at Bank | 10000 | Printing and stationary | 9000 |
| Purchases | 300000 | General charges | 13000 |
| Salaries | 19000 | Sundry creditors | 40000 |
| Carriage inwards | 41000 | Deposit from customers | 6000 |

Prepare Trading, Profit and loss account and Balance sheet after taking into consideration the following information.

1. Closing stock as on 31st March was Rs. 10000.

b) Salary of Rs. 2000 is yet to be paid to an employee.

**Illustration IX**

Prepare Trading and Profit &Loss A/C for the year ended 31.12.2001 and a Balance Sheet as on that date from the following Trial Balance.

|  |  |  |
| --- | --- | --- |
|  | Debit Rs. | Credit Rs. |
| Purchases | 45000 |  |
| Debtors | 60000 |  |
| Interest earned |  | 1200 |
| Salaries | 9000 |  |
| Sales |  | 96300 |
| Purchase returns |  | 1500 |
| Wages | 6000 |  |
| Rent | 4500 |  |
| Sales returns | 3000 |  |
| Bad debts return off | 2100 |  |
| Creditors |  | 36600 |
| Capital |  | 31800 |
| Drawings | 7200 |  |
| Printing and stationary | 2400 |  |
| Insurance | 3600 |  |
| Opening stock | 15000 |  |
| Office expenses | 3600 |  |
| Furniture and fittings | 6000 |  |
| GRAND TOTAL | 167400 | 167400 |

Adjust the following

1. Closing stock Rs.20000
2. Write off furniture @ 15% per annum.
3. Explain the meaning of the ‘Analysis of Financial Statements’. Discuss briefly the different type of analysis.
4. Discuss the importance of Ratio Analysis for inter firm and intra-firm comparison, including circumstances responsible for its limitations, if any.
5. How are ratios classified for the purpose of financial analysis? With assumed data, illustrate any two types of ratios under each category?
6. Write a brief note on the importance of ratio analysis to different category of users.
7. As a financial analyst, what precautions would you take while interpreting ratios meaningfully?
8. What are the limitations of Ratio Analysis? Does ratio analysis really measure the financial performance of a company?
9. following is the Profit and Loss account and Balance Sheet of Jai Hind Ltd. Calculate the following ratios:

a) Gross Profit Ratio

b) Current Ratio

c) Quick ratio

Profit and Loss Account

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Rs. | Particulars | Rs. |
| To Opening Stock of  Finished goods  Raw materials  To Purchase of raw material  To Manufacturing Expenses  To Administration Expenses  To Selling& Distribution Exp  To Loss on sale of Plant  To Interest on Debentures    To Net Profit | 100000  50000  300000  100000  50000  50000  55000  10000  385000 | By Sales  By Closing Stock:  Raw Material  Finished goods  By Profit on sale of shares | 800000  150000  100000  50000 |
| 1100000 | 1100000 |

Balance Sheet

|  |  |  |  |
| --- | --- | --- | --- |
| Liabilities | Rs. | Assets | Rs. |
| Share Capital:  Equity Share Capital  Preference share Capital  Reserves  Debentures  Sundry creditors  Bills payable | 100000  100000  100000  200000  100000  50000 | Fixed Assets  Stock of Raw Materials  Stock of finished goods  Sundry Debtors  Bank balance | 250000  150000  100000  100000  50000 |
| 650000 | 650000 |

1. a) From the following information, calculate

i. Debt-Equity ratio

ii. Current ratio

|  |  |  |  |
| --- | --- | --- | --- |
|  | Rs. |  | Rs. |
| Debentures | 1,40,000 | Bank balance | 30,000 |
| Long term Loans | 70,000 | Sundry Debtors | 70,000 |
| General reserve | 40,000 |  |  |
| Creditors | 66,000 |  |  |
| Bills payable | 14,000 |  |  |
| Share capital | 1,20,000 |  |  |

b) Calculate interest coverage ratio from the following information

|  |  |
| --- | --- |
|  | Rs. |
| Net profit after deducting interest and taxes | 6,00,000 |
| 12% Debentures of the face value of | 15,00,000 |
| Amount provided towards taxation | 1,20,000 |

1. Compute the following ratios.
2. Calculate Earnings per share

|  |  |
| --- | --- |
|  | Rs. |
| Net profit before preferential dividend | 1,15,000 |
| Equity share capital (40,000 shares of Rs.100 each) | 4,00,000 |
| 12½% Preference share capital | 2,00,000 |

b) Calculate Debtors Turnover Ratio

|  |  |
| --- | --- |
| Total sales for the year | Rs.1,75,000 |
| Cash sales 25% of total sales | Rs |
| Sales returns out of credit sales | Rs. 10,000 |
| Sundry Debtors-Opening balance | Rs. 8,000 |
| Sundry Debtors-Closing balance | Rs.12,000 |

c) Calculate interest coverage ratio

|  |  |
| --- | --- |
|  | Rs. |
| Net profit after deducting interest and taxes | 6,00,000 |
| 12% Debentures of the face value of | 15,00,000 |
| Amount provided towards taxation | 1,20,000 |

1. From the information given below calculate:

a) Inventory turnover ratio (Stock)

b) Receivables Turnover ratio (Debtors)

|  |  |
| --- | --- |
|  | (Amount in Lakhs of Rs.) |
| Sales (100% credit) | 42.00 |
| Opening stock | 6.00 |
| Closing stock | 7.00 |
| Sales returns | 3.00 |
| Opening Balance of Sundry debtors | 6.00 |
| Closing Balance of Sundry debtors | 4.00 |
| Opening Balance of Bills Receivables | 3.00 |
| Closing Balance of Bills Receivables | 5.00 |
| Gross profit= 30% of Sales |  |

1. From the following extract of a balance sheet of an Airlines company calculate the debt equity ratio and interest coverage ratio. Given that the Debt-Equity ratio is in the range of 10:1, how do you interpret this ratio?

50,000, 10% Preference shares of Rs. 100 each

2, 00,000 equity shares of Rs. 10 each

10%, 30,000 Debentures of Rs. 100 each

Net profit during the year was Rs. 10, 00,000

1. The following are the extracts from the financial statements of Blue and Red Ltd.; as on 31st March 2001 and 2002 respectively.

31. March 2001 31. March 2002

Rs. Rs.

Stock 10,000 25,000

Debtors 20,000 20,000

Bills Receivables 10,000 5,000

Cash in Hand 18,000 15,000

Bills payable 15,000 20,000

Bank overdraft 2,000

9% Debentures 5, 00,000 5, 00,000

Sales for the year 3, 50,000 3, 00,000

Gross profit 70,000 50,000

Compute for both the years the following:

(a) Current Ratio

(b) Acid Ratio

(c) Stock Turnover Ratio. Also interpret the results.

1. Following is the Balance Sheet of XYZ company as on 31st Dec 2000

|  |  |  |  |
| --- | --- | --- | --- |
| Liabilities | Rs. | Assets | Rs. |
| Equity share capital  Capital Reserve  8% loan on Mortgage  Trade Creditors  Bank overdraft | 20,000  10,000  16,000  8,000  6,000 | Goodwill  Fixed assets  Stocks  Debtors  Investments  Cash in hand | 12,000  28,000  6,000  6,000  2,000  6,000 |
| 60,000 | 60,000 |

Sales amounted to Rs. 1, 20,000. Calculate Ratios for

(a) Testing liquidity, and

(b) Solvency of the Company.

1. ) ABC Ltd has the following information:

Cash = Rs.4, 000 Debtors= Rs.4, 000

Inventory = Rs.24, 000 Current Liabilities = Rs.16, 000

Determine the current ratio and acid-test ratio.

b) A company has sold products worth Rs.6, 00,000 with a gross profit margin of

20%. The inventory at the beginning of the year is Rs.30, 000 and at the end of

the year is Rs. 50,000. Determine the inventory turnover ratio and inventory

holding Period.

1. **Sample Assignment Scripts :** (To be attached)
2. **Unit Wise Course material:**

**UNIT-I**

**INTRODUCTION TO MANAGERIAL ECONOMICS**

Imagine for a while that you have finished your studies and have joined as an engineer in a manufacturing organization. What do you do there? You plan to produce maximum quantity of goods of a given quality at a reasonable cost. On the other hand, if you are a sale manager, you have to sell a maximum amount of goods with minimum advertisement costs. In other words, you want to minimize your costs and maximize your returns and by doing so, you are practicing the principles of managerial economics.

Managers, in their day-to-day activities, are always confronted with several issues such as how much quantity is to be supplied; at what price; should the product be made internally; or whether it should be bought from outside; how much quantity is to be produced to make a given amount of profit and so on. Managerial economics provides us a basic insight into seeking solutions for managerial problems.

**INTRODUCTION TO MANAGERIAL ECONOMICS:**

Managerial economics, as the name itself implies, is an offshoot of two distinct disciplines: Economics and Management. In other words, it is necessary to understand what these disciplines are, at least in brief, to understand the nature and scope of managerial economics

**MANAGEMENT**

Management is the science and art of getting things done through people in formally organized groups. It is necessary that every organization be well managed to enable it to achieve its desired goals. Management includes a number of functions: *Planning, organizing, staffing, directing, and controlling*. The manager while directing the efforts of his staff *communicates* to them the goals, objectives, policies, and procedures; *coordinates* their efforts; *motivates* them to sustain their enthusiasm; and *leads* them to achieve the corporate goals.

**ECONOMICS**

Economics is a study of human activity both at individual and national level. The economists of early age treated economics merely as the science of wealth. The reason for this is clear.

Every one of us in involved in efforts aimed at earning money and spending this money to satisfy our wants such as food, Clothing, shelter, and others. Such activities of earning and spending money are called “Economic activities”.

It was only during the eighteenth century that Adam Smith, the Father of Economics, defined economics as the study of nature and uses of national wealth’.

Dr. Alfred Marshall, one of the greatest economists of the nineteenth century, writes “Economics is a study of man’s actions in the ordinary business of life: it enquires how he gets his income and how he uses it”. Thus, it is one side, a study of wealth; and on the other, and more important side; it is the study of man. As Marshall observed, the chief aim of economics is to promote ‘human welfare’, but not wealth.

Scarcity

How to produce?

What to produce?

Unlimited wants

When to produce?

Where to produce?

Limited resources

Why to produce?

All the above questions will lead to a business problem. The science which gives optimal solution for the above business problems is managerial economic

Optimal solution

Business problem

Management/manager decision

Traditional economics

Managerial Economics

***Meaning & Definition:***

Managerial Economics as a subject gained popularity in USA after the publication of the book “Managerial Economics” by Joel Dean in 1951.

Managerial Economics refers to the firm’s decision making process. It could be also interpreted as “Economics of Management” or “Economics of Management”. Managerial Economics is also called as “Industrial Economics” or “Business Economics”.

“Managerial Economics is the integration of economic theory with business practice for the purpose of facilitating decision making and forward planning by management”.

----------M. H. Spencer and Louis Siegelman

Managerial economics shows how economic analysis can be used in formulating police.

-------------- Joel Dean

Managerial economics is designed to provide a rigorous treatment of those aspects of economic theory and analysis that are most use for managerial decision analysis

------------ J. L. Pappas and E. F. Brigham.

**NATURE OF MANAGERIAL ECONOMICS**

Further, it is assumed that the firm or the buyer acts in a rational manner (which normally does not happen). The buyer is carried away by the advertisements, brand loyalties, incentives and so on, and, therefore, the natural behavior of the consumer will be rational is not a realistic assumption. Unfortunately, there are no other alternatives to understand the subject other than by making such assumptions. This is because the behavior of a firm or a consumer is a complex phenomenon.

The other features of managerial economics are explained as below:

1. **Close to microeconomics:**

Managerial economics is concerned with finding the solutions for different managerial problems of a particular firm. Thus, it is more close to microeconomics. The study of an individual consumer or a firm is called microeconomics (also called the *Theory of Firm*). Microeconomics deals with behavior and problems of single individual and of micro organization. Managerial economics has its roots in microeconomics and it deals with the micro or individual enterprises.

1. **Macroeconomics:**

The study of ‘aggregate’ or total level of economic activity in a country is called *macroeconomics*. It studies the flow of economics resources or factors of production (such as land, labour, capital, organization and technology) from the resource owner to the business firms and then from the business firms to the households. It deals with total aggregates, for instance, total national income total employment, output and total investment. It studies the interrelations among various aggregates and examines their nature and behaviour, their determination and causes of fluctuations in the.

1. ***Normative statements*:**

A normative statement usually includes or implies the words ‘ought’ or ‘should’. They reflect people’s moral attitudes and are expressions of what a team of people ought to do. For instance, it deals with statements such as ‘Government of India should open up the economy. Such statement are based on value judgments and express views of what is ‘good’ or ‘bad’, ‘right’ or ‘ wrong’. One problem with normative statements is that they cannot to verify by looking at the facts, because they mostly deal with the future. Disagreements about such statements are usually settled by voting on them.

1. ***Prescriptive actions*:**

Prescriptive action is goal oriented. Given a problem and the objectives of the firm, it suggests the course of action from the available alternatives for optimal solution. If does not merely mention the concept, it also explains whether the concept can be applied in a given context on not...

1. ***Offers scope to evaluate each alternative*:**

Managerial economics provides an opportunity to evaluate each alternative in terms of its costs and revenue. The managerial economist can decide which is the better alternative to maximize the profits for the firm.

1. ***Interdisciplinary:***

The contents, tools and techniques of managerial economics are drawn from different subjects such as economics, management, mathematics, finance, marketing statistics, accountancy, psychology, organizational behavior, sociology and etc.

1. **Managerial economic is descriptive**:

It is provides explanation description for the concepts of sales, profit ect… managerial economic provides brief description for the questions like how will be our sales, when can we reach breakeven and from what time we can get profits ect...

1. **Managerial economic is application oriented**:

*It is* helps the managers in solving problems of different application areas like production. Pricing, promotion demand analysis ect.

**SCOPE OF MANAGERIAL ECONOMICS:**

The scope of managerial economics refers to its area of study. Managerial economics refers to its area of study. Managerial economics is help to find out the optimal solution for different managerial problems such as *Production*, Capital Management Decisions, Pricing Decisions, Promotion Strategies, *Demand Analyses and Forecasting, Resource Allocation Profit analysis ,Capital or investment analyses,* Profit Expectation and Management

The production department, marketing and sales department and the finance department usually handle these five types of decisions.

*Production*

Capital Management Decisions

Pricing Decisions

Promotion Strategies

*Demand Analyses and Forecasting:*

*Resource Allocation:*

*Profit analysis:*

*Capital or investment analyses:*

Profit Expectation and Management

Concepts of Managerial economics

Optimum solution

**1. Production**

*It means inputs are transfer to output.* Production analysis is in physical terms. While the cost analysis is in monetary terms cost concepts and classifications, cost-out-put relationships, economies and diseconomies of scale and production functions are some of the points constituting cost and production analysis.

**2. Capital Management Decisions**

Capital management decision carries lot of weight age in the organization. It deals with various options of capital employment and respective returns with that investment. A manager has to select optimal investment decision among the available options with the use of managerial economics using discounted cash flow techniques and non discounted can flow techniques.

**3. Pricing Decisions**

Pricing plays a vital role in the success of product as well as the organization. Managerial Economics provides different types of prices for products. Managerial Economics has a close watch on the factors affecting the pricing. How the organization has to price the items, when to do changes in pricing like questions will be answered by managerial Economics. Pricing decisions have been always within the preview of managerial economics. Pricing policies are merely a subset of broader class of managerial economic problems. Price theory helps to explain how prices are determined under different types of market conditions.

**4. Promotion Strategies**

Whatever many be the quality of product, if it was not reached to final customer, it cannot get success. So, proper promotion has to be done in all products and services. Managerial Economics guides managers how to promote and what is the sector they need to concentrate more and what should be the advertisement budget etc.

***5.* Demand Analyses and Forecasting:**

A firm can survive only if it is able to the demand for its product at the right time, within the right quantity. Understanding the basic concepts of demand is essential for demand forecasting. Demand analysis should be a basic activity of the firm because many of the other activities of the firms depend upon the outcome of the demand forecast.

***4.* Resource Allocation:**

Managerial Economics is the traditional economic theory that is concerned with the problem of optimum allocation of scarce resources. Marginal analysis is applied to the problem of determining the level of output, which maximizes profit. In this respect linear programming techniques has been used to solve optimization problems. In fact lines programming is one of the most practical and powerful managerial decision making tools currently available.

***5.* Profit analysis*:***

Profit making is the major goal of firms. There are several constraints here an account of competition from other products, changing input prices and changing business environment hence in spite of careful planning, there is always certain risk involved.

Managerial economics deals with techniques of averting of minimizing risks. Profit theory guides in the measurement and management of profit, in calculating the pure return on capital, besides future profit planning.

***6.* Capital or investment analyses:**

Capital is the foundation of business. Lack of capital may result in small size of operations. Availability of capital from various sources like equity capital, institutional finance etc. may help to undertake large-scale operations. Hence efficient allocation and management of capital is one of the most important tasks of the managers. The major issues related to capital analysis are:

The choice of investment project

Evaluation of the efficiency of capital

Most efficient allocation of capital

Knowledge of capital theory can help very much in taking investment decisions. This involves, capital budgeting, feasibility studies, analysis of cost of capital etc.

**7. Profit Expectation and Management**

In addition to the all the above, sales of product takes place. Managerial economics tells us when can we reach the breakeven point and when can be we get profit. It also guides as in holders or reinvest in the same product.

These are the application areas where managerial economics can be used to take a decision.

**MANAGERIAL ECONOMICS RELATIONSHIP WITH OTHER DISCIPLINES:**

Many new subjects have evolved in recent years due to the interaction among basic disciplines. While there are many such new subjects in natural and social sciences, managerial economics can be taken as the best example of such a phenomenon among social sciences. Hence it is necessary to trace its roots and relationship with other disciplines.

*1****.* Relationship with economics:**

The relationship between managerial economics and economics theory may be viewed from the point of view of the two approaches to the subject Viz. Micro Economics and Marco Economics. Microeconomics is the study of the economic behavior of individuals, firms and other such micro organizations. Managerial economics is rooted in Micro Economic theory.

Managerial Economics makes use to several Micro Economic concepts such as marginal cost, marginal revenue, elasticity of demand as well as price theory and theories of market structure to name only a few. Macro theory on the other hand is the study of the economy as a whole. It deals with the analysis of national income, the level of employment, general price level, consumption and investment in the economy and even matters related to international trade, Money, public finance, etc.

*2****.* Management theory and accounting**:

Managerial economics has been influenced by the developments in management theory and accounting techniques. Accounting refers to the recording of pecuniary transactions of the firm in certain books. A proper knowledge of accounting techniques is very essential for the success of the firm because profit maximization is the major objective of the firm.

***3.* Managerial Economics and mathematics:**

The use of mathematics is significant for managerial economics in view of its profit maximization goal long with optional use of resources. The major problem of the firm is how to minimize cost, hoe to maximize profit or how to optimize sales. Mathematical concepts and techniques are widely used in economic logic to solve these problems. Also mathematical methods help to estimate and predict the economic factors for decision making and forward planning.

***4.* Managerial Economics and Statistics:**

Managerial Economics needs the tools of statistics in more than one way. A successful businessman must correctly estimate the demand for his product. He should be able to analyses the impact of variations in tastes. Fashion and changes in income on demand only then he can adjust his output. Statistical methods provide and sure base for decision-making. Thus statistical tools are used in collecting data and analyzing them to help in the decision making process.

*5****.* Managerial Economics and Operations Research:**

Taking effectives decisions is the major concern of both managerial economics and operations research. The development of techniques and concepts such as linear programming, inventory models and game theory is due to the development of this new subject of operations research in the postwar years. Operations research is concerned with the complex problems arising out of the management of men, machines, materials and money.

Operation research provides a scientific model of the system and it helps managerial economists in the field of product development, material management, and inventory control, quality control, marketing and demand analysis. The varied tools of operations Research are helpful to managerial economists in decision-making.

***6.* Managerial Economics and the theory of Decision- making:**

The Theory of decision-making is a new field of knowledge grown in the second half of this century. Most of the economic theories explain a single goal for the consumer i.e., Profit maximization for the firm. But the theory of decision-making is developed to explain multiplicity of goals and lot of uncertainty.

As such this new branch of knowledge is useful to business firms, which have to take quick decision in the case of multiple goals. Viewed this way the theory of decision making is more practical and application oriented than the economic theories.

**DEMAND ANALYSIS**

**INTRODUCTION & MEANING:**

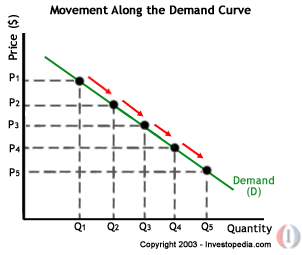
Demand in common parlance means the desire for an object. But in economics demand is something more than this. According to Stonier and Hague, “Demand in economics means demand backed up by enough money to pay for the goods demanded”. This means that the demand becomes effective only it if is backed by the purchasing power in addition to this there must be willingness to buy a commodity.

|  |  |
| --- | --- |
| Price of Apple (In. Rs.) | Quantity Demanded |
| 10 | 1 |
| 8 | 2 |
| 6 | 3 |
| 4 | 4 |
| 2 | 5 |

Thus demand in economics means the desire backed by the willingness to buy a commodity and the purchasing power to pay. In the words of “Benham” “The demand for anything at a given price is the amount of it which will be bought per unit of time at that Price”. (Thus demand is always at a price for a definite quantity at a specified time.) Thus demand has three essentials – price, quantity demanded and time. Without these, demand has to significance in economics.

A product or services is said to have demand when tree conditions are satisfied:

**Desire + Ability to pay + Willingness to pay for it**



**FACTORS AFFECTING DEMAND:**

There are factors on which the demand for a commodity depends. These factors are economic, social as well as political factors. The effect of all the factors on the amount demanded for the commodity is called Demand Function.

These factors are as follows:

1. **Price of the Commodity:**

The most important factor-affecting amount demanded is the price of the commodity. The amount of a commodity demanded at a particular price is more properly called price demand. The relation between price and demand is called the Law of Demand. It is not only the existing price but also the expected changes in price, which affect demand

1. **Income of the Consumer:**

The second most important factor influencing demand is consumer income. In fact, we can establish a relation between the consumer income and the demand at different levels of income, price and other things remaining the same. The demand for a normal commodity goes up when income rises and falls down when income falls. But in case of Giffen goods the relationship is the opposite.

1. **Prices of related goods:**

The demand for a commodity is also affected by the changes in prices of the related goods also. Related goods can be of two types:

(I). Substitutes which can replace each other in use; for example, tea and coffee are substitutes. The change in price of a substitute has effect on a commodity’s demand in the same direction in which price changes. The rise in price of coffee shall raise the demand for tea;

(ii). Complementary foods are those which are jointly demanded, such as pen and ink. In such cases complementary goods have opposite relationship between price of one commodity and the amount demanded for the other. If the price of pens goes up, their demand is less as a result of which the demand for ink is also less.

The price anddemand go in opposite direction. The effect of changes in price of a commodity on amounts demanded of related commodities is called Cross Demand.

1. **Tastes of the Consumers:**

The amount demanded also depends on consumer’s taste. Tastes include fashion, habit, customs, etc. A consumer’s taste is also affected by advertisement. If the taste for a commodity goes up, its amount demanded is more even at the same price. This is called increase in demand. The opposite is called decrease in demand.

1. **Population:**

Increase in population increases demand for necessaries of life. The composition of population also affects demand. Composition of population means the proportion of young and old and children as well as the ratio of men to women. A change in composition of population has an effect on the nature of demand for different commodities.

1. **Expectations regarding the future:**

If consumers expect changes in price of commodity in future, they will change the demand at present even when the present price remains the same. Similarly, if consumers expect their incomes to rise in the near future they may increase the demand for a commodity just now.

1. **Advertisement expenditure:**

Advertisement promotes sales. Other factors remaining same, with every increase in the advertisement expense there will be an increase in sales.

1. **Demonstration effect:**

Demand for luxury item is always great among the rich. This naturally influences the less affluent or the lower income group in the neighborhood. They also begin to buy luxury item to imitate their rich neighbors even when they do not have any genuine need for them

1. ***Climate and weather:***

The climate of an area and the weather prevailing there has a decisive effect on consumer’s demand. In cold areas woolen cloth is demanded. During hot summer days, ice is very much in demand. On a rainy day, ice cream is not so much demanded.

**LAW OF DEMAND**

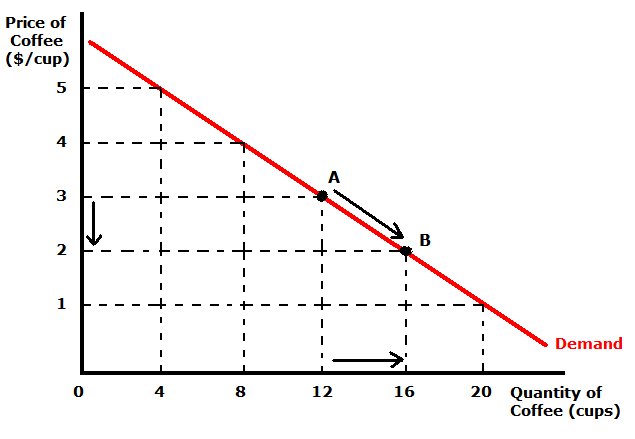
Law of demand shows the relation between price and quantity demanded of a commodity in the market. In the words of Marshall, “the amount demand increases with a fall in price and diminishes with a rise in price”.

Generally, a person demands more at a lower price and less at a higher price. The relation of price to demand or sales is known in Economics as the Law of Demand.

The Law of Demand states that “higher the price, lower the demand and vice versa, other things remaining the same”.

The demand curve slopes downward from left to rights showing that more quantities are demanded at lower prices. That is, demand responds to price in the reverse direction. The reasons for the inverse relation between price and quantity demanded are the following:

|  |  |
| --- | --- |
| Price of Apple (In. Rs.) | Quantity Demanded |
| 10 | 1 |
| 8 | 2 |
| 6 | 3 |
| 4 | 4 |
| 2 | 5 |

*Demand Schedule .*

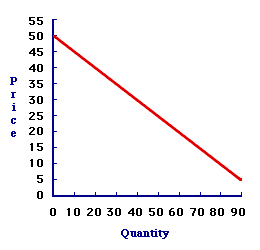
When the price falls from Rs. 10 to 8 quantity demand increases from 1 to 2. In the same way as price falls, quantity demand increases on the basis of the demand schedule we can draw the demand curve The demand curve DD shows the inverse relation between price and quantity demand of apple. It is downward sloping.

**Income Effect:**

A fall in price results in an increase in incomes of the consumer. As the price falls he can buy the same quantity as before with less amount of money. Thus he gains some money a part of which can be used for purchasing some more unit of the same commodity. This results in an increase in demand for that commodity. This results in an increase in demand for that commodity. When the price rises the consumers’ income is reduced. This causes fall in the purchasing power of the consumer. Now he can buy lesser quantity with the same amount. Hence, we can observe a decrease in demand o that commodity.

**Substitute Effect:**

When the price of a commodity rises, the consumer may substitute that relatively costly commodity with less costly one if the substitutes are available. When tea becomes cheaper some people may shift their consumption from coffee to tea. Similarly if the price rises consumers, to some extent, may substitute the costly commodity with a comparatively low priced commodity of a similar kind.



**Diminishing of Marginal Utility**:

If a person consumes more units of the same commodity, he will get less and less satisfaction from the additional units i.e., the utility from each additional units goes on diminishing. The consumer will be ready to buy the additional unit only if is available at a lower price. That is why consumers buy more at lower prices. He goes on buying till the marginal utility of the product is equal to its price.

***Assumptions:***

Law is demand is based on certain assumptions:

This is no change in consumers taste and preferences.

Income should remain constant.

Prices of other goods should not change.

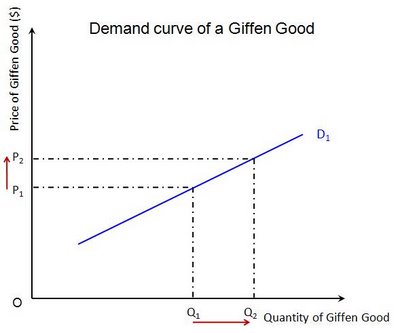
There should be no substitute for the commodity

The commodity should not confer at any distinction

The demand for the commodity should be continuous

People should not expect any change in the price of the commodity

***EXCEPTIONAL DEMAND CURVE***

Sometimes the demand curve slopes upwards from left to right. In this case the demand curve has a positive slope.

When price increases from OP to Op1 quantity demanded also increases from to OQ1 and vice versa. The reasons for exceptional demand curve are as follows.

***1. Giffen paradox:***

*Robert giffen has observed an effect of goods which has increase in demand even if price raised and goods demand decreases even if price decreased. He named above the goods as*

Superior goods

Inferior goods

Ex: if a person buy bread and meat daily, If the price of bread is decreased, he will not purchases more breads, for the balance of money he will purchases meat . Decrease in the price of an inferior goods does not increases its demand, dut increase the demand for superior goods

The Giffen good or inferior good is an exception to the law of demand. When the price of an inferior good falls, the poor will buy less and vice versa. For example, when the price of maize falls, the poor are willing to spend more on superior goods than on maize if the price of maize increases, he has to increase the quantity of money spent on it. Otherwise he will have to face starvation. Thus a fall in price is followed by reduction in quantity demanded and vice versa. “Giffen” first explained this and therefore it is called as Giffen’s paradox.

***2. Demonstration effect:***

‘Veblan’ has explained the exceptional demand curve through his doctrine of conspicuous consumption. Rich people buy certain good because it gives social distinction or prestige for example diamonds are bought by the richer class for the prestige it possess. It the price of diamonds falls poor also will buy is hence they will not give prestige. Therefore, rich people may stop buying this commodity.

***3. Ignorance:***

Sometimes, the quality of the commodity is Judge by its price. Consumers think that the product is superior if the price is high. As such they buy more at a higher price.

***4. Speculative effect:***

If the price of the commodity is increasing the consumers will buy more of it because of the fear that it increase still further, Thus, an increase in price may not be accomplished by a decrease in demand.

***5. Fear of shortage:***

During the times of emergency of war People may expect shortage of a commodity. At that time, they may buy more at a higher price to keep stocks for the future.

***6. Necessaries:***

In the case of necessaries like rice, vegetables etc. people buy more even at a higher price.

**7. Goods don’t have substitutes:**

As a general tendency, demand has to be decrease with increase in price, but if any goods don’t have substitutes, like salt and medicines, the demand will not get decreases. People will definitely buy as they don’t have other alternative.

**8. Insignificant income spent on goods:**

If consumers spend a small amount for any goods the price changes will not influence the demand for that sort of goods, as they spent insignificant income or match boxes they might not reduce buying even if price rises

**9. Conspicuous consumption:**

Goods like diamonds, pearls ect ,are purchased by rich and wealthy section of the society because the price of such goods are so high that they are beyond the reach of a common man .most of these goods are demand when their price go up very high

ELASTICITY OF DEMAND

Elasticity of demand explains the relationship between a change in price and consequent change in amount demanded. “Marshall” introduced the concept of elasticity of demand. Elasticity of demand shows the extent of change in quantity demanded to a change in price.

In the words of “Marshall”, “The elasticity of demand in a market is great or small according as the amount demanded increases much or little for a given fall in the price and diminishes much or little for a given rise in Price”

**Elastic demand:** A small change in price may lead to a great change in quantity demanded. In this case, demand is elastic.

**In-elastic demand:** If a big change in price is followed by a small change in demanded then the demand in “inelastic”.

Proportionate change in the quantity demand of commodity

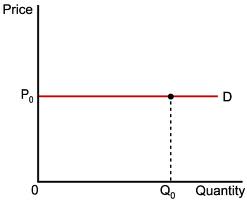
**Elasticity** = ------------------------------------------------------------------

Proportionate change in the factors of commodity

**MEASUREMENT OF ELASTICITY OF DEMAND**

* **Perfectly elastic demand**
* **Perfectly Inelastic Demand**
* **Relatively elastic demand**
* **Relatively in-elastic demand**
* **Unit elasticity of demand**

**A. PERFECTLY ELASTIC DEMAND:**

When small change in price leads to an infinitely large change is quantity demand, it is called perfectly or infinitely elastic demand. In this case E=∞

The demand curve DD1 is horizontal straight line. It shows the at “OP” price any amount is demand and if price increases, the consumer will not purchase the commodity.

**B. PERFECTLY INELASTIC DEMAND**

In this case, even a large change in price fails to bring about a change in quantity demanded.

# Description: http://courses.cit.cornell.edu/econ101-dl/images/l6fig2.gif

# When price increases from ‘OP’ to ‘OP’, the quantity demanded remains the same. In other words the response of demand to a change in Price is nil. In this case ‘E’=0.

**C. RELATIVELY ELASTIC DEMAND:**

Demand changes more than proportionately to a change in price. i.e. a small change in price loads to a very big change in the quantity demanded. In this caseE > 1. This demand curve will be flatter.

# Description: http://1.bp.blogspot.com/_Fu8Af7ufmbU/SqYxe-NVwKI/AAAAAAAAAdA/u_q5-0iXPQc/s400/Relatively+Elastic+Curve.gif

When price falls from ‘OP’ to ‘OP1’, amount demanded increase from “OQ’ to “OQ1’ which is larger than the change in price.

**D. RELATIVELY IN-ELASTIC DEMAND.**

Quantity demanded changes less than proportional to a change in price. A large change in price leads to small change in amount demanded. Here E < 1. Demanded carve will be steeper.

# Description: http://4.bp.blogspot.com/_Fu8Af7ufmbU/SqYxfWU67cI/AAAAAAAAAdI/m0_nDhUX9rE/s400/Relatively+Inelastic+Curve.gif

When price falls from “OP’ to ‘OP1 amount demanded increases from OQ to OQ1, which is smaller than the change in price.

**E. UNIT ELASTICITY OF DEMAND:**

The change in demand is exactly equal to the change in price. When both are equal E=1 and elasticity if said to be unitary.

# Description: https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQEsvcvxLQyWh7qjkB2YvPMd_N_ywcOndub0qZOtasAfRcLsOeXwA

When price falls from ‘OP’ to ‘OP1’ quantity demanded increases from ‘OP’ to ‘OP1’, quantity demanded increases from ‘OM’ to ‘OM1’. Thus a change in price has resulted in an equal change in quantity demanded so price elasticity of demand is equal to unity.

# Description: http://www.transtutors.com/Uploadfile/CMS_Images/3116_elasticities-of-demands.JPG

**TYPES OF ELASTICITY OF DEMAND:**

There are three types of elasticity of demand:

1. Price elasticity of demand
2. Income elasticity of demand
3. Cross elasticity of demand
4. advertising elasticity of demand

**1. PRICE ELASTICITY OF DEMAND:**

Marshall was the first economist to define price elasticity of demand. Price elasticity of demand measures changes in quantity demand to a change in Price. It is the ratio of percentage change in quantity demanded to a percentage change in price.

Proportionate change in the quantity demand of commodity

**Price elasticity** = ------------------------------------------------------------------

Proportionate change in the price of commodity

There are three cases of price elasticity of demand

* Price elasticity greater than unity
* Price elasticity leas than unity
* Unit price elasticity
* **Price elasticity greater than unity:**

Demand changes more than proportionately to a change in price. i.e. a small change in price loads to a very big change in the quantity demanded. In this caseE > 1. This demand curve will be flatter.

# Description: http://1.bp.blogspot.com/_Fu8Af7ufmbU/SqYxe-NVwKI/AAAAAAAAAdA/u_q5-0iXPQc/s400/Relatively+Elastic+Curve.gif

When price falls from ‘OP’ to ‘OP1’, amount demanded increase from “OQ’ to “OQ1’ which is larger than the change in price.

* **Price elasticity leas than unity:**

Quantity demanded changes less than proportional to a change in price. A large change in price leads to small change in amount demanded. Here E < 1. Demanded carve will be steeper.

# Description: http://www.agmrc.org/media/cms/Graph2_E8477D0941263.jpg

When price falls from “OP1’ to ‘OP2 amount demanded increases from OQ1 to OQ2, which is smaller than the change in price.

* **unit price elasticity:**

The change in demand is exactly equal to the change in price. When both are equal E=1 and elasticity if said to be unitary.

**2. INCOME ELASTICITY OF DEMAND:**

Income elasticity of demand shows the change in quantity demanded as a result of a change in income. Income elasticity of demand may be slated in the form of a formula.

Proportionate change in the quantity demand of commodity

**Income Elasticity** = ------------------------------------------------------------------

Proportionate change in the income of the people

Income elasticity of demand can be classified in to five types.

**A. Zero income elasticity:**

Quantity demanded remains the same, even though money income increases. Symbolically, it can be expressed as Ey=0. It can be depicted in the following way:

# Description: https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcR3khXNwss1Gc56-Q1kYl20hXqKHvW4205NDbHDpigpAnm_EmDs

As income increases from OY to OY1, quantity demanded never changes.

**B. Negative Income elasticity:**

When income increases, quantity demanded falls. In this case, income elasticity of demand is negative. i.e., Ey< 0

# Description: https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcRAiTMoxfDHZNh4xswi60gXt_t8Xo81zGhnXW4TXbD77fxog7sBUQ

When income increases from OY1 to OY2, demand falls from OQ1 to OQ2.

**c. Unit income elasticity:**

When an increase in income brings about a proportionate increase in quantity demanded, and then income elasticity of demand is equal to one. Ey = 1

# Description: http://wikieducator.org/images/0/04/Income_2.jpeg

When income increases from OY1 to OY2, Quantity demanded also increases from OQ1 to OQ2.

**d. Income elasticitylees than unity:**

In this case, an increase in come brings about a more than proportionate increase in quantity demanded. Symbolically it can be written as Ey< 1.

# Description: https://encrypted-tbn1.gstatic.com/images?q=tbn:ANd9GcTRqiRTvstE8oBiAv_u2DrqDKn2oCdfsGt5FKZPsuAROzzMD5LaMA

It shows high-income elasticity of demand. When income increases from OY to OY1, Quantity demanded increases from OQ to OQ1.

**E. Income elasticity greater than unity:**

When income increases quantity demanded also increases but less than proportionately. In this case E < 1.

# Description: https://encrypted-tbn3.gstatic.com/images?q=tbn:ANd9GcQOyrvrjrkXGvGIKJZSuLCgm8xA2PpTT-YH4w_9XPAwU0Dg8fH4CQ

An increase in income from OY1 to OY2, brings what an increase in quantity demanded from OQ1 to OQ2, But the increase in quantity demanded is smaller than the increase in income. Hence, income elasticity of demand is less than one.

**3. CROSS ELASTICITY OF DEMAND:**

A change in the price of one commodity leads to a change in the quantity demanded of another commodity. This is called a cross elasticity of demand. The formula for cross elasticity of demand is:

Proportionate change in the quantity demand of commodity “**X”**

**Cross elasticity** = -----------------------------------------------------------------------

Proportionate change in the price of commodity “**Y”**

**A.In case of substitutes**, cross elasticity of demand is positive. Eg: Coffee and Tea. When the price of coffee increases, Quantity demanded of tea increases. Both are substitutes.

# Description: https://lh4.googleusercontent.com/C9WCWKult828yd4Vw0YKFaPBx_k7NBWBcPm0Q-smU7G9bNkswqi53ju0fVok0wAJrSzOHyyxS8KMuv4s-cE3FCIuo4wHulnvYVIAFNCc8yZgTYGgE_E

**B.In case of compliments**, cross elasticity is negative. If increase in the price of one commodity leads to a decrease in the quantity demanded of another and vice versa.

# Description: http://faculty.tamu-commerce.edu/dfunderburk/231/images/graph5.jpg

When price of car goes up from OP to OP! the quantity demanded of petrol decreases from OQ1 to OQ2. The cross-demanded curve has negative slope.

**4 ADVERTISING ELASTICITY OF DEMAND**

It refers to increase in the sale revenue because of changes in the advertising expenditure. In other words there is a direct relationship between the amount of money spent on advertising and its impact on sales. It is always positive

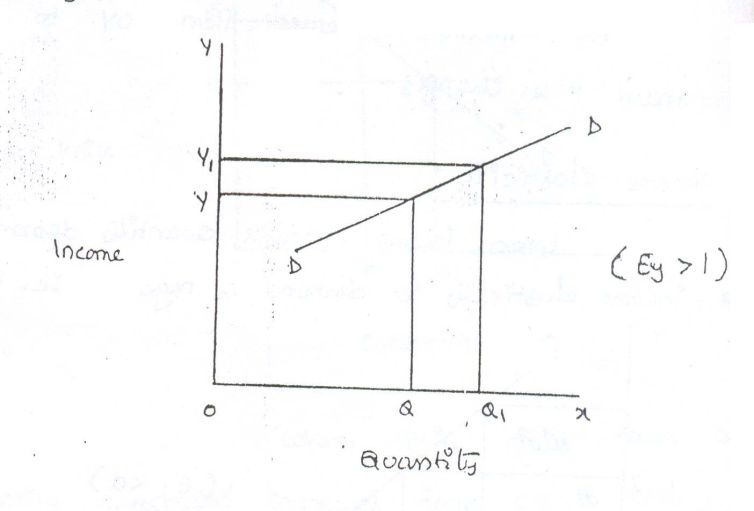
Proportionate change in the quantity demand of product “**X”**

**Advertising elasticity** = -----------------------------------------------------------------------

Proportionate change in the advertising cost

**Advertising elasticity greater than unity:**

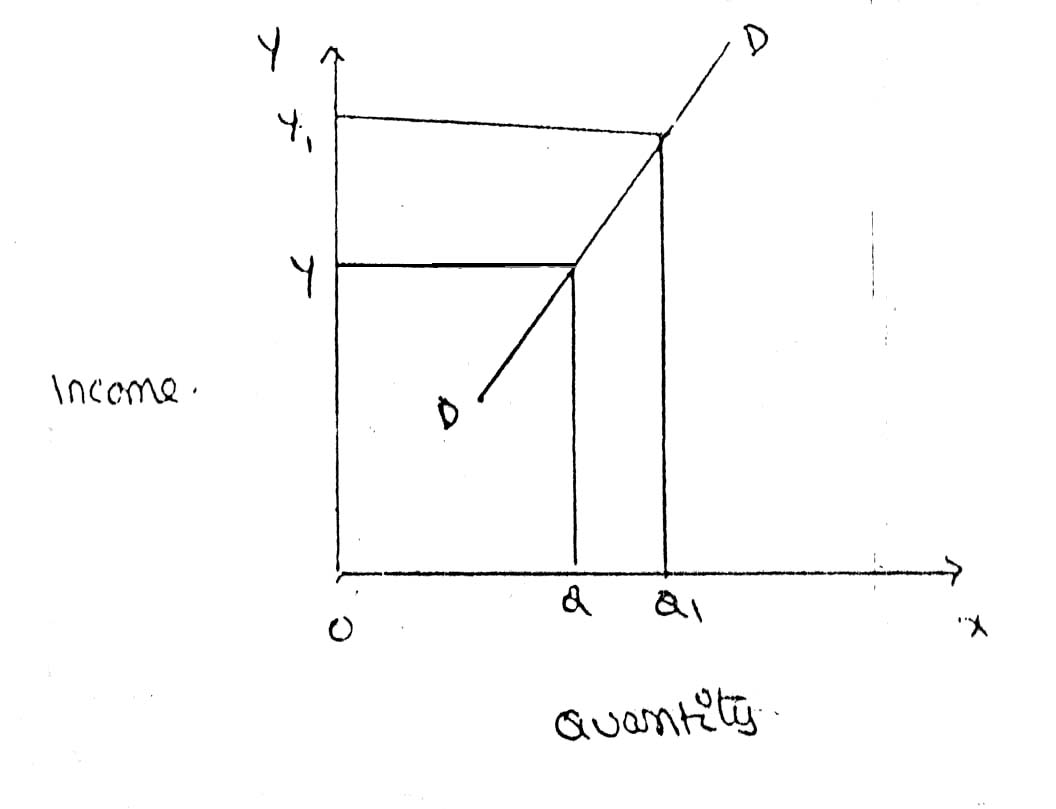
In this case, an increase in come brings about a more than proportionate increase in quantity demanded. Symbolically it can be written as Ey> 1.



It shows high-income elasticity of demand. When income increases from OY to OY1, Quantity demanded increases from OQ to OQ1.

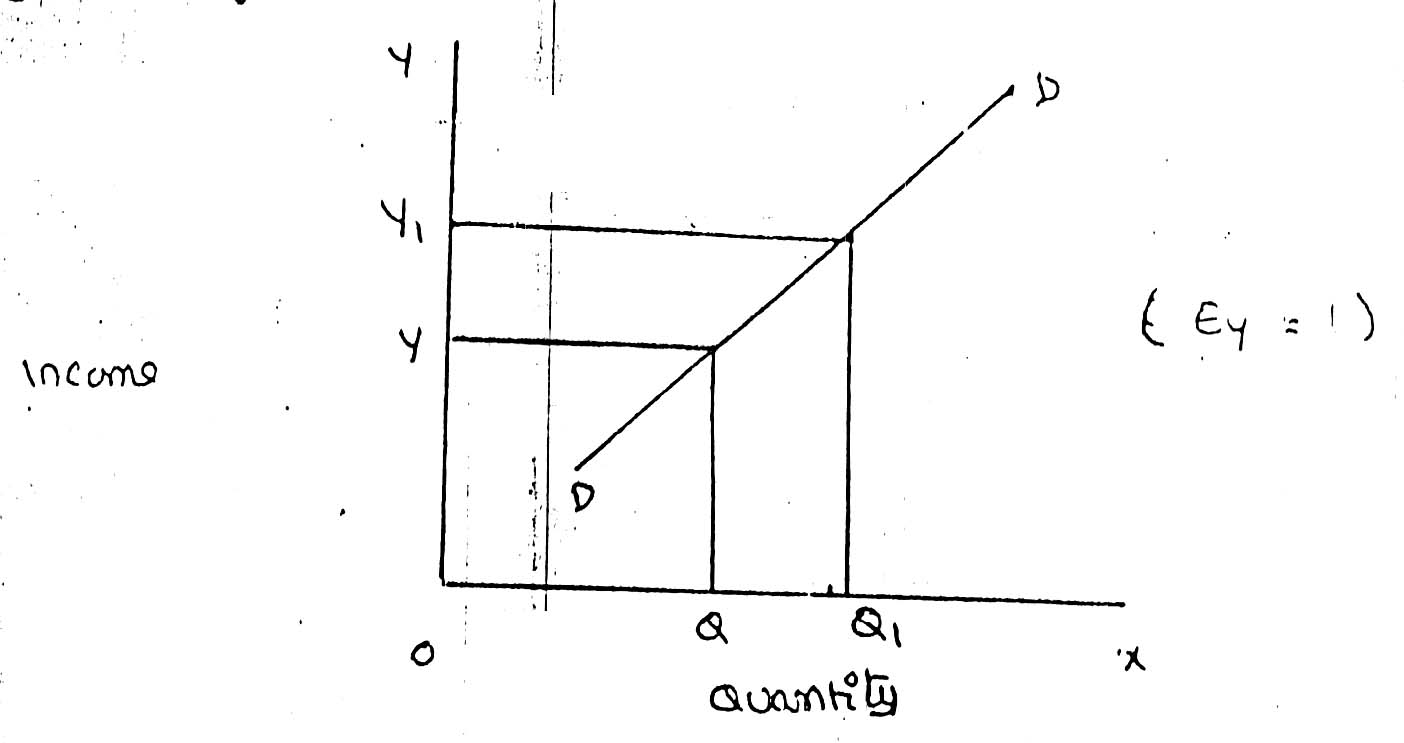
**Advertising elasticity leas than unity:**

When income increases quantity demanded also increases but less than proportionately. In this case E < 1.



**Unit advertising elasticity:**

When an increase in income brings about a proportionate increase in quantity demanded, and then income elasticity of demand is equal to one. Eye = 1



**FACTORS INFLUENCING THE ELASTICITY OF DEMAND**

Elasticity of demand depends on many factors.

***1. Nature of commodity:***

Elasticity or in-elasticity of demand depends on the nature of the commodity i.e. whether a commodity is a necessity, comfort or luxury, normally; the demand for Necessaries like salt, rice etc is inelastic. On the other band, the demand for comforts and luxuries is elastic.

***2. Availability of substitutes:***

Elasticity of demand depends on availability or non-availability of substitutes. In case of commodities, which have substitutes, demand is elastic, but in case of commodities, which have no substitutes, demand is in elastic.

***3. Variety of uses:***

If a commodity can be used for several purposes, than it will have elastic demand. i.e. electricity. On the other hand, demanded is inelastic for commodities, which can be put to only one use.

***4. Postponement of demand:***

If the consumption of a commodity can be postponed, than it will have elastic demand. On the contrary, if the demand for a commodity cannot be postpones, than demand is in elastic. The demand for rice or medicine cannot be postponed, while the demand for Cycle or umbrella can be postponed.

***5. Amount of money spent:***

Elasticity of demand depends on the amount of money spent on the commodity. If the consumer spends a smaller for example a consumer spends a little amount on salt and matchboxes. Even when price of salt or matchbox goes up, demanded will not fall. Therefore, demand is in case of clothing a consumer spends a large proportion of his income and an increase in price will reduce his demand for clothing. So the demand is elastic.

***6. Time:***

Elasticity of demand varies with time. Generally, demand is inelastic during short period and elastic during the long period. Demand is inelastic during short period because the consumers do not have enough time to know about the change is price. Even if they are aware of the price change, they may not immediately switch over to a new commodity, as they are accustomed to the old commodity.

***7. Range of Prices:***

Range of prices exerts an important influence on elasticity of demand. At a very high price, demand is inelastic because a slight fall in price will not induce the people buy more. Similarly at a low price also demand is inelastic. This is because at a low price all those who want to buy the commodity would have bought it and a further fall in price will not increase the demand. Therefore, elasticity is low at very him and very low prices.

**IMPORTANCE OF ELASTICITY OF DEMAND:**

The concept of elasticity of demand is of much practical importance.

***1. Price fixation:***

The manufacturer can decide the amount of price that can be fixed for his product based on the concept of elasticity. If there is no competition the manufacturer is free to fix his price. Where there is a competition it difficult to fix the price

***2. Production:***

Producers generally decide their production level on the basis of demand for the product. Hence elasticity of demand helps the producers to take correct decision regarding the level of cut put to be produced.

***3. Distribution:***

Elasticity of demand also helps in the determination of rewards for factors of production. For example, if the demand for labour is inelastic, trade unions will be successful in raising wages. It is applicable to other factors of production.

***4. International Trade:***

Elasticity of demand helps in finding out the terms of trade between two countries. Terms of trade refers to the rate at which domestic commodity is exchanged for foreign commodities. Terms of trade depends upon the elasticity of demand of the two countries for each other goods.

***5. Public Finance:***

Elasticity of demand helps the government in formulating tax policies. For example, for imposing tax on a commodity, the Finance Minister has to take into account the elasticity of demand.

***6. Nationalization:*** The concept of elasticity of demand enables the government to decide about nationalization of industries.

**7. Forecasting demand:**

Income elasticity is used to forecasting demand for product. The demand for the product can be forecasting a given level. Other words, the impact of changing income level on the demand of the product can be assessed with the help of income elasticity

**8. Planning the level of output and price:**

The knowing of price elasticity is very useful to producers. If the demand for the product is inelasticity, a little higher price may be to him to get huge profits

**9. Public utilities**:

The govt uses the concept of elasticity in fixing chargers for the public utility such as electricity, water ect

**DEMAND FORECASTING**

**INTRODUCTION:**

The information about the future is essential for both new firms and those planning to expand the scale of their production. Demand forecasting refers to an estimate of future demand for the product. Forecasting helps to assess the likely demand for products and services and to plan production accordingly

In recent times, forecasting plays an important role in business decision-making. Demand forecasting has an important influence on production planning. It is essential for a firm to produce the required quantities at the right time.

It is essential to distinguish between forecasts of demand and forecasts of sales. Sales forecast is important for estimating revenue cash requirements and expenses. Demand forecasts relate to production, inventory control, timing, reliability of forecast etc. However, there is not much difference between these two terms.

**THE NEED FOR DEMAND FORECASTING**

The importance of demand forecasting is paramount when either production or demand is uncertain. Where the supply is not in accordance with the demand, it results in the development of a black market or excessive prices.

Where there is a lot of competition, the entrepreneur has to estimate the demand for his production and services so that he can plan his material inputs, such as manpower, finances, advertising and other overheads.

**TYPES OF DEMAND FORECASTING:**

Based on the time span and planning requirements of business firms, demand forecasting can be classified in to

1. Short-term demand forecasting and

2. Long – term demand forecasting.

***1. Short-term demand forecasting:*** Short-term demand forecasting is limited to short periods, usually for one year. It relates to policies regarding sales, purchase, price and finances. It refers to existing production capacity of the firm. Short-term forecasting is essential for formulating is essential for formulating a suitable price policy. If the business people expect of rise in the prices of raw materials of shortages, they may buy early... Production may be undertaken based on expected sales and not on actual sales.

***2. Long – term forecasting:*** In long-term forecasting, the businessmen should now about the long-term demand for the product. Planning of a new plant or expansion of an existing unit depends on long-term demand. Similarly a multi product firm must take into account the demand for different items. When forecast are mode covering long periods, the probability of error is high. It is very difficult to forecast the production, the trend of prices and the nature of competition.

**FORECASTING LEVELS**

**INDUSTRY LEVEL**

**FIRM LEVEL**

**ECONOMIC LEVEL**

Economic forecasting is concerned with the economics, its covers whole economy. It based on levels of income saving of the customers.

Industrial level forecasting is used for inter-industry comparisons and is being supplied by trade association or chamber of commerce.

Firm level forecasting relates to individual firm. Estimate the demand for product and services offered by a single firm

**Functional nature o demand**

Higher volumes of sales can be realized with higher level of advertisements. However there could be some minimum value sales even when there are no advertisements on a large scale.

**Degree of orientation**

The fore casting is terms of total sales can be viewed as general forecasting where as product and service wise forecasting is a refers to specific forecasting.

**METHODS OF DEMANDFORECASTING**

1. SURVEY METHOD

(a) Census methods

(b) Sample method

2. STATISTICAL METHODS

1. Trend Projection Methods

A) Moving Average Method

B) Exponential Smoothing

2. Barometric Techniques

3. Correlation and Regression Methods

3.OTHERS METHODS

(a)Expert Opinion

(B)Test Marketing

(C)Controlled Experiments

(D)Judgmental Approach

1. **Survey method :**

It is the most useful source of information would be the buyers themselves. It is better to draw list of all potential buyers, approach each buyers to ask how much he plans to buy of the given product at a given point of time. The survey of buyers can be conducted either by covering the whole populations or by selecting a sample group of buyers. Suppose there are 10000 buyers for a particular product.

If the company wishes to elicit the opinion of all the buyers, this method is called census or total enumeration methods. This methods is not only time consuming but also costly. The firm can select a group of buyers who can represent the whole populations this methods is called the sample method.

The survey method is considered more advantages in the following situations.

(1) Where the product is new on the market for which no data previously exists

(2) When the buyers are few and they are accessible

(3) When the cost of reaching them is not significant

(4) When the consumers stick to their intentions

(5) When they are willing to disclose what they intend to do.

This method has certain disadvantages also. They are:

(1) SURVEYS MAY BE EXPENSIVE**;-**Quite often the value of information supplied by the customer is not worth the cost of gathering it.

(2) SAMPLE SIZE AND TIMING OF SURVEY**;-**Sample size should be large enough to yield meaningful results on the desired aspects of study. Also the sample should be selected in such a way that it represents the whole population under the study. This increase the cost and also the time needed to undertake the analysis. The forecast results can deeply be influenced by the timing of the survey. For example, the number of residents preferring to stay in multi-stored apartments soon after the news about an earthquake may drastically come down when compared to the normal times.

Where the surveys are conducted by a group of firms, these costs can be shared.

(3) METHODS OF SAMPLING**;-**The survey should be based on appropriate method of sampling. The method so selected should be capable of providing result with no bays. For instance, the surveys conducted on the internet will have a built-in bias towards those in the higher socio-economic groups who have access to interment.

(4) INCONSISTENT BUYING BEHAVIOUR**;-**The buyers also may not express their intentions freely. Even the buyers do no act upon the way they express. Most of the buyers are susceptible to the advertisement strategies and are emotional when it really comes to the question of buying the product or services.

**STATISTICAL METHODS**

For forecasting the demand for goods and services in the long-run, statistical and mathematical methods are used considering the past data.

**1. TREND PROJECTION METHODS;-**These are generally based on analysis of past sales patterns. These methods dispense with the need for costly market research because the necessary information is often already available in company files in terms of different time periods, that is, a time series data.

(b)**MOVING AVERAGE METHOD;-**This method considers that the average of past events determine the future events. In other words, this method provides consistent results when the past events are consistent and unaffected by wide changes. As the name itself suggest, under this method, the average keeps on moving depending up on the number of years selected. Selection of the number of years is the decisive factor in this method. Moving averages get updated as new information flows in.

(c)**EXPONENTIAL SMOOTIHING;-**This is a more popular technique used for short forecasts. This method is an improvement over moving averages method. Unlike in moving averages method, all time periods (ranging from the immediate past) here are given varying weights, that is, the values of the given variable in the recent time are given higher weights and the values of the given variable in the distant past are given relatively lower weights for further processing.

**2. BAROMETRIC TECHNIQUES;-**In other words, to forecast demand for a particular product or service, use some other relevant indicator (Which is known as a barometer) of future demand. How the statistical data relating to the economy comes handy for this purpose is explained in the following examples.

**3. CORRELATION AND REGRESSION METHODS;-**Correlation and regression methods are statistical techniques. When the two variables tend to change together, then they are said to be correlated. The extent to which they are correlated is measured by correlation coefficient. Of these two variables, one is a dependent variable and the other is an independent. If the high values of one variable are associated with the high values of another, they are said to be positively correlated. For example, if the advertisement are positively correlated. Similarly, if the high values of one variable are associated with the low values of another, then they are said to be negatively correlated. For example, if the price of a product has come down; and as result, there is increase in its demand; the demand and the price are negatively correlated.

**OTHERS METHODS**

**(a)EXPERT OPINION**: Well informed person are called experts. Experts constitute another source of information. These people are generally the outside experts and they do not have any vested in the result of particular survey

An expert is good at forecasting and analyzing the future trends in a given product or service at a given level of technology. The service of an expert could be advantageously used when a firm uses general economic forecast or special industry forecast prepared outside the firm. It may be easy to administer this method where there are parameters clearly defined to make forecast. This act as guidelines

This method has certain advantages and disadvantages.

* Result of this method would be more reliable as the expert is unbiased, has no direct involvement in its primary activities
* Independent demand forecast can be made relatively quickly and cheaply
* Where there is different point of view among different experts, consensus can be arrived through an objective analysis. These experts can be asked to explain the reasons why the forecasts are out of line with consensus. These can be taken into account before taking the final decisions. Sorting out difference in estimates in this way is called DELPHI TECNIQUE

**(b)TEST MAREKETING**: It is likely that opinions given by buyers, sales man or other experts may be, at times, misleading. This is the reason why of the manufacturers favor to test their product or service in a limited market as test –run before they launch their product nationwide. Based on the result of test marketing, valuable lessons can be learnt in how customer reacts to the given product and necessary changes can be introduced to gain wider acceptability. To forecast the sales of a new product or the likely sales of an established product in a new channel of distribution or territory, it is customary to find test marketing in practice.

Automobiles companies maintain a panel of consumers who give feedback on style and design and specification of the new models. Accordingly these companies make changes, if any, and launch the product in the wider markets

The advantages of test marketing are:

* The acceptability of the product can be judged in a limited market
* Before this is too late, the correction can be made to the product design, if necessary. Thus, major atrophy, in term of failure, can be avoided.
* The customer psychology is more focused in this method and the product and service are aligned or redesigned accordingly to gain more customer acceptance

The following are the disadvantages of this method:

* It reveals the quality of product to the competitors before it is launched in the wider markets. The competitors may bring about the similar product or often misuse the result of test marketing against the given company.
* It is not always easy to select a representative audience or market.
* It may also be difficult to extrapolate the feedback received from such a test market, particularly where the chosen market is not fully representative.

**(c)CONTROLLED EXPERIMENTS**: It refers to such exercises of the major determinants of demand are manipulated to suit to the customer with taste and preferences, income groups, and such other. It is further factors remain same in this method in this method the product is introduced in different packages, different prices in different markets or same markets.

This method is still in the infancy stage and not much tried because of the following reasons:

* It is costly and consuming
* It involves elaborate model of studying different markets and different permutations and combinations that can push the product aggressively
* It fails in one market, it may affect other market also

**(d)JUDGEMENTAL APPROACH**: When none of the above methods are directly related to the given product or service, the management has no alternative other than using its own judgment. Even when the above methods are used, the forecasting process is supplemented with the factor of judgment for the following reasons:

* Historical data for significantly long period is not available
* Turning points in terms of polices or procedure

**UNIT - II**

**PRODUCTION AND COST ANALYSIS**

**Introduction:**

The production function expresses a functional relationship between physical inputs and physical outputs of a firm at any particular time period. The output is thus a function of inputs

**Definition:**

Samuelson defines the production function as "the technical relationship which reveals the maximum amount of output capable of being produced by each set of inputs". It is defined for a given state of technical knowledge.

**Input-OutputRelationship or Production Function**

The inputs for any product or service are land, labour, capital, organization and technology. In other words, the production here is the function here of these five variable inputs. Mathematically, this is expressed as

Q=F (L1, L2, C, O, T)

L1 =land

L2 =labour

C = capital

O = organization

T = technology

Where Q is the quantity of production, f explains the function, that is, the type of relation between inputs and outputs these inputs have been taken in conventional terms. In reality, materials also can be included in a set of inputs.

In a specific situation, some factors of production may be important and the relative importance of the factors depends upon the final product to be manufactured. For example, in the case of the software industry, land is not an input factor as significant as that in case of an agricultural product.

In the case of an agricultural product, increasing the other factors of production can increase the production; but beyond a point, increased output can be had only with increased use of agricultural land. Investment in land forms a significant portion of the total cost of production for output. With change in industry and the requirements, the production function also needs to be modified to suit to the situation.

***Assumptions:***

Production function has the following assumptions.

1. The production function is related to a particular period of time.
2. There is no change in technology.
3. The producer is using the best techniques available.
4. The factors of production are divisible.
5. Production function can be fitted to a short run or to long run.

**ProductionFunction with One Variable Inputs and Laws Of Returns**

Assume that a firms production function consists of fixed quantities of all inputs (land, equipment, etc.) except labour which is a variable input when the firm expands output by employing more and more labour it alters the proportion between fixed and the variable inputs. The law can be stated as follows:

“When total output or production of a commodity is increased by adding units of a variable input while the quantities of other inputs are held constant, the increase in total production becomes after some point, smaller and smaller”.

**Three stages of law:**

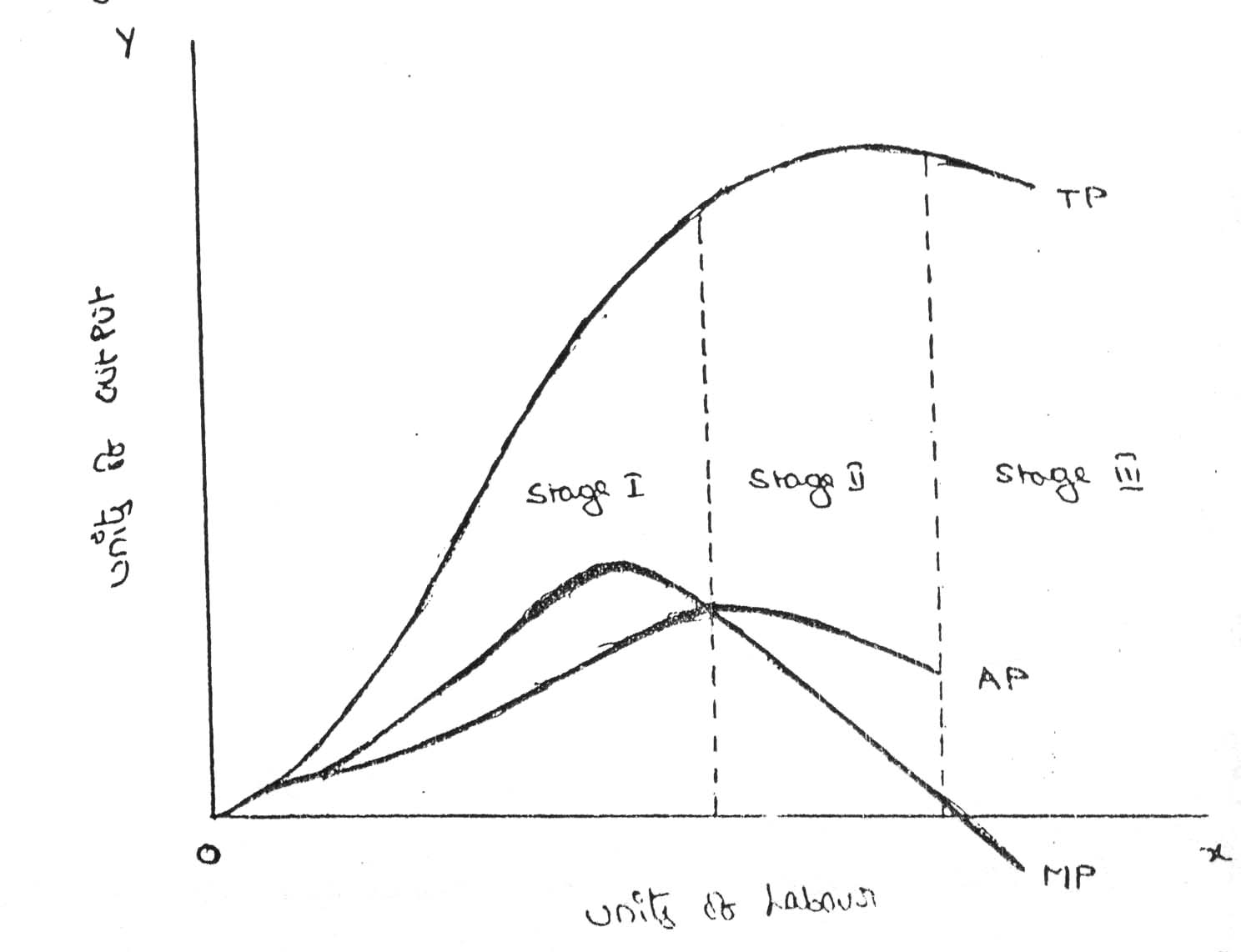
The behaviors of the Output when the varying quantity of one factor is combines with a fixed quantity of the other can be divided in to three district stages. The three stages can be better understood by following the table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fixed factor | Variable factor (Labour) | Total product | Average Product | Marginal Product | |
| 1 | 1 | 100 | 100 | - | Stage I |
| 1 | 2 | 220 | 120 | 120 |
| 1 | 3 | 270 | 90 | 50 |
| 1 | 4 | 300 | 75 | 30 | Stage II |
| 1 | 5 | 320 | 64 | 20 |
| 1 | 6 | 330 | 55 | 10 |
| 1 | 7 | 330 | 47 | 0 | Stage III |
| 1 | 8 | 320 | 40 | -10 |

Above table reveals that both average product and marginal product increase in the beginning and then decline of the two marginal products drops of faster than average product.

Total product is maximum when the farmer employs 6th worker, nothing is produced by the 7th worker and its marginal productivity is zero, whereas marginal product of 8th worker is ‘-10’, by just creating credits 8th worker not only fails to make a positive contribution but leads to a fall in the total output.

Production function with one variable input and the remaining fixed inputs is illustrated as below



From the above graph the law of variable proportions operates in three stages. In the first stage, total product increases at an increasing rate. The marginal product in this stage increases at an increasing rate resulting in a greater increase in total product. The average product also increases. This stage continues up to the point where average product is equal to marginal product. The law of increasing returns is in operation at this stage.

The law of diminishing returns starts operating from the second stage awards. At the second stage total product increases only at a diminishing rate. The average product also declines. The second stage comes to an end where total product becomes maximum and marginal product becomes zero. The marginal product becomes negative in the third stage. So the total product also declines. The average product continues to decline

|  |  |  |  |
| --- | --- | --- | --- |
| STAGES | TP | MP | AP |
| 1 | Increase at an increasing rate | Increase reach  the maximum | Increase and reach  the maximum |
| 2 | Increase atDiminishing rate Till it reaches Maximum | Diminish equal to zero | Starts Diminish |
| 3 | Start declining | Because negative | Continues to decline |

**ProductionFunction with Two Variable Inputs and Laws of Returns**

Let us consider a production process that requires two inputs, capital(c) and labour (L) to produce a given output (Q). There could be more than two inputs in a real life situation, but for a simple analysis, we restrict the number of inputs to two only. In other words, the production function based on two inputs can be expressed as:

Q=f(C,L)

Normally, both capital and labour are required to produce a product. To some extent, these two inputs can be substituted for each other. Hence the product may choose any combination of labour and capital that gives him the required number of units of output. For any given level of output, a producer may hire both capital and labour, but he is free to choose any one combination of labour and capital out of several such combinations. The alternative combinations of labour and capital yielding a given level of output are such that if the use of one factor input is increased, that of another will decrease and vice versa.

**ISOQUANTS:**

The term Isoquants is derived from the words ‘iso’ and ‘quant’ – ‘Iso’ means equal and ‘quent’ implies quantity. Isoquant therefore, means equal quantity. A family of iso-product curves or isoquants or production difference curves can represent a production function with two variable inputs, which are substitutable for one another within limits.

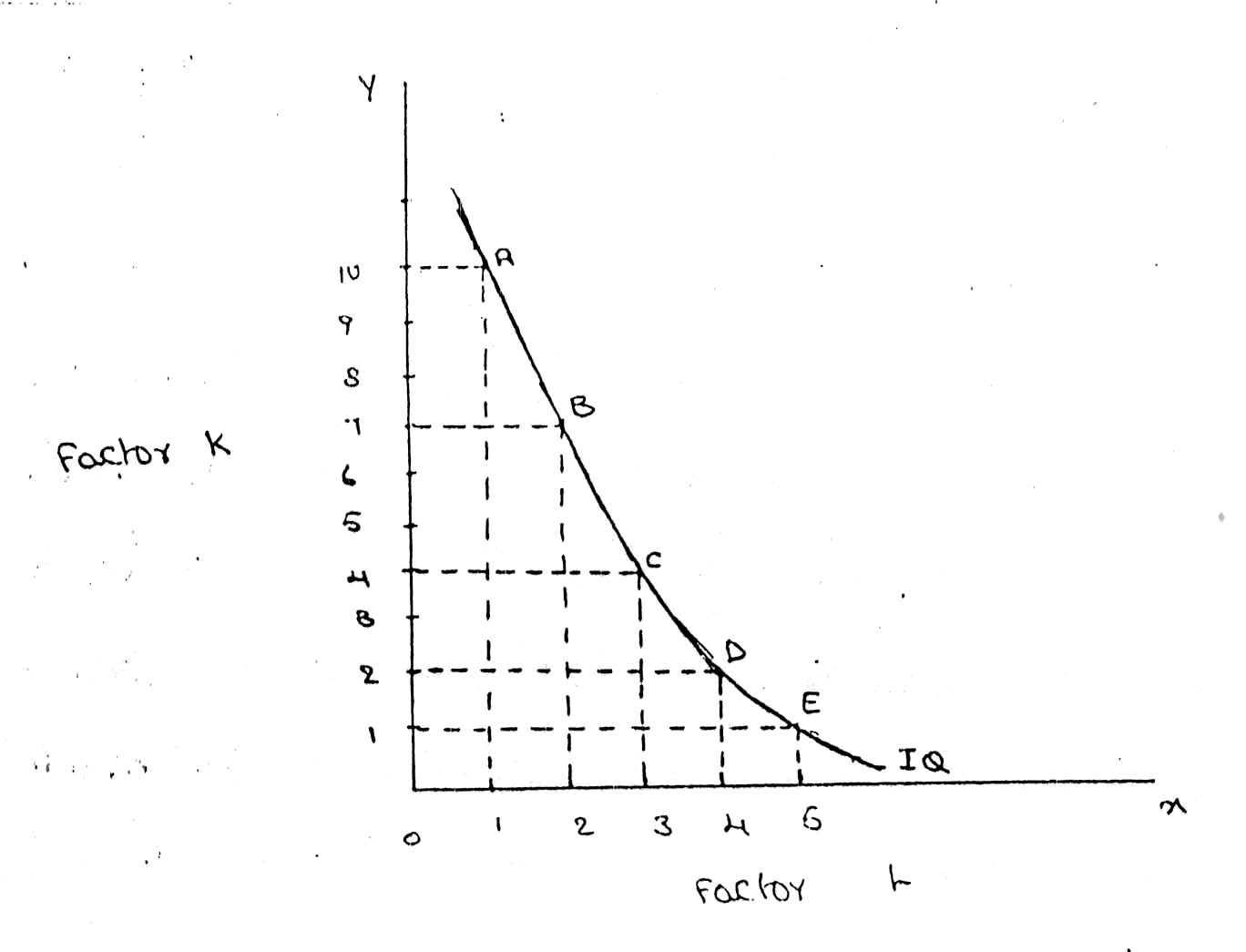
Isoquants are the curves, which represent the different combinations of inputs producing a particular quantity of output. Any combination on the isoquant represents the some level of output.

Q= f (L, K)

Where ‘Q’, the units of output is a function of the quantity of two inputs ‘L’ and ‘K’.

Thus an isoquant shows all possible combinations of two inputs, which are capable of producing equal or a given level of output. Since each combination yields same output, the producer becomes indifferent towards these combinations.

|  |  |  |  |
| --- | --- | --- | --- |
| Combinations | Labour (units) | Capital (Units) | Output (quintals) |
| A | 1 | 10 | 50 |
| B | 2 | 7 | 50 |
| C | 3 | 4 | 50 |
| D | 4 | 4 | 50 |
| E | 5 | 1 | 50 |



**FEATURES OF AN ISOQUANT**

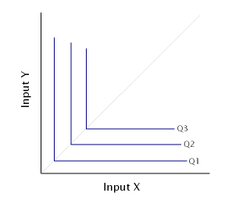
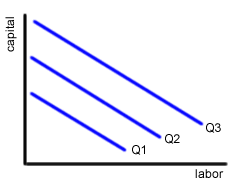
(1).**DOWNWARD SLOPING:-**Isoquants are downward sloping curves because, if one input increases, the other one reduces. There is no question of increase in both the inputs to yield a given output.

A degree of substitution is assumed between the factors of production. In other words, an isoquant cannot be increasing, as increase in both the inputs does not yield same level of output. If it is constant, it means that the output remains constant though the use of one of the factors is increasing, which is not true, isoquants slope from left to right.

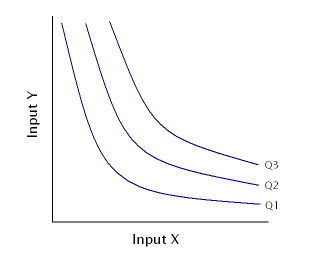
(2).**CONVEX TO ORIGIN:-**Isoquants are convex to the origin. It is because the input factors are not perfect substitutes. One input factors were perfect substituted by other input factor in a 'diminishing marginal rate'. If the input factors were perfect substitutes, the isoquant would be a falling straight line. When the inputs are used in fixed proportion, and substitution of one input for the other cannot take place, the isoquant will be L shaped.

(3).**DO NOT INTERSECT:-**Two isoproducts do not intersect with each other. It is because, each of these denote a particular level of output. If the manufacturer wants to operate at a higher level of output, he has to switch over to another isoquant with a higher level of output and vice versa.

(4).**DO NOT TOUCH AXES:-**The isoquant touches neither x-axis nor y-axis, as both inputs are required to produce a given product.



isoquant perfect substitute isoquant not perfect substitute



It showing different volume of output

**ISO COST**

## Definition:

A firm can produce a given level of output using efficiently different combinations of two inputs. For choosing efficient combination of the inputs, the producer selects that combination of factors which has the lower cost of production. The information about the cost can be obtained from the***isocost lines.***

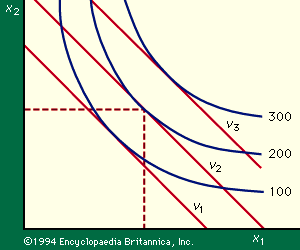
**Explanation:**

An isocost line is also called ***outlay line or price line or factor cost line.*** An isocost line shows all the combinations of labor and capital that are available for a given total cost to-the producer..

In economics, the isocost is the set of combinations of goods that have the same total cost; this can be represented by a curve on a graph.   
In economics an `isocost` line shows all combinations of inputs which cost the same total amount

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### Isoquant and Isocost

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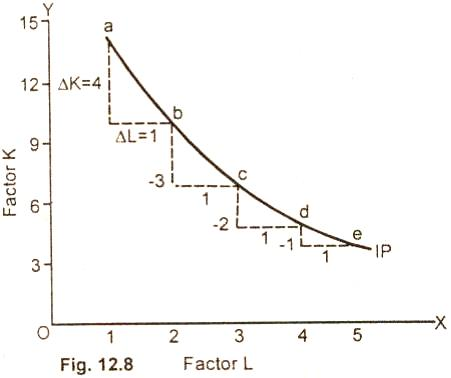
# Marginal rate of technical substitution

In [economic](http://en.wikipedia.org/wiki/Economic) theory, the **Marginal Rate of Technical Substitution** (**MRTS**) - or **Technical Rate of Substitution** (**TRS**) - is the amount by which the quantity of one input has to be reduced ( − Δ*x*2) when one extra unit of another input is used (Δ*x*1 = 1), so that output remains constant (y = \bar{y}).

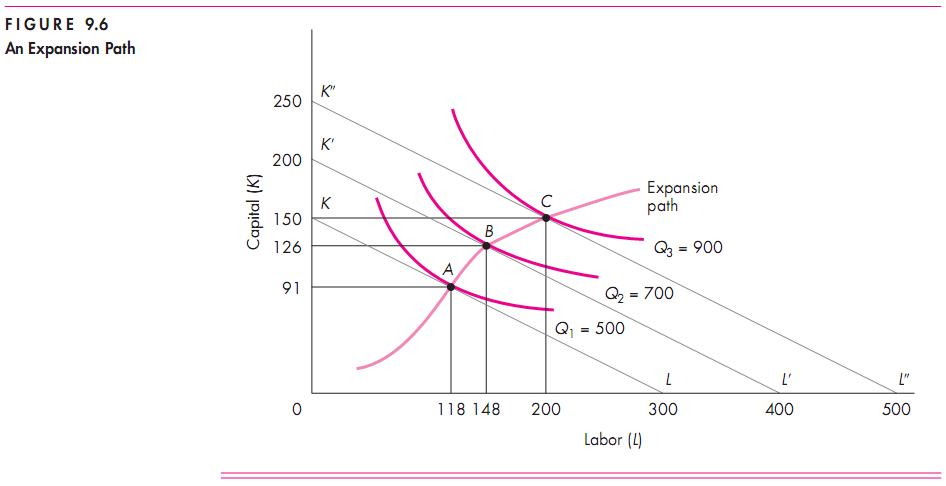
MRTS(x_1,x_2) =-\frac{\Delta x_1}{\Delta x_2} = \frac{MP_2}{MP_1}

where *MP*1 and *MP*2 are the [marginal products](http://en.wikipedia.org/wiki/Marginal_product) of input 1 and input 2, respectively, and *MRTS*(*x*1,*x*2) is **Marginal Rate of Technical Substitution** of the input *x*1 for *x*2.Along an isoquant, the MRTS shows the rate at which one input (e.g. capital or labor) may be substituted for another, while maintaining the same level of output. The MRTS can also be seen as the slope of an [isoquant](http://en.wikipedia.org/wiki/Isoquant) at the point in question.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Combinations | Labour (units) | Capital (Units) | Output (quintals) | MRTS |
| A | 20 | 1 | 50 |  |
| B | 15 | 2 | 50 | 5:1 |
| C | 11 | 3 | 50 | 4:1 |
| D | 8 | 4 | 50 | 3:1 |
| E | 6 | 5 | 50 | 2:1 |
| F | 5 | 6 | 50 | 1:1 |

****

**Least cost combination of inputs**



**Cobb-Douglas production function:**

Production function of the linear homogenous type is invested by and first tested by C. W. Cobb and P. H. Dougles in 1899 to1922. This famous statistical production function is known as Cobb-Douglas production function. Originally the function is applied on the empirical study of the American manufacturing industry. Cabb – Douglas production function takes the following mathematical form.

Y= (bKX L1-x)

Where Y=output k=Capital L=Labour

*The production function shows that one percent change in labour, capital reaming the same is associated with a 0.75 %change in output. One percent change in capital, labour reaming the same, is associated with a 0.25 %change in output.*

***Assumptions:***

It has the following assumptions

1. The function assumes that output is the function of two factors viz. capital and labour.
2. It is a linear homogenous production function of the first degree
3. The function assumes that the logarithm of the total output of the economy is a linear function of the logarithms of the labour force and capital stock.
4. There are constant returns to scale
5. All inputs are homogenous(same)

**RETURNS TO SCALE**

Another important attribute of production function is how output responds in the long run to changes in the scale of the firm i.e. when all inputs are increased in the same proportion (by say 10%), how does output change.

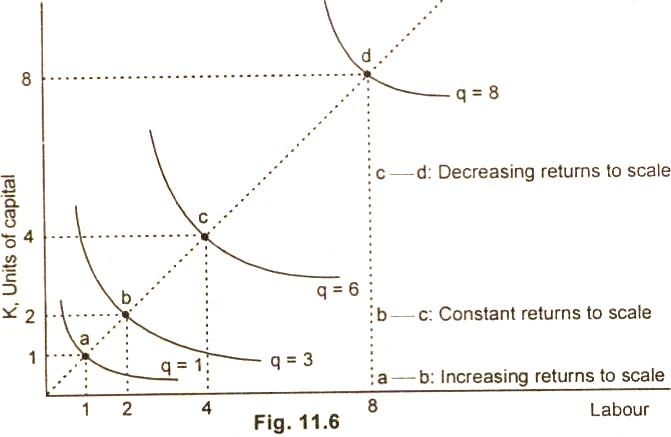
Clearly, there are 3 possibilities. If output increases by more than an increase in inputs (i.e.by more than 10%), then the situation is one of **increasing returns to scale (IRS).**

If output increases by less than the increase in inputs, then it is a case of **decreasing returns to scale (DRS).**

Lastly, output may increase by exactly the same proportion as inputs. For example a doubling of inputs may

Lead to a doubling of output. This is a case of **constant returns to scale (CRS).**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Capital (Units) | Labour (units) | % increase in both inputs | Output (quintals) | % increase in both output | Law applications |
| 1 | 3 |  | 50 |  |  |
| A2 | 6 | 100 | 120 | 140 | increase |
| 4 | 12 | 100 | 240 | 100 | constant |
| 8 | 24 | 100 | 360 | 50 | decrease |



**ECONOMIES OF SCALE**

The economics of scale result because of increase in the scale of production. Marshal divides the economies of scale into two groups:

Internal economies

External; economies

**Internal economies:**

It refers to the economies in production cost which accrue to the firm alone whenit expands it output. the internal economies occur as results of increase in the scale of production.

The internal economies divide into following type:

1. **Managerial economies :**

As the firm expands the firm need qualified managerial personnel to handle each of its functions such as marketing, finace, ect functional specilisational ensure minimum wastage and lower the cost of productions in the long run.

1. **Commercial economies**

The transactions of buying and selling raw material and other operating supplies such as spares and so on. There could be cheaper saving in the procurement, transportation and storage costs. This will leads to lower cost and increase profits.

1. **Financial economies**

There could be cheaper credit facility from the financial institution to meet the capital expenditure or working capital requirement .a large firm to give security to financial institution

1. **Technical economies**

Increase in the scale of production follows when there is sophisticated technology available and the firm is in a position to hire qualified technology manpower to make use of it.

1. **Marketing economies**

As the firm grow lager and lager it can afford to maintain a full fledged marketing departmentindependently to handle the issues related to design of customer ,promotion ,marketing staff.

1. **Risk bearing economies**

As there is growth in size of firm there is increase in the risk also. Sharing in the risk with the insurance companies is the first priority for any firm. The firm insureit machinery and other assets against the fire theft ect.the lager firm can spread their risk so that they do not keep all their eggs in one basket.

1. **Economies of research and development**

Large organizations such as dr.reddy labs,HCL, ect bring out several innovative products.

**External economies**

It refers to the entire firm in the industry, because of growth of the on industry as a whole or because of growth of industry.

1. **Economies concentration**

Because all firm are located at one place ,it is likely that there is better infrastructure in term of approach roads, tans potation ect

1. **Economies of R&D**

The entire firm can pool resource together to finance research and development activity and thus shares benefits of research.

1. **Economies of welfare**

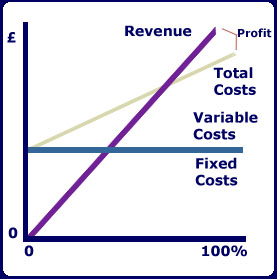
There could be common facility such as canteen, industryhousing, community halls,ect which can be used in common by the employee in the whole industry.

Production may be carried on a small scale or o a large scale by a firm. When a firm expands its size of production by increasing all the factors, it secures certain advantages known as economies of production. Marshall has classified these economies of large-scale production into internal economies and external economies.

Internal economies are those, which are opened to a single factory or a single firm independently of the action of other firms. They result from an increase in the scale of output of a firm and cannot be achieved unless output increases.

**BREAKEVEN ANALYSIS**

The study of cost-volume-profit relationship is often referred as BEA. The term BEA is interpreted in two senses. In its narrow sense, it is concerned with finding out BEP; BEP is the point at which total revenue is equal to total cost. It is the point of no profit, no loss. In its broad determine the probable profit at any level of production

****

1. ***Fixed cost:*** Expenses that do not vary with the volume of production are known as fixed expenses. Eg. Manager’s salary, rent and taxes, insurance etc. It should be noted that fixed changes are fixed only within a certain range of plant capacity. The concept of fixed overhead is most useful in formulating a price fixing policy. Fixed cost per unit is not fixed.
2. ***Variable Cost****:* Expenses that vary almost in direct proportion to the volume of production of sales are called variable expenses. Eg. Electric power and fuel, packing materials consumable stores. It should be noted that variable cost per unit is fixed.
3. ***Contribution:*** Contribution is the difference between sales and variable costs and it contributed towards fixed costs and profit. It helps in sales and pricing policies and measuring the profitability of different proposals. Contribution is a sure test to decide whether a product is worthwhile to be continued among different products.

Contribution = Sales – Variable cost

Contribution = Fixed Cost + Profit.

1. ***Margin of safety:*** Margin of safety is the excess of sales over the break even sales. It can be expressed in absolute sales amount or in percentage. It indicates the extent to which the sales can be reduced without resulting in loss. A large margin of safety indicates the soundness of the business. The formula for the margin of safety is:

Present sales – Break even sales **or** 

1. ***Break – Even- Point:*** If we divide the term into three words, then it does not require further explanation.

Break-divide

Even-equal

Point-place or position

Break Even Point refers to the point where total cost is equal to total revenue. It is a point of no profit, no loss. This is also a minimum point of no profit, no loss. This is also a minimum point of production where total costs are recovered. If sales go up beyond the Break Even Point, organization makes a profit. If they come down, a loss is incurred.

1. Break Even point (Units) = 
2. Break Even point (In Rupees) = 

**Merits:**

1. Information provided by the Break Even Chart can be understood more easily then those contained in the profit and Loss Account and the cost statement.
2. Break Even Chart discloses the relationship between cost, volume and profit. It reveals how changes in profit. So, it helps management in decision-making.
3. It is very useful for forecasting costs and profits long term planning and growth
4. The chart discloses profits at various levels of production.
5. It serves as a useful tool for cost control.
6. It can also be used to study the comparative plant efficiencies of the industry.
7. Analytical Break-even chart present the different elements, in the costs – direct material, direct labour, fixed and variable overheads.

**Demerits:**

1. Break-even chart presents only cost volume profits. It ignores other considerations such as capital amount, marketing aspects and effect of government policy etc., which are necessary in decision making.
2. It is assumed that sales, total cost and fixed cost can be represented as straight lines. In actual practice, this may not be so.
3. It assumes that profit is a function of output. This is not always true. The firm may increase the profit without increasing its output.
4. A major draw back of BEC is its inability to handle production and sale of multiple products.
5. It is difficult to handle selling costs such as advertisement and sale promotion in BEC.
6. It ignores economics of scale in production.
7. Fixed costs do not remain constant in the long run.
8. Semi-variable costs are completely ignored.
9. It assumes production is equal to sale. It is not always true because generally there may be opening stock.
10. When production increases variable cost per unit may not remain constant but may reduce on account of bulk buying etc.

# **(A)ActualCost** Actual cost is defined as the cost or expenditure which a firm incurs for producing or acquiring a good or service.  The actual costs or expenditures are recorded in the books of accounts of a [business](http://layman-blog.blogspot.in/2010/06/different-types-of-costs-with-examples.html) unit.  Actual costs are also called as "Outlay Costs" or "AbsoluteCosts"or"AcquisitionCosts". Examples:  Costofrawmaterials,WageBilletc.

# OpportunityCost Opportunity cost is concerned with the cost of forgone opportunities/alternatives.  In other words, it is the return from the second best use of the firms resources which the firms forgoes in order to avail of the return from the best use of the resources.  It can also be said as the comparison between the policy that was chosen and the policy that was rejected.  The concept of opportunity cost focuses on the net revenue that could be generated in the next best use of a scare input.  Opportunity cost is also called as "Alternative Cost". If a firm owns a land, there is no cost of using the land (ie., the rent) in the firms account.  But the firm has an opportunity cost of using the land, which is equal to the rent forgone by not letting the land out on rent. **(C) Sunk Cost** Sunk costs are those do not alter by varying the nature or level of business activity.  Sunk costs are generally not taken into consideration in decision - making as they do not vary with the changes in the future.  Sunk costs are a part of the outlay/actual costs.  Sunk costs are also called as "Non-Avoidable costs" or "Inescapable costs". Examples: All the past costs are considered as sunk costs. The best example is amortization of past expenses, like depreciation. (D) Incremental Cost Incremental costs are addition to costs resulting from a change in the nature of level of business activity.  As the costs can be avoided by not bringing any variation in the activity in the activity, they are also called as "Avoidable Costs" or "Escapable Costs". More ever incremental costs resulting from a contemplated change is the Future, they are also called as "Differential Costs" Example: Change in distribution channels adding or deleting a product in the product line. (E) Explicit Cost Explicit costs are those expenses/expenditures that are actually paid by the firm.  These costs are recorded in the books of accounts.  Explicit costs are important for calculating the profit and loss accounts and guide in economic decision-making.  Explicit costs are also called as "Paid out costs" Example: Interest payment on borrowed funds, rent payment, wages, utility expenses etc. (F) Implicit Cost Implicit costs are a part of opportunity cost. They are the theoretical costs ie., they are not recognised by the accounting system and are not recorded in the books of accounts but are very important in certain decisions.  They are also called as the earnings of those employed resources which belong to the owner himself.  Implicit costs are also called as "Imputed costs". Examples: Rent on idle land, depreciation on dully depreciated property still in use, interest on equity capital etc. (G) Book Cost Book costs are those business costs which don't involve any cash payments but a provision is made in the books of accounts in order to include them in the profit and loss account and take tax advantages, like provision for depreciation and for unpaid amount of the interest on the owners capital. (H) Out Of Pocket Costs Out of pocket costs are those costs are expenses which are current payments to the outsiders of the firm.  All the explicit costs fall into the category of out of pocket costs. Examples: Rent Payed, wages, salaries, interest etc (I) Accounting Costs Accounting costs are the actual or outlay costs that point out the amount of expenditure that has already been incurred on a particular process or on production as such accounting costs facilitate for managing the taxation need and profitability of the firm. Examples: All Sunk costs are accounting costs (J) Economic Costs Economic costs are related to future.  They play a vital role in business decisions as the costs considered in decision - making are usually future costs.  They have the nature similar to that of incremental, imputed explicit and opportunity costs. (K) Direct Cost Direct costs are those which have direct relationship with a unit of operation like manufacturing a product, organizing a process or an activity etc.  In other words, direct costs are those which are directly and definitely identifiable.  The nature of the direct costs are related with a particular product/process, they vary with variations in them.  Therefore all direct costs are variable in nature. It is also called as "Traceable Costs" Examples: In operating railway services, the costs of wagons, coaches and engines are direct costs. (L) Indirect Costs Indirect costs are those which cannot be easily and definitely identifiable in relation to a plant, a product, a process or a department.  Like the direct costs indirect costs, do not vary ie., they may or may not be variable in nature.  However, the nature of indirect costs depend upon the costing under consideration.  Indirect costs are both the fixed and the variable type as they may or may not vary as a result of the proposed changes in the production process etc. Indirect costs are also called as Non-traceable costs. Example: The cost of factory building, the track of a railway system etc., are fixed indirect costs and the costs of machinery, labour etc..,

# UNIT-III

# MARKET AND NEW ECONOMIC ENVIRONMENT

# Pricing is an important, if not the most important function of all enterprises. Since every enterprise is engaged in the production of some goods or/and service. Incurring some expenditure, it must set a price for the same to sell it in the market.

# Price

# Price denotes the exchange value of a unit of good expressed in terms of money. Thus the current price of a maruti car around Rs. 2,00,000, the price of a hair cut is Rs. 25 the price of a economics book is Rs. 150 and so on. Nevertheless, if one gives a little, if one gives a little thought to this subject, one would realize that there is nothing like a unique price for any good. Instead, there are multiple prices.

# Price concepts

# Price of a well-defined product varies over the types of the buyers, place it is received, credit sale or cash sale, time taken between final production and sale, etc.

# The multiple prices is more serious in the case of items like cars refrigerators, coal, furniture and bricks and is of little significance for items like shaving blade, soaps, tooth pastes, creams and stationeries. Differences in various prices of any good are due to differences in transport cost, storage cost accessories, interest cost, intermediaries’ profits etc.

# Price determinants – Demand and supply (Equilibrium Price)

# The price at which demand and supply of a commodity is equal known as equilibrium price. The demand and supply schedules of a good are shown in the table below.

# Demand supply schedule

|  |  |  |
| --- | --- | --- |
| Price | Demand | Supply |
| 50 | 100 | 200 |
| 40 | 120 | 180 |
| 30 | 150 | 150 |
| 20 | 200 | 110 |
| 10 | 300 | 50 |

# Of the five possible prices in the above example, price Rs.30 would be the market-clearing price. No other price could prevail in the market. If price is Rs. 50 supply would exceed demand and consequently the producers of this good would not find enough customers for their demand, thereby they would accumulate unwanted inventories of output. Similarly if price were Rs.10, there would be excess demand, which would give rise to competition among the buyers of good, forcing price to Rs.30. At price Rs.30, demand equals supply and thus both producers and consumers are satisfied. The economist calls such a price as equilibrium price.

# 

# It was seen in unit 1 that the demand for a good depends on, a number of factors and thus, every factor, which influences either demand or supply is in fact a determinant of price. Accordingly, a change in demand or/and supply causes price change.

# BASIC FACTORS IN PRICING

# Factors considered while pricing:

# Price of raw materials: Price of any item primarily depends upon the raw material availability and the cost spent on purchasing the raw martial. If prices of raw materials are high, price of the finished product will also be high and vice versa. If availability of raw materials is less, the price will get increased else it will be minimum.

# Production costs: Next factor deterring the price of the product is the production costs. Higher the production costs, higher will be the price of finished goods. It includes cost of machinery, hiring people, transportation costs, and distribution costs etc.

# Profit expectation: Profit expectation influences the price a lot. If the organization has higher profit expectations, the price of the product becomes high and vice versa.

# Price of the complementary goods: The organization needs to have an eye on the Complementary goods price. If the complimentary goods price is high, the organization has to reduce its price otherwise both the products will lose the demand. But the firm can price the item high if the price of complimentary good is less.

# Number of substitutes: If the number of substitutes for the product is high, the organization should be very careful while pricing the item. Because of perfect competition, there is a chance of losing the customer base. If the number of substitutes is less, the organization can price the item according to their wish.

# Intervention of government: One of the most important factors in the necessary products is the government intervention. In the some product category, Government will fix some price ceiling and the organization has to price their items according to that only.

# Demand for the product: The most common factor that has to be considered while pricing is demand. Higher the demand, higher the price can be charged.

# 

# MARKET

# Market is a place where buyer and seller meet, goods and services are offered for the sale and transfer of ownership occurs. A market may be also defined as the demand made by a certain group of potential buyers for a good or service. The former one is a narrow concept and later one, a broader concept.

# Narrow concept Economists describe a market as a collection of buyers and sellers who transact over a particular product or product class (the housing market, the clothing market, the grain market etc.). For business purpose we define a market as people or organizations with wants (needs) to satisfy, money to spend, and the willingness to spend it.

# Broadly, market represents the structure and nature of buyers and sellers for a commodity/service and the process by which the price of the commodity or service is established. In this sense, we are referring to the structure of competition and the process of price determination for a commodity or service

# Different Market Structures

# Market:

# A Market is a place where sellers sell and buyers buy a commodity. According to Robert Dorfman, a market is a group of people and firm who are in contact with one another for the purpose of buying and selling some commodity. It is not necessary that every member of the market be in contact with every other one; the contacts may be indirect.

# Market structure describes the competitive environment in the market for any good or service. A market consists of all firms and individuals who are willing and able to buy or sell a particular product. This includes firms and individuals currently engaged in buying and selling a particular product, as well as potential entrants.

# fig-19

# Perfect competitionIt refers to a market structure where competition among the sellers and buyers prevails in its most perfect form. In a perfectly competitive market, a single market price prevails for the commodity, which is determined by the forces of total demand and total supply in the market.

# Monopoly:- If there is only one seller, monopoly market is said to exist. An extreme version of imperfect market is monopoly. Here a single seller completely controls the entire industry. It is only firm producing the given product in its industry. In case of monopoly, there is very little difference between the firm and industry. The firm is called monopolist or monopoly firm. Maruti-Suzuki enjoyed all the government protection for a long time when it enjoyed monopoly in respect of small cars.

# Monopolistic Competition:- When large number of sellers produces differentiated products, monopolistic competition is said to exist. A product is said to be differentiated when its important features vary. It may be differentiated based on real or perceived differences. For cameras, the important features include Zoom lenses, focal length, memory, size of camera, aperture and exposure controls, flash, safety, digital day and date display, and the overall picture quality and so on.

# Duopoly:- If there are two sellers, duopoly is said to exist. If Pepsi and coke are the two companies in soft drinks, this market is called duopoly. Basic facilities for satellite communication are presently provided by Mahan agar Telephone Nigam Limited (MNTL) and videsh sanchar Nigam Limited (VSNL). This market for satellite Communication can be referred to as duopoly.

# Oligopoly:- Another variety of imperfect competition is oligopoly. If there is competition among a few sellers, oligopoly is said to exist. The examples are the car manufacturing companies (such as Maruti suzuki, Hindustan Motors, Daewoo, Toyota and so on), newspapers (such as The Hindu, Indian Express, times of india, Economic Times, Eenadu and so on). In oligopoly, each individual seller or firm can affect the market price

# Comparison of various market forms

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Characteristic | | Perfect competition | Imperfect competition | | |
| Monopolistic competition | oligopoly | Monopoly |
|  | Number of firms | Many | Many | few | one |
|  | Ability to affect price | None | Limited | Some | considerable |
|  | Entry barriers | None (Free entry) | None (Free entry) | Some (limited entry) | Complete (No entry) |
|  | Product type | Homogeneous | Differentiated | Homogeneous | Brand |
|  | Marketing methods | Commodity exchanges or actions | Advertising quality and design differences | Advertising qualityRevelry administered prices | Promotional and public relations advertising |
|  | Example | Fruit stalls | Grocer | Cars | Post office |

# Characteristics of Perfect Competition

# The following features characterize a perfectly competitive market:

# A large number of buyers and sellers: The number of buyers and sellers is large and the share of each one of them in the market is so small that none has any influence on the market price.

# Homogeneous product: The product of each seller is totally undifferentiated from those of the others. Under perfect competition, the product offered for sale by all the seller must be identical in every respect. The goods offered for sale are perfect substitutes of one another. Buyers have no special preference for the product of a particular seller. No seller can raise the price above the prevailing price or lower the price below the prevailing price.

# Free entry and exit: Any buyer and seller is free to enter or leave the market of the commodity. Under perfect competition, there will be no restriction on the entry and exit of both buyers and sellers. If the existing sellers start making abnormal profits, new sellers should be able to enter the market freely. This will bring down the abnormal profits to the normal level. Similarly, when losses will occur existing sellers may leave the market. However, such free entry or free exit is possible only in the long run, but not in the short-run.

# Perfect knowledge: All buyers and sellers have perfect knowledge about the market for the commodity. Perfect competition implies perfect knowledge on the part of buyers and sellers regarding the market conditions. As a results, no buyer will be prepared to pay a price higher than the prevailing price. Sellers will not charge a price higher or lower than the prevailing price. In this market, advertisement has no scope.

# Indifference (**No attachment):**: No buyer has a preference to buy from a particular seller and no seller to sell to a particular buyer.There is no attachment between the buyers and sellers under perfect competition. Since products of all sellers are identical and their prices are the same a buyer is free to buy the commodity from any seller he likes. He has no special inclination for the product of any seller as in case of monopolistic competition or oligopoly. Theoretically, perfect competition is irrelevant. In reality, it does not exist.

# Non-existence of transport costs: Perfectly competitive market also assumes the non-existence of transport costs.

# Perfect mobility of factors of production: Factors of production must be in a position to move freely into or out of industry and from one firm to the other.The second perfection mobility of factors of production from one use to another use. This feature ensures that all sellers or firms get equal advantages so far as services of factors of production are concerned. This is essential to enable the firms and industry to achieve equilibrium.

Under such a market no single buyer or seller plays a significant role in price determination. One the other hand all of them jointly determine the price. The price is determined in the industry, which is composed of all the buyers and seller for the commodity. The demand curve facing the industry is the sum of all consumers’ demands at various prices. The industry supply curve is the sum of all sellers’ supplies at various prices.

**Pure competition and perfect competition**

The term perfect competition is used in a wider sense. Pure competition has only limited assumptions. When the assumptions, that large number of buyers and sellers, homogeneous products, free entry and exit are satisfied, there exists pure competition. Competition becomes perfect only when all the assumptions (features) are satisfied. Generally pure competition can be seen in agricultural products.

# fig-20

# The equilibrium of a perfectly competitive firm may be explained with the help of the fig. 6.2.

# In the given fig. PL and MC represent the Price line and Marginal cost curve. PL also represents Marginal revenue, Average revenue and demand. As Marginal revenue, Average revenue and demand are the same in perfect competition, all are equal to the price line. Marginal cost curve is U- shaped curve cutting MR curve at R and T. At point R marginal cost becomes equal to marginal revenue. But MC curve cuts the MR curve from above. So this is not the equilibrium position. The downward sloping marginal cost curve indicates that the firm can reduce its cost of production by increasing output.

# PRICE-OUTPUT DETERMINATION IN CASE OF PERFECT COMPETITION

# The price or value of a commodity under perfect competition is determined by the demand for and the supply of that commodity.

# Under perfect competition there is large number of sellers trading in a homogeneous product. Each firm supplies only very small portion of the market demand. No single buyer or seller is powerful enough to influence the price. The demand of all consumers and the supply of all firms together determine the price.

# The individual seller is only a price taker and not a price maker. An individual firm has no price policy of its own. Thus, the main problem of a firm in a perfectly competitive market is not to determine the price of its product but to adjust its output to the given price, So that the profit is maximum.

# Marshall however gives great importance to the time element for the determination of price. He divided the time periods on the basis of supply and ignored the forces of demand. It is two types 1. Time based 2. Profit based

# TIME BASED

# Very short period or Market period

# Short period

# Long period

# Very short period:

# It is the period in which the supply is more or less fixed because the time available to the firm to adjust the supply of the commodity to its changed demand is extremely short; say a single day or a few days. The price determined in this period is known as Market Price.

# fig-21

# In this figure quantity is represented along X-axis and price is represented along Y-axis. MS is the very short period supply curve of perishable goods. DD is demand curve. It intersects supply curve at E. The price is OP. The quantity exchanged is OM. D1 D1 represents increased demand. This curve cuts the supply curve at E1. Even at the new equilibrium, supply is OM only. But price increases to OP1. So, when demand increases, the price will increase but not the supply. If demand decreases new demand curve will be D2 D2. This curve cuts the supply curve at E2. Even at this new equilibrium, the supply is OM only. But price falls to OP2. Hence in very short period, given the supply, it is the change in demand that influences price. The price determined in a very short period is called Market Price.

# Short Period:

# In this period, the time available to firms to adjust the supply of the commodity to its changed demand is, of course, greater than that in the market period. In this period altering the variable factors like raw materials, labour, etc can change supply. During this period new firms cannot enter into the industry.

# fig-23

# In the given diagram MPS is the market period supply curve. DD is the initial demand curve. It intersects MPS curve at E. The price is OP and out put OM. Suppose demand increases, the demand curve shifts upwards and becomes D1D1. In the very short period, supply remains fixed on OM. The new demand curve D1D1 intersects MPS at E1. The price will rise to OP1. This is what happen in the very short-period.

# As the price rises from OP to OP1, firms expand output. As firms can vary some factors but not all, the law of variable proportions operates. This results in new short-run supply curve SPS. It interests D1 D1 curve at E4. The price will fall from OP1 to OP4.

# It the demand decreases, DD curve shifts downward and becomes D2D2. It interests MPS curve at E2. The price will fall to OP2. This is what happens in market period. In the short period, the supply curve is SPS. D2D2 curve interests SPS curve at E3. The short period price is higher than the market period price.

# Long period:

# In this period, a sufficiently long time is available to the firms to adjust the supply of the commodity fully to the changed demand. In this period not only variable factors of production but also fixed factors of production can be changed. In this period new firms can also enter the industry. The price determined in this period is known as long run normal price.

# http://images.flatworldknowledge.com/rittenberg/rittenberg-fig04_002.jpg

# PRICE FIXATION AND PROFIT

# Super normal profit :

# Normal profit :

# *Subnormal profit*

# Super normal profit :

# The price and output of the firm are determined, under perfect competition, based on the industry price and its own cost. The industry price has greater say in this process because the firm’s own sales are very small and significant. The process of price output determination in case of perfect competition is illustrated.

# The firm’s demand curve is horizontal at the price determined in the industry (MR=AR=price). This demand curve is also known as average revenue curve. This is because if all the units are sold at the same price, on an average, the revenue to the firm equals its price.

# When the average revenue is constant (neither falling nor rising), it will coincide with the marginal revenue curve. Thus, CC is the demand curve representing the price, average revenue curve, and also the marginal revenue curve (Price = AR = MR). Average cost (AC) and marginal cost (MC) are the firm average and marginal cost curves.

# 

# In fig. 8.3, the firm satisfies both conditions: (a) MR = MC; and (b) MC curve must cut the MR curve from below. The firm attains equilibrium at point D where MR = MC. The MC curve passes through the minimum point of AC curve.

# Equilibrium Output Determination of a Firm under Perfect Competition in the Short run:

# The firm gets higher profits as long as the price (in this case MR or AR) it receives for each unit exceeds the average cost (AC) of production.

# Average, DE is the average profit and the area CDEF is the total profit which constitutes the ‘supernormal’ or ‘abnormal’ profits.

# Based on its cost function and marker condition, the firm may make profits. Losses or just break even in the short-run

# Normal profit :

# Having been attracted by supernormal profits, more and more firms enter the industry. With the result, there will be a scramble for scare inputs among the competing firms pushing the input prices. Hence, the average cost increases. The entry of more and more firms will expand the supply pulling down the marker price. As a result, the super normal profits hitherto enjoyed by the firms get eroded. The entry of the firms into the industry continues till the supernormal profits but not supernormal profits. Normal profits are the profits that are just sufficient for the firms to stay in the business. It is to be noted that normal profits are included in the average cost curve.

# All those firms that are not able to earn at least normal will leave the industry.

# 

# Subnormal profit

# In the short-run, if the marker price is below the average cost, the firm may still supply goods provided the market price is above the average variable cost. If the market price is below the average variable cost, the firm refuses to sell the goods even in the short-run for the simple reason that, by not selling the goods, the firm suffers a loss equal to average fixed cost only. If it sells the goods, the loss will be more than the average fixed costs. Thus, the firm’s short-run supply curve will be that portion of the marginal cost curve which is above the average variable cost curve

# C:\Users\DEVA PRASAD\Desktop\loss_making_firm.png

Long-run marginal cost (LMC) curve passes through the minimum point of the long-run average cost curve (LAC) at E, while passing through the marginal revenue curve. E is the equilibrium point and the firm produces OQ units of output. It can be noted that normal profits are not visible to the naked eye since normal profits are included in the average cost. Long-run average cost includes the opportunity cost of staying in business

# C:\Users\DEVA PRASAD\Desktop\Fig. 12.4 Alt SR Outcomes.jpg

# *.*

# Monopoly

# The word monopoly is made up of two syllables, Mono and poly. Mono means single while poly implies selling. Thus monopoly is a form of market organization in which there is only one seller of the commodity. There are no close substitutes for the commodity sold by the seller. Pure monopoly is a market situation in which a single firm sells a product for which there is no good substitute.

# Features of monopoly

# The following are the features of monopoly.

# Single person or a firm: A single person or a firm controls the total supply of the commodity. There will be no competition for monopoly firm. The monopolist firm is the only firm in the whole industry.

# No close substitute: The goods sold by the monopolist shall not have closely competition substitutes.Even if price of monopoly product increase people will not go in far substitute. For example: If the price of electric bulb increase slightly, consumer will not go in for kerosene lamp.

# Large number of Buyers: Under monopoly, there may be a large number of buyers in the market who compete among themselves.

# Price Maker: Since the monopolist controls the whole supply of a commodity, he is a price-maker, and then he can alter the price.

# Supply and Price: The monopolist can fix either the supply or the price. He cannot fix both. If he charges a very high price, he can sell a small amount. If he wants to sell more, he has to charge a low price. He cannot sell as much as he wishes for any price he pleases.

# Downward Sloping Demand Curve: The demand curve (average revenue curve) of monopolist slopes downward from left to right. It means that he can sell more only by lowering price.

# Types of Monopoly

# Monopoly may be classified into various types. The different types of monopolies are explained below:

# Legal Monopoly: If monopoly arises on account of legal support or as a matter of legal privilege, it is called Legal Monopoly. Ex. Patent rights, special brands, trade means, copyright etc.

# Government Monopoly: Sometimes the government will take the responsibility of supplying a commodity and avoid private interference. Ex. Water, electricity. These monopolies, created to satisfy social wants, are formed on social considerations. These are also called Social Monopolies.

# Private Monopoly: If the total supply of a good is produced by a single private person or firm, it is called private monopoly. Hindustan Lever Ltd. Is having the monopoly power to produce Lux Soap.

# Pricing under Monopoly

# Monopoly refers to a market situation where there is only one seller. He has complete control over the supply of a commodity. He is therefore in a position to fix any price. Under monopoly there is no distinction between a firm and an industry. This is because the entire industry consists of a single firm.

# fig-27

# The market demand curve of the monopolist (the average revenue curve) is downward sloping. Its corresponding marginal revenue curve is also downward sloping. But the marginal revenue curve lies below the average revenue curve as shown in the figure. The monopolist faces the down-sloping demand curve because to sell more output, he must reduce the price of his product. The firm’s demand curve and industry’s demand curve are one and the same. The average cost and marginal cost curve are U shaped curve. Marginal cost falls and rises steeply when compared to average cost.

# Price output determination (Equilibrium Point)

# The monopolistic firm attains equilibrium when its marginal cost becomes equal to the marginal revenue. The monopolist always desires to make maximum profits. He makes maximum profits when MC=MR. He does not increasing his output if his revenue exceeds his costs. But when the costs exceed the revenue, the monopolist firm incur loses. Hence the monopolist curtails his production. He produces up to that point where additional cost is equal to the additional revenue (MR=MC). Thus point is called equilibrium point. The price output determination under monopoly may be explained with the help of a diagram.

# In the diagram 6.12 the quantity supplied or demanded is shown along X-axis. The cost or revenue is shown along Y-axis. AC and MC are the average cost and marginal cost curves respectively. AR and MR curves slope downwards from left to right. AC and MC and U shaped curves. The monopolistic firm attains equilibrium when its marginal cost is equal to marginal revenue (MC=MR). Under monopoly, the MC curve may cut the MR curve from below or from a side. In the diagram, the above condition is satisfied at point E. At point E, MC=MR. The firm is in equilibrium. The equilibrium output is OM.

# The above diagram (Average revenue) = MQ or OP

# Average cost = MR

# Profit per unit = Average Revenue-Average cost=MQ-MR=QR

# Total Profit = QRXSR=PQRS

# fig-28

# The area PQRS resents the maximum profit earned by the monopoly firm.

# But it is not always possible for a monopolist to earn super-normal profits. If the demand and cost situations are not favorable, the monopolist may realize short run losses.

# Through the monopolist is a price marker, due to weak demand and high costs; he suffers a loss equal to PABC.

# If AR > AC -> Abnormal or super normal profits.

# If AR = AC -> Normal Profit

# If AR < AC -> Loss

# In the long run the firm has time to adjust his plant size or to use existing plant so as to maximize profits.

# Monopolistic competition

# Perfect competition and pure monopoly are rate phenomena in the real world. Instead, almost every market seems to exhibit characteristics of both perfect competition and monopoly. Hence in the real world it is the state of imperfect competition lying between these two extreme limits that work. Edward. H. Chamberlain developed the theory of monopolistic competition, which presents a more realistic picture of the actual market structure and the nature of competition.

# Characteristics of Monopolistic CompetitionThe important characteristics of monopolistic competition are:

# Existence of Many firms: Industry consists of a large number of sellers, each one of whom does not feel dependent upon others. Every firm acts independently without bothering about the reactions of its rivals. The size is so large that an individual firm has only a relatively small part in the total market, so that each firm has very limited control over the price of the product. As the number is relatively large it is difficult for these firms to determine its price- output policies without considering the possible reactions of the rival forms. A monopolistically competitive firm follows an independent price policy.

# Product Differentiation: Product differentiation means that products are different in some ways, but not altogether so. The products are not identical but the same time they will not be entirely different from each other. IT really means that there are various monopolist firms competing with each other. An example of monopolistic competition and product differentiation is the toothpaste produced by various firms. The product of each firm is different from that of its rivals in one or more respects. Different toothpastes like Colgate, Close-up, Forehans, Cibaca, etc., provide an example of monopolistic competition. These products are relatively close substitute for each other but not perfect substitutes. Consumers have definite preferences for the particular verities or brands of products offered for sale by various sellers. Advertisement, packing, trademarks, brand names etc. help differentiation of products even if they are physically identical.

# Large Number of Buyers: There are large number buyers in the market. But the buyers have their own brand preferences. So the sellers are able to exercise a certain degree of monopoly over them. Each seller has to plan various incentive schemes to retain the customers who patronize his products.

# Free Entry and Exist of Firms: As in the perfect competition, in the monopolistic competition too, there is freedom of entry and exit. That is, there is no barrier as found under monopoly.

# Selling costs: Since the products are close substitute much effort is needed to retain the existing consumers and to create new demand. So each firm has to spend a lot on selling cost, which includes cost on advertising and other sale promotion activities.

# Imperfect Knowledge: Imperfect knowledge about the product leads to monopolistic competition. If the buyers are fully aware of the quality of the product they cannot be influenced much by advertisement or other sales promotion techniques. But in the business world we can see that thought the quality of certain products is the same, effective advertisement and sales promotion techniques make certain brands monopolistic. For examples, effective dealer service backed by advertisement-helped popularization of some brands through the quality of almost all the cement available in the market remains the same.

# Pricing Methods

# Pricing is not an exact science. Pricing decisions, more often, are done by trial and error. Most often we see discounts and concessions offered at the time of purchase. Sometimes, certain shames are introduced wherein if you by a packet of Tea powder, a dining still table spoon if free! Why are all these provided? While the main objective of such shames is to increase sales, one of the other objectives is also to correct the pricing strategy, if at all it has gone wrong earlier.

# Pricing is an important exercise. Under-pricing will result in losses and over-pricing will make the customers run away. To determine pricing in a scientific manner, it is necessary to understand the pricing objectives, pricing methods, pricing policies, and pricing procedures.

# PRICING OBJECTIVES

# Pricing objectives refer to the general and specific objectives, which a firm sets for itself in establishing the price of its products and/or services and these are not much different from the marketing objectives or firm's overall business objectives.

# Generally, the following are the objectives of pricing.

# (a) To maximize profits,

# (b) To increase sales

# (c) To increase the market share,

# (d) To satisfy customers, and

# (e) To meet the competition.

# PRCING POLICY

# The firm has to formulate its pricing policies, particularly when it deals in multiple products. The pricing policies are intended to bring consistency in the pricing pattern. For instance, to maintain price differentials between the deluxe models and basic models and so on. Pricing policy defines how to handle complex issues such as price discrimination and so forth.

# PRICING METHODS

# 1. COST-BASED PRICING METHODS

# (a) COST PULS PRICING;- This is also called 'full cost or mark up' pricing. Here the average cost at normal capacity of output is ascertained and then a conventional margin of profit is added to the cost to arrive at the price. In other words, find out the product unit's total cost and add a percentage of profit to arrive at the selling price.

# (b) MARGINAL COST PRICING;- In marginal cost pricing, selling price is fixed in such a way that it covers fully the variable or marginal cost and contributes towards recovery of fixed costs fully or partly, depending upon the market situations. In times of stiff competition, marginal cost offers a guide-line as to how far the selling price can be lowered.

# fig-33

# COMPETITION-ORIENTED PRICING

# Here the pricing is a very complex task. Here the price of a product is set based on what the competitor charges for similar products. In other words, a reduction in the price of products by the competitor will force us also to follow suit. In such a case, how far we can go on reducing the price? Here the marginal cost concept comes handy. As long as the price covers the marginal cost, continue to sell. If not, better stop selling. It is because, every unit sold at less than marginal cost results in loss.

# SEALED BID PRICING;- This method popular in tenders and contracts. Each contracting firm quotes its price in a sealed cover called 'tender'. All the tenders are opened on a scheduled date and the person, who quotes the lowest price, other things remaining the same, is awarded the contract. The objective of the bidding firm is to bag the contract and hence it will quote lower than others. Marginal cost concept continues to be the guiding principle here also. Any price quoted less than the marginal price results in loss. Any price quoted ambitiously, no doubt, results in profit but suffers from the danger of losing the contract.

# GOING RATE PRICING;-Here the price charged by the firm is in tune with price charged in the industry as a whole. In other words, the prevailing market price at a given point of time is the guiding factor. When one wants to buy determine the price. Normally the market leaders keep announcing the prevailing prices at a given point of time based on demand and supply positions.

# DEMAND-ORIENTED PRICING

# The higher the demand, the higher can be the price. Cost is not the consideration here. The key to pricing here is the value as perceived by the consumer. This is a relatively modern marketing concept. Today most of the organizations consider favorably such proposals where there is possibility to charge higher prices on their products and services, even though they call for higher investments and latest technology. Demand-oriented pricing can take two forms: (a) Differential pricing also called price discrimination, (b) perceived value pricing.

# PRICE DISCRIMINATION;-

# Price discrimination refers to the practice of charging different prices to customers for the same good. The firm uses its desecration to charge differently the different customers. It is also called differential pricing. customers of different profiles can be separated in various ways, such as by different consumer requirements (for example bulk and low gas supply to industrial and household consumers), by nature of product itself (for example original and replacement components of pressure cookers), by geographical areas (domestic and international markets), by income group (in a government hospital the patients are charged a fee based on their income groups) and so on.

# The objects of price discrimination are to

# \* develop a new market including for export,

# \* utilize the maximum capacity,

# \* share consumer's surplus along with consumer, not leaving it totally to him,

# \* meet competition,

# \* increase market share.

# PERCEIVED VALUE PRICING;- Perceived value pricing refers to where the price is fixed on the basis of the perception of the buyer of the value of the products.

# STRATEGY-BASED PRICING

# MARKET SKIMMING;-

# When the product is introduced for the first time in the market, the company follows this method. Under this method, the company fixes a very high price for the product. The main idea is to charge the customer maximum possible. This strategy is mostly found in case of technology products. When Sony introduces a particular TV model, it fixes a very high price. When new series of Pentium is released into market, it is priced very high. Initially, all cannot afford except a very few. As the time passes by, the price comes down and more people can afford to buy except a very few. This method can be followed only when (i) the demand for the product is inelastic,(ii) there is no threat from competitors,(iii) a high price is coupled with high technology or quality.

# MARKET PENETRATION;-

# This is exactly opposite to the market skimming method. Here the price of the product is fixed so low that the company can increase its market share. The company attains profits with increasing volumes and increase in the market share. More often, the companies believe that it is necessary to dominate the market in the long-run than making profits in the short-run. This method is more suitable where market is highly price-sensitive. In such a case, a low price stimulates more rapid growth. It will be more appropriate in cases where the costs are likely to fall with increase in output. A low price may not attract significant degree of competition also.

# TWO-PART PRICING;-

# The firms with market power can enhance profits by the strategy of two-part pricing. Under this strategy, a firm charges a fixed fee for the right to purchase its goods, plus a per unit charges for each unit purchased. Entertainment house such as country clubs. Golf courses and health clubs usually adopt this strategy. Then charge a fixed initiation fee plus a charge per month or per visit, to use the facilities. There are also organizations that charge membership fee (equivalent to the consumer surplus) and offer their products and services cost-to-cost basis.

# BLOCK PRICING;-

# Block pricing is another way a firm with market power can enhance its profits. We see block pricing in our day-to-day life very frequently. Six Lux soaps in a single packed or five Magi noodles in a single pack illustrate this pricing method. By selling certain number of units of a product as one package, the firm earns more than by selling unit wise. The block pricing is a profit maximization price on each package. It is generally the total value the consumer receives for the package, including consumer surplus.

# COMMODITY BUNDLING;-

# Commodity bundling refers to the practice of bundling two or more different products together and selling them at a single 'bundle price'. The package includes the airfare, hotel, meals, sightseeing and so on at a bundled price instead of pricing each of these services separately. Computer firms offer PCs, assembling as per the customer specifications and offer them at a bundled price. The car companies provide cars with air-conditioning, Power steering, automatic transmission, auto gear and so forth, and sell them at a special price.

# PEAK LOAD PRICING;-

# During seasonal period when demand is likely to be higher, a firm may enhance profits by peak load pricing. The firm's philosophy is to charge a higher price during peak times than is charged during off-peak times. The pricing is done in such a way that the business is not lost to the competitors. The firm following such a strategy covers the likely losses during the off-peak times form the likely profits from the peak times.

# CROSS SUBSIDISATION;-

# In cases where demand for two products produced by a firm is interrelated through demand or costs, the firm may enhance the profitability of its operations through cross subsidization. Using the profits generated by established products, a firm may expand its activates by financing new product development and diversification into new product markets.

# TRANSFER PRICING;- Transfer pricing is an internal pricing technique. It refers to a price at which inputs of one department are transferred to another, in order to maximize the overall profits of the company.

Business is a continuous process. It is group of people working together to maximum Profits. Business involves various functions such as procuring materials Distribution selling.

**Definition**

Business is a human activity whose objective is to create wealth through purchase and sale of goods and services

---L.H.Hanney---

The following are the alternatives you have on hand:

* You can set up a small/medium/large industry to manufacture
* You can develop software
* You can design hardware
* You can be a consultant

If you choose any one or more of the above, you have chosen the line of activity. The next step for you is to decide whether.

* You want to be only owner (It means you what to be sole trader)
* You want to take some more professionals as co-owners along with you (If partners)
* You want to bring all like-minded people to share the benefits of the common enterprise (You want to promote a joint stock company)
* You want to involve government in the IT business (here you want to suggest government to promote a public enterprise!)

To decide this, it is necessary to know how to evaluate each of these alternatives.

###### **CHARACTERISTICS OF BUSINESS:**

**1. Entrepreneur:** An entrepreneur is a person who can indent the of market for a product or service. Who start the business that person is called entrepreneur

**2. Economic activities:** It involves various activities like purchasing, sales. ECT

**3. Profit motive;** Profit motive is the primary motive of the business. The activities which do not lead to profit marking are not business.

**4. Financing**: It is support is necessary for setting up infrastructure and running

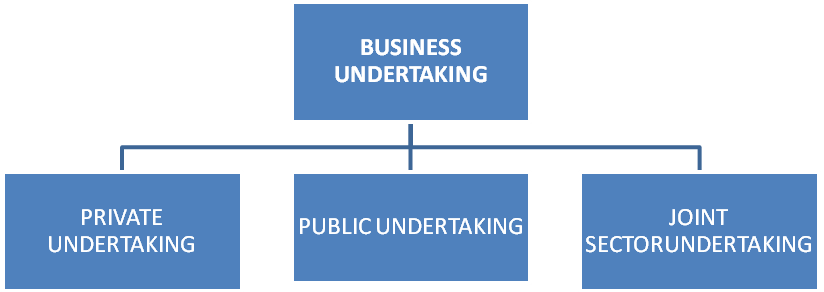
**5. Consumersatisfaction**:All business must satisfy consumer’s demand.

###### **FACTORS AFFECTING THE CHOICE OF FORM OF BUSINESS ORGANIZATION**:

Before we choose a particular form of business organization, let us study what factors affect such a choice?

The following are the factors affecting the choice of a business organization:

1. **Easy to start and easy to close:** The form of business organization should be such that it should be easy to close. There should not be hassles or long procedures in the process of setting up business or closing the same.
2. **Division of labour:** There should be possibility to divide the work among the available owners.
3. **Large amount of resources:** Large volume of business requires large volume of resources. Some forms of business organization do not permit to raise larger resources. Select the one which permits to mobilize the large resources.
4. **Liability:**The liability of the owners should be limited to the extent of money invested in business. It is better if their personal properties are not brought into business to make up the losses of the business.
5. **Secrecy:**The form of business organization you select should be such that it should permit to take care of the business secrets. We know that century old business units are still surviving only because they could successfully guard their business secrets.
6. **Transfer of ownership:**There should be simple procedures to transfer the ownership to the next legal heir.
7. **Ownership, Management and control:**If ownership, management and control are in the hands of one or a small group of persons, communication will be effective and coordination will be easier. Where ownership, management and control are widely distributed, it calls for a high degree of professional’s skills to monitor the performance of the business.
8. **Continuity:** The business should continue forever and ever irrespective of the uncertainties in future.
9. **Quick decision-making:**Select such a form of business organization, which permits you to take decisions quickly and promptly. Delay in decisions may invalidate the relevance of the decisions.
10. **Personal contact with customer:**Most of the times, customers give us clues to improve business. So choose such a form, which keeps you close to the customers.
11. **Flexibility:** In times of rough weather, there should be enough flexibility to shift from one business to the other. Thelesser the funds committed in a particular business, the better it is.
12. **Taxation:** More profit means more tax. Choose such a form, which permits to pay low tax.

****Public enterprises

* sole trader
* partners Departmental undertaking
* joint stock company Public corporation

Government Company

**SOLE TRADER**

The sole trader is the simplest, oldest and natural form of business organization. It is also called sole proprietorship. ‘Sole’ means **one.** ‘Sole trader’ implies that **there is only one trade**r who is the owner of the business.

It is a one-man form of organization wherein the trader assumes all the risk of ownership carrying out the business with his **own capital, skill and intelligence**. He is **the boss for himself.** He has total operational freedom. He is the **owner, Manager and controller**. He has **total freedom and flexibility**. Full control lies with him. He can take **his own decisions**. He can choose or drop a particular product or business based on its merits. He need not discuss this with anybody. He is responsible for himself. Restaurants, Supermarkets, pan shops, medical shops, hosiery shops etc.

### Features of sole trader

* It is **easy to start** a business under this form and also easy to close.
* He introduces his **own capital**. Sometimes, he may borrow, if necessary
* He enjoys **all the profits** and in case of loss, he lone suffers.
* He has **a high degree of flexibility** to shift from one business to the other.
* **Business secretes** can be guarded well
* There **is no continuity**. The business comes to a close with the death, illness or insanity of the sole trader He has total operational freedom. He is the owner, manager and controller.
* He can be **directly in touch with the customers.**
* He can take **decisions very fast** and implement them promptly.
* **Rates of tax**, for example, income tax and so on are comparatively very low.

### Advantages of sole trader:

The following are the advantages of the sole trader from of business organization:

1. **Easy to start and easy to close**: Formation of a sole trader form of organization is relatively easy even closing the business is easy.
2. **Personal contact with customers directly:** Based on the tastes and preferences of the customers the stocks can be maintained.
3. **Prompt decision-making:** To improve the quality of services to the customers, he can take any decision and implement the same promptly. He is the boss and he is responsible for his business Decisions relating to growth or expansion can be made promptly.
4. **High degree of flexibility:** Based on the profitability, the trader can decide to continue or change the business, if need be.
5. **Secrecy:** Business secrets can well be maintained because there is only one trader.
6. **Low rate of taxation:** The rate of income tax for sole traders is relatively very low.
7. **Direct motivation:** If there are profits, all the profits belong to the trader himself. In other words. If he works more hard, he will get more profits. This is the direct motivating factor. At the same time, if he does not take active interest, he may stand to lose badly also.
8. **Total Control:** The ownership, management and control are in the hands of the sole trader and hence it is easy to maintain the hold on business.
9. **Minimum interference from government:** Except in matters relating to public interest, government does not interfere in the business matters of the sole trader. The sole trader is free to fix price for his products/services if he enjoys monopoly market.
10. **Transferability:** The legal heirs of the sole trader may take the possession of the business.

### Disadvantages of sole trader:

The following are the disadvantages of sole trader form:

1. **Unlimited liability:** The liability of the sole trader is unlimited. It means that the sole trader has to bring his personal property to clear off the loans of his business. From the legal point of view, he is not different from his business.
2. **Limited amounts of capital:** The resources a sole trader can mobilize cannot be very large and hence this naturally sets a limit for the scale of operations.
3. **No division of labour:** All the work related to different functions such as marketing, production, finance, labour and so on has to be taken care of by the sole trader himself. There is nobody else to take his burden. Family members and relatives cannot show as much interest as the trader takes.
4. **Uncertainty:** There is no continuity in the duration of the business. On the death, insanity of insolvency the business may be come to an end.
5. **Inadequate for growth and expansion:** This from is suitable for only small size, one-man-show type of organizations. This may not really work out for growing and expanding organizations.
6. **Lack of specialization:** The services of specialists such as accountants, market researchers, consultants and so on, are not within the reach of most of the sole traders.
7. **More competition:** Because it is easy to set up a small business, there is a high degree of competition among the small businessmen and a few who are good in taking care of customer requirements along can service.
8. **Low bargaining power:** The sole trader is the in the receiving end in terms of loans or supply of raw materials. He may have to compromise many times regarding the terms and conditions of purchase of materials or borrowing loans from the finance houses or banks

# Partnership

Partnership is an improved from of sole trader in certain respects. Where there are like-minded persons with resources, they can come together to do the business and share the profits/losses of the business in an agreed ratio. Persons who have entered into such an agreement are individually called **‘partners’** and collectively called **‘firm’**. The relationship among partners is called a partnership.

Indian Partnership Act, 1932 defines partnership as the relationship between two or more persons who agree to share the profits of the business carried on by all or any one of them acting for all.

### Features of partnership

1. **Relationship:** Partnership is a relationship among persons. It is relationship resulting out of an agreement.
2. **Two or more persons:** There should be two or more number of persons.
3. **There should be a business**: Business should be conducted.
4. **Agreement:** Persons should agree to share the profits/losses of the business
5. **Carried on by all or any one of them acting for all:** The business can be carried on by all or any one of the persons acting for all. This means that the business can be carried on by one person who is the agent for all other persons. Every partner is both an agent and a principal. Agent for other partners and principal for himself. All the partners are agents and the ‘partnership’ is their principal.

The following are the other features:

1. **Unlimited liability:** The liability of the partners is unlimited. The partnership and partners, in the eye of law, and not different but one and the same. Hence, the partners have to bring their personal assets to clear the losses of the firm, if any.
2. **Number of partners:** According to the Indian Partnership Act, the minimum number of partners should be two and the maximum number if restricted, as given below:

* 10 partners is case of banking business
* 20 in case of non-banking business

1. **Division of labour:** Because there are more than two persons, the work can be divided among the partners based on their aptitude.
2. **Personal contact with customers:** The partners can continuously be in touch with the customers to monitor their requirements.
3. **Flexibility:** All the partners are likeminded persons and hence they can take any decision relating to business.

**PARTNERSHIP DEED**

The written agreement among the partners is called ‘the partnership deed’. It contains the terms and conditions governing the working of partnership. The following are contents of the partnership deed.

1. Names and addresses of the firm and partners
2. Nature of the business proposed
3. Duration
4. Amount of capital of the partnership and the ratio for contribution by each of the partners.
5. Their profit sharing ration (this is used for sharing losses also)
6. Rate of interest charged on capital contributed, loans taken from the partnership and the amounts drawn, if any, by the partners from their respective capital balances.
7. The amount of salary or commission payable to any partner
8. Procedure to value good will of the firm at the time of admission of a new partner, retirement of death of a partner
9. Allocation of responsibilities of the partners in the firm
10. Procedure for dissolution of the firm
11. Name of the arbitrator to whom the disputes, if any, can be referred to for settlement.
12. Special rights, obligations and liabilities of partners(s), if any.

# Kind of partners

The following are the different kinds of partners:

1. **Active Partner:** Active partner takes **active part in the affairs** of the partnership. He is also called working partner.
2. **Sleeping Partner:** Sleeping partner **contributes to capital but does not take part** in the affairs of the partnership.
3. **Nominal Partner:** Nominal partner is partner just for namesake. He neither **contributes to capital nor takes part in the affairs of business**. Normally, the nominal partners are those who have good business connections, and are well places in the society.
4. **Partner by Estoppels:** Estoppels means **behavior or conduct**. Partner by estoppels gives an impression to outsiders that he is the partner in the firm. In fact is neither contributes to capital, nor takes any role in the affairs of the partnership.
5. **Partner by holding out:** If partners declare a particular person (having social status) as partner and this **person does not contradict** even after he comes to know such declaration, he is called a partner by holding out and he is liable for the claims of third parties. However, the third parties should prove they entered into contract with the firm in the belief that he is the partner of the firm. Such a person is called partner by holding out.
6. **Minor Partner:** Minor has a special status in the partnership. A minor can be admitted for the benefits of the firm. A minor is entitled **to his share of profits** of the firm. The liability of a minor partner is limited to the extent of his contribution of the capital of the firm.

### Right of partners

Every partner has right

1. To take part in the management of business
2. To express his opinion
3. Of access to and inspect and copy and book of accounts of the firm
4. To share equally the profits of the firm in the absence of any specific agreement to the contrary
5. To receive interest on capital at an agreed rate of interest from the profits of the firm
6. To receive interest on loans, if any, extended to the firm.
7. To be indemnified for any loss incurred by him in the conduct of the business
8. To receive any money spent by him in the ordinary and proper conduct of the business of the firm.

### Advantages of partnership

The following are the advantages of the partnership from:

1. **Easy to form:** Once there is a group of like-minded persons and good business proposal, it is easy to start and register a partnership.
2. **Availability of larger amount of capital:** More amount of capital can be raised from more number of partners.
3. **Division of labour:** The different partners come with varied backgrounds and skills. This facilities division of labour.
4. **Flexibility:** The partners are free to change their decisions, add or drop a particular product or start a new business or close the present one and so on.
5. **Personal contact with customers**: There is scope to keep close monitoring with customers requirements by keeping one of the partners in charge of sales and marketing. Necessary changes can be initiated based on the merits of the proposals from the customers.
6. **Quick decisions and prompt action:** If there is consensus among partners, it is enough to implement any decision and initiate prompt action. Sometimes, it may more time for the partners on strategic issues to reach consensus.
7. **The positive impact of unlimited liability:** Every partner is always alert about his impending danger of unlimited liability. Hence he tries to do his best to bring profits for the partnership firm by making good use of all his contacts.

**Disadvantagesof partnership:**

The following are the disadvantages of partnership:

1. **Formation of partnership is difficult:** Only like-minded persons can start a partnership. It is sarcastically said,’ it is easy to find a life partner, but not a business partner’.
2. **Liability:** The partners have joint and several liabilities beside unlimited liability. Joint and several liability puts additional burden on the partners, which means that even the personal properties of the partner or partners can be attached. Even when all but one partner become insolvent, the solvent partner has to bear the entire burden of business loss.
3. **Lack of harmony or cohesiveness:** It is likely that partners may not, most often work as a group with cohesiveness. This result in mutual conflicts, an attitude of suspicion and crisis of confidence. Lack of harmony results in delay in decisions and paralyses the entire operations
4. **Limited growth:** The resources when compared to sole trader, a partnership may raise little more. But when compare to the other forms such as a company, resources raised in this form of organization are limited. Added to this, there is a restriction on the maximum number of partners.
5. **Instability:** The partnership form is known for its instability. The firm may be dissolved on death, insolvency or insanity of any of the partners.
6. **Lack of Public confidence:** Public and even the financial institutions look at the unregistered firm with a suspicious eye. Though registration of the firm under the Indian Partnership Act is a solution of such problem, this cannot revive public confidence into this form of organization overnight. The partnership can create confidence in other only with their performance.

# Joint stock company

The joint stock company emerges from the limitations of partnership such as joint and several liability, unlimited liability, limited resources and uncertain duration and so on. Normally, to take part in a business, it may need large money and we cannot foretell the fate of business. It is not literally possible to get into business with little money. Against this background, it is interesting to study the functioning of a joint stock company.

The main principle of the joint stock company from is to provide opportunity to take part in business with a low investment as possible say Rs.1000. Joint Stock Company has been a boon for investors with moderate funds to invest.

The word ‘ company’ has a Latin origin, **com means ‘ come together’, pany means ‘ bread’**, joint stock company means, people come together to earn their livelihood by investing in the stock of company jointly.

### Company Defined

Lord Justice Lindley explained the concept of the joint stock company from of organization as ‘**an association of many persons who contribute money or money’s worth to a common stock and employ it for a common purpose.**

### Features of Joint Stock Company

1. **Artificial person:** The Company has no form or shape. It is an artificial person created by law. It is intangible, invisible and existing only, in the eyes of law.
2. **Separate legal existence**: it has an independence existence, it separate from its members. It can acquire the assets. It can borrow for the company. It can sue other if they are in default in payment of dues, breach of contract with it, if any. Similarly, outsiders for any claim can sue it. A shareholder is not liable for the acts of the company. Similarly, the shareholders cannot bind the company by their acts.
3. **Voluntary association of persons**: The Company is an association of voluntary association of persons who want to carry on business for profit. To carry on business, they need capital. So they invest in the share capital of the company.
4. **Limited Liability**: The shareholders have limited liability i.e., liability limited to the face value of the shares held by him. In other words, the liability of a shareholder is restricted to the extent of his contribution to the share capital of the company. The shareholder need not pay anything, even in times of loss for the company, other than his contribution to the share capital.
5. **Capital is divided into shares**: The total capital is divided into a certain number of units. Each unit is called a share. The price of each share is priced so low that every investor would like to invest in the company. The companies promoted by promoters of good standing (i.e., known for their reputation in terms of reliability character and dynamism) are likely to attract huge resources.
6. **Transferability of shares**: In the company form of organization, the shares can be transferred from one person to the other. A shareholder of a public company can cell sell his holding of shares at his will. However, the shares of a private company cannot be transferred. A private company restricts the transferability of the shares.
7. **Common Seal**: As the company is an artificial person created by law has no physical form, it cannot sign its name on a paper; so, it has a common seal on which its name is engraved. The common seal should affix every document or contract; otherwise the company is not bound by such a document or contract.
8. **Perpetual succession**: ‘Members may comes and members may go, but the company continues for ever and ever’ A. company has uninterrupted existence because of the right given to the shareholders to transfer the shares.
9. **Ownership and Management separated**: The shareholders are spread over the length and breadth of the country, and sometimes, they are from different parts of the world. To facilitate administration, the shareholders elect some among themselves or the promoters of the company as directors to a Board, which looks after the management of the business. The Board recruits the managers and employees at different levels in the management. Thus the management is separated from the owners.
10. **Winding up**: Winding up refers to the putting an end to the company. Because law creates it, only law can put an end to it in special circumstances such as representation from creditors of financial institutions, or shareholders against the company that their interests are not safeguarded. The company is not affected by the death or insolvency of any of its members.
11. **The name of the company ends with ‘limited’**: it is necessary that the name of the company ends with limited (Ltd.) to give an indication to the outsiders that they are dealing with the company with limited liability and they should be careful about the liability aspect of their transactions with the company.

**FORMATION OF JOINT STOCK COMPANY**

There are two stages in the formation of a joint stock company. They are:

1. To obtain Certificates of Incorporation
2. To obtain certificate of commencement of Business

**Certificate of Incorporation**: The certificate of Incorporation is just like a ‘date of birth’ certificate. It certifies that a company with such and such a name is born on a particular day.

**Certificate of commencement of Business**: A private company need not obtain the certificate of commencement of business. It can start its commercial operations immediately after obtaining the certificate of Incorporation.

The persons who conceive the idea of starting a company and who organize the necessary initial resources are called promoters. The vision of the promoters forms the backbone for the company in the future to reckon with.

The promoters have to file the following documents, along with necessary fee, with a registrar of joint stock companies to obtain certificate of incorporation:

1. **Memorandum of Association**: The Memorandum of Association is also called the charter of the company. It outlines the relations of the company with the outsiders. If furnishes all its details in six clause such as (ii) Name clause (II) situation clause (iii) objects clause (iv) Capital clause and (vi) subscription clause duly executed by its subscribers.
2. **Articles of association**: Articles of Association furnishes the byelaws or internal rules government the internal conduct of the company.
3. The list of names and address of the proposed directors and their willingness, in writing to act as such, in case of registration of a public company.
4. A statutory declaration that all the legal requirements have been fulfilled. The declaration has to be duly signed by any one of the following: Company secretary in whole practice, the proposed director, legal solicitor, chartered accountant in whole time practice or advocate of High court.

The registrar of joint stock companies peruses and verifies whether all these documents are in order or not. If he is satisfied with the information furnished, he will register the documents and then issue a certificate of incorporation, if it is private company, it can start its business operation immediately after obtaining certificate of incorporation.

### Advantages of Joint Stock Company

1. **Mobilization of larger resources:** A joint stock company provides opportunity for the investors to invest, even small sums, in the capital of large companies. The facilities rising of larger resources.
2. **Separate legal entity:** The Company has separate legal entity. It is registered under Indian Companies Act, 1956.
3. **Limited liability:** The shareholder has limited liability in respect of the shares held by him. In no case, does his liability exceed more than the face value of the shares allotted to him.
4. **Transferability of shares:** The shares can be transferred to others. However, the private company shares cannot be transferred.
5. **Liquidity of investments**: By providing the transferability of shares, shares can be converted into cash.
6. **Inculcates the habit of savings and investments**: Because the share face value is very low, this promotes the habit of saving among the common man and mobilizes the same towards investments in the company.
7. **Democracy in management**: the shareholders elect the directors in a democratic way in the general body meetings. The shareholders are free to make any proposals, question the practice of the management, suggest the possible remedial measures, as they perceive, the directors respond to the issue raised by the shareholders and have to justify their actions.
8. **Economics of large scale production**: Since the production is in the scale with large funds at
9. **Continued existence**: The Company has perpetual succession. It has no natural end. It continues forever and ever unless law put an end to it.
10. **Institutional confidence**: Financial Institutions prefer to deal with companies in view of their professionalism and financial strengths.
11. **Professional management**: With the larger funds at its disposal, the Board of Directors recruits competent and professional managers to handle the affairs of the company in a professional manner.
12. **Growth and Expansion**: With large resources and professional management, the company can earn good returns on its operations, build good amount of reserves and further consider the proposals for growth and expansion.

All that shines is not gold. The company from of organization is not without any disadvantages. The following are the disadvantages of joint stock companies.

### Disadvantages of Joint Stock Company

1. **Formation of company is a long drawn procedure**: Promoting a joint stock company involves a long drawn procedure. It is expensive and involves large number of legal formalities.
2. **High degree of government interference**: The government brings out a number of rules and regulations governing the internal conduct of the operations of a company such as meetings, voting, audit and so on, and any violation of these rules results into statutory lapses, punishable under the companies act.
3. **Inordinate delays in decision-making**: As the size of the organization grows, the number of levels in organization also increases in the name of specialization. The more the number of levels, the more is the delay in decision-making. Sometimes, so-called professionals do not respond to the urgencies as required. It promotes delay in administration, which is referred to ‘red tape and bureaucracy’.
4. **Lack or initiative**: In most of the cases, the employees of the company at different levels show slack in their personal initiative with the result, the opportunities once missed do not recur and the company loses the revenue.
5. **Lack of responsibility and commitment**: In some cases, the managers at different levels are afraid to take risk and more worried about their jobs rather than the huge funds invested in the capital of the company lose the revenue.
6. **Lack of responsibility and commitment:** In some cases, the managers at different levels are afraid to take risk and more worried about their jobs rather than the huge funds invested in the capital of the company. Where managers do not show up willingness to take responsibility, they cannot be considered as committed. They will not be able to handle the business risks.

# Public enterprises

Public enterprises occupy an important position in the Indian economy. Today, public enterprises provide the substance and heart of the economy. Its investment of over Rs.10, 000 crore is in heavy and basic industry, and infrastructure like power, transport and communications. The concept of public enterprise in Indian dates back to the era of pre-independence.

### Genesis (aim) of Public Enterprises

In consequence to declaration of its goal as socialistic pattern of society in 1954, the Government of India realized that it is through progressive extension of public enterprises only, the following aims of our five years plans can be fulfilled.

* Higher production
* Greater employment
* Economic equality, and
* Dispersal of economic power

The government found it necessary to revise its industrial policy in 1956 to give it a socialistic bent.

### Need for Public Enterprises

The Industrial Policy Resolution 1956 states the need for promoting public enterprises as follows:

* To accelerate **the rate of economic growth** by planned development
* **To speed up industrialization, particularly development** of heavy industries and to expand public sector and to build up a large and growing cooperative sector.
* **To increase infrastructure facilities**
* To disperse the industries over different geographical areas for balanced regional development
* **To increase the opportunities** of gainful employment
* To help in **raising the standards of living**

### Achievements of public Enterprises

The achievements of public enterprise are vast and varied. They are:

1. Setting up a number of **public enterprises in basic and key industries**
2. Generating considerably large **employment opportunities in skilled, unskilled, supervisory and managerial cadres.**
3. Creating internal resources and contributing towards national exchequer for funds for development and welfare.
4. Bringing about **development activities in backward regions, through locations** in different areas of the country.
5. Creating viable infrastructure and bringing about rapid industrialization (ancillary industries developed around the public sector as its nucleus).
6. **Restricting the growth of private** monopolies
7. **Taking over sick industrial units and putting them**, in most of the vases, in order,
8. **Creating financial systems, through a powerful networking** of financial institutions, development and promotional institutions, which has resulted in social control and social orientation of investment, credit and capital management systems.
9. Benefiting the rural areas, priority sectors, and small business in the fields of industry, finance, credit, services, trade, transport, and consultancy and so on.

Let us see the different forms of public enterprise and their features now.

### FORMS OF PUBLIC ENTERPRISES

Public enterprises can be classified into three forms:

1. Departmental undertaking
2. Public corporation
3. Government company

**(A)DEPARTMENTAL UNDERTAKING**

This is the earliest from of public enterprise. Under this form, the affairs of the public enterprise are carried out under the **overall control of one of the departments** of the government. The government department appoints a managing director (normally a civil servant) for the departmental undertaking. He will be given the executive authority to take necessary decisions. The departmental undertaking does not have a budget of its own. As and when it wants, it draws money from the government exchequer and when it has surplus money, it deposits it in the government exchequer. However, it is subject to budget, accounting and audit controls.

Examples for departmental undertakings are Railways, Department of Posts, All India Radio, and Doordarshan, Defence undertakings like DRDL, DLRL, ordinance factories, and such.

**Features of Departmental Undertaking**

1. **Under the control of a government department**: The departmental undertaking is not an independent organization. It has no separate existence. It is designed to work under close control of a government department. It is subject to direct ministerial control.
2. **More financial freedom:** The departmental undertaking can draw funds from government account as per the needs and deposit back when convenient.
3. **Like any other government department**: The departmental undertaking is almost similar to any other government department
4. **Budget, accounting and audit controls**: The departmental undertaking has to follow guidelines (as applicable to the other government departments) underlying the budget preparation, maintenance of accounts, and getting the accounts audited internally and by external auditors.
5. **More a government organization, less a business organization.** The set up of a departmental undertaking is more rigid, less flexible, and slow in responding to market needs.

**Advantages of Departmental Undertaking**

1. **Effective control**: Control is likely to be effective because it is directly under the Ministry.
2. **Responsible Executives**: Normally the administration is entrusted to a senior civil servant. The administration will be organized and effective.
3. **Less scope for mystification of funds**: Departmental undertaking does not draw any money more than is needed, that too subject to ministerial sanction and other controls. So chances for mis-utilisation are low.
4. **Adds to Government revenue**: The revenue of the government is on the rise when the revenue of the departmental undertaking is deposited in the government account.

### Disadvantages

1. **Decisions delayed**: Control is centralized. This results in lower degree of flexibility. Officials in the lower levels cannot take initiative. Decisions cannot be fast and actions cannot be prompt.
2. **No incentive to maximize earnings**: The departmental undertaking does not retain any surplus with it. So there is no inventive for maximizing the efficiency or earnings.
3. **Slow response to market conditions**: Since there is no competition, there is no profit motive; there is no incentive to move swiftly to market needs.
4. **Redtapism and bureaucracy**: The departmental undertakings are in the control of a civil servant and under the immediate supervision of a government department. Administration gets delayed substantially.
5. **Incidence of more taxes**: At times, in case of losses, these are made up by the government funds only. To make up these, there may be a need for fresh taxes, which is undesirable.

Any business organization to be more successful needs to be more dynamic, flexible, and responsive to market conditions, fast in decision making and prompt in actions. None of these qualities figure in the features of a departmental undertaking. It is true that departmental undertaking operates as an extension to the government. With the result, the government may miss certain business opportunities. So as not to miss business opportunities, the government has thought of another form of public enterprise, that is, Public corporation.

# B)Public corporation

Having released that the routing government administration would not be able to cope up with the demand of its business enterprises, the Government of India, in 1948, decided to organize some of its enterprises as statutory corporations. In pursuance of this, Industrial Finance Corporation, Employees’ State Insurance Corporation was set up in 1948.

Public corporation is a **‘right mix of public ownership, public accountability and business management for public ends’**. The public corporation provides machinery, which is flexible, while at the same time retaining public control.

### Definition

A public corporation is defined as a **‘body corporate create by an Act of Parliament or Legislature and notified** by the name in the official gazette of the central or state government. It is a corporate entity having perpetual succession, and common seal with power to acquire, hold, dispose off property, sue and is sued by its name”.

Examples of a public corporation are Life Insurance Corporation of India, Unit Trust of India, Industrial Finance Corporation of India, Damodar Valley Corporation and others.

### Features

1. **A body corporate**: It has a separate legal existence. It is a separate company by itself. If can raise resources, buy and sell properties, by name sue and be sued.
2. **More freedom and day-to-day affairs**: It is relatively free from any type of political interference. It enjoys administrative autonomy.
3. **Freedom regarding personnel**: The employees of public corporation are not government civil servants. The corporation has absolute freedom to formulate its own personnel policies and procedures, and these are applicable to all the employees including directors.
4. **Perpetual succession**: A statute in parliament or state legislature creates it. It continues forever and till a statue is passed to wind it up.
5. **Financial autonomy**: Through the public corporation is fully owned government organization and the initial finance are provided by the Government, it enjoys total financial autonomy, its income and expenditure are not shown in the annual budget of the government, and it enjoys total financial autonomy. Its income and expenditure are not shown in the annual budget of the government. However, for its freedom it is restricted regarding capital expenditure beyond the laid down limits, and raising the capital through capital market.
6. **Commercial audit**: Except in the case of banks and other financial institutions where chartered accountants are auditors, in all corporations, the audit is entrusted to the comptroller and auditor general of India.
7. **Run on commercial principles**: As far as the discharge of functions, the corporation shall act as far as possible on sound business principles.

### Advantages

1. **Independence, initiative and flexibility**: The Corporation has an autonomous set up. So it is independent, take necessary initiative to realize its goals, and it can be flexible in its decisions as required.
2. **Scope for Redtapism and bureaucracy minimized**: The Corporation has its own policies and procedures. If necessary they can be simplified to eliminate redtapism and bureaucracy, if any.
3. **Public interest protected**: The Corporation can protect the public interest by making its policies more public friendly; Public interests are protected because every policy of the corporation is subject to ministerial directives and board parliamentary control.
4. **Employee friendly work environment**: Corporation can design its own work culture and train its employees accordingly. It can provide better amenities and better terms of service to the employees and thereby secure greater productivity.
5. **Competitive prices**: the corporation is a government organization and hence can afford with minimum margins of profit, it can offer its products and services at competitive prices.
6. **Economics of scale**: By increasing the size of its operations, it can achieve economics of large-scale production.
7. **Public accountability**: It is accountable to the Parliament or legislature; it has to submit its annual report on its working results.

**Disadvantages**

1. **Continued political interference**: the autonomy is on paper only and in reality, the continued.
2. **Misuse of Power**: In some cases, the greater autonomy leads to misuse of power. It takes time to unearth the impact of such misuse on the resources of the corporation. Cases of misuse of power defeat the very purpose of the public corporation.
3. **Burden for the government**: Where the public corporation ignores the commercial principles and suffers losses, it is burdensome for the government to provide subsidies to make up the losses.

**(c)GOVERNMENT COMPANY**

Section 617 of the Indian Companies Act defines a government company as “any company in which not less than 51 percent of the paid up share capital” is held by the Central Government or by any State Government or Governments or partly by Central Government and partly by one or more of the state Governments and includes and company which is subsidiary of government company as thus defined”.

A government company is the right combination of operating flexibility of privately organized companies with the advantages of state regulation and control in public interest.

Government companies differ in the degree of control and their motive also.

Some government companies are promoted as

* A company to take over the existing sick companies under private management (E.g. Hindustan Shipyard)
* A company established as a totally state enterprise to safeguard national interests such as Hindustan Aeronautics Ltd. And so on.
* Mixed ownership company in collaboration with a private consult to obtain technical know how and guidance for the management of its enterprises, e.g. Hindustan Cables)

### Features

The following are the features of a government company:

1. **Like any other registered company**: It is incorporated as a registered company under the Indian companies Act. 1956. Like any other company, the government company has separate legal existence. Common seal, perpetual succession, limited liability, and so on...
2. **Shareholding**: The majority of the share are held by the Government, Central or State, partly by the Central and State Government(s), in the name of the President of India, It is also common that the collaborators and allotted some shares for providing the transfer of technology.
3. **Directors are nominated**: As the government is the owner of the entire or majority of the share capital of the company, it has freedom to nominate the directors to the Board. Government may consider the requirements of the company in terms of necessary specialization and appoints the directors accordingly.
4. **Administrative autonomy and financial freedom**: A government company functions independently with full discretion and in the normal administration of affairs of the undertaking.
5. **Subject to ministerial control**: Concerned minister may act as the immediate boss. It is because it is the government that nominates the directors, the minister issue directions for a company and he can call for information related to the progress and affairs of the company any time.

**Advantages**

1. **Formation is easy**: There is no need for an Act in legislature or parliament to promote a government company. A Government company can be promoted as per the provisions of the companies Act. Which is relatively easier?
2. **Separate legal entity**: It retains the advantages of public corporation such as autonomy, legal entity.
3. **Ability to compete:** It is free from the rigid rules and regulations. It can smoothly function with all the necessary initiative and drive necessary to complete with any other private organization. It retains its independence in respect of large financial resources, recruitment of personnel, management of its affairs, and so on.
4. **Flexibility**: A Government company is more flexible than a departmental undertaking or public corporation. Necessary changes can be initiated, which the framework of the company law. Government can, if necessary, change the provisions of the Companies Act. If found restricting the freedom of the government company. The form of Government Company is so flexible that it can be used for taking over sick units promoting strategic industries in the context of national security and interest.
5. **Quick decision and prompt actions**: In view of the autonomy, the government company take decision quickly and ensure that the actions and initiated promptly.
6. **Private participation facilitated**: Government company is the only from providing scope for private participation in the ownership. The facilities to take the best, necessary to conduct the affairs of business, from the private sector and also from the public sector.

### Disadvantages

1. **Continued political and government interference**: Government seldom leaves the government company to function on its own. Government is the major shareholder and it dictates its decisions to the Board. The Board of Directors gets these approved in the general body. There were a number of cases where the operational polices were influenced by the whims and fancies of the civil servants and the ministers.
2. **Higher degree of government control**: The degree of government control is so high that the government company is reduced to mere adjuncts to the ministry and is, in majority of the cases, not treated better than the subordinate organization or offices of the government.
3. **Evades constitutional responsibility**: A government company is creating by executive action of the government without the specific approval of the parliament or Legislature.
4. **Poor sense of attachment or commitment**: The members of the Board of Management of government companies and from the ministerial departments in their ex-officio capacity. The lack the sense of attachment and do not reflect any degree of commitment to lead the company in a competitive environment.
5. **Divided loyalties**: The employees are mostly drawn from the regular government departments for a defined period. After this period, they go back to their government departments and hence their divided loyalty dilutes their interest towards their job in the government company.

**Comparison of Private and Public Sector**

|  |  |  |
| --- | --- | --- |
|  | **Private sector** | **Public sector** |
| 1. | Profit is the main motive. It benefits only owners. | Service to the country is the main motive. It benefits all. |
| 2. | It is owned and managed by an individual or a group of individuals. | It is owned and managed by the government |
| 3. | It has to face tough competition in the market. | Generally it is a monopoly concern hence less competition. |
| 4. | Large amount of capital may not be available. | Large amount of capital can be available |
| 5. | It leads to economic inequality and concentration of wealth in the hands of a few | It leads to economic equality. The profits earned are utilized for public welfare. |
| 6. | Large scale business is generally not possible because of limited resources. | Large scale is always possible as the government has huge resources. |
| 7. | Private sector dominates in the production of consumer goods. | The public sector dominates in the production of producer goods. |

**Comparison of Partnership Business and Joint Stock Company**

|  |  |  |
| --- | --- | --- |
|  | **Partnership Business** | **Joint Stock Company** |
| 1. | **Registration:**  Not a matter of compulsion but a matter of voluntary decision. | Registration is a matter of compulsion for every company, as per the companies’ Act, 1956, provisions. |
| 2. | **Basic document:**  A partnership deed or agreement is the base which helps partners to conduct business. | Memorandum articles of association prospectus are the documents which create some base for working of a company. |
| 3. | **Continuous survival:**  In case of firm with only two partners, natural death, retirement of any one partner may dissolve the business. | This being artificial personality liquidation or dissolution is not an easy process. They enjoy longer life than any other form of business. |
| 4. | **Capital resources:**  Partnership forms are not allowed to issue shares or debentures to the public. They have to rely on the partner’s ability to invest and borrow from banks. | Public as well as private companies are allowed to tackle many sources of finance i.e.  Shares, debentures, public deposits, etc so, they enjoy sound financial position. |
| 5. | **No. of presentation:**  Minimum 2 persons and maximum 20 persons can be admitted an s partners. | Minimum 2 and maximum 50 persons for private company, No limit of maximum members in public companies. |
| 6. | **Competition capacity:**  In case of partnership organization, capacity is more than sole trader but less than joint stock company. | More capital and use of expert persons increase the capacity to compete with any other forms of business organization. |
| 7. | **Legal restriction:**  These are very limited for partnership firms. No required to give any publicity to its accounts. | More legal and other restrictions. Publishing annual reports, according statements is a matter of compulsion. |
|  | | |
| **8.** | **Scope for expansion:**  In case of firms they have to rely on local markets. Scope of expansion is very limited. Cannot take expert’s advice. | More capacity to face competition. Joint stock companies can easily. Undertake expansion activities. They can even export goods to other countries. |

**Comparison of Individual Proprietorship and Partnership**

|  |  |  |
| --- | --- | --- |
|  | Proprietorship | Partnership |
| 1. | Single owner of the firm. | Minimum two or maximum twenty partners. |
| 2. | Easy to form the organization. | Some legal documents are to be prepared. |
| 3. | Success depends on skills of single owner. | Success depends on co-operation, understanding and skills of different partners. |
| 4. | Proprietor enjoys more freedom and profit. | Partner has less freedom and share of profit. |
| 5. | Single proprietor can raise limited capital. | Partners together can collect large capital as compared to proprietor. |
| 6. | Business risk is totally with single proprietor. | Risk of business is equally divided among partners. |
| 7. | Individual proprietor can take decisions fast. | Partnership decisions are critical and take time. |
| 8. | Individual proprietor business is less efficient with less expertise. | Partnership business is more efficient and more expertise can be available from partners. |
| 9. | After the death of proprietor the business may discontinue. | Partners may carry out the business. |
| 10. | The business secret can be maintained or kept confidential. | Business secrecy cannot be maintained. |

**Comparison of Joint Stock Company and Public Enterprises**

|  |  |  |
| --- | --- | --- |
|  | **Joint Stock Company** | **Public Enterprises** |
| 1. | Main motive is profit making. | Service to the country is main motive. |
| 2. | Management of company is looked after by the board of directions. | It is owned and managed by the government. |
| 3. | It has to face competition in market. | Generally it is a monopoly concern. |
| 4. | Easy to form a company | Legal formalities are to be completed. |

**Comparison of Co-operative and Joint Stock Company**

|  |  |  |
| --- | --- | --- |
|  | Co-operative Enterprise | Joint Stock Company |
| 1. | Minimum ten and maximum no limit for members. | There is no maximum limit on membership |
| 2. | Suitable for medium or small business. | Suitable for medium or large business. |
| 3. | Liability of members is limited. | Liability is limited to the contribution made by the share holders. |
| 4. | Management by managing committee. | Management of the company is looked after by the board of directions. |

**Comparison of MOA and AOA**

|  |  |  |
| --- | --- | --- |
|  | **Memorandum of association (MOA)** | **Articles of Association (AOA)** |
| 1. | MOA defines the object and scope of the business. | AOA defines the rules, regulation and bye laws of the business. |
| 2. | MOA is a mandatory document. | AOA is an optional document. |
| 3. | Any modification in MOA requires consent of government or court. | Modification in AOA requires resolution of share holders. |
| 4. | MOA is regulated by companies act. | AOA is regulated by shareholders. |

**UNIT- IV**

**CAPITAL BUDGETING**

**INTRODUCTION:**

Capital forms the base for the business. Capital, in general, does not mean only money. It may refer to money’s worth also. Capital has different forms. Creativity, innovation or new ideas can be considered as one form of capital. Some people have ideas but they may not have money. There are some others who have money only. The ideal combination for business is to have both. Today, there are different sources of raising finance for many types of business provided we have the margin or the base money. In this chapter are restrict our discussion to money form of capital.

Finance is the prerequisite to commence and vary on business. **It is rightly said to be the lifeblood of the business.** No growth and expansion of business can take place without sufficient finance. It shows that no business activity is possible without finance. This is why; every business has to make plans regarding acquisition and utilization of funds.

### FUNCTION OF FINANCE:

### According to B. O. Wheeler, Financial Management is concerned with the acquisition and utiliasation of capital funds in meeting the financial needs and overall objectives of a business enterprise. Thus the primary function of finance is to acquire capital funds and put them for proper utilization, with which the firm’s objectives are fulfilled.

### The firm should be able to procure sufficient funds on reasonable terms and conditions and should exercise proper control in applying them in order to earn a good rate of return, which in turn allows the firm to reward the sources of funds reasonably, and leaves the firm with good surplus to grow further.

### SIGNIFICANCE OF CAPITAL:

### Capital plays a very significant role in the modern production system. It is very difficult to imagine the process of production without capital accumulation and technological advancement are closely related to each other. Capital creates and enhances the level of employment opportunities. It has a strategic role in enhancing productivity. Capital is necessary not only for micro-enterprises but also to the government. Capital is a scare resource and every country has to utilize the same judiciously.

**NEED FOR CAPITAL:**

The business needs for capital are varied. They are:

1. **To promote a business:** Capital is required at the promotion stage. A large variety of expenses have to be incurred on project reports, feasibility studies and reports, preparation and filing of various documents, and for meeting various other expenses in connection with the raising of capital from the public.
2. **To conduct business operations smoothly:** Business firms also need capital for the purpose of conducting their business operation such as research and development, advertising, sales promotion. Distribution and operating expenses.
3. **To expand and diversity:** The firm requires a lot of capital for expansion and diversification purposes. This includes development expense such as purchase of sophisticated machinery and equipment and also payment towards sophisticated technology.
4. **To meet contingencies:** A firm needs funds to meet contingencies such as a sudden fall in sales major litigation (legal cases), natural calamities like fire, and so on.
5. **To pay taxes:** The firm has to meet its statutory commitments such as income tax and sales tax excise duty and so on.
6. **To pay dividends and interests:** The business has to make payment towards dividends and in interests to shareholders and financial institutions respectively.
7. **To replace the assets:** The business needs to replace its assets like plant and machinery after a certain period of use. For this purpose the firm needs funds to make suitable replacement of assets in place of old and worn-out assets.
8. **To support welfare programmers:** The Company may also have to take up social welfare programmers such as literacy drive, and health camps. It may have to donate to charitable trusts educational institutions or public service organizations.
9. **To wind up:** At the time of winding up, the company may need funds to meet the liquidation expenses.

**TYPES OF CAPITAL**

Capital can broadly be divided into two types:

* Fixed capital.
* Working capital

**1. Fixed Capital:**

Fixed capital is that portion of capital **which is invested in acquiring long-term assets such as land and buildings, plant and machinery, furniture and fixtures, and so on**. Fixed capital forms the skeleton of the business. It provides the basic assets as per the business. These assets are not meant for resale. They are intended to generate revenues.

The following are the features of fixed assets:

1. ***Permanent in nature:***Fixed capital is more or less permanent in nature. It is generally not withdrawn as long as the business carries on its business.
2. ***Profit generation****:* Fixed assets are the sources of profits but they can never generate profits by themselves. They use stocks, cash and debtors to generate profits.
3. ***Low quality****:*  The fixed assets cannot be converted into cash quickly. Liquidity refers to conversion of assets into cash.
4. ***Amount of fixed capital****:* The amount of fixed capital of a company depends on a number of factors such as size of the company, nature of business, method of production and so on. A manufacturing company such as steel factory may require relatively large finance when compared to a service organization such as a software company.
5. ***Utilized for promotion and expansion****:* The fixed capital is mostly needed at the times of promoting the company to purchase the fixed assets or at the time of expansion/modernization, in other words, the need for fixed capital arises less frequently.

**Types of Fixed Assets**

Fixed assets can be divided into three types:

1. **Tangible Fixed Assets:**

These are physical items which can be seen and touched. Most of the common fixed assets are land, buildings, machinery, motor vehicles, furniture and so on.

1. **Tangible Fixed Assets:**

These do not have physical form. They cannot be seen or touched. But these are very valuable to business. Examples are goodwill, brand names, trademarks, patents, copy rights and so on.

1. **Financial Fixed Assets:**

These are investments in shares, foreign currency deposits, government bonds, shares held by the business in other companies and so on.

**2. Working Capital:**

**Working capital is the flesh and blood of the business**. It is that position of capital that makes a company work. It is not just possible to carry on the business with only fixed assets; working capital is a must. Working capital is also called ***circulating capital.***It is used to meet regular or recurring needs of the business. The regular needs refer to the purchase of materials, payment of wages and salaries, expenses like rent advertising, power and so on. In short, working capital is the amounts needed to cover the cost of operating the business.

Finance is required for two purpose viz. **for it establishment and to carry out the day-to-day operations** of a business. Funds are required to purchase the fixed assets such as plant, machinery, land, building, furniture, etc, on long-term basis. Investments in these assets represent that part of firm’s capital, which is blocked on a permanent of fixed basis and is called fixed capital. Funds are also needed for short-term purposes such as the purchase of raw materials, payment of wages and other day-to-day expenses, etc. and these funds are known as working capital.

Working capital takes the form of cash, near cash and other assets in the process o f moving towards cash form in a short period. These other assets are rocks of raw materials, supplies needed for manufacture, stocks of finished goods ready for sale, semi-processed items or components, debtors and others short-term investments if any.

**Features of Working Capital:**

1. ***Short life spans:***Working capital changes in its form: from cash to stock to debtors; debtors to cash. The cash balances may be kept idle for a week or so, debtors have a life span of a few months, raw materials are held for a short-time until they go into production; finished goods are held for a short-time until they are sold.
2. ***Smooth flow of operations:*** Adequate amount of working capital enables the business to conduct its operations smoothly. It is therefore, called the ‘flesh and blood’ of the business.
3. ***Liquidity****:* The assets represented by the working capital can be converted into cash quickly within a short period of time unlike fixed assets.
4. ***Amount of working capital****:* The amount of working capital of a business depends on many factors such as size and nature of the business, production of wages and salaries, rent and other expenses and so on.
5. ***Utilize for payment of current expenses****:* The working capital is used to pay for current expenses such as suppliers or raw materials, payment of wages and salaries, rent and other expenses and so on.

**Components of working capital:**

Form the accounting point of view, working capital is the difference between current assets and current liabilities.

**Working capital= Current Assets – Current Liabilities**

**Current Assets:** *Cash* isrequired to pay salaries. Office expenses and to pay creditors for purchases

*Stock of raw materials* in adequate quantities to ensure uninterrupted production

*Stock of finished goods* in sufficient quantities to meet the demand from consumers

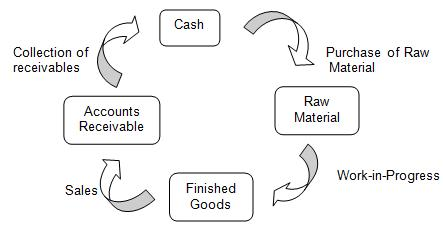
*Debtors, that is,* people to whom we sell goods on credit basis for increased sales

*Prepaid expenses,* that is, the expenses paid in advance such as insurance, rent, and salaries and so on

*Bills receivable* these are the bills of exchange received for the money lent or to be received for a short period.

**Current Liabilities:** Creditors, that is, the people from whom we purchase on credit basis. *Accruals,* that is, those expenses in respect of which, the liability has arisen. In other words, the expenses have fallen due and hence to be incurred, such as interest salaries, taxes and so on. *Bills payables* these are the bills of exchange against which money is to be paid within a short period.

**Working Capital Cycle:**



### Concept of working capital:

There are two concepts of working capital:

1. Gross working capital
2. Net working capitaL
3. **Gross working capital:**

In the broader sense, the term working capital refers to the gross working capital. The notion of the gross working capital refers to the **capital invested in total current assets of the enterprise**. Current assets are those assets, which in the ordinary course of business, can be converted into cash within a short period, normally one accounting year.

Examples of current assets:

1. Cash in hand and bank balance
2. Bills receivables or Accounts Receivables
3. Sundry Debtors (less provision for bad debts)
4. Short-term loans and advances.
5. Inventories of stocks, such as:
   1. Raw materials
   2. Work – in process
   3. Stores and spares
   4. Finished goods
6. **Net working capital:**

In a narrow sense, the term working capital refers to the net working capital. Networking capital represents **the excess of current assets over current liabilities**.

### CLASSIFICATION OR KINDS OF WORKING CAPITAL:

Working capital may be classified in two ways:

1. On the basis of concept.
2. On the basis of time permanency

**On the basis of concept,** working capital is classified as gross working capital and net working capital is discussed earlier. This classification is important from the point of view of the financial manager. On the basis of time, working capital may be classified as:

1. Permanent or fixed working capital
2. Temporary of variable working capital
   1. **Permanent or fixed working capital**:

Which is continuously required by the enterprise to carry out its normal business operations and this minimum is known as permanent of fixed working capital. For example, every firm has to maintain a minimum level of raw materials, work in process; finished goods and cash balance to run the business operations smoothly and profitably.

The permanent working capital can further be classified into **regular working capital and reserve working capital.**

**Regular working capital** is the minimum amount of working capital required to ensure circulation of current assets from cash to inventories, from inventories to receivables and from receivable to cash and so on.

**Reserve working capital** is the excess amount over the requirement for regular working capital which may be provided for contingencies that may arise at unstated period such as strikes, rise in prices, depression etc.

* 1. **Temporary or variable working capital**:

Temporary or variable working capital is the amount of working capital, which is required to meet the seasonal demands and some special exigencies. Thus the variable working capital can be further classified into seasonal working capital and special working capital. While seasonal working capital is required to meet certain seasonal demands, the special working capital is that part of working capital which is required to meet special exigencies such as launching of extensive marketing campaigns, for conducting research etc.

### Importance of working capital:

1. **Solvency of the business**: Adequate working capital helps in maintaining solvency of the business by providing uninterrupted flow of production.
2. **Good will**: Sufficient working capital enables a business concern to make prompt payment and hence helps in creating and maintaining good will.
3. **Easy loans**: A concern having adequate working capital, high solvency and good credit standing can arrange loans from banks and others on easy and favorable terms.
4. **Cash Discounts**: Adequate working capital also enables a concern to avail cash discounts n the purchases and hence it reduces costs.
5. **Regular supply of raw materials**: Sufficient working capital ensures regular supply of raw materials and continuous production.
6. **Regular payments of salaries wages and other day to daycommitments**: A company which has ample working capital can make regular payment of salaries, wages and other day to day commitments which raises the morale of its employees, increases their efficiency, reduces wastage and cost and enhances production and profits.
7. **Exploitation of favorable market conditions**: The concerns with adequate working capital only can exploit favorable market conditions such as purchasing its requirements in bulk when the prices are lower.
8. **Ability to face crisis:** Adequate working capital enables a concern to face business crisis in emergencies.
9. **Quick and regular return on Investments**: Every investor wants a quick and regular return on his investment. Sufficiency of working capital enables a concern to pay quick and regular dividends to its investors, as there may not be much pressure to plough back profits. This gains the confidence of its investors and creates a favorable market to raise additional funds in the future.
10. **High morale:** Adequacy of working capital creates an environment of security, confidence, and high morale and creates overall efficiency in a business. Every business concern should have adequate working capital to run its business operations. It should have neither redundant excess working capital nor inadequate shortage of working capital. Both, excess as well as short working capital positions are bad for any business. However, out of the two, it is the inadequacy of working capital which is more dangerous from the point of view of the firm.

**The need or objectives of working capital:**

1. For the purchase of raw materials.
2. To pay wages, salaries and other day-to-day expenses and overhead cost such as fuel, power and office expenses, etc.
3. To meet the selling expenses such as packing, advertising, etc.
4. To provide credit facilities to the customers and
5. To maintain the inventories of raw materials, work-in-progress, stores and spares and finishes stock etc.

Generally, the level of working capital needed depends upon the time gap (known as operating cycle) and the size of operations. Greater the size of the business unit generally, larger will be the requirements of working capital. The amount of working capital needed also goes on increasing with the growth and expansion of business. Similarly, the larger the operating cycle, the larger the requirement for working capital. There are many other factors, which influence the need of working capital in a business, and these are discussed below in the following pages.

### Factors determining the working capital requirements:

1. **Nature or character of business**: The working capital requirements of a firm basically depend upon the nature of its business. Public utility undertakings like electricity, water supply and railways need very limited working capital as their sales are on cash and are engaged in provision of services only.
2. **Size of business or scale of operations**: The working capital requirements of a concern are directly influenced by the size of its business, which may be measured in terms of scale of operations. However, in some cases, even a smaller concern may need more working capital due to high overhead charges, inefficient use of available resources and other economic disadvantages of small size.
3. **Production policy**: If the demand for a given product is subject to wide fluctuations due to seasonal variations, the requirements of working capital, in such cases, depend upon the production policy.

The production could be kept either steady by accumulating inventories during stack periods with a view to meet high demand during the peck season or the production could be curtailed during the slack season and increased during the peak season

1. **Manufacturing process/Length of production cycle**: In manufacturing business, the requirements of working capital will be in direct proportion to the length of manufacturing process. Longer the process period of manufacture, larger is the amount of working capital required, as the raw materials and other supplies have to be carried for a longer period.
2. **Seasonal variations:** If the raw material availability is seasonal, they have to be bought in bulk during the season to ensure an uninterrupted material for the production. A huge amount is, thus, blocked in the form of material, inventories during such season, which give rise to more working capital requirements
3. **Working capital cycle**: In a manufacturing concern, the working capital cycle starts with the purchase of raw material and ends with the realization of cash from the sale of finished products. This cycle involves purchase of raw materials and stores, its conversion into stocks of finished goods through work–in progress with progressive increment of labour and service costs, conversion of finished stock into sales, debtors and receivables and ultimately realization of cash...
4. **Business cycles**: Business cycle refers to alternate expansion and contraction in general business activity. In a period of boom, i.e., when the business is prosperous, there is a need for larger amount of working capital due to increase in sales. On the contrary, in the times of depression, i.e., when there is a down swing of the cycle, the business contracts, sales decline, difficulties are faced in collection from debtors and firms may have to hold large amount of working capital.
5. **Rate of growth of business**: The working capital requirements of a concern increase with the growth and expansion of its business activities. The retained profits may provide for a part of working capital but the fast growing concerns need larger amount of working capital than the amount of undistributed profits.

# Source of finance/ CAPITAL

**METHODS AND SOURCES OF FINANCE:**

Method of Finance is the type of finance used-such as a loan or a mortgage. The source of finance would be where the money was obtained from-a loan may be obtained from a bank while the mortgage may be obtained from a credit society. From a financial statement, we can read in what form the capital is tied up (fixed assets or current assets) and how these are financed (from own capital or borrowed funds).

It is necessary to notice the difference between methods and sources of finance to identify which type of asset can be bought from what source of funds. For example, fixed asset can be bought only from long-term source of funds. If you buy a long-term asset utilizing funds from short-term sources, the asset has to be sold off to repay the short-term loan, in the event of pressure to repay the loan.

**METHODS OF FINANCE:**

The following are the common methods of finance:

* Long –term finance
* Medium-term fiancé
* Short-term fiancé

Now we will discuss each of these methods identifying the sources under each method:

**1.  LONG-TERM FINANCE:**

Long-term finance refers to that finance available for a long period say three years and above. The long-term methods outlined below are used to purchase fixed assets such as land and buildings, plant and so on.

**Own Capital:**

Irrespective of the form of organization such as soletrader, partnership or a company, the owners of the business have to invest their own finances to start with. Money invested by the owners, partners or promoters is permanent and will stay with the business throughout the life of the business.

**Share Capital:**

Normally in the case of a company, the capital is raised by issue of shares. The capital so raised is called share capital. The liability of the shareholder is limited to the extent of his contribution to the share capital of the company. The shareholder is entitled to dividend in case the company makes profits and the directors announce dividend formally in the general body meetings. The share capital can be of two types: ***Preference share capital and equity share capita*l.** The salient features of preference share capital and ordinary share capital are discussed below:

**Preference Share Capital:** Capital raised through issue of preference shares is called preference share capital.

***Preference share:*** A preference shareholder enjoys two rights over equity shareholders: (a) right to receive fixed rate of dividend and (b) right to return of capital. After setting the claims of outsiders, preference shareholders are the first to get their dividend and then the balance will go to the equity shareholders. However, the preference shareholders do not have any voting rights in the annual general body meetings of the company. This deprives them of the right to participate in the management of the affairs of the company.

***Types of preference shares:*** Preference shares are of five types. They are:

***Cumulative preference share:***A cumulative preference share gets his right to the arrears of dividend cumulated over a period of time. If the company is not in a position to pay dividends during a particular year due to paucity of profits, it has to pay the same to the cumulative preference shareholders when it makes profits. In other words, the holders of cumulative preference shares enjoy the right to receive, when profits permit, the dividend missed in the years when the profits were nil or inadequate.

1. ***Non-cumulative preference shares:*** The holders of these shares do not enjoy any right over the arrears of dividend. Hence the unpaid dividend in arrears cannot be claimed in future.
2. ***Participating preference shares****:* The holder of these shares enjoys the dividend two times. They get their normal fixed rate of dividend as per their entitlement. They participate again along with the equity shareholders in the distribution of profits.
3. ***Redeemable preference shares****:* These shares are repaid at the end of a given period. The period of repayment is stipulated on each share.
4. *Non-redeemable preference shares* These shares continue as long as the company continues. They are repaid only at the end of the lifetime of the company.

**Equity Share Capital:** Capital raised through issue of equity share is called equity share capital. An equity share is also called ordinary share. An equity shareholder does not enjoy any priorities such as those enjoyed by a preference shareholder. But an equity shareholder is entitled to voting rights as many as the number of shares he holds. The profits after praying all the claims belong to the equity shareholders. In case of loss, they are the first to suffer the losses. Equity shareholders are the real risk bearers of the company. But at the same time, they are entitled for the whole surplus of the profits after payment of dividends to preference shareholders. Therefore, the rate of dividend on equity shares is not fixed.

**Retained Profits:**

The retained profits are the profits remaining after all the claims. They form a very significant source of finance. Retained profits form good source of working capital. Particularly in times of growth and expansion, retained profits can be advantageously utilized.

**Long-term Loans:**

There are specialized financial institutions offering long-term loans, provided the business proposal is feasible. The promoter should be offer asset of the business as security to avail of this source.

**Debentures:**

Debentures are the loans taken by the company. It is a certificate or letter issued by the company under its common seal acknowledging the receipt of loan. A debenture holder is the creditor of the company. A debenture holder is entitled to a fixed rate of interest on the debenture amount. Payment of interest on debenture is the first charge against profit.

**1. Convertible Debentures:** These debentures are converted into equity shares after the period mentioned in the terms and conditions of issue. In terms of cost, debentures are cheaper than the equity shares. Where the company is not sure of good profits to sustain the size of equity, it prefers to issue convertible debentures. These debentures continue as loan for the defined period. These are converted into equity shares on the specified date. Then onwards, these shareholders will be entitled to dividend, which will be normally higher than the rate of interest on debentures.

**2. Partly Convertible Debentures:** A portion of debentures is to be converted into equity shares. They continue as loan till the date of payment.

**3. Non-convertible Debentures:** These debentures will not be converted into equity shares. They continue as loan till the date of payment.

**4. Secured Debentures**: These debentures are safe because the assets of the company are offered as security towards the payment of the debentures. Newly promoted companies issue secured debentures to create confidence among the investors.

**5. Partly Secured Debentures**: These debentures are partly covered by the security. In other words, the security value is lesser than the face value of the debentures issued.

**6. Unsecured Debentures**: There is no security for these debentures. Normally, the companies having a good financial records issue unsecured debentures.

**7. Redeemable Debentures**: These debentures are repaid on a specified date.

**8. Non-redeemable Debentures**: These are repaid only at the end of the lifetime of the company.

**II. MEDIUM-TERM FINANCE:**

Medium-term finance refers to such sources of finance where the repayment is normally over one year and less than three years. This is normally utilized to buy or lease motor-vehicles, computer equipment, or machinery whose life is less than three years. The sources of medium-term finance are as given below:

**Bank Loans:**

Bank loans are extended at a fixed rate interest. Repayment of the loan and interest are scheduled at the beginning and are usually directly debited to the current account of the borrower. These are secured loans.

**Hire-purchase**:

It is a facility to buy a fixed asset while paying the price over a long period of time. In other words, the possession of the asset can be taken by making a down payment of a part of the price and the balance will be repaid with a fixed rate of interest in agreed number of installments. The buyer becomes the owner of the asset only on payment of the last installment.

**Leasing of Renting**:

Where there is a need for fixed assets, the asset need not be purchased. It can be taken on lease or rent for specified number of years. The company who owns the asset is called *lessor* and the company which takes the asset on lease is called *lessee*. The agreement between the lessor and lessee is called a lease agreement. On the expiry of the lease agreement, the owner takes the asset back into his custody. Under lease agreement, ownership to the asset never passes.

**Venture Capital**:

This form of finance is available only for limited companies. Venture capital is normally provided in such projects where there is relatively a higher degree of risk. For such projects, finance through the conventional sources may not be available. Many banks offer such finance through their merchant banking divisions, of specialist banks which offers advice un-financial assistance.

**iii) Short-term fiancé**:

Short term finance is that finance which is available for a period of less than one year. The following are the sources of short term finance.

**Commercial Paper (CP):**

CPs are issued usually in large denominations by the leading, nationally reputed, highly rated and credit worthy, large manufacturing and finance companies in the public and private sectors.

**Bank overdraft:**

This is a special arrangement with the banker where the customer can draw more than what he has any savings/current account subject to a maximum limit interest is charged on a day to day basis on the actual amount overdrawn. This source is utilized to meet the temporary shortage of funds.

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**Trade Credit**:

This is a short term credit facility extended by the creditor to the debtor. Normally, it is common for the trader to by the material and other supplies from the suppliers on the credit basis. After selling the stocks the trader pays the cash and buys fresh stocks again on credit. Sometimes, the suppliers may insist on the buyer to sign on bill (bill of exchange). This bill is called bills payable.

**Debit factoring or Credit factoring:**

Debit factoring is an arrangement with factor where the trader agrees to sell its accounts receivable or debtor at discount to the specialized dealer called factors. In the case of Credit factoring the trader agrees to sell his accounts payables (at premium).

**UNIT-IV**

**Capital Budgeting**

**Capital Budgeting:**

Capital budgeting **is the process of making investment decision in long-term assets** or courses of action. Capital expenditure incurred today is expected to bring its benefits over a period of time. These expenditures are related to the acquisition & improvement of fixes assets.

Capital budgeting is the planning of expenditure and the benefit, which spread over a number of years. It is the process of deciding whether or not to invest in a particular project, as the investment possibilities may not be rewarding. The manager has to choose a project, which gives a rate of return, which is more than the cost of financing the project. For this the manager has to evaluate the worth of the projects in-terms of cost and benefits. The benefits are the expected cash inflows from the project, which are discounted against a standard, generally the cost of capital.

**Capital budgeting Techniques:**

The capital budgeting appraisal methods are techniques of evaluation of investment proposal will help the company to decide upon the desirability of an investment proposal depending upon their; relative income generating capacity and rank them in order of their desirability. These methods provide the company a set of norms on the basis of which either it has to accept or reject the investment proposal. The most widely accepted techniques used in estimating the cost-returns of investment projects can be grouped under two categories.

1. Traditional methods
2. Discounted Cash flow methods

**1. Traditional methods**

These methods are based on the principles to determine the desirability of an investment project on the basis of its useful life and expected returns. These methods depend upon the accounting information available from the books of accounts of the company. These will not take into account the concept of ‘time value of money’, which is a significant factor to determine the desirability of a project in terms of present value.

**A. Pay-back period method**: It is the most popular and widely recognized traditional method of evaluating the investment proposals. It can be defined, as ‘the number of years required to recover the original cash out lay invested in a project’.

According to Weston & Brigham, “**The pay back period is the number of years it takes the firm to recover its original investment by net returns before depreciation, but after taxes**”.

According to James. C. Vanhorne, “The payback period is the number of years required to recover initial cash investment.

The pay back period is also called payout or payoff period. This period is calculated by dividing the cost of the project by the annual earnings after tax but before depreciation under this method the projects are ranked on the basis of the length of the payback period. A project with the shortest payback period will be given the highest rank and taken as the best investment. The shorter the payback period, the less risky the investment is the formula for payback period is

Cash outlay (or) original cost of project

Pay-back period = -------------------------------------------------------------

Annual cash inflow

**Merits:**

1. It is one of the earliest methods of evaluating the investment projects.
2. It is simple to understand and to compute.
3. It dose not involve any cost for computation of the payback period
4. It is one of the widely used methods in small scale industry sector
5. It can be computed on the basis of accounting information available from the books.

**Demerits:**

1. This method fails to take into account the cash flows received by the company after the pay back period.
2. It doesn’t take into account the interest factor involved in an investment outlay.
3. It doesn’t take into account the interest factor involved in an investment outlay.
4. It is not consistent with the objective of maximizing the market value of the company’s share.
5. It fails to consider the pattern of cash inflows i. e., the magnitude and timing of cash in flows.

**B. Accounting (or) Average rate of return method (ARR):**

It is an accounting method, which uses the accounting information repeated by the financial statements to measure the probability of an investment proposal. **It can be determine by dividing the average income after taxes by the average investment** i.e., the average book value after depreciation.

According to ‘Soloman’, accounting rate of return on an investment can be calculated as the ratio of accounting net income to the initial investment, i.e.

Average net income after taxes

ARR= ----------------------------------------------------- X 100

Average Investment

Total Income after Taxes

Average net income after taxes = --------------------------------------

No. Of Years

Total Investment

Average investment = --------------------------------------

2

On the basis of this method, the company can select all those projects whose ARR is higher than the minimum rate established by the company. It can reject the projects with an ARR lower than the expected rate of return. This method can also help the management to rank the proposal on the basis of ARR. A highest rank will be given to a project with highest ARR, where as a lowest rank to a project with lowest ARR.

**Merits:**

1. It is very simple to understand and calculate.
2. It can be readily computed with the help of the available accounting data.
3. It uses the entire stream of earning to calculate the ARR.

**Demerits:**

1. It is not based on cash flows generated by a project.
2. This method does not consider the objective of wealth maximization
3. IT ignores the length of the projects useful life.
4. It does not take into account the fact that the profits can be re-invested.

**II: Discounted cash flow methods:**

**The traditional method does not take into consideration the time value of money**. They give equal weight age to the present and future flow of incomes. The DCF methods are based on the concept that a rupee earned today is more worth than a rupee earned tomorrow. These methods take into consideration the profitability and also time value of money.

**A. Net present value method (NPV)**

The NPV takes into consideration the time value of money. The cash flows of different years and valued differently and made comparable in terms of present values for this the net cash inflows of various period are discounted using required rate of return which is predetermined.

According to Ezra Solomon, **“It is a present value of future returns, discounted at the required rate of return minus the present value of the cost of the investment**.”

NPV is the difference between the present value of cash inflows of a project and the initial cost of the project.

According the NPV technique, only one project will be selected whose NPV is positive or above zero. If a project(s) NPV is less than ‘Zero’. It gives negative NPV hence. It must be rejected. If there is more than one project with positive NPV’s the project is selected whose NPV is the highest.

The formula for NPV is

NPV= Present value of cash inflows – investment.

C1 C2 C3 Cn

NPV = ------ + ------- + -------- + -------

(1+K) (1+K) (1+K) (1+K)

Co- investment

C1, C2, C3… Cn= cash inflows in different years.

K= Cost of the Capital (or) Discounting rate

D= Years.

**Merits:**

1. It recognizes the time value of money.
2. It is based on the entire cash flows generated during the useful life of the asset.
3. It is consistent with the objective of maximization of wealth of the owners.
4. The ranking of projects is independent of the discount rate used for determining the present value.

**Demerits:**

1. It is different to understand and use.
2. The NPV is calculated by using the cost of capital as a discount rate. But the concept of cost of capital. If self is difficult to understood and determine.
3. It does not give solutions when the comparable projects are involved in different amounts of investment.
4. It does not give correct answer to a question whether alternative projects or limited funds are available with unequal lines.

**B. Internal Rate of Return Method (IRR**

**The IRR for an investment proposal is that discount rate which equates the present value of cash inflows with the present value of cash out flows of an investment**. The IRR is also known as cutoff or handle rate. It is usually the concern’s cost of capital.

According to Weston and Brigham “The internal rate is the interest rate that equates the present value of the expected future receipts to the cost of the investment outlay.

When compared the IRR with the required rate of return (RRR), if the IRR is more than RRR then the project is accepted else rejected. In case of more than one project with IRR more than RRR, the one, which gives the highest IRR, is selected.

The IRR is not a predetermine rate, rather it is to be trial and error method. It implies that one has to start with a discounting rate to calculate the present value of cash inflows. If the obtained present value is higher than the initial cost of the project one has to try with a higher rate. Like wise if the present value of expected cash inflows obtained is lower than the present value of cash flow. Lower rate is to be taken up. The process is continued till the net present value becomes Zero. As this discount rate is determined internally, this method is called internal rate of return method.

P1 - Q

IRR = L+ --------- X D

P1 –P2

L- Lower discount rate

P1 - Present value of cash inflows at lower rate.,P2 - Present value of cash inflows at higher rate.

Q- Actual investment.D- Difference in Discount rates.

**Merits:**

1. It consider the time value of money
2. It takes into account the cash flows over the entire useful life of the asset.
3. It has a psychological appear to the user because when the highest rate of return projects are selected, it satisfies the investors in terms of the rate of return an capital
4. It always suggests accepting to projects with maximum rate of return.
5. It is inconformity with the firm’s objective of maximum owner’s welfare.

**Demerits:**

1. It is very difficult to understand and use.
2. It involves a very complicated computational work.
3. It may not give unique answer in all situations.

**C. Probability Index Method (PI):**

The method is also called benefit cost ration. **This method is obtained cloth a slight modification of the NPV method**. In case of NPV the present value of cash out flows are profitability index (PI), the present value of cash inflows are divide by the present value of cash out flows, while NPV is a absolute measure, the PI is a relative measure.

It the PI is more than one (>1), the proposal is accepted else rejected. If there are more than one investment proposal with the more than one PI the one with the highest PI will be selected. This method is more useful incase of projects with different cash outlays cash outlays and hence is superior to the NPV method.

The formula for PI is

Present Value of Future Cash Inflow

Probability index = ----------------------------------------

Investment

**Merits:**

1. It requires less computational work then IRR method
2. It helps to accept / reject investment proposal on the basis of value of the index.
3. It is useful to rank the proposals on the basis of the highest/lowest value of the index.
4. It is useful to tank the proposals on the basis of the highest/lowest value of the index.
5. It takes into consideration the entire stream of cash flows generated during the useful life of the asset.

**Demerits:**

1. It is somewhat difficult to understand
2. Some people may feel no limitation for index number due to several limitation involved in their competitions
3. It is very difficult to understand the analytical part of the decision on the basis of probability index.

**UNIT – V**

INTRODUCTION TO FINANCIAL ACCOUNTING AND ANALYSIS

**HISTORY OF ACCOUNTING:**

Accounting based on the principles of Double Entry System came into existence in 17th Century. Fra Luka Paciolo, a Fransiscan monk and mathematician published a book *De computicetscripturies*in 1494 at Venice in Italyl. This book was translated into English in 1543. In this book he covered a brief section on ‘book-keeping’.

**ORIGIN OF ACCOUNTING IN INDIA:**

Accounting was practiced in India thousand years ago and there is a clear evidence for this. In his famous book *Arthashastra*Kautilya dealt with not only politics and economics but also the art of proper keeping of accounts. However, the accounting on modern lines was introduced in India after 1850 with the formation joint stock companies in India.

Accounting in India is now a fast developing discipline. The two premier Accounting Institutes in India viz., chartered Accountants of India and the Institute of Cost and Works Accountants of India

**BOOK-KEEPING AND ACCOUNTING**

First stage is called Book-Keeping and the second one is accounting.

**Book – Keeping:** Book – Keeping involves the chronological recording of financial transactions in a set of books in a systematic manner.

**Accounting:** Accounting is concerned with the maintenance of accounts giving stress to the design of the system of records, the preparation of reports based on the recorded date and the interpretation of the reports.

**MEANING OF ACCOUNTING**

Thus, book-keeping is an art of recording the business transactions in the books of original entry and the ledges. Accountancy begins where Book-keeping ends. Accountancy means the compilations of accounts in such a way that one is in a position to know the state of affairs of the business.

**Definition of Accounting:**

**Smith and Ashburne:** “Accounting is a means of measuring and reporting the results of economic activities.”

**American Institute of Certified Public Accountants (AICPA):**

“The art of recording, classifying and summarizing in a significant manner and in terms of money transactions and events, which are in part at least, of a financial character and interpreting the results thereof.”

Thus, accounting is an art of identifying, recording, summarizing and interpreting business transactions of financial nature. Hence accounting is the *Language of Business.*

**BRANCHES OF ACCOUNTING:**

The important branches of accounting are:

1. **Financial Accounting:** The purpose of Accounting is to ascertain the financial results i.e. profit or loss in the operations during a specific period. It is also aimed at knowing the financial position, i.e. assets, liabilities and equity position at the end of the period. It also provides other relevant information to the management as a basic for decision-making for planning and controlling the operations of the business.
2. **Cost Accounting:**  The purpose of this branch of accounting is to ascertain the cost of a product / operation / project and the costs incurred for carrying out various activities. It also assists the management in controlling the costs. The necessary data and information are gatherr4ed form financial and other sources.
3. **Management Accounting:**  Its aim to assist the management in taking correct policy decision and to evaluate the impact of its decisions and actions. The data required for this purpose are drawn accounting and cost-accounting.

**FUNCTIONS OF AN ACCOUNTANT**

The job of an accountant involves the following types of accounting works

1. **Designing Work:** It includes the designing of the accounting system, basis for identification and classification of financial transactions and events, forms, methods, procedures, etc.
2. **Recording Work:** The financial transactions are identified, classified and recorded in appropriate books of accounts according to principles. This is “Book Keeping”. The recording of transactions tends to be mechanical and repetitive.
3. **Summarizing Work:** The recorded transactions are summarized into significant form according to generally accepted accounting principles. The work includes the preparation of profit and loss account, balance sheet. This phase is called ‘preparation of final accounts’
4. **Analysis and Interpretation Work:** The financial statements are analysed by using ratio analysis, break-even analysis, funds flow and cash flow analysis.
5. **Reporting Work:**  The summarized statements along with analysis and interpretation are communicated to the interested parties or whoever has the right to receive them.

For Ex. Share holders. In addition, the accou8nting departments have to prepare and send regular reports so as to assist the management in decision making. This is ‘Reporting’.

1. **Preparation of Budget:** The management must be able to reasonably estimate the future requirements and opportunities. As an aid to this process, the accountant has to prepare budgets, like cash budget, capital budget, purchase budget, sales budget etc. this is ‘Budgeting’.
2. **Taxation Work:** The accountant has to prepare various statements and returns pertaining to income-tax, sales-tax, excise or customs duties etc., and file the returns with the authorities concerned.
3. **Auditing:** It involves a critical review and verification of the books of accounts statements and reports with a view to verifying their accuracy. This is ‘Auditing’

**USERS OF ACCOUNTING INFORMATION**

Different categories of users need different kinds of information for making decisions. The users of accounting can be divided in two board groups

(1). Internal users and

(2). External users.

1. **Internal Users:**

**Managers:** These are the persons who manage the business, i.e. management at him top, middle and lower levels. Their requirements of information are different because they make different types of decisions.

Accounting reports are important to managers for evaluating the results of their decisions. In additions to external financial statements, managers need detailed internal reports either branch division or department or product-wise. Accounting reports for managers are prepared much more frequently than external reports.

Accounting information also helps the managers in appraising the performance of subordinates. As such Accounting is termed as “the eyes and ears of management.”

2. **External Users:**

**1. Investors:**  Those who are interested in buying the shares of company are naturally interested in the financial statements to know how safe the investment already made is and how safe the proposed investments will be.

**2. Creditors:** Lenders are interested to know whether their load, principal and interest, will be paid when due. Suppliers and other creditors are also interested to know the ability of the firm to pay their dues in time.

**3. Workers:** In our country, workers are entitled to payment of bonus which depends on the size of profit earned. Hence, they would like to be satisfied that he bonus being paid to them is correct. This knowledge also helps them in conducting negotiations for wages.

**4. Customers:** They are also concerned with the stability and profitability of the enterprise. They may be interested in knowing the financial strength of the company to rent it for further decisions relating to purchase of goods.

**5. Government:** Governments all over the world are using financial statements for compiling statistics concerning business which, in turn, helps in compiling national accounts. The financial statements are useful for tax authorities for calculating taxes.

**6. Public :**The public at large interested in the functioning of the enterprises because it may make a substantial contribution to the local economy in many ways including the number of people employed and their patronage to local suppliers.

**7. Researchers:**The financial statements’, being a mirror of business conditions, is of great interest to scholars undertaking research in accounting theory as well as business affairs and practices.

**ADVANTAGES FROM ACCOUNTING**

The role of accounting has changed from that of a mere record keeping during the 1st decade of 20th century of the present stage, which it is accepted as information system and decision making activity. The following are the advantages of accounting.

1. **Provides for systematic records:** Since all the financial transactions are recorded in the books, one need not rely on memory. Any information required is readily available from these records.
2. **Facilitates the preparation of financial statements:** Profit and loss accountant and balance sheet can be easily prepared with the help of the information in the records. This enables the trader to know the net result of business operations (i.e. profit / loss) during the accounting period and the financial position of the business at the end of the accounting period.
3. **Provides control over assets:**Book-keeping provides information regarding cash in had, cash at bank, stock of goods, accounts receivables from various parties and the amounts invested in various other assets. As the trader knows the values of the assets he will have control over them.
4. **Provides the required information:** Interested parties such as owners, lenders, creditors etc., get necessary information at frequent intervals.
5. **Comparative study:** One can compare the present performance of the organization with that of its past. This enables the managers to draw useful conclusion and make proper decisions.
6. **Less Scope for fraud or theft:** It is difficult to conceal fraud or theft etc., because of the balancing of the books of accounts periodically. As the work is divided among many persons, there will be check and counter check.
7. **Tax matters:** Properly maintained book-keeping records will help in the settlement of all tax matters with the tax authorities.
8. **Ascertaining Value of Business:** The accounting records will help in ascertaining the correct value of the business. This helps in the event of sale or purchase of a business.
9. **Documentary evidence:** Accounting records can also be used as evidence in the court to substantiate the claim of the business. These records are based on documentary proof. Every entry is supported by authentic vouchers. As such, Courts accept these records as evidence.
10. **Helpful to management:** Accounting is useful to the management in various ways. It enables the management to asses the achievement of its performance. The weakness of the business can be identified and corrective measures can be applied to remove them with the helps accounting.

**LIMITATIONS OF ACCOUNTING** .

1. **Does not record all events:**  Only the transactions of a financial character will be recorded under book-keeping. So it does not reveal a complete picture about the quality of human resources, locational advantage, business contacts etc.
2. **Does not reflect current values:** The data available under book-keeping is historical in nature. So they do not reflect current values. For instance, we record the value of stock at cost price or market price, which ever is less. In case of, building, machinery etc., we adopt historical cost as the basis. Infact, the current values of buildings, plant and machinery may be much more than what is recorded in the balance sheet.
3. **Estimates based on Personal Judgment:** The estimate used for determining the values of various items may not be correct. For example, debtors are estimated in terms of collectibility, inventories are based on marketability, and fixed assets are based on useful working life. These estimates are based on personal judgment and hence sometimes may not be correct.
4. **Inadequate information on costs and Profits:** Book-keeping only provides information about the overall profitability of the business. No information is given about the cost and profitability of different activities of products or divisions.

**BASIC ACCOUNTING CONCEPTS**

Accounting has been evolved over a period of several centuries. During this period, certain rules and conventions have been adopted. These rules and conventions are termed as **Generally Accepted Accounting Principles.** These principles are also referred as standards, assumptions, concepts, conventions doctrines, etc. Thus, the accounting concepts are the fundamental ideas or basic assumptions underlying the theory and practice of financial accounting. They are the broad working rules for all accounting activities developed and accepted by the accounting profession.

# BASIC ACCOUNTING CONCEPTS

Accounting is a system evolved to achieve a set of objectives. In order to achieve the goals, we need a set of rules or guidelines. These guidelines are termed here as “BASIC ACCOUNTING CONCEPTS”. The term concept means an idea or thought. Basic accounting concepts are the fundamental ideas or basic assumptions underlying the theory and profit of FINANCIAL ACCOUNTING. These concepts help in bringing about uniformity in the practice of accounting. In accountancy following concepts are quite popular.

1. *BUSINESS ENTITY CONEPT*: In this concept “Business is treated as separate from the proprietor”. All the Transactions recorded in the book of Business and not in the books of proprietor. The proprietor is also treated as a creditor for the Business.

2. *GOING CONCERN CONCEPT*: This concept relates with the long life of Business. The assumption is that business will continue to exist for unlimited period unless it is dissolved due to some reasons or the other.

3. *MONEY MEASUREMENT CONCEPT*: In this concept “Only those transactions are recorded in accounting which can be expressed in terms of money, those transactions which can not be expressed in terms of money are not recorded in the books of accounting”.

4. *COST CONCEPT*: Accounting to this concept, can asset is recorded at its cost in the books of account. i.e., the price, which is paid at the time of acquiring it. In balance sheet, these assets appear not at cost price every year, but depreciation is deducted and they appear at the amount, which is cost, less classification.

5. *ACCOUNTING PERIOD CONCEPT*: every Businessman wants to know the result of his investment and efforts after a certain period. Usually one-year period is regarded as an ideal for this purpose. This period is called Accounting Period. It depends on the nature of the business and object of the proprietor of business.

6. *DUAL ASCEPT CONCEPT*: According to this concept “Every business transactions has two aspects”, one is the receiving benefit aspect another one is giving benefit aspect. The receiving benefit aspect is termed as

“DEBIT”, where as the giving benefit aspect is termed as “CREDIT”. Therefore, for every debit, there will be corresponding credit.

7. *MATCHING COST CONCEPT*: According to this concept “The expenses incurred during an accounting period, e.g., if revenue is recognized on all goods sold during a period, cost of those good sole should alsoBe charged to that period.

8. *REALISATION CONCEPT*: According to this concept revenue is recognized when a sale is made. Sale is Considered to be made at the point when the property in goods posses to the buyer and he becomes legally liable to pay.

**ACCOUNTING CONVENTIONS** Accounting is based on some customs or usages. Naturally accountants here to adopt that usage or custom.They are termed as convert conventions in accounting. The following are some of the important accounting conventions.

1. *FULL DISCLOSURE*: According to this convention accounting reports should disclose fully and fairly the information. They purport to represent. They should be prepared honestly and sufficiently disclose information which is if material interest to proprietors, present and potential creditors and investors. The companies ACT, 1956 makes it compulsory to provide all the information in the prescribed form.

2. *MATERIALITY*: Under this convention the trader records important factor about the commercial activities. In the form of financial statements if any unimportant information is to be given for the sake of clarity it will be given as footnotes.

3. *CONSISTENCY*:It means that accounting method adopted should not be changed from year to year. It means that there should be consistent in the methods or principles followed. Or else the results of a year cannot be conveniently compared with that of another.

4. *CONSERVATISM*: This convention warns the trader not to take unrealized income in to account. That is why the practice of valuing stock at cost or market price, which ever is lower is in vague. This is the policy of “playing safe”; it takes in to consideration all prospective losses but leaves all prospective profits.

**CLASSIFICATION OF BUSINESS TRANSACTIONS**

All business transactions are classified into three categories:

1. Those relating to persons

2. Those relating to property (Assets)

3. Those relating to income & expenses

Thus, three classes of accounts are maintained for recording all business transactions. They are:

1. Personal accounts

2. Real accounts

3. Nominal accounts

1*. Personal Accounts*: Accounts which are transactions with persons are called “Personal Accounts”.

A separate account is kept on the name of each person for recording the benefits received from, or given to the person in the course of dealings with him.

E.g.: Krishna’s A/C, Gopal’s A/C, SBI A/C, NagarjunaFinanaceLtd.A/C, ObulReddy& Sons A/C , HMT Ltd. A/C, Capital A/C, Drawings A/C etc.

2. *Real Accounts*: The accounts relating to properties or assets are known as “Real Accounts” .Every business needs assets such as machinery, furniture etc, for running its activities .A separate account is maintained for each asset owned by the business.

E.g.: cash A/C, furniture A/C, building A/C, machinery A/C etc.

3.*NominalAccounts: Accounts* relating to expenses, losses, incomes and gains are known as “Nominal Accounts”. A separate account is maintained for each item of expenses, losses, income or gain.

E.g.: Salaries A/C, stationery A/C, wages A/C, postage A/C, commission A/C, interest A/C, purchases A/C, rent A/C, discount A/C, commission received A/C, interest received A/C, rent received A/C, discount received A/C.

Before recording a transaction, it is necessary to find out which of the accounts is to be debited and which is to be credited. The following three different rules have been laid down for the three classes of accounts….

1. *Personal Accounts*: The account of the person receiving benefit (receiver) is to be debited and the account of the person giving the benefit (given) is to be credited.

***Rule***: “Debit----The Receiver

Credit---The Giver”

2. *Real Accounts*: When an asset is coming into the business, account of that asset is to be debited .When an asset is going out of the business; the account of that asset is to be credited.

***Rule***: “Debit----What comes in

Credit---What goes out”

3. *Nominal Accounts*: When an expense is incurred or loss encountered, the account representing the expense or loss is to be debited. When any income is earned or gain made, the account representing the income of gain is to be credited.

***Rule***: “Debit----All expenses and losses

Credit---All incomes and gains”

**JOURNAL**

The first step in accounting therefore is the record of all the transactions in the books of original entry viz., Journal and then posting into ledges.

*JOURNAL:* The word Journal is derived from the Latin word ‘journ’ which means a day. Therefore, journal means a ‘day Book’ in day-to-day business transactions are recorded in chronological order.

Journal is treated as the book of original entry or first entry or prime entry. All the business transactions are recorded in this book before they are posted in the ledges. The journal is a complete and chronological (in order of dates) record of business transactions. It is recorded in a systematic manner. The process of recording a transaction in the journal is called “JOURNALISING”. The entries made in the book are called “Journal Entries”.

The proforma of Journal is given below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date Date | Particulars | L.F. no | Debit  RS. | Credit  RS. |
| 1998 Jan 1 | Purchases account to cash account(being goods purchased for cash) |  | 10,000/- | 10,000/- |

***Note: Problems to be solved on journal***

**Ledger**

All the transactions in a journal are recorded in a chronological order. After a certain period, if we want to know whether a particular account is showing a debit or credit balance it becomes very difficult. So, the ledger is designed to accommodate the various accounts maintained the trader. It contains the final or permanent record of all the transactions in duly classified form. “A ledger is a book which contains various accounts.” The process of transferring entries from journal to ledger is called “POSTING”.

Posting is the process of entering in the ledger the entries given in the journal. Posting into ledger is done periodically, may be weekly or fortnightly as per the convenience of the business. The following are the guidelines for posting transactions in the ledger.

1. After the completion of Journal entries only posting is to be made in the ledger.
2. For each item in the Journal a separate account is to be opened. Further, for each new item a new account is to be opened.
3. Depending upon the number of transactions space for each account is to be determined in the ledger.
4. For each account there must be a name. This should be written in the top of the table. At the end of the name, the word “Account” is to be added.
5. The debit side of the Journal entry is to be posted on the debit side of the account, by starting with “TO”.
6. The credit side of the Journal entry is to be posted on the debit side of the account, by starting with “BY”.

*Proforma for ledger:*

***LEDGER BOOK***Particulars account

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Particulars | Lfno | Amount | Date | Particulars | Lfno | amount |
|  |  |  |  |  |  |  |  |

Sales account

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Particulars | Lfno | Amount | Date | Particulars | Lfno | amount |
|  |  |  |  |  |  |  |  |

Cash account

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Date | Particulars | Lfno | Amount | Date | Particulars | Lfno | amount |
|  |  |  |  |  |  |  |  |

**TRAIL BALANCE**

The first step in the preparation of final accounts is the preparation of trail balance. In the double entry system of book keeping, there will be credit for every debit and there will not be any debit without credit. When this principle is followed in writing journal entries, the total amount of all debits is equal to the total amount all credits.

A trail balance is a statement of debit and credit balances. It is prepared on a particular date with the object of checking the accuracy of the books of accounts. It indicates that all the transactions for a particular period have been duly entered in the book, properly posted and balanced. The trail balance doesn’t include stock in hand at the end of the period. All adjustments required to be done at the end of the period including closing stock are generally given under the trail balance.

*DEFINITIONS:* *SPICER AND POGLAR :*A trail balance is a list of all the balances standing on the ledger accounts and cash book of a concern at any given date.

*J.R.BATLIBOI:*

A trail balance is a statement of debit and credit balances extracted from the ledger with a view to test the arithmetical accuracy of the books.

Thus a trail balance is a list of balances of the ledger accounts’ and cash book of a business concern at any given date.

*PROFORMA FOR TRAIL BALANCE*:

Trail balance for MR…………………………………… as on …………

|  |  |  |  |
| --- | --- | --- | --- |
| NO | NAME OF ACCOUNT  (PARTICULARS) | DEBIT AMOUNT (RS.) | CREDIT AMOUNT (RS.) |
|  |  |  |  |

***Note: Problems to be solved on trail balance***

**FINAL ACCOUNTS**

In every business, the business man is interested in knowing whether the business has resulted in profit or loss and what the financial position of the business is at a given time. In brief, he wants to know

(I)The profitability of the business and

(ii) The soundness of the business.

The trader can ascertain this by preparing the final accounts. The final accounts are prepared from the trial balance. Hence the trial balance is said to be the link between the ledger accounts and the final accounts. The final accounts of a firm can be divided into two stages. The first stage is preparing the trading and profit and loss account and the second stage is preparing the balance sheet.

**TRADING ACCOUNT**

The first step in the preparation of final account is the preparation of trading account. The main purpose of preparing the trading account is to ascertain gross profit or gross loss as a result of buying and selling the goods.

*Trading account of MR……………………. for the year ended ……………………*

|  |  |  |  |
| --- | --- | --- | --- |
| Particulars | Amount | Particulars | Amount |
| To opening stock  To purchases xxxx  Less: returns xx  To carriage inwards  To wages  To freight  To customs duty, octroi  To gas, fuel, coal,  Water  To factory expenses  To other man. Expenses  To productive expenses  To gross profit c/d | Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx | By sales xxxx  Less: returns xxx  By closing stock | Xxxx  Xxxx |
| Xxxx |

Finally, a ledger may be defined as a summary statement of all the transactions relating to a person, asset, expense or income which have taken place during a given period of time. The up-to-date state of any account can be easily known by referring to the ledger.

**PROFIT AND LOSS ACCOUNT**

The business man is always interested in knowing his net income or net profit.Net profit represents the excess of gross profit plus the other revenue incomes over administrative, sales, Financial and other expenses. The debit side of profit and loss account shows the expenses and the credit side the incomes. If the total of the credit side is more, it will be the net profit. And if the debit side is more, it will be net loss.

PROFIT AND LOSS A/C OF MR…………………….FOR THE YEAR ENDED…………

|  |  |  |  |
| --- | --- | --- | --- |
| PARTICULARS | AMOUNT | PARTICULARS | AMOUNT |
| TO office salaries  TO rent,rates,taxes  TO Printing and stationery  TO Legal charges  Audit fee  TO Insurance  TO General expenses  TO Advertisements  TO Bad debts  TO Carriage outwards  TO Repairs  TO Depreciation  TO interest paid  TO Interest on capital  TO Interest on loans  TO Discount allowed  TO Commission  TO Net profit-------🡪  (transferred to capital a/c) | Xxxxxx  Xxxxx  Xxxxx  Xxxx  Xxxx  Xxxx  Xxxxx  Xxxx  Xxxx  Xxxx  Xxxxx  Xxxxx  Xxxxx  Xxxx  Xxxxx  Xxxxx  Xxxxx | By gross profit b/d  Interest received  Discount received  Commission received  Income from investments  Dividend on shares  Miscellaneous investments  Rent received | Xxxxx  Xxxxx  Xxxx  Xxxxx  Xxxx  Xxxx  xxxx |
| xxxxxx | Xxxxxx |

**BALANCE SHEET**

The second point of final accounts is the preparation of balance sheet. It is prepared often in the trading and profit; loss accounts have been compiled and closed. A balance sheet may be considered as a statement of the financial position of the concern at a given date.

*DEFINITION:* A balance sheet is an item wise list of assets, liabilities and proprietorship of a business at a certain state.

*J.R.botliboi:* A balance sheet is a statement with a view to measure exact financial position of a business at a particular date.

Thus, Balance sheet is defined as a statement which sets out the assets and liabilities of a business firm and which serves to as certain the financial position of the same on any particular date. On the left-hand side of this statement, the liabilities and the capital are shown. On the right-hand side all the assets are shown. Therefore, the two sides of the balance sheet should be equal. Otherwise, there is an error somewhere.

BALANCE SHEET OF ………………………… AS ON …………………………………….

|  |  |  |  |
| --- | --- | --- | --- |
| Liabilities and capital | Amount | Assets | Amount |
| Creditors  Bills payable  Bank overdraft  Loans  Mortgage  Reserve fund  Capital xxxxxx  Add:  Net Profit xxxx  -------  xxxxxxx  --------  Less:  Drawings xxxx  --------- | Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx | Cash in hand  Cash at bank  Bills receivable  Debtors  Closing stock  Investments  Furniture and fittings  Plats&machinery  Land & buildings  Patents, tm ,copyrights  Goodwill  Prepaid expenses  Outstanding incomes | Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx  Xxxx |
| XXXX | XXXX |

*Advantages:* The following are the advantages of final balance.

1. It helps in checking the arithmetical accuracy of books of accounts.
2. It helps in the preparation of financial statements.
3. It helps in detecting errors.
4. It serves as an instrument for carrying out the job of rectification of entries.
5. It is possible to find out the balances of various accounts at one place.

**FINAL ACCOUNTS -- ADJUSTMENTS**

We know that business is a going concern. It has to be carried on indefinitely. At the end of every accounting year. The trader prepares the trading and profit and loss account and balance sheet. While preparing these financial statements, sometimes the trader may come across certain problems .The expenses of the current year may be still payable or the expenses of the next year have been prepaid during the current year. In the same way, the income of the current year still receivable and the income of the next year have been received during the current year. Without these adjustments, the profit figures arrived at or the financial position of the concern may not be correct. As such these adjustments are to be made while preparing the final accounts.

The adjustments to be made to final accounts will be given under the Trial Balance. While making the adjustment in the final accounts, the student should remember that “every adjustment is to be made in the final accounts twice i.e. once in trading, profit and loss account and later in balance sheet generally”. The following are some of the important adjustments to be made at the time of preparing of final accounts:-

1. *CLOSING STOCK*:-

(i)*If closing stock is given in Trail Balance*: It should be shown only in the balance sheet “Assets Side”.

(ii)*If closing stock is given as adjustment:*

1. First, it should be posted at the credit side of “Trading Account”.
2. Next, shown at the asset side of the “Balance Sheet”.

2. *OUTSTANDING EXPENSES*:-

(i)*If outstanding expenses given in Trail Balance*: It should be only on the liability side of Balance Sheet.

(ii)*If outstanding expenses given as adjustment*:

1. First, it should be added to the concerned expense at the debit side of profit and loss account or Trading Account.
2. Next, it should be added at the liabilities side of the

Balance Sheet.

3. *PREAPID EXPENSES*:-

(i)*If prepaid expenses given in Trial Balance*: It should be shown only in assets side of the Balance Sheet.

(ii)*If prepaid expense given as adjustment*  :

1. First, it should be deducted from the concerned expenses at the debit side of profit and loss account or Trading Account.
2. Next, it should be shown at the assets side of the Balance Sheet.

4. *INCOME EARNED BUT NOT RECEIVED [OR] OUTSTANDING INCOME [OR] ACCURED INCOME*:-

(i)*If incomes given in Trial Balance*: It should be shown only on the assets side of the Balance Sheet.

(ii)*If incomes outstanding given as adjustment*:

1. First, it should be added to the concerned income at the credit side of profit and loss account.
2. Next, it should be shown at the assets side of the Balance sheet.

5. *INCOME RECEIVED IN ADVANCE: UNEARNED INCOME*:-

(i)*If unearned incomes given in Trail Balance*: It should be shown only on the liabilities side of the Balance Sheet.

(ii)*If unearned income given as adjustment* :

1. First, it should be deducted from the concerned income in the credit side of the profit and loss account.
2. Secondly, it should be shown in the liabilities side of the Balance Sheet.

6. *DEPRECIATION*:-

(i)*If Depreciation given in Trail Balance*: It should be shown only on the debit side of the profit and loss account.

(ii)*If Depreciation given as adjustment*

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deduced from the concerned asset in the Balance sheet assets side.

7. *INTEREST ON LOAN [OR] CAPITAL*:-

(i)*If interest on loan (or) capital given in Trail balance*:It should be shown only on debit side of the profit and loss account.

(ii)*If interest on loan (or)capital given as adjustment*:

1. First, it should be shown on debit side of the profit and loss account.
2. Secondly, it should added to the loan or capital in

The liabilities side of the Balance Sheet.

8. *BAD DEBTS*:-

(i)*If bad debts given in Trail balance*: It should be shown on the debit side of the profit and loss account.

(ii)*If bad debts given as adjustment*:

1. First, it should be shown on the debit side of the profit and loss account.
2. Secondly, it should be deducted from debtors in the assets side of the Balance Sheet.

9. *INTEREST ON DRAWINGS*:-

(i)*If interest on drawings given in Trail balance*: It should be shown on the credit side of the profit and loss account.

(ii)*If interest on drawings given as adjustments*:

1. First, it should be shown on the credit side of the profit and loss account.
2. Secondly, it should be deducted from capital on liabilities

Side of the Balance Sheet.

10. *INTEREST ON INVESTMENTS*:-

(I)*If interest on the investments given in Trail balance: It* should be shown on the credit side of the profit and loss account.

(ii)*If interest on investments given as adjustments* :

1. First, it should be shown on the credit side of the profit and loss account.
2. Secondly, it should be added to the investments on assets side of the Balance Sheet.

***Note: Problems to be solved on final accounts***

**KEY WORDS IN BOOK-KEEPING**

1. *TRANSACTIONS*: Any sale or purchase of goods of services is called the transaction.

Transactions are two types.

[A]. cash transaction: cash transaction is one where cash receipt or payment is involved in the exchange.

[b]. Credit transaction: Credit transaction will not have cash, either received or paid, for something given or received respectively.

2. *GOODS*: Fill those things which a firm purchases for resale are called goods.

3. *PURCHASES*: Purchases means purchase of goods, unless it is stated otherwise it also represents the Goods purchased.

4. *SALES*: Sales means sale of goods, unless it is stated otherwise it also represents these goods sold.

5. *EXPENSES*: Payments for the purchase of goods as services are known as expenses.

6. *REVENUE*: Revenue is the amount realized or receivable from the sale of goods or services.

7. *ASSETS*: The valuable things owned by the business are known as assets. These are the properties Owned by the business.

8. *LIABILITIES*: Liabilities are the obligations or debts payable by the enterprise in future in the term of money or goods.

9*. DEBTORS*: Debtors means a person who owes money to the trader.

10. *CREDITORS*: A creditor is a person to whom something is owned by the business.

11. *DRAWINGS*: cash or goods withdrawn by the proprietor from the Business for his personal or Household is termed to as “drawing”.

12. *RESERVE*: An amount set aside out of profits or other surplus and designed to meet contingencies.

13. *ACCOUNT*: A summarized statements of transactions relating to a particular person, thing, Expense or income.

14. *DISCOUNT*: There are two types of discounts...

1. Cash discount: An allowable made to encourage frame payment or before the expiration of the period allowed for credit.
2. Trade discount: A deduction from the gross or catalogue price allowed to traders who buys them for resale.

**RATIO ANALYSIS**

Ratio analysis is the process of determining and interpreting numerical relationships based on financial statements. By computing ratios, it is easy to understand the financial position of the firm. Ratio analysis is used to focus on financial issues such as liquidity, profitability and solvency of a given firm.

**WHAT IS A RATIO?**

Ratio is simply a number expressed in terms of another. It refers to the numerical or quantitative relationship between two variables which are comparable. It is an expression derived by dividing one variable by the other. It is a statistical measure that provides an insight into the relationships between two variables. Ratios used rightly may even develop understanding and stimulate thinking. Ratios can be expressed in terms of percentages, proportions, and quotients also.

**INTERPERTATION:**

Interpretation refers to evaluating the ratio in terms of the laid out standards or norms; nature of the industry/sector; and identifying the possible cause for improvement or decline in the performance of the company. An insight into the logical functioning of business and the knowledge of cause and effect relationship among the given variables in the micro- and macro-business environment will enhance the quality of interpretation. Interpretation is to be made with meticulous care because future decisions are based on the results of interpretation.

**USES OR ADVANTAGES OR IMPORTANCE OF RATIO ANALYSIS**

**Useful in financial position analysis:** Accounting reveals the financial position of the concern. This helps banks, insurance companies and other financial institution in lending and making investment decisions.

**Useful in simplifying accounting figures**: Accounting ratios simplify, summaries and systematic the accounting figures in order to make them more understandable and in lucid form.

**Useful in assessing the operational efficiency:** Accounting ratios helps to have an idea of the working of a concern. The efficiency of the firm becomes evident when analysis is based on accounting ratio. This helps the management to assess financial requirements and the capabilities of various business units.

**Useful in forecasting purposes**: If accounting ratios are calculated for number of years, then a trend is established. This trend helps in setting up future plans and forecasting.

**Useful in locating the weak spots of the business**: Accounting ratios are of great assistance in locating the weak spots in the business even through the overall performance may be efficient.

**Useful in comparison of performance**: Managers are usually interested to know which department performance is good and for that he compare one department with the another department of the same firm. Ratios also help him to make any change in the organisation structure.

LIMITATIONS OF RATIO ANALYSIS:

These limitations should be kept in mind while making use of ratio analyses for interpreting the financial statements. The following are the main limitations of ratio analysis.

**False results if based on incorrect accounting data**: Accounting ratios can be correct only if the data (on which they are based) is correct. Sometimes, the information given in the financial statements is affected by window dressing, i. e. showing position better than what actually is.

**No idea of probable happenings in future:** Ratios are an attempt to make an analysis of the past financial statements; so they are historical documents. Now-a-days keeping in view the complexities of the business, it is important to have an idea of the probable happenings in future.

**Variation in accounting methods:** The two firms’ results are comparable with the help of accounting ratios only if they follow the some accounting methods or bases. Comparison will become difficult if the two concerns follow the different methods of providing depreciation or valuing stock.

**Price level change**: Change in price levels make comparison for various years difficult.

**Only one method of analysis:** Ratio analysis is only a beginning and gives just a fraction of information needed for decision-making so, to have a comprehensive analysis of financial statements, ratios should be used along with other methods of analysis.

**No common standards:** It is very difficult to by down a common standard for comparison because circumstances differ from concern to concern and the nature of each industry is different.

**Different meanings assigned to the some term:** Different firms, in order to calculate ratio may assign different meanings. This may affect the calculation of ratio in different firms and such ratio when used for comparison may lead to wrong conclusions.

**TYPES OF RATIO:**

Based on their nature, the ratios can broadly be classified into four categories:

Liquidity ratios

Activity ratios

Capital structure ratios

Profitability ratios

LIQUIDITY RATIOS:

Liquidity ratios express the ability of the firm to meet its short-term commitments as and when they become due. Creditors are interested to know whether the firm will be in a position to meet its commitments on time or not.

If the firm is not in a position to meet its short-term commitments such as payment of taxes, wages and salaries, and so on, then it cannot continue in business for long despite its strong capital base. Liquidity ratios help in identifying the danger signals for the firm in advance.

Apart from the firm itself, all the financing companies offering short-term finances are interested in there ratios.

Liquidity ratios can be classified into two types:

1. CURRENT RATIO:

2. QUICK RATIO

**1. CURRENT RATIO:**

Current ratio is the ratio between current assets and current liabilities. The firm is said to be comfortable in its liquidity position if the current ratio is 2:1. It is almost considered as a yardstick to assess short-term liquidity. However, it may vary from one industry sector to the other. In other words, for every rupee of current liability, there should be two rupees worth current assets. The interests of the creditors are safeguarded if the current ratio is at least 2:1.

**CURRENT RATIO= CURRENT ASSETS/ CURRENT LIABILITES**

**2. QUICK RATIO:**

Quick ratio is also called acid test ratio. It measures the firm’s ability to convert its current assets quickly into cash in order to meet its current liabilities. It is the ratio between liquid assets and liquid liabilities. It supplements the information given by current ratio.

**QUICK RATIO = QUICK ASSETS/ CURRENT LIABILITIES**

Where Quick assets = Current assets – (Stock + Prepaid expenses)

Quick assets are those assets that can be converted into cash quickly. These are also called liquid assets. Since stock can be sold quickly, it is not included in the list of quick assets. All current assets except stock and prepaid expenses, if any, are called quick or liquid assets.

**ACTIVITY RATIOS**:

Activity ratios express how active the firm is in terms of selling its stocks, collecting its receivables and paying its creditors. These are three types:

Inventory Turnover Ratio

Debtors Turnover Ratio

**INVENTORY TURNOVER RATIO:**

It is also called stock turnover ratio. It indicates the number of times the average stock is being sold during a given accounting period. It establishes the relation between the cost of goods sold during a given period and the average amount of inventory outstanding during that period. The higher the inventory turnover ratio, the better is the performance of the firm in selling its stocks.

It helps in determining the liquidity of the firm by giving the rate at which inventories are converted into sales and then to cash. It also helps the financial manager to design an appropriate inventory policy so as to avoid piling of inventories. It is calculated as given below:

**INVENTORY TURNOVER RATIO = COST OF GOODS SOLD/ AVERAGE INVETORY**

Where cost of goods sold = Sales – Gross profit;

Average inventory is the average of opening stock at the beginning of the year and the closing stock at the end of the year, that is,

**AVERAGE STOCK = OPENING STOCK + CLOSING STOCK / 2**

A high inventory turnover ratio implies the efficiency of the firm whereas a low inventory turnover ratio indicates that the firm is not in a position a clear its stocks.

From inventory turnover ratio, we can also determine the inventory holding period. It is determined as given below:

**INVENTORY HOLDING PERIOD = 364 DAYS/ INVENTORY TURNOVER RATIO**

**DEBTORS TURNOVER RATIO:**

Debtor’s turnover ratio reveals the number of times the average debtors are collected during a given accounting period. In other words, It shows how quickly the firm is in a position to collect its debts. It is necessary to keep close monitoring of realization of debts because it directly affect the working capital position. In case, the firm is not in a position to collect its debts, to meet the working capital requirements, it has to borrow paying interest. This further erodes the profitability. The successful companies maintain the aged list of the debtors showing the details of when to collect, how much to collect and from which debtor.

Debtor’s turnover ratio is calculated as given below:

**DEBTORS TURNOVER RATIO = CREDIT SALES/ AVEREGE DEBTORS**

Where credit sales refer to goods sold on credit. Average debtors are the average of opening and closing balances of debtors for the given accounting period.

A higher debtor’s turnover ratio explains that the firm is efficient in collecting its debts whereas lower ratio signifies its inefficiency.

**DEBT COLLECTION PERIOD:**

Debt collection period refers to the time taken to collect the debts. From debtors turnover ratio, we can find out the debt collection period as follows.

**DEBT COLLECTION PERIOD = 365 DAYS/ DEBTORS TURNOVER RATIO**

The lesser the time, more is the efficiency of the firm and vice versa.

**CAPITAL STRUCTURE RATIOS (LEVERAGE RATIOS):**

Capital structure or leverage ratio is defined as ‘the financial ratio, which focuses on the long-term solvency of the firm. The long-term solvency of the firm is always reflected in its ability to meet its long-term commitments such as payment of interest periodically without fail, repayment of principal as and when due.

DEBT-EQUITY (D/E) RATIO

INTEREST COVERAGE RATIO

**DEBT-EQUITY (D/E) RATIO:**

Debt-equity ratio is the ratio between outsider’s funds (debt) and insiders fund (equity). This is used to measure the firm’s obligations to creditors in relation to the owner’s funds. It is a measure of solvency. The yardstick for this ratio is 1:1. In other words, for every rupee of debt, there should be one rupee worth internal funds.

This is also industry/sector specific ratio. Depending upon the industry, the standard for the debt-equity ratio differs. For instance, in case of capital intensive industries such as shipping companies or steel manufacturing companies, the D/E ratio can be as high as 20:1. So this ratio has to be interpreted considering the nature of industry and competitors D/E ratios.

Debt-equity ratio is calculated as follows:

**DEBT-EQUITY RATIO = (DEBT/EQUITY) OR (OUTSIDERS FUNDS/INSIDERS OR SHAREHOLDERS FUNDS)**

**INTEREST COVERAGE RATIO:**

Interest coverage ratio is calculated to judge the firm’s capacity to pay the interest on debt it borrows. It gives an idea of the extent the firm’s earnings may contract before it is unable to pay interest payments out of current earnings. It is a very important ratio for the financial institutions to judge the ability of the borrower to service the load from the current year’s profits. The higher the ratio, better it is. In other words, a higher ratio implies that the company has no problems in paying interest.

Interest coverage ratio is calculated as follows:

**INTEREST COVERAGE RATIO = (NTE PROFIT BEFORE INTEREST AND TAXES/ FIXED INTEREST CHARGES)**

The more the number of times of coverage, the better is the solvency position of the borrower.

**PROFITABILITY RAITOS**:

Profitability ratios throw light on how well the firm is organizing its activities in profitable manner. The owners expect reasonable rate of return on their investment. The firm should generate enough profits not only to meet the expectations of the owners, but also to finance the expansion activities.

**1. GROSS PROFIT RATIO:**

Gross profit ratio is the ratio between gross profits to sales during a given period. It is expressed in terms of percentage. Gross profit is the difference between the net sales and the cost of goods sold.

GROSS PROFIT RATIO = (GROSS PROFIT/SALES) \* 100

**2. NET PROFIT RATIO**:

Net profit ratio is the ratio between net profits after taxes and net sales. It indicates what portion of sales is left to the owners after operating expenses. Non-operating income such as interest on investments, gain on sale of fixed assets and so on are added to the operating profit and non-operation expenses such as loss on sale of fixed assets and so on are deducted from such profit. This is the net profit after adjusting non-operating income and non-operation expenses;

NET PROFIT RATIO = (NET PROFIT AFTER TAXES/NET SALES) \* 100

3**. OPERATING RATIO:**

Operation ratio is the ratio between costs of goods sold plus operating expenses and the net sales. This is expressed as a percentage to net sales. The higher the operating ratio, the lower is the profitability and vice versa.

OPERATING RATIO = (OPERATING EXPENSES/NET SALES)\*100

Where Operating expenses = (Cost of goods sold + Administrative expenses + Selling and distribution expenses)

**4. EARNINGS PER SHARE (EPS):**

EPS is the relationship between net profits and the number of shares outstanding at the end of the given period. This can be compared with previous years to provide a basis for assessing the company’s performance.

EPS = (NET PROFIT AFTER TEXES/NUMBER OF SHARES OUTSTANDING

DUPONT CHART:

The elements that go into computation of earning power have been built into the following chart by Du Pont Company for the first time and hence it is called Du Pont Chart.

It can be seen that the earning power is dependent on many variables. Any change in these factors will affect the earning power. If the selling price increases, it will increase the profits and vice versa. If the cost of goods sold increases, the profit margin declines. The earnings power will improve only if turnover or net profit or both increases.

Earning power is an important ratio that can be used to evaluate and compare the performances of departments as well as the firm as a whole. It is a valuable tool for inter-firm comparison also.

Working capital + Non-current assets

Sales/Investment

Investment turnover

Earning power

ROI

Net

Profit/sales

Profit margin

Cost of goods sold + selling & Adm. Expenses

Sales minus expenses

*\*\*\*\*\*ALL THE BEST\*\*\*\*\**

**Mid Question papers:**

**MID-I**

**SUBJECT- Managerial Economics & Financial Analysis BRANCH-Mech- III A**

1. Define Managerial economics, nature & scope of Managerial Economics with its importance.
2. Explain 3 stages of Law of diminishing Returns & determine BEP with the help of graphical representation.
3. Explain the Price- output determination under monopoly & perfect competition
4. Define the terms:
5. Isoquants
6. MRTS
7. LCC of inputs.

**MID-II**

**SUBJECT: MEFA** **DEPT: MECH A**

1. Calculate the Net present value (NPV) of the two projects X and Y. Suggest which of the two projects should be accepted assuming a discount rate of 10%

|  |  |  |
| --- | --- | --- |
| Item | Project-A | Project-B |
| Initial Investment | Rs. 80,000 | Rs. 1,20,000 |
| Life Period | 5 Years | 5 Years |
| Scrap Value | Rs.4,000 | Rs.8,000 |
| (Annual Cash Inflows) | (CFAT) | (CFAT) |
| Year: 1 | Rs.24,000 | Rs.70,000 |
| ,, 2 | Rs.36,000 | Rs.50,000 |
| ,, 3 | Rs.14,000 | Rs.24,000 |
| ,, 4 | Rs.10,000 | Rs.8,000 |
| ,, 5 | Rs.8,000 | Rs.8,000 |

2. a) What are the characteristics of a Business Unit?

b) What are the characteristic features of a sole trader form of organization?

c) What are the salient features Partnership firm.

1. 3. Examine the following three proposals and evaluate them based on
   1. PBP Method
   2. ARR Method. (ARR on original Investment)

Initial Investment is Rs.10, 00,000/- each for all the three projects.

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Cash inflows (Rs.)** | | |
| **Project-A** | **Project-B** | **Project-B** |
| 1. | 5,00,000 | 6,00,000 | 2,00,000 |
| 2. | 5,00,000 | 2,00,000 | 2,00,000 |
| 3. | 2,00,000 | 2,00,000 | 6,00,000 |
| 4. | ------- | 3,00,000 | 4,00,000 |

4. During January 2003 Narayan transacted the following business.

|  |  |  |
| --- | --- | --- |
| Date | Transactions | Amount |
| 2003  Jan. 1  ,, 2  ,, 3  ,, 4  ,, 5  ,, 6  ,, 7  ,, 8  ,, 9  ,, 10  ,, 11  ,, 12 | Commenced business with cash  Purchased goods on credit from Shyam  Received goods from Murthy as advance for goods ordered by him  Paid Wages  Goods returned to shyam  Goods sold to Kamal  Goods returned by Kamal  Paid into Bank  Goods sold for Cash  Bought goods for cash  Paid salaries  Withdrew cash for personal use | 40000  30000  3000  500  200  10000  500  500  750  1000.  700  1000 |

Journalize the above transactions and prepare cash Account

1. **Mid & Quiz exam marks** (A)

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| **Sl.No** | | **Roll No** | | **NAME** | MID - I | | | MID-II | |
| 1 | | 118R1A04A1 | | P.RAGHURAJ | A | | | A | |
| 2 | | 128R1A0460 | | T.NARESH | 17 | | | 16 | |
| 3 | | 138R1A0401 | | A.AKHIL REDDY | 20 | | | 22 | |
| 4 | | 138R1A0402 | | A.LIKITHA | 18 | | | 17 | |
| 5 | | 138R1A0403 | | A.SHARATH CHANDRA | 20 | | | 21 | |
| 6 | | 138R1A0404 | | A.SRAVAN GOUD | 16 | | | 21 | |
| 7 | | 138R1A0405 | | AKSHAY THAKUR | 21 | | | 18 | |
| 8 | | 138R1A0406 | | A.SAI SUNAYANA | 17 | | | 20 | |
| 9 | | 138R1A0407 | | A.RAMYASRI | 21 | | | 22 | |
| 10 | | 138R1A0408 | | A.DHANUSH RAJ YADAU | 19 | | | 17 | |
| 11 | | 138R1A0409 | | A.USHA RANI | 19 | | | 20 | |
| 12 | | 138R1A0410 | | ANUSRI | 18 | | | 24 | |
| 16 | | 138R1A0411 | | A.GOUTHAMI | 15 | | | 22 | |
| 14 | | 138R1A0412 | | B.AKHIL PREM | 24 | | | 14 | |
| 15 | | 138R1A0413 | | B .SNEHA | 12 | | | 23 | |
| 16 | | 138R1A0414 | | B.SRIKANTH | 19 | | | 18 | |
| 17 | | 138R1A0415 | | B.SAI UDAY REDDY | 17 | | | 21 | |
| 18 | | 138R1A0416 | | B SAMPATH CHARY | 18 | | | 20 | |
| 19 | | 138R1A0417 | | B.SURESH KUMAR YADAU | 20 | | | 18 | |
| 20 | | 138R1A0418 | | B. SREEJA | 19 | | | 21 | |
| 21 | | 138R1A0419 | | B.SAI KIRAN GOUD | 14 | | | 20 | |
| 22 | | 138R1A0420 | | B.CHANDU | 14 | | | 18 | |
| 23 | | 138R1A0421 | | B.MANISH | 18 | | | 21 | |
| 24 | | 138R1A0422 | | B.SAI DEEPAK | 17 | | | 14 | |
| 25 | | 138R1A0423 | | CH. MADHAV | 19 | | | 23 | |
| 26 | | 138R1A0424 | | C.ANUSHA | 19 | | | 20 | |
| 27 | | 138R1A0425 | | P.MOUNIKA | 20 | | | 22 | |
| 28 | | 138R1A0426 | | C.SRILEKHA | 20 | | | 23 | |
| 29 | | 138R1A0427 | | C.RAMYA | 17 | | | 20 | |
| 30 | | 138R1A0428 | | C. NAVEEN RAJ | 16 | | | 22 | |
| 31 | | 138R1A0429 | | C SRILOKH | 16 | | | 14 | |
| 32 | | 138R1A0430 | | C .NARESH CHARY | 15 | | | 15 | |
| 33 | | 138R1A0431 | | C.VIJAY KUMAR GOUD | 18 | | | 20 | |
| 34 | | 138R1A0432 | | C.KUMARI | 19 | | | 15 | |
| 35 | | 138R1A0433 | | D.KEERTHANA | 16 | | | 22 | |
| 36 | | 138R1A0435 | | D.NAYEEM ASIF | 16 | | | 20 | |
| 37 | | 138R1A0436 | | D.RAMYA | 18 | | | 15 | |
| 38 | | 138R1A0437 | | D.SAISREENADH | 17 | | | 19 | |
| 39 | | 138R1A0438 | | D.FRANCIS | 17 | | | 17 | |
| 40 | | 138R1A0439 | | P.DILIP VARMA | 21 | | | 15 | |
| 41 | | 138R1A0440 | | D. SRUTHA KEERTHI | 16 | | | 20 | |
| 42 | | 138R1A0441 | | D.NIKHIL | 19 | | | 20 | |
| 43 | | 138R1A0442 | | E. SRAVYA PRIYA | 20 | | | 18 | |
| 44 | | 138R1A0444 | | G RAJESH | 17 | | | 19 | |
| 45 | | 138R1A0445 | | G.SHASHIDAR BABU | 14 | | | 18 | |
| 46 | | 138R1A0446 | | G SHIVA PRASAD GOUD | 20 | | | 17 | |
| 47 | | 138R1A0447 | | G.SUKANYA | 20 | | | 21 | |
| 48 | | 138R1A0449 | | G.DEEPIKA | 15 | | | 14 | |
| 49 | | 138R1A0450 | | GAURAU SINGH | 16 | | | 23 | |
| 50 | | 138R1A0451 | | G.MOUNIKA | 19 | | | 20 | |
| 51 | | 138R1A0452 | | G.BABITHA REDDY | 18 | | | 21 | |
| 52 | | 138R1A0453 | | G.RAJASEKHAR | 15 | | | 21 | |
| 53 | | 138R1A0454 | | G.SRAVANA LASHMI | 18 | | | 14 | |
| 54 | | 138R1A0455 | | G.MANASA | 16 | | | 20 | |
| 55 | | 138R1A0456 | | J.CHRISTINA | 20 | | | 20 | |
| 56 | | 138R1A0457 | | J.RAHUL | 14 | | | 14 | |
| 57 | | 138R1A0458 | | J.KRISHNA TEJA | 14 | | | 15 | |
| 58 | | 138R1A0459 | | J.SAMPTH | 14 | | | 18 | |
| 59 | | 138R1A0460 | | J.SIRISHA | 18 | | | 14 | |
| 60 | | 138R1A0461 | | G.PAVANKUMAR REDDY | 14 | | | 15 | |
| 61 | | 138R1A0462 | | H CHIRANJEEVI | | | 19 | 18 | |
| 62 | | 138R1A0463 | | J.SANTHOSH REDDY | | | 14 | 14 | |
| 63 | | 138R1A0464 | | SURYA KANTH | | | 17 | 16 | |
| 64 | | 138R1A0465 | | J.SNEHA | | | 18 | 20 | |
| 65 | | 138R1A0466 | | K.HARSHAVARDHAN REDDY | | | 15 | 18 | |
| 66 | | 138R1A0467 | |  | | |  |  | |
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1. **List of slow learners**

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| --- | --- | --- | --- | --- |
| **S.No** | **Roll No.** | **Name of the Student** | **I MID** | **II MID** |
| 1 | 138R1A0340 | JALA RAKESH | 14 | 14 |
| 2 | 128R1A0357 | K.RAVITEJA | 15 | 05 |
| 3 | 128R1A0359 | MP.RAJA SAI | 14 | 14 |
| 4 |  |  |  |  |
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1. **Remedial classes schedule for slow learners** (To be attached)
2. **Subject wise (attendance monthly)**

|  |  |
| --- | --- |
| CMR ENGINEERING COLLEGE |  |
| kandlakoya (V),Medchal Road,Hyderabad |  |
| Department of Mechanical Engineering | |
| **ATTENDANCE UPTO 30-8-2014** | |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **III B.TECH I SEM (A) SECTION A.Y 2014-15** | | | | | | | | | | | | | | |
|  |  | |  | **ATD-II** | **DOM** | **MEFA** | **MT** | **MSE** | **DMM-I** | **MT-Lab** | **TE-lab** | **Total No of classes** | **Total %** | **Remarks** |
| **NO.OF CLASSES HELD** | | |  | **32** | **29** | **41** | **34** | **33** | **37** | **24** | **24** | **254** |  |  |
| **Sl.No** | **Roll No** | |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 128R1A0301 | | ADULA SRINIVAS | 26 | 25 | 29 | 29 | 26 | 30 | 21 | 21 | 207 | **81.5** |  |
| 2 | 128R1A0302 | | A GIRIDHAR | 16 | 22 | 21 | 20 | 21 | 27 | 21 | 18 | 166 | **65.4** |  |
| 3 | 128R1A0303 | | NEMALIKONDA SAI KRISHNA | 15 | 21 | 19 | 21 | 18 | 24 | 21 | 12 | 151 | **59.4** |  |
| 4 | 128R1A0304 | | B ABISHEK YADAV | 22 | 20 | 31 | 23 | 24 | 22 | 24 | 18 | 184 | **72.4** |  |
| 5 | 128R1A0305 | | BHAGATH MATTA RAJA | 16 | 20 | 20 | 19 | 19 | 21 | 21 | 18 | 154 | **60.6** |  |
| 6 | 128R1A0307 | | BURUGUPALLI CHANDANA | 31 | 25 | 34 | 31 | 30 | 31 | 21 | 24 | 227 | **89.4** |  |
| 7 | 128R1A0308 | | CHITTALA SWAMY SHARAVAN | 21 | 26 | 32 | 25 | 27 | 32 | 24 | 21 | 208 | **81.9** |  |
| 8 | 128R1A0309 | | D SRIKANTH REDDY | 17 | 19 | 18 | 16 | 18 | 19 | 18 | 21 | 146 | **57.5** |  |
| 9 | 128R1A0310 | | DATLA TEJA MURTHY RAJU | 13 | 13 | 15 | 12 | 17 | 13 | 18 | 15 | 116 | **45.7** |  |
| 10 | 128R1A0311 | | DEVARAKONDA ABHISHEK | 18 | 20 | 22 | 20 | 17 | 27 | 21 | 18 | 163 | **64.2** |  |
| 11 | 128R1A0312 | | DHALKARI RAJESH | 19 | 22 | 21 | 20 | 21 | 29 | 21 | 21 | 174 | **68.5** |  |
| 12 | 128R1A0313 | | DUMNAWAR RAHUL | 18 | 20 | 23 | 20 | 24 | 22 | 21 | 12 | 160 | **63.0** |  |
| 16 | 128R1A0314 | | ESURI PRAKASH | 22 | 27 | 29 | 26 | 25 | 31 | 24 | 18 | 202 | **79.5** |  |
| 14 | 128R1A0315 | | GANGADHARI MURALI | 18 | 23 | 26 | 21 | 21 | 25 | 6 | 12 | 152 | **59.8** |  |
| 15 | 128R1A0316 | | GANTHI SHEKHAR | 25 | 27 | 26 | 26 | 23 | 32 | 18 | 15 | 192 | **75.6** |  |
| 16 | 128R1A0317 | | GOWNIBAITI RAJESH | 14 | 25 | 14 | 17 | 17 | 26 | 18 | 12 | 143 | **56.3** |  |
| 17 | 128R1A0318 | | JAGGARI MOHAN | 17 | 24 | 18 | 19 | 18 | 27 | 15 | 12 | 150 | **59.1** |  |
| 18 | 128R1A0319 | | K CHAITANYA | 24 | 26 | 25 | 27 | 20 | 28 | 21 | 24 | 195 | **76.8** |  |
| 19 | 128R1A0320 | | K VIKRAM ADITHYA | 25 | 24 | 24 | 21 | 24 | 26 | 21 | 21 | 186 | **73.2** |  |
| 20 | 128R1A0322 | | KUMMAM MADHU | 17 | 18 | 19 | 15 | 23 | 19 | 21 | 12 | 144 | **56.7** |  |
| 21 | 128R1A0323 | | K PUNEET REDDY | 27 | 26 | 29 | 27 | 26 | 29 | 24 | 24 | 212 | **83.5** |  |
| 22 | 128R1A0324 | | KAKUMANI SAINARAYANA VARAPRASAD | 17 | 24 | 29 | 22 | 17 | 27 | 3 | 9 | 148 | **58.3** |  |
| 23 | 128R1A0325 | | KUMMARI DINESH KUMAR | 21 | 25 | 24 | 22 | 23 | 31 | 24 | 18 | 188 | **74.0** |  |
| 24 | 128R1A0326 | | KONDA RAMAKRISHNA | 22 | 26 | 23 | 27 | 27 | 28 | 9 | 18 | 180 | **70.9** |  |
| 25 | 128R1A0327 | | KAVADI NAVEEN | 13 | 16 | 17 | 13 | 16 | 16 | 21 | 21 | 133 | **52.4** |  |
| 26 | 128R1A0328 | | LAKKIREDDY SAICHANDREDDY | 12 | 22 | 20 | 21 | 17 | 25 | 18 | 15 | 150 | **59.1** |  |
| 27 | 128R1A0329 | | MUKTHAVARAM ABHINAV PADMANABHA | 26 | 27 | 36 | 29 | 30 | 33 | 24 | 24 | 229 | **90.2** |  |
| 28 | 128R1A0330 | | PANUGOTHU VIDYASAGAR | 11 | 20 | 19 | 18 | 17 | 23 | 15 | 9 | 132 | **52.0** |  |
| 29 | 128R1A0331 | | MARI VINEETH | 21 | 26 | 21 | 20 | 28 | 29 | 21 | 18 | 184 | **72.4** |  |
| 30 | 128R1A0332 | | MARUPAKULA YESHWANTH GOUD | 20 | 19 | 23 | 23 | 21 | 20 | 21 | 18 | 165 | **98.8** |  |
|  |  | |  | **ATD-II** | **DOM** | **MEFA** | **MT** | **MSE** | **DMM-I** | **MT-Lab** | **TE-lab** | **Total No of classes** | **Total %** | **Remarks** |
|  | **NO.OF CLASSES HELD** | | | **32** | **29** | **41** | **34** | **33** | **37** | **27** | **21** | **254** |  |  |
| 31 | 128R1A0333 | MOHAMMAD SALMAN | | 11 | 18 | 14 | 11 | 19 | 18 | 12 | 15 | 118 | **46.5** |  |
| 32 | 128R1A0334 | MOHAMMAD JAMEEL | | 19 | 20 | 15 | 17 | 21 | 26 | 15 | 15 | 148 | **58.3** |  |
| 33 | 128R1A0335 | MOHAMMAD MUJAHED | | 13 | 15 | 16 | 12 | 15 | 23 | 15 | 15 | 124 | **48.8** |  |
| 34 | 128R1A0336 | MOLUGU JEEVAN KUMAR | | 15 | 16 | 18 | 19 | 16 | 27 | 15 | 18 | 144 | **56.7** |  |
| 35 | 128R1A0337 | MUTHYALA ARUNKUMAR | | 14 | 17 | 17 | 16 | 18 | 24 | 9 | 18 | 133 | **52.4** |  |
| 36 | 128R1A0338 | MUTHYALA SAINATH | | 16 | 15 | 14 | 15 | 15 | 18 | 15 | 18 | 126 | **49.6** |  |
| 37 | 128R1A0339 | N SAINATH KUMAR | | 17 | 9 | 9 | 11 | 9 | 22 | 9 | 12 | 98 | **38.6** |  |
| 38 | 128R1A0341 | NAVIRIKATNAM BHANUCHANDER | | 19 | 19 | 18 | 16 | 21 | 26 | 15 | 18 | 152 | **59.8** |  |
| 39 | 128R1A0342 | PALLELA SAIDULU | | 24 | 18 | 22 | 20 | 21 | 25 | 24 | 21 | 175 | **68.9** |  |
| 40 | 128R1A0343 | PASHEM SAINATH REDDY | | 23 | 20 | 29 | 25 | 25 | 33 | 24 | 21 | 200 | **78.7** |  |
| 41 | 128R1A0344 | PATTAPU SAI PRASANTH | | 23 | 21 | 20 | 17 | 26 | 21 | 9 | 18 | 155 | **61.0** |  |
| 42 | 128R1A0345 | PERATLA PRUTHVI RAJ | | 5 | 8 | 6 | 6 | 8 | 14 | 0 | 9 | 56 | **22.0** |  |
| 43 | 128R1A0346 | PITTA AKHIL | | 15 | 19 | 23 | 19 | 22 | 31 | 9 | 18 | 156 | **61.4** |  |
| 44 | 128R1A0347 | POLSANI RAMANI | | 26 | 16 | 27 | 24 | 16 | 29 | 24 | 21 | 183 | **72.0** |  |
| 45 | 128R1A0348 | PULLURI VENKAT KOUSHIK | | 16 | 17 | 19 | 15 | 19 | 20 | 12 | 21 | 139 | **54.7** |  |
| 46 | 128R1A0349 | R RESHWANTH REDDY | | 24 | 20 | 26 | 25 | 22 | 31 | 21 | 21 | 190 | **74.8** |  |
| 47 | 128R1A0350 | RAMAGIRI VINEETH | | 23 | 19 | 27 | 26 | 19 | 29 | 21 | 15 | 179 | **70.5** |  |
| 48 | 128R1A0351 | SUTAKULLA SURESH KUMAR | | 21 | 18 | 21 | 20 | 18 | 28 | 18 | 21 | 165 | **65.0** |  |
| 49 | 128R1A0352 | SOLA SATHISH BABU | | 23 | 19 | 28 | 26 | 19 | 19 | 27 | 21 | 182 | **71.7** |  |
| 50 | 128R1A0353 | SAHU AKHILA | | 23 | 21 | 28 | 25 | 27 | 35 | 27 | 18 | 204 | **80.3** |  |
| 51 | 128R1A0354 | SAMUDRALA SHIVAPRASAD | | 12 | 15 | 15 | 13 | 15 | 19 | 15 | 15 | 119 | **46.9** |  |
| 52 | 128R1A0355 | SURAMPALLY SUSHMA | | 22 | 23 | 28 | 27 | 28 | 30 | 21 | 21 | 200 | **78.7** |  |
| 53 | 128R1A0356 | SURENDER MOHAN SINGH | | 15 | 16 | 17 | 14 | 16 | 21 | 15 | 21 | 135 | **53.1** |  |
| 54 | 128R1A0357 | T VISHNU VARDHAN | | 11 | 12 | 12 | 11 | 12 | 20 | 3 | 12 | 93 | **36.6** |  |
| 55 | 128R1A0358 | VANGA PRIYANKA REDDY | | 26 | 20 | 25 | 23 | 24 | 32 | 27 | 21 | 198 | **78.0** |  |
| 56 | 128R1A0359 | VEERUBHOTLA SAI MANIKANTA | | 19 | 18 | 21 | 20 | 18 | 27 | 21 | 21 | 165 | **65.0** |  |
| 57 | 128R1A0360 | TERAPALLI RAJU | | 11 | 13 | 15 | 15 | 13 | 24 | 9 | 6 | 106 | **41.7** |  |
| 58 | 12931A0323 | S.shakeer Hussain | | 17 | 25 | 21 | 15 | 29 | 31 | 15 | 18 | 171 | **67.3** |  |
| 59 | 12931A0325 | M.S.S.Hussain | | 18 | 25 | 21 | 15 | 29 | 31 | 15 | 18 | 172 | **67.7** |  |
| 60 | 118R1A0305 | B.Nikhil varma | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0.0** |  |
| 61 | 118R1A0327 | K.NAVEENKumar | | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | **2.0** |  |
| 62 | 118R1A03A1 | nrupen reddy | | 2 | 0 | 1 | 0 | 0 | 0 | 3 | 0 | 6 | **2.4** |  |

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **III B.TECH I SEM (B) SECTION** | **NAME OF STUDENT** | **ATD-II** | **DOM** | **MEFA** | **MT** | **MSE** | **DMM-I** | **MT-Lab** | **TE-lab** | **Total No of classes** | **Total %** |
| **ROLL NO:** |
|  |  | **29** | **28** | **39** | **37** | **33** | **37** | **18** | **18** | **239** |  |
| 128R1A0361 | A HARISH | 23 | 25 | 28 | 30 | 32 | 27 | 15 | 18 | 198 | **82.8** |
| 128R1A0362 | AMIT KUMAR | 16 | 22 | 16 | 17 | 27 | 24 | 15 | 15 | 152 | **63.6** |
| 128R1A0363 | BAVIDODDI THIRUMAL REDDY | 23 | 19 | 22 | 27 | 21 | 33 | 15 | 18 | 178 | **74.5** |
| 128R1A0364 | BIROJU UMA MAHESHWAR CHARY | 20 | 20 | 22 | 18 | 28 | 27 | 9 | 12 | 156 | **65.3** |
| 128R1A0365 | BOLAGANI PRASANNA KUMAR | 18 | 19 | 22 | 20 | 24 | 26 | 12 | 15 | 156 | **65.3** |
| 128R1A0366 | BOLLI HEMANTH KUMAR | 28 | 19 | 27 | 32 | 24 | 34 | 15 | 15 | 194 | **81.2** |
| 128R1A0367 | BURUGULA VENKATRAM REDDY | 24 | 18 | 31 | 30 | 26 | 34 | 18 | 18 | 199 | **83.3** |
| 128R1A0368 | CHEGURI UTKARSH RAO | 14 | 20 | 15 | 15 | 27 | 17 | 9 | 12 | 129 | **54.0** |
| 128R1A0369 | CHINTA NAVEEN | 14 | 19 | 13 | 8 | 21 | 21 | 6 | 18 | 120 | **50.2** |
| 128R1A0370 | E KARTHIK | 15 | 17 | 10 | 13 | 19 | 17 | 12 | 15 | 118 | **49.4** |
| 128R1A0371 | D ASHWIN KUMAR | 28 | 19 | 31 | 31 | 29 | 32 | 18 | 18 | 206 | **86.2** |
| 128R1A0372 | DADDE HARIPRASAD | 13 | 15 | 10 | 10 | 16 | 15 | 3 | 6 | 88 | **36.8** |
| 128R1A0373 | DHAMA ABHISHEK BABURAM | 14 | 19 | 17 | 16 | 20 | 23 | 6 | 12 | 127 | **53.1** |
| 128R1A0374 | DHANAVATH SREENIVAS | 8 | 9 | 4 | 6 | 10 | 13 | 0 | 6 | 56 | **23.4** |
| 128R1A0375 | DIVVAALA SAI TEJA | 21 | 20 | 26 | 25 | 28 | 33 | 18 | 18 | 189 | **79.1** |
| 128R1A0376 | DUSA UMAVANTH | 12 | 18 | 11 | 16 | 19 | 24 | 3 | 12 | 115 | **48.1** |
| 128R1A0377 | EVURI GOVIND REDDY | 15 | 17 | 13 | 18 | 18 | 27 | 12 | 15 | 135 | **56.5** |
| 128R1A0378 | GANGANNAGARI THARUN KUMAR REDDY | 25 | 24 | 30 | 32 | 32 | 33 | 15 | 15 | 206 | **86.2** |
| 128R1A0379 | GIRAVENA SANTHOSH KUMAR | 18 | 19 | 14 | 18 | 20 | 30 | 12 | 12 | 143 | **59.8** |
| 128R1A0380 | GIRI TEJASHIWINI | 22 | 20 | 27 | 28 | 24 | 35 | 15 | 18 | 189 | **79.1** |
| 128R1A0381 | J CHANDRA SHEKHAR | 23 | 21 | 26 | 27 | 26 | 31 | 12 | 12 | 178 | **74.5** |
| 128R1A0382 | JANGA PRAVEEN REDDY | 12 | 18 | 12 | 11 | 19 | 19 | 9 | 15 | 115 | **48.1** |
| 128R1A0383 | K VIJAY KUMAR | 19 | 21 | 23 | 24 | 27 | 26 | 15 | 18 | 173 | **72.4** |
| 128R1A0384 | K VISHAL | 27 | 21 | 31 | 34 | 28 | 35 | 12 | 18 | 206 | **86.2** |
| 128R1A0386 | KAKKIRALA HASWANTH GUPTA | 20 | 20 | 22 | 31 | 22 | 33 | 12 | 15 | 175 | **73.2** |
| 128R1A0387 | KAPARPOINA SRIKANTH | 9 | 15 | 9 | 10 | 16 | 17 | 6 | 6 | 88 | **36.8** |
| 128R1A0388 | KHEDLE ELLALINGA | 19 | 18 | 22 | 20 | 22 | 24 | 18 | 18 | 161 | **67.4** |
| 128R1A0389 | KODUKULA PRASHANTH KUMAR | 12 | 17 | 14 | 9 | 19 | 22 | 0 | 12 | 105 | **43.9** |
| 128R1A0390 | KOMMANA BOYANA SRI RAVI TEJA | 22 | 26 | 28 | 29 | 29 | 29 | 18 | 18 | 199 | **83.3** |
| 128R1A0391 | KOMMATA KRISHNA | 20 | 19 | 19 | 24 | 20 | 21 | 15 | 15 | 153 | **64.0** |
|  |  | **ATD-II** | **DOM** | **MEFA** | **MT** | **MSE** | **DMM-I** | **MT-Lab** | **TE-lab** | **Total No of classes** | **Total%** |
| **NO.OF CLASSES HELD** | | **29** | **28** | **39** | **37** | **33** | **37** | **21** | **21** | **245** |  |
| 128R1A0392 | KOMMULA RAJU | 21 | 24 | 23 | 27 | 27 | 26 | 18 | 15 | 181 | **73.9** |
| 128R1A0393 | KONGARI KRISHNA CHITHANYA REDDY | 27 | 23 | 25 | 26 | 27 | 29 | 15 | 18 | 190 | **77.6** |
| 128R1A0394 | M VENKATA SUNEEL | 18 | 20 | 21 | 19 | 24 | 27 | 9 | 15 | 153 | **62.4** |
| 128R1A0395 | MALGU HEMANTH KUMAR | 24 | 25 | 29 | 31 | 27 | 32 | 18 | 18 | 204 | **83.3** |
| 128R1A0396 | MITTAPALLY LAVANYA | 20 | 20 | 24 | 25 | 23 | 27 | 21 | 21 | 181 | **73.9** |
| 128R1A0397 | MEENAGA LAKSHMICHAKRAVARTHI | 21 | 21 | 19 | 19 | 24 | 26 | 18 | 12 | 160 | **65.3** |
| 128R1A0398 | MOHAMMED WAHEDULLAH | 22 | 21 | 29 | 29 | 24 | 30 | 21 | 21 | 197 | **80.4** |
| 128R1A0399 | MOOD VINAY KUMAR | 19 | 21 | 22 | 20 | 24 | 21 | 15 | 18 | 160 | **65.3** |
| 128R1A03A0 | MUDUMBY NAVYA SRUTHI | 16 | 22 | 20 | 24 | 25 | 28 | 12 | 18 | 165 | **67.3** |
| 128R1A03A2 | NENAVATH SANTHOSH NAYAK | 15 | 20 | 16 | 15 | 21 | 25 | 18 | 18 | 148 | **60.4** |
| 128R1A03A3 | YANNA PRASHANTH | 19 | 20 | 18 | 17 | 21 | 25 | 15 | 21 | 156 | **63.7** |
| 128R1A03A4 | PANKAJ KUMAR YADAV | 17 | 20 | 24 | 26 | 23 | 33 | 18 | 15 | 176 | **71.8** |
| 128R1A03A5 | PENUMACHA SANTOSHKUMAR RAJU | 19 | 21 | 23 | 18 | 25 | 28 | 21 | 18 | 173 | **70.6** |
| 128R1A03A6 | PERKA SRIKANTH | 23 | 22 | 24 | 24 | 26 | 27 | 18 | 18 | 182 | **74.3** |
| 128R1A03A7 | PERUMANDLA SRUJAN KANTH | 15 | 19 | 15 | 17 | 20 | 22 | 12 | 12 | 132 | **53.9** |
| 128R1A03A9 | SANADI PRANAY KUMAR | 25 | 20 | 31 | 33 | 26 | 34 | 18 | 15 | 202 | **82.4** |
| 128R1A03B2 | SYED ABDUL RAHMAN PASHA | 12 | 19 | 19 | 18 | 20 | 20 | 9 | 18 | 135 | **55.1** |
| 128R1A03B3 | SYED KHAJA MOIN AHMED | 11 | 17 | 20 | 19 | 19 | 25 | 15 | 18 | 144 | **58.8** |
| 128R1A03B4 | TANNERU NAGARAJ | 12 | 12 | 13 | 10 | 13 | 21 | 9 | 12 | 102 | **41.6** |
| 128R1A03B5 | V SANTHOSH REDDY | 19 | 12 | 12 | 9 | 17 | 17 | 15 | 18 | 119 | **48.6** |
| 128R1A03B6 | VADLAMUDI TEJASRI | 21 | 20 | 24 | 29 | 28 | 32 | 18 | 15 | 187 | **76.3** |
| 128R1A03B7 | VANJARI SHIVAKUMAR | 13 | 18 | 16 | 14 | 21 | 23 | 9 | 12 | 126 | **51.4** |
| 128R1A03B8 | GEDDADA VINAY KUMAR | 23 | 20 | 22 | 24 | 25 | 25 | 15 | 18 | 172 | **70.2** |
| 128R1A03B9 | ABHISHEK NAGLA | 19 | 19 | 17 | 20 | 22 | 22 | 9 | 15 | 143 | **58.4** |
| 128R1A03C0 | VISWANADHAM UDAY KUMAR | 27 | 20 | 29 | 30 | 27 | 33 | 18 | 18 | 202 | **82.4** |
| 138R5A0301 | maturi naga praveen | 18 | 20 | 19 | 23 | 23 | 33 | 12 | 15 | 163 | **66.5** |
| 12931A0301 | P.Sriteja | 18 | 21 | 20 | 21 | 14 | 29 | 15 | 21 | 159 | **64.9** |
| 12931A0306 | N.Rajkumar | 21 | 20 | 24 | 27 | 22 | 30 | 12 | 21 | 177 | **72.2** |
| 12931A0326 | K.Bhanu Prakash | 19 | 21 | 20 | 23 | 21 | 30 | 12 | 21 | 167 | **68.2** |
| 12931A0327 | A.Yellanna | 22 | 22 | 24 | 26 | 26 | 28 | 15 | 18 | 181 | **73.9** |
| 118R1A0385 | KAKI Naga teja | 22 | 20 | 21 | 26 | 26 | 32 | 15 | 21 | 183 | **74.7** |
| 118R1A0311 | D NAVANEETH KUMAR | 4 | 10 | 3 | 3 | 11 | 0 | 3 | 3 | 37 | **15.1** |
| 118R1A0320 | JADHAV PRASHANTH | 6 | 11 | 5 | 3 | 13 | 0 | 6 | 3 | 47 | **19.2** |
| 118R1A0332 | MALAPROLU SANDEEP | 0 | 10 | 0 | 0 | 11 | 0 | 0 | 0 | 21 | **8.6** |
| 118R1A0340 | N KAUSHIK | 0 | 10 | 0 | 0 | 12 | 0 | 0 | 0 | 22 | **9.0** |
| 118R1A0346 | RAYAPUDI ARUN KUMAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0.0** |

**Slow learner’s attendance UPTO 30/8/2014**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| s.no | Roll no | name | **ATD-II** | **DOM** | **MEFA** | **MT** | **MSE** | **DMM-I** | **MT-Lab** | **TE-lab** | **Total No of classes** | **Total %** | **MID-I Marks** | **Remarks** |
| 1 | 128R1A0317 | GOWNIBAITI RAJESH | 14 | 25 | 14 | 17 | 17 | 26 | 18 | 12 | 143 | **56.3** | 9 |  |
| 2 | 128R1A0322 | KUMMAM MADHU | 17 | 18 | 19 | 15 | 23 | 19 | 21 | 12 | 144 | **56.7** | 7 |  |
| 3 | 128R1A0333 | MOHAMMAD SALMAN | 11 | 18 | 14 | 11 | 19 | 18 | 12 | 15 | 118 | **46.5** | 10 |  |
| 4 | 128R1A0357 | T VISHNU VARDHAN | 11 | 12 | 12 | 11 | 12 | 20 | 3 | 12 | 93 | **36.6** | 8 |  |
| 5 | 128R1A0360 | TERAPALLI RAJU | 11 | 13 | 15 | 15 | 13 | 24 | 9 | 6 | 106 | **41.7** | 9 |  |
| 6 | 118R1A0305 | B.Nikhil varma | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **0.0** | 8 |  |
| 7 | 118R1A0327 | K.NAVEENKumar | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 5 | **2.0** | 8 |  |
| 8 | 128R1A0364 | BIROJU UMA MAHESHWAR CHARY | 20 | 20 | 22 | 18 | 28 | 27 | 9 | 12 | 156 | **65.3** | 11 |  |
| 9 | 128R1A0368 | CHEGURI UTKARSH RAO | 14 | 20 | 15 | 15 | 27 | 17 | 9 | 12 | 129 | **54.0** | 13 |  |
| 10 | 128R1A0372 | DADDE HARIPRASAD | 13 | 15 | 10 | 10 | 16 | 15 | 3 | 6 | 88 | **36.8** | 7 |  |
| 11 | 128R1A0377 | EVURI GOVIND REDDY | 15 | 17 | 13 | 18 | 18 | 27 | 12 | 15 | 135 | **56.5** | 4 |  |
| 12 | 128R1A0382 | JANGA PRAVEEN REDDY | 12 | 18 | 12 | 11 | 19 | 19 | 9 | 15 | 115 | **48.1** | 11 |  |
| 13 | 128R1A0383 | K VIJAY KUMAR | 19 | 21 | 23 | 24 | 27 | 26 | 15 | 18 | 173 | **72.4** | 14 |  |
| 14 | 128R1A0387 | KAPARPOINA SRIKANTH | 9 | 15 | 9 | 10 | 16 | 17 | 6 | 6 | 88 | **36.8** | 12 |  |
| 15 | 128R1A0388 | KHEDLE ELLALINGA | 19 | 18 | 22 | 20 | 22 | 24 | 18 | 18 | 161 | **67.4** | 13 |  |
| 16 | 128R1A0393 | KONGARI KRISHNA CHITHANYA REDDY | 27 | 23 | 25 | 26 | 27 | 29 | 15 | 18 | 190 | **77.6** | 13 |  |
| 17 | 128R1A0394 | M VENKATA SUNEEL | 18 | 20 | 21 | 19 | 24 | 27 | 9 | 15 | 153 | **62.4** | 12 |  |
| 18 | 128R1A03A2 | NENAVATH SANTHOSH NAYAK | 15 | 20 | 16 | 15 | 21 | 25 | 18 | 18 | 148 | **60.4** | 11 |  |
| 19 | 118R1A0385 | KAKI Naga teja | 22 | 20 | 21 | 26 | 26 | 32 | 15 | 21 | 183 | **74.7** | 8 |  |
| 20 | 118R1A0311 | D NAVANEETH KUMAR | 4 | 10 | 3 | 3 | 11 | 0 | 3 | 3 | 37 | **15.1** | 9 |  |
| 21 | 118R1A0320 | JADHAV PRASHANTH | 6 | 11 | 5 | 3 | 13 | 0 | 6 | 3 | 47 | **19.2** | 7 |  |

Slot wise MEFA attendance:

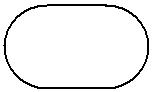
|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **30/6 to 15/7** | **Upto 31 aug** | **Upto sept-26** | **Upto oct-31** |  |  |
| **NO.OF CLASSES HELD** | | **14** | **41** | **53** | **63** |  |  |
| **Sl.No** | **Roll No** |  |  |  |  |  |  |
| 1 | 128R1A0301 | 8 | 29 | 40 | 48 |  |  |
| 2 | 128R1A0302 | 6 | 21 | 31 | 40 |  |  |
| 3 | 128R1A0303 | 7 | 19 | 28 | 36 |  |  |
| 4 | 128R1A0304 | 14 | 31 | 40 | 48 |  |  |
| 5 | 128R1A0305 | 6 | 20 | 29 | 38 |  |  |
| 6 | 128R1A0307 | 10 | 34 | 46 | 54 |  |  |
| 7 | 128R1A0308 | 11 | 32 | 40 | 50 |  |  |
| 8 | 128R1A0309 | 6 | 18 | 26 | 29 |  |  |
| 9 | 128R1A0310 | 4 | 15 | 23 | 28 |  |  |
| 10 | 128R1A0311 | 7 | 22 | 30 | 37 |  |  |
| 11 | 128R1A0312 | 5 | 21 | 31 | 40 |  |  |
| 12 | 128R1A0313 | 7 | 23 | 30 | 35 |  |  |
| 13 | 128R1A0314 | 8 | 29 | 40 | 49 |  |  |
| 14 | 128R1A0315 | 8 | 26 | 35 | 40 |  |  |
| 15 | 128R1A0316 | 2 | 26 | 37 | 46 |  |  |
| 16 | 128R1A0317 | 3 | 14 | 20 | 23 |  |  |
| 17 | 128R1A0318 | 5 | 18 | 27 | 35 |  |  |
| 18 | 128R1A0319 | 7 | 25 | 36 | 44 |  |  |
| 19 | 128R1A0320 | 8 | 24 | 33 | 40 |  |  |
| 20 | 128R1A0322 | 9 | 19 | 27 | 33 |  |  |
| 21 | 128R1A0323 | 9 | 29 | 39 | 46 |  |  |
| 22 | 128R1A0324 | 10 | 29 | 37 | 45 |  |  |
| 23 | 128R1A0325 | 8 | 24 | 33 | 41 |  |  |
| 24 | 128R1A0326 | 13 | 23 | 31 | 37 |  |  |
| 25 | 128R1A0327 | 5 | 17 | 23 | 28 |  |  |
| 26 | 128R1A0328 | 5 | 20 | 28 | 55 |  |  |
| 27 | 128R1A0329 | 13 | 36 | 47 | 57 |  |  |
| 28 | 128R1A0330 | 3 | 19 | 27 | 35 |  |  |
| 29 | 128R1A0331 | 7 | 21 | 29 | 35 |  |  |
| 30 | 128R1A0332 | 6 | 23 | 31 | 39 |  |  |
| 31 | 128R1A0333 | 4 | 14 | 21 | 27 |  |  |
| 32 | 128R1A0334 | 7 | 15 | 23 | 32 |  |  |
| 33 | 128R1A0335 | 2 | 16 | 24 | 31 |  |  |
| 34 | 128R1A0336 | 1 | 18 | 26 | 33 |  |  |
| 35 | 128R1A0337 | 2 | 17 | 23 | 32 |  |  |
| 36 | 128R1A0338 | 2 | 14 | 24 | 32 |  |  |
| 37 | 128R1A0339 | 1 | 9 | 18 | 27 |  |  |
| 38 | 128R1A0341 | 6 | 18 | 28 | 36 |  |  |
| 39 | 128R1A0342 | 9 | 22 | 30 | 37 |  |  |
| 40 | 128R1A0343 | 9 | 29 | 38 | 48 |  |  |
| 41 | 128R1A0344 | 5 | 20 | 25 | 32 |  |  |
| 42 | 128R1A0345 | 2 | 6 | 10 | 11 |  |  |
| 43 | 128R1A0346 | 3 | 23 | 33 | 43 |  |  |
| 44 | 128R1A0347 | 10 | 27 | 37 | 47 |  |  |
| 45 | 128R1A0348 | 5 | 19 | 28 | 31 |  |  |
| 46 | 128R1A0349 | 9 | 26 | 34 | 43 |  |  |
| 47 | 128R1A0350 | 8 | 27 | 32 | 41 |  |  |
| 48 | 128R1A0351 | 4 | 21 | 31 | 38 |  |  |
| 49 | 128R1A0352 | 10 | 28 | 37 | 42 |  |  |
| 50 | 128R1A0353 | 11 | 28 | 37 | 46 |  |  |
| 51 | 128R1A0354 | 7 | 15 | 25 | 33 |  |  |
| 52 | 128R1A0355 | 10 | 28 | 37 | 46 |  |  |
| 53 | 128R1A0356 | 7 | 17 | 22 | 29 |  |  |
| 54 | 128R1A0357 | 1 | 12 | 19 | 27 |  |  |
| 55 | 128R1A0358 | 9 | 25 | 35 | 33 |  |  |
| 56 | 128R1A0359 | 7 | 21 | 29 | 33 |  |  |
| 57 | 128R1A0360 | 4 | 15 | 29 | 31 |  |  |
| 58 | 12931A0323 | 6 | 21 | 31 | 40 |  |  |
| 59 | 12931A0325 | 6 | 21 | 31 | 41 |  |  |
| Faculty Sign | |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **NO.OF CLASSES HELD** | | **14** | **39** | **54** | **63** |  |  |
| **Sl.No** | **Roll No** |  |  |  |  |  |  |
| 1 | 118R1A0311 | 0 | 3 | 7 | 8 |  |  |
| 2 | 118R1A0320 | 0 | 5 | 9 | 10 |  |  |
| 3 | 118R1A0332 | 0 | 0 | 0 | 0 |  |  |
| 4 | 118R1A0340 | 0 | 0 | 0 | 0 |  |  |
| 5 | 118R1A0346 | 0 | 0 | 0 | 0 |  |  |
| 6 | 118R1A0385 | 9 | 21 | 27 | 32 |  |  |
| 7 | 128R1A0361 | 1 | 28 | 41 | 49 |  |  |
| 8 | 128R1A0362 | 9 | 16 | 24 | 30 |  |  |
| 9 | 128R1A0363 | 6 | 22 | 32 | 40 |  |  |
| 10 | 128R1A0364 | 5 | 22 | 28 | 32 |  |  |
| 11 | 128R1A0365 | 9 | 22 | 30 | 34 |  |  |
| 12 | 128R1A0366 | 9 | 27 | 38 | 47 |  |  |
| 13 | 128R1A0367 | 8 | 31 | 42 | 50 |  |  |
| 14 | 128R1A0368 | 11 | 15 | 22 | 29 |  |  |
| 15 | 128R1A0369 | 8 | 13 | 22 | 27 |  |  |
| 16 | 128R1A0370 | 5 | 10 | 19 | 23 |  |  |
| 17 | 128R1A0371 | 3 | 31 | 42 | 49 |  |  |
| 18 | 128R1A0372 | 10 | 10 | 20 | 25 |  |  |
| 19 | 128R1A0373 | 2 | 17 | 25 | 33 |  |  |
| 20 | 128R1A0374 | 5 | 4 | 10 | 16 |  |  |
| 21 | 128R1A0375 | 0 | 26 | 38 | 46 |  |  |
| 22 | 128R1A0376 | 10 | 11 | 19 | 26 |  |  |
| 23 | 128R1A0377 | 2 | 13 | 21 | 26 |  |  |
| 24 | 128R1A0378 | 3 | 30 | 37 | 45 |  |  |
| 25 | 128R1A0379 | 11 | 14 | 27 | 36 |  |  |
| 26 | 128R1A0380 | 3 | 27 | 36 | 45 |  |  |
| 27 | 128R1A0381 | 9 | 26 | 34 | 42 |  |  |
| 28 | 128R1A0382 | 9 | 12 | 19 | 22 |  |  |
| 29 | 128R1A0383 | 2 | 23 | 29 | 35 |  |  |
| 30 | 128R1A0384 | 9 | 31 | 42 | 50 |  |  |
| 31 | 128R1A0386 | 9 | 22 | 34 | 40 |  |  |
| 32 | 128R1A0387 | 3 | 9 | 19 | 26 |  |  |
| 33 | 128R1A0388 | 0 | 22 | 32 | 38 |  |  |
| 34 | 128R1A0389 | 9 | 14 | 22 | 28 |  |  |
| 35 | 128R1A0390 | 2 | 28 | 37 | 44 |  |  |
| 36 | 128R1A0391 | 11 | 19 | 25 | 29 |  |  |
| 37 | 128R1A0392 | 7 | 23 | 32 | 40 |  |  |
| 38 | 128R1A0393 | 10 | 25 | 36 | 43 |  |  |
| 39 | 128R1A0394 | 10 | 21 | 31 | 38 |  |  |
| 40 | 128R1A0395 | 8 | 29 | 42 | 50 |  |  |
| 41 | 128R1A0396 | 10 | 24 | 36 | 43 |  |  |
| 42 | 128R1A0397 | 10 | 19 | 28 | 33 |  |  |
| 43 | 128R1A0398 | 9 | 29 | 42 | 49 |  |  |
| 44 | 128R1A0399 | 9 | 22 | 34 | 41 |  |  |
| 45 | 128R1A03A0 | 8 | 20 | 31 | 35 |  |  |
| 46 | 128R1A03A2 | 6 | 16 | 22 | 24 |  |  |
| 47 | 128R1A03A3 | 3 | 18 | 27 | 33 |  |  |
| 48 | 128R1A03A4 | 10 | 24 | 38 | 47 |  |  |
| 49 | 128R1A03A5 | 9 | 23 | 31 | 37 |  |  |
| 50 | 128R1A03A6 | 9 | 24 | 36 | 44 |  |  |
| 51 | 128R1A03A7 | 4 | 15 | 27 | 32 |  |  |
| 52 | 128R1A03A9 | 9 | 31 | 44 | 49 |  |  |
| 53 | 128R1A03B2 | 6 | 19 | 29 | 35 |  |  |
| 54 | 128R1A03B3 | 7 | 20 | 30 | 33 |  |  |
| 55 | 128R1A03B4 | 5 | 13 | 20 | 25 |  |  |
| 56 | 128R1A03B5 | 3 | 12 | 20 | 26 |  |  |
| 57 | 128R1A03B6 | 9 | 24 | 37 | 45 |  |  |
| 58 | 128R1A03B7 | 3 | 16 | 27 | 33 |  |  |
| 59 | 128R1A03B8 | 7 | 22 | 35 | 40 |  |  |
| 60 | 128R1A03B9 | 5 | 17 | 29 | 35 |  |  |
| 61 | 128R1A03C0 | 8 | 29 | 44 | 51 |  |  |
| 62 | 138R5A0301 | 4 | 19 | 32 | 38 |  |  |
| 63 | 12931A0301 | 4 | 20 | 33 | 41 |  |  |
| 64 | 12931A0306 | 4 | 24 | 37 | 44 |  |  |
| 65 | 12931A0326 | 3 | 20 | 32 | 38 |  |  |
| 66 | 12931A0327 | 4 | 24 | 37 | 45 |  |  |

1. **Sample mid answer scripts** (To be attached here)
2. **Slow learner’s performance in mid**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **Roll No.** | **Name of the Student** | **I MID** | **II MID** |
| 1 | 128R1A0317 | GOWNIBAITI RAJESH | 9 | 17 |
| 2 | 128R1A0322 | KUMMAM MADHU | 7 | 20 |
| 3 | 128R1A0333 | MOHAMMAD SALMAN | 10 | 21 |
| 4 | 128R1A0357 | T VISHNU VARDHAN | 8 | 22 |
| 5 | 128R1A0360 | TERAPALLI RAJU | 9 | 23 |
| 6 | 118R1A0305 | B.Nikhil varma | 8 | 0 |
| 7 | 118R1A0327 | K.NAVEENKumar | 8 | 0 |
| 8 | 128R1A0364 | BIROJU UMA MAHESHWAR CHARY | 11 | 13 |
| 9 | 128R1A0368 | CHEGURI UTKARSH RAO | 13 | 15 |
| 10 | 128R1A0372 | DADDE HARIPRASAD | 7 | 12 |
| 11 | 128R1A0377 | EVURI GOVIND REDDY | 4 | 0 |
| 12 | 128R1A0382 | JANGA PRAVEEN REDDY | 11 | 12 |
| 13 | 128R1A0383 | K VIJAY KUMAR | 14 | 12 |
| 14 | 128R1A0387 | KAPARPOINA SRIKANTH | 12 | 0 |
| 15 | 128R1A0388 | KHEDLE ELLALINGA | 13 | 17 |
|  | 128R1A0389 | KODUKULA PRASHANTH KUMAR | A | 0 |
| 16 | 128R1A0393 | KONGARI KRISHNA CHITHANYA REDDY | 13 | 22 |
| 17 | 128R1A0394 | M VENKATA SUNEEL | 12 | 16 |
| 18 | 128R1A03A2 | NENAVATH SANTHOSH NAYAK | 11 | 6 |
| 19 | 118R1A0385 | KAKI Naga teja | 8 | 10 |
| 20 | 118R1A0311 | D NAVANEETH KUMAR | 9 | 0 |
| 21 | 118R1A0320 | JADHAV PRASHANTH | 7 | 0 |

1. **Result analysis** (To be attached here)
2. **Material collected from Internet/Websites (**Attached) 
3. **Power point presentations** (Attached )
4. **Previous Question papers**



Code No: R21022 **R10** SET - 1

**II B. Tech I Semester, Regular Examinations, Dec – 2012**

**MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS**

(Com. to EEE, ME, ECE, CSE, IT, EIE, ECC, BME)

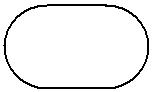
Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions All Questions carry **Equal** Marks

~~~~~~~~~~~~~~~~~~~~~~~~~~

1. Define Managerial Economics. Explain the nature and scope of Managerial Economics.
2. What is Price Elasticity of Demand? How do you measure it?
3. What is monopolistic competition? Explain the equilibrium of firm and industry in both the short-run and long-run under monopolistic competition.
4. Define production function? What are the types of production function? Explain them in brief.
5. Define sole trader. What are the features, merits and demerits of sole trader?
6. What are the methods of ranking investment proposals?
7. Journalize the following Transactions from the books of Miss. Madhuri?
   1. Madhuri Commenced business with a capital of Rs.1,00,000/-
   2. Purchased furniture Rs.3,000/-
   3. Sold Goods worth Rs.3,500/-
   4. Paid Salaries Rs.10,000/-
   5. Office Expenses paid Rs.800/-
   6. Cash deposited into bank Rs.30,000/-
   7. Purchased good on credit basis from Miss. Shreya Rs.40,000/-
   8. Cash withdraw from bank Rs.15,000/-
8. Explain the following Ratios:
   1. Current Ration
   2. Quick Ration
   3. Gross Profit Ratio
   4. Operating Ratio
   5. EPS

1 of 1



Code No: R21022 **R10** SET - 2

**II B. Tech I Semester, Regular Examinations, Dec – 2012**

**MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS**

(Com. to EEE, ME, ECE, CSE, IT, EIE, ECC, BME)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions All Questions carry **Equal** Marks

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1. Discuss the relationship between managerial economics and other subjects.
2. Distinguish various types of price elasticity of demand. What are the factors on which the elasticity of demand depends?
3. Define production function? What are the types of production function? Explain them in brief.
4. ABC Company has supplied the following information.

No. of units sold 20,000 units,

Fixed cost: Rs. 2, 00, 000

Variable cost per unit Rs. 10

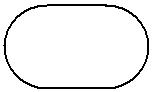
Selling price per unit. Rs. 20

Find out:

* 1. BEP in units
  2. Margin of safety
  3. Sales to get a profit of Rs. 1,00,000
  4. Verify the results in all the above cases

1. What are the necessary conditions to be satisfied by a firm in arriving at the optimal level of output in a perfectly competitive market?
2. Define Public enterprises? Explain their features and advantages?
3. Discuss briefly the various phases of business cycle.
4. Explain the following Ratios
   1. Short term Ratios
   2. Long term Ratios and
   3. Profitability Ratios

1 of 1



Code No: R21022 **R10** SET - 3

**II B. Tech I Semester, Regular Examinations, Dec – 2012**

**MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS**

(Com. to EEE, ME, ECE, CSE, IT, EIE, ECC, BME)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions All Questions carry **Equal** Marks

Present value tables are permitted for Q. No. 7

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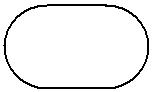
1. Explain how Managerial Economics is linked with other academic disciplines.
2. Define Law of Demand. What are its assumptions and exceptions?
3. Illustrate the price determination in case of monopoly.
4. Explain the production function with reference to Law of Variable proportions and substitutability of factors.
5. Evaluate sole proprietorship form of business organization.
6. If sales are 10,000 units and selling price is Rs. 15 per unit, variable cost Rs. 8 per unit and fixed cost is Rs. 70,000. Find out BEP in terms of rupees and units. What is the profit earned? What should be the sales for earning a profit of Rs. 50,000/-.
7. ABC Co. Ltd. is proposing to undertake one project. Two projects A and B are available. The initial cost of the Project in each case is Rs. 4, 00,000/-. A discount factor of 10% is used to compare the projects. Cash flows after taxes are likely to be as under.

|  |  |  |
| --- | --- | --- |
|  | **Cash flows after taxes (in Rs.)** | |
| **Year** | **Project ’A’** | **Project ’B’** |
|  |  |  |
| 1 | 1.50,000 | 50,000 |
|  |  |  |
| 2 | 2,00,000 | 1,50,000 |
|  |  |  |
| 3 | 2,50,000 | 2,00,000 |
|  |  |  |
| 4 | 1,50,000 | 3,00,000 |
|  |  |  |
| 5 | 1,00,000 | 2,00,000 |
|  |  |  |

Which one do you recommend under Net Present Value Index method?

1. What are the important ratios? Explain any four of them with examples to understand the financial statements?

1 of 1



Code No: R21022 **R10** SET - 4

**II B. Tech I Semester, Regular Examinations, Dec – 2012**

**MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS**

(Com. to EEE, ME, ECE, CSE, IT, EIE, ECC, BME)

Time: 3 hours Max. Marks: 75

Answer any **FIVE** Questions All Questions carry **Equal** Marks

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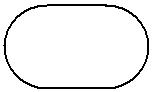
1. What is the relationship between managerial economics and other subjects.
2. Discuss briefly the various methods demand forecasting and point out their limitations.
3. What are the necessary conditions to be satisfied by a firm in arriving at the optimal level of output in a perfectly competitive market?
4. Define and distinguish various cost concepts in managerial decisions.
5. a) What is the Break-even point? Explain its assumptions and limitations. b) From the following data calculate the break-even volume:

Fixed cost Rs. 10,000 Selling price ----Rs. 7 per unit Variable cost ---Rs. 3 per unit

Suppose the price reduces to Rs. 2 per unit, what would you say about the break-even position?

1. Discuss the role of sleeping partner. What are the features, merits and demerits of sole trader?

1 of 2



Code No: R21022 **R10** SET - 4

1. From the following information, prepare Final Accounts?

|  |  |  |
| --- | --- | --- |
| **Particulars** | **Debit** | **Credit** |
| Purchases | 15,000 | --- |
| Sales | --- | 35,000 |
| Returns | 700 | 800 |
| Opening Stock | 10,000 | --- |
| Wages | 500 | --- |
| Salaries | 700 | --- |
| Depreciation | 1000 | --- |
| Rent Received | --- | 5,000 |
| Building | 15,000 | --- |
| Capital | --- | 30,000 |
| Debitors | 10,000 | --- |
| Creditors | --- | 7,000 |
| Bank our draft | --- | 5,000 |
| Cash | 29,900 | --- |
|  | --------- | -------- |
| **Total:** | **82,800** | **82,000** |

Adjustments:

Closing Stock was valued Rs.15,000/-

Outstanding wages Rs.500/-

Appreciation on Building @10%

1. Explain the following Ratios

a) Short term Ratios b) Long term Ratios and c) Profitability Ratios

2 of 2

1. **References (Text books/Websites/Journals)**

**TEXT BOOKS**

.

T1. Aryasri: Managerial Economics and Financial Analysis, 2/e, TMH, 2005.

# T2. Varshney & Maheswari: Managerial Economics, Sultan Chand, 2003.

# REFERENCE BOOKS

R1.Ambrish Gupta, Financial Accounting for Management Pearson Education, New Delhi.  
 R2.H.CraigPeterson&W.CrisLewis,ManagerialEconomics,PHI,4thEd.   
 R3.SumaDamodaran,ManagerialEconomics,OxfordUniversityPress.   
 R4.Lipsey&Chrystel,Economics,OxfordUniversityPress.  
 R5. S. A. Siddiqui & A. S. Siddiqui, Managerial Economics & Financial Analysis,

R6. Domnick Salvatore: Managerial Economics In a Global Economy, 4th Edition, Thomson

**(6) *Websites***

1. www.entrpreneurs.com
2. www.icai.org
3. www.investopedia.com
4. www.indiastudychannel.com
5. www.referenceforbusiness.com

**(7*) Expert Details***

* 1. Dr.Rana singh Professor in Management & Associate Dean Centinum Institute
  2. Rakesh Bhalla Vice- chairman ,NRIC of ICWA

**National**

1. Dr. D.Ganesh Rao - Prof. & Head, Deptt. of Telecommunication Engg., M.S. Ramayya Instt. of Tech., Bangalore

2. Prof. S.C. Dutta Roy, Deptt. of Electrical Engg., IIT, Delhi.

3. Mr. A.Nagoor Kani, 52, Seshachalam Street, Saidapet, Chennai.

**Regional**

1. Prof. N.S. Murthy, Dept. of ECE, NIT, Warangal.

2. Mr. K.V.Srinivasa Rao, HoD, Dept. of ECE, Aurora Engineering College, Bhongir, Nalgonda.

**(8) *Journals***

* 1. Indian Economy
  2. Survey of economics
  3. The Accounting Review
  4. Journals of Accounting Education
  5. Business World

***Thank you***