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Syllabus – 2016

PAPER1: FUNDAMENTALS OF ECONOMICS AND MANAGEMENT (FEM)

Syllabus Structure

<table>
<thead>
<tr>
<th></th>
<th>Fundamentals of Economics</th>
<th>50%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Fundamental of Management</td>
<td>50%</td>
</tr>
</tbody>
</table>

ASSESSMENT STRATEGY

There will be written examination paper of three hours

OBJECTIVES

To gain basic knowledge in Economics and understand the concept of management at the macro and micro level

Learning Aims

The syllabus aims to test the student’s ability to:

- Understand the basic concepts of economics at the macro and micro level
- Conceptualize the basic principles of management

Skill sets required

Level A: Requiring the skill levels of knowledge and comprehension

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section A: Fundamentals of Economics</td>
<td>20%</td>
</tr>
<tr>
<td>1. Basic concepts of Economics</td>
<td>20%</td>
</tr>
<tr>
<td>2. Forms of Market</td>
<td>10%</td>
</tr>
</tbody>
</table>

Section B: Fundamentals of Management

<table>
<thead>
<tr>
<th>CONTENTS</th>
<th>Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Management Process</td>
<td>50%</td>
</tr>
</tbody>
</table>

SECTION A: FUNDAMENTALS OF ECONOMICS [50 MARKS]

1. Basic Concepts of Economics – Micro & Macro Economics

(a) The Fundamentals of Economics

(b) Utility, Wealth, Production

(c) Theory of Demand (meaning, determinants of demand, law of demand, elasticity of demand- price, income and cross elasticity) and Supply (meaning, determinants, law of supply and elasticity of supply)

(d) Equilibrium

(e) Theory of Production (meaning, factors, laws of production- law of variable proportion, laws of returns to scale)

(f) Cost of Production (concept of costs, short-run and long-run costs, average and marginal costs, total, fixed and variable costs)
2. **Forms of Market**
   Pricing strategies in various forms of markets

3. **Money and Banking**
   (a) Definition of Money, Types, Features and Functions
   (b) Definition, functions, utility, principles of Banking
   (c) Commercial Banks, Central Bank
   (d) Measures of credit control and Money Market

**SECTION B – FUNDAMENTALS OF MANAGEMENT**

4. **Management Process**
   (a) Introduction, planning, organizing, staffing, leading, control, communication, co-ordination
   (b) Concept of Power, Authority, Delegation of Authority, Responsibility, Accountability
   (c) Leadership & Motivation – Concept & Theories
   (d) Decision-making - types of decisions, decision-making process.
## Contents

### SECTION A : ECONOMICS

#### Study Note 1 : Basic Concepts of Economics

1.1 Definition and Scope of Economics  
1.2 Few Fundamental Concepts

#### Study Note 2 : Theory of Demand and Supply

2.1 Demand  
2.2 Supply  
2.3 Equilibrium

#### Study Note 3 : Theory of Production

3.1 Meaning of Production  
3.2 Factors of Production and its Classification  
3.3 Production Functions  
3.4 Law of Variable Proportion  
3.5 Law of Return to Scale

#### Study Note 4 : Theory of Cost

4.1 Meaning of Cost  
4.2 Cost Functions  
4.3 Cost Curves  
4.4 Economies of Scale

#### Study Note 5 : Market

5.1 Meaning of Market  
5.2 Perfect Competition  
5.3 Imperfect Competition

#### Study Note 6 : Money

6.1 Definition of Money  
6.2 Function of Money  
6.3 Components of Money Supply  
6.4 Quantity Theory of Money
### Study Note 7: Bank

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>Meaning of Banking</td>
<td>103</td>
</tr>
<tr>
<td>7.2</td>
<td>Commercial Bank</td>
<td>103</td>
</tr>
<tr>
<td>7.3</td>
<td>Central Bank</td>
<td>109</td>
</tr>
<tr>
<td>7.4</td>
<td>Financial Institution</td>
<td>111</td>
</tr>
</tbody>
</table>

### Study Note 8: Money Market

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.1</td>
<td>Meaning of Market</td>
<td>119</td>
</tr>
<tr>
<td>8.2</td>
<td>Structure and Functions of Indian Money Market</td>
<td>120</td>
</tr>
</tbody>
</table>

### SECTION B: MANAGEMENT

#### Study Note 9: Management Process

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1</td>
<td>Introduction</td>
<td>127</td>
</tr>
<tr>
<td>9.2</td>
<td>Planning</td>
<td>133</td>
</tr>
<tr>
<td>9.3</td>
<td>Organising</td>
<td>138</td>
</tr>
<tr>
<td>9.4</td>
<td>Staffing</td>
<td>139</td>
</tr>
<tr>
<td>9.5</td>
<td>Leading</td>
<td>146</td>
</tr>
<tr>
<td>9.6</td>
<td>Control</td>
<td>146</td>
</tr>
<tr>
<td>9.7</td>
<td>Communication</td>
<td>152</td>
</tr>
<tr>
<td>9.8</td>
<td>Co-ordination</td>
<td>155</td>
</tr>
<tr>
<td>9.9</td>
<td>Directing</td>
<td>156</td>
</tr>
</tbody>
</table>

#### Study Note 10: Management – Concepts

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>Concept of Authority</td>
<td>179</td>
</tr>
<tr>
<td>10.2</td>
<td>Concept of Power</td>
<td>180</td>
</tr>
<tr>
<td>10.3</td>
<td>Delegation of Authority</td>
<td>181</td>
</tr>
<tr>
<td>10.4</td>
<td>Concept of Responsibility</td>
<td>187</td>
</tr>
<tr>
<td>10.5</td>
<td>Authority, Responsibility and Accountability</td>
<td>189</td>
</tr>
</tbody>
</table>

#### Study Note 11: Leadership and Motivation

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.1</td>
<td>Leadership</td>
<td>199</td>
</tr>
<tr>
<td>11.2</td>
<td>Characteristics of Leadership</td>
<td>200</td>
</tr>
<tr>
<td>11.3</td>
<td>Motivation</td>
<td>206</td>
</tr>
</tbody>
</table>
Study Note 12: Decision Making

12.1 Introduction 225
12.2 Types of Decision 225
12.3 The Decision – Making Process 226
Section - A
FUNDAMENTALS OF ECONOMICS
(Syllabus - 2016)
1.1 DEFINITION & SCOPE OF ECONOMICS

What is economics?
Economics is one of the social sciences. It explains about the economic activities of a man. Any activity which is related to earning of the money and spending of the money is called economic activity. Almost all people are engaged in economic activities, because they want to earn the money.

Subject Matter of Economics:
In economics, a want is something that is desired. Want is the starting point of economic activity. Wants leads to efforts. An effort leads to satisfaction. Wants $\rightarrow$ Efforts $\rightarrow$ Satisfaction.
This is the subject matter of economics. This subject matter of economics is divided into four parts.

(i) Consumption
(ii) Production
(iii) Exchange
(iv) Distribution

(i) **Consumption:** It is an act to use the goods or service to satisfy the wants. In economics, Consumption is typically defined as final purchased by an individual that are not investments of some sort. In other words when you buy food, clothes, a hair, airplane tickets, a car, etc., that’s consumption.
In someone buys a house to live in, that should be defined as consumption. If they buy a house to rent out it to someone else, that should be defined as an investment. Similarly, if they buy a car to drive, that’s consumption. If you buy a car to use as a taxi for a business, that could be construed as an investment. In short the reason for the purchase determines whether something is viewed as on investment or as consumption.

(ii) **Production:** In economics, Production involves the creation of goods and services by using resources. It is a process to change the raw materials into final/finished goods. It is nothing but creation of utility. To produce anything so many factors are essential. All these factors are classified into four categories. They are:

(a) Land
(b) Labour
(c) Capital
(d) Organization
(iii) Exchange: It means change of the goods from one person to another person. Once up on a time goods are exchanged for goods. It is called “Barter system.” To overcome the inconveniences in the barter system money was invented. Now the goods are exchanged for money. Price is essential for the exchange of goods for money.

(iv) Distribution: Distribution means sharing of the income among the factors of production. The total income which is generated by selling of these goods and services in the market must be distributed among the factors of production in the form of rent, wages, interest and profits.

There are two types of distribution

1. Micro distribution
2. Macro distribution

1. Micro Distribution

Micro distribution is nothing but pricing of factors of production. It means it explains how the price (rent) per a unit of land is determined. In the same way how the price per unit of labour is determined how the price per unit of capital is determined etc., are discussed.

Ricardian theory of rent, modern theory of rent, different wage theories, Interest theories profit theories etc are discussed.

2. Macro Distribution

Macro distribution means sharing of the total national income among the total factors of production. It means we came to know whether the income is distributed properly or not properly among the people in the society.

Modern economists extended the subject matter of economics. They added some other concepts to the economics. They are:

(a) Employment (b) Income (c) Planning and Economic development (d) International trade

1.1.2 Definitions of Economics:

The definitions of economics can be classified into four categories.

(a) Wealth definitions

(b) Welfare definitions

(c) Scarcity definitions

(d) Growth definitions

Wealth definitions: Almost classical economists followed wealth definition. It is mostly associated with J.B. Say and Adam Smith. Adam Smith was called “Father of economics”. The name of book written by Adam Smith is “An Enquiry into the nature and causes of Wealth of nations (1776)” Adam Smith delinked the economics from political economy and he explained it in a scientific manner.

Definitions:

According to J. B. Say, “economics is the study of science of wealth.”

According to Adam Smith, “economics is the science which deals with the wealth”.
According to the above definitions:-
• Economics explains how the wealth is produced, consumed, exchanged and distributed.
• According to Adam Smith man is an economic man.
• Economics is a science of study of wealth only.
• This definition deals with the causes behind the creation of wealth.
• It only considers material wealth.

Criticism:
This definition was criticized by so many philosophers they are Carlyle, Ruskin, Walrus, and Dickens and others.
According to critics, economics is a decimal science, Gospel of Mammon, bread and butter science, uncompleted science etc.
Wealth is of no use unless it satisfied human wants.
This definition is not of much importance to man and his welfare.

Welfare definition:
This definition was given by Alfred Marshall. He was the follower of Adam Smith. He wrote a famous book “Principles of economics” (or) “Principles of political economy” in 1870.

Definition:
“Economic is the study of mankind in ordinary business of life. It examines that part of Individual and social action which is most closely connected with the attainment and with the use of material requisites of well being”.

According to Alfred Marshall’s definition, economics is one side study of wealth on other and more important side is the study of part of man (or) welfare of the man.

Main Points:
1. According to this definition economic is a social science.
2. According to definition goods are classified into two types (or) categories
3. Material goods
4. Immaterial goods
5. According to Alfred Marshall economic is a normal science.
6. The top priority is given to man (or) welfare of man secondary priority is given to wealth.
7. Marshall enhanced the status of man from economic man to social man. Economics related only some material goods which promote the human welfare.

Criticism:
This definition was criticized by Lionel Robbins on the following grounds:
1. According to Robbins welfare definition is uncompleted definition.
2. According to Robbins economics must be neutral between ends.
3. According to Robbins economist must be as a describer not a describer.
4. Marshall neglected some materials goods which do not promote human welfare, but these goods are also produced; exchanged & consumed. So, they also come under the subject matter of economic

Example: Cigarette and alcoholic products.
Scarcity Definition/Robbins definitions
This definition was given by Lionel Robbins. He wrote a famous book “an essay on the nature and significance of economic science” (1932).

Definitions:
“Economics is a science which studies human behavior as a relationship between ends and scarce means which have alternative uses”. - Robbins

Main Points:
In the above definition
1. Wants are unlimited
2. Limited resources
3. Alternative uses of limited resources
4. Problem of choice

Merits:
1. According to this definition economics is an analytical science.
2. Economic turn into universal science.
3. According to Robbins. It is a positive science.
4. Neutral between ends.

Criticism:
These definitions also criticized by so many economists on the following terms:
1. It is not a universal science.
2. Not applicable to developed countries.
3. Not applicable to communist (or) dictatorship countries.
4. It is not applicable to developing countries like India.
5. It is an old wine in a new bottle.
6. It also neglected the dynamic concepts.

Growth Definition
This Definition was given by J.M. Keynes and P.A. Samuelson. It is associated with P.A. Samuelson. The name of book written by Samuel son was “Economics - An Introductory Analysis (1948). In this book he gave a new definition to economics.

Definitions
“Economic is the study of how men and society choose with ‘or’ without use of money to employ the scarce productive resources that would have alternative uses to produce various commodities over time for distribution them for consumption now or in future among the various persons and groups in the society. It Analysis the costs and benefits of improving pattern or resource [use allocation]. - P.A. Samuelson

Main points:
1. Like the scarcity definition it also accepts the unlimited wants and limited resource which have alternative uses.
2. According to Samuelson, the problem of scarcity of resources not only confined to present but also to the future. It means he introduced the concept of time element.

3. He also adopted a dynamic approach to the study of economics considering Economic Growth as an integral part of economics.

4. This definition includes Marshall’s welfare definition and Robbin’s scarcity definition.

**Scope of Economics**

| Traditional Approach | • Economics is a social science.  
|                      | • It studies man’s behaviour as a rational social being.  
|                      | • It considered as a science of wealth in relation to human welfare.  
|                      | • Earning and spending of income was considered to be end of all economic activities.  
|                      | • Wealth was considered as a means to an end – the end being human welfare. |
| Modern Approach      | • An individual, either as a consumer or as a producer, can optimize his goal is an economic decision.  
|                      | • The scope of Economics lies in analyzing economic problems and suggesting policy measures.  
|                      | • Social problems can thus be explained by abstract theoretical tools or by empirical methods.  
|                      | • In classical discussion, Economics is a positive science.  
|                      | • It seeks to explain what the problem is and how it tends to be solved.  
|                      | • In modern time it is both a positive and a normative science.  
|                      | • Economists of today deal economic issues not merely as they are but also as they should be.  
|                      | • Welfare economics and growth economics are more normative than positive. |

1.1.3 **MICRO AND MACRO ECONOMICS**

The terms ‘Micro’ and ‘Macro’ are introduced by Ragnar Frisch in economics. He is the Prof. of Oslo University in Britain. According to him the economics is studied in two ways i.e., Micro level and Macro level.

**Meaning of Micro economics:**

The word Micro is derived from Greek work ‘Mikros’. Which means very small or Millionth part? It studies about the behavior of Individual units. Individual units are a consumer, a producer, a firm or industry. Marshall developed the Micro economics very well. According to Marshall the Micro economics divide the economy into small units or small parts each part is studied. It explains how a consumer gets maximum satisfaction how the producer gets maximum output and how the firm gets maximum profits.

**Definition:**

Micro economics is study of particular firm particular household, individual prices, wages, incomes, individual Industries, particular commodities”. - *K. E. Boulding*

**Scope of Micro Economics:**

The Micro economics explains how the price of a good is determined and how the price per unit of factors of production is determined and it is also deals with theories of economics welfare. So Micro economics is called “Price theory”.
Users or significance of Micro economics:
1. Understanding the operations of economy
2. Economic welfare of people
3. Managerial economics

Macro Economics:
The word “Macro” is derived from Greek word “Makros”. Which means “large or very big”? The Macro economics studies the economy as a single unit. It does not deal with Individual units. It deals with the aggregates ‘or’ totals and averages.

For example: national income, full employment, total output, total investment, total consumption etc.

Definition:
According to Gardner Ackaly, “Macro economics is concerned with such variables as a aggregate volume of output of a economy with the extend to this resources are employed with the size of the national income and with the general price level.

Scope of macro economics:
Macro economics studies about the National Income i.e. calculation of the national income, trends in the national income etc., It also deals with total employment (full employment), total output etc., It also studies about trade cycles, Inflation etc., It also deals with theories of economic growth and macro theory of distribution. It is also called Income and Employment theory.

Both Micro and macro economics are interdependent. From 1930 onwards there is an importance to the Macro economics.

Scope of Macro economics can be explained by the following chart.
The Macro economics analysis some problems of the economy
1. Level of output and employment
2. Fluctuate in level of output, employment and National Income
3. Changes in the general price level
4. Economic growth and economic development
5. Theories of distribution

Significance of Macro economics:
1. Understanding the working of an economy
2. Formulating policies
3. Prepare the economics plans
4. Take the remedial measures of trade cycles & Inflation

WHETHER THE ECONOMICS IS SCIENCE OR ART

Meaning of Science:
The term science implies:-
1. A systematic body of knowledge which traces the relationship between cause and effect.
2. Observation of certain facts, systematic collection and classification and analysis of facts
3. Making generalization on the basis of relevant facts and formulating laws or theories there by.
4. Subjecting in the theories to the test of real world observations.
5. Like the physics chemistry and botany economics also satisfy the above four characteristics. Economics is regard as science.

Economics as an Art:
Keynes defines Art as ‘a system of rules for the attainment of a given end”. The object of Art is to formulate rules to be used for the formulation of policies.

Difference between science and Art:
1. Science is theoretical but art is practical.
2. A science teaches us “to know”, an Art teacher us “to do”.
3. Economics as a science in methodology and Art in its application.
4. Economics is both science and Art.

WHETHER THE ECONOMICS IS POSITIVE SCIENCE ‘OR’ NORMATIVE SCIENCE?

Economics as a positive science:
1. The positive science explains “what it is” but not “what ought to be”
2. It explains about the things as they are
3. It does not deal with value judgments.
4. According to Lionel Robbins economics is a Positive science.
Economics as a Normative Science:
1. A normative science explains what ought to be and what not ought to be.
2. It does relates to value judgments
3. It deals with good & bad (or) right and wrong.
4. According to Alfred Marshall economics is a normative science.
5. Economics is both positive and normative science

DEDUCTIVE METHOD AND INDUCTIVE METHOD

Deductive Method:
1. It is also called prior method, abstract method and analytical method.
2. In this method the laws or theories are prepared on the basis of fundamental assumptions.
3. In this method the logic proceeds from general to particulars.
   - For example: law of D.M.U, law of equi-marginal utility law of consumer surplus etc.

Inductive Method:
1. This method is also known as historical method ‘or’ statistical method.
2. In this method the laws ‘or’ theories are prepared on the basis of facts ‘or’ statistical data.
3. In this method the logic proceeds from particular to general.
   - For example: law of variable proportions, law of returns to scale, population theories etc.

Central Problems of All economies

Due to the scarcity of resources every economy should faces some problems. The central problems of all economics are explained as follows:

What to produce
If the present is given importance the resources are diverted for the production of consumer goods. If future is given importance resources are diverted for the production of capital goods.

How to produce
This problem is arising because of unavailability of some resources. A country may produce by labour Intensive technique ‘or’ capital Intensive technique, depending upon its man power and stock of capital.

For whom to produce
A country may produce mass consumption goods at a large (for poor people) ‘or’ goods for upper classes. It is depend upon policies of the government.
1.2 Few Fundamental Concepts

1. Wealth:
   The stock of goods under the ownership of a person ‘or’ a nation is called wealth.
   (a) Personal wealth:
       The stock of goods under the ownership of a person is called personal wealth.
       For example: houses, buildings, furniture, land, money in cash, company shares, stocks of
       other commodities etc., health, goodwill etc. can also be considered to be the parts of Individual
       wealth. But in economics only transferable goods are considered as wealth.
   (b) National Wealth:
       The stock of goods under the ownership of a nation is called national wealth. It includes the
       wealth of all the citizens in the country. For example: Natural resources, roads, parks, bridges,
       hospitals, public education institutions etc., If the citizen of the country holds a government
       bond it is personal wealth. But from the government point of view it is a liability. So, it should not
       be considered the part of wealth of nation.

Wealth and Welfare:
Welfare means well-being ‘or’ happiness. In generally, if the wealth increases welfare also increase
but:
1. If a nation goes on creating wealth without paying any consideration to the health and mental
   peace of citizens. It is doubtful whether the welfare increases.
2. If the wealth is not distributed properly. It is also doubtful whether welfare increases.

2. Money:
   Anything which is widely accepted in exchange of goods or in settling debts is regarded as money. Once
   upon a time Barter system was prevailed.
   1. When some commodities used as a medium of exchange by customs. It is called customary money.
      For example: The use of cowries in ancient India as a medium of exchange.

Constituents of Money Supply:
1. Rupee notes and coins to be public
2. Credit cards
3. Traveler cheques

3. Market:
   In ordinary language the term market refers to a place where the goods are bought and sold. But in
   economics it refers to a system by which the buyers and sellers established contact with each other
directly ‘or’ indirectly with a view to purchasing and selling the commodity.

Function of the Market:
1. To determine the price of the goods.
2. To determine the quantity of goods [supply]

Market Mechanism:
Market Mechanism means the totality of all markets i.e. the markets were all goods and services in the
market. The market mechanism determines the prices and quantities brought and sold of all the goods
and services.
4. **Investment**: An increasing the capital stock is called Investment.

**Types of Investment:**

(a) **Real Investment**:  
An increasing the real capital stock is called real investment. For example machines, raw material, buildings and other types of capital goods.

(b) **Portfolio Investment**:  
The purchasing of new shares of a company is called portfolio investment.

**Note**: Purchasing of an existing share from another share holder is not an investment. Because it cannot be increase the capital stock of the company.

It is savings that are invested:
\[ Y = C + S \]
(or)
\[ Y = C + I \]
\[ S = I \]

• Note: if there is foreign investment then \( S \neq I \).

**Gross Investment and Net Investment:**

The Aggregate Investment made by an economy during a year is called gross investment. The gross investment includes

(a) **Inventory Investment**:  
Investment in raw materials, semi finished goods and finished goods are called inventory investment.

(b) **Fixed Investment**:  
Investment made in fixed assets like machines, building, factories shares etc. is called fixed investment.

**Net Investment:**

By deducting the depreciation cost of capital from gross investment the net investment can be obtained.

Net Investment = Gross Investment – Depreciation

5. **Production:**

It refers to creation of goods for the purpose of selling them into the market. In one word production means ‘Creation of utility’. When a child make a doll for playing for her enjoyment of this activity. It is not called production but the doll maker who sells these dolls in the market is engaged in production.

**Factors of production:**

The goods and services with the help of which the process of production is carried out are called factors of production. Total factor of production.

1. Land
2. Labour
3. Capital
4. Organization
The factors of production are also called Inputs. The goods and services produced with the help of Inputs are called output.

6. Consumption:
Consumption is defined as the satisfaction of human wants through the use of goods and services.
Determinants of consumption:
1. Present Income
2. Future income
3. Wealth income

7. Saving:
Saving is defined as income minus consumption. Whatever is left in the hands of an individual after meeting the consumption expenditure is called saving. Saving is generated out of current income and also out of past income.

8. Income:
The net inflow of money (purchasing power) of a person over a certain period of time is called income. For example: Daily income, weekly income, monthly income and yearly income.

Wealth and Income:
A person (‘or’ a nation) consumes a part of income and saves the rest. These savings are accumulated in the form of wealth. Wealth is a stock owned at a point of time. Income is a flow, over a period of time.

9. The concept of consumer surplus:
This concept was introduced by Alfred Marshall. This concept is derived from law of diminishing marginal utility. Consumer surplus is the difference between willing price and actual price.

\[ C.S. = \text{Willing Price} - \text{Actual Price} \]

or

\[ C.S = \text{Demand Price} - \text{Market Price} \]

Definition:
The excess of price which a consumer would be willing to pay for a thing rather than go without the thing and over what he actually does pay.

10. LAW OF DIMINISHING MARGINAL UTILITY:
The law of D.M.U explains the common experience of every consumer. It is based upon one of the characteristics of wants i.e. “A particular want is suitable”. According to this law when a person goes on increasing in the consumption of any one commodity the additional utility derived from the additional unit goes on diminishing. So, it is called law of diminishing marginal utility. The law of D.M.U was firstly profounded by H.H. Gossan in 1854. So, it is called Gossans’ first law of consumption. The law of D.M.U was developed by Alfred Marshall.

Definition:
“The additional benefit which a person derives from a given increase his stock of anything, diminishes with every increase in the stock that he already has”. - Marshall
Concepts in this law:

1. Total utility:
   It is the total amount of satisfaction obtained by the consumer by the consumption of total units of a thing. The sum of marginal utilities is also called total utility.
   \[ TU_x = f(Q_x) \]
   \[ Or \]
   \[ TU_x = \sum MU_x \]

2. Marginal Utility:
   It is the additional utility obtained by the consumer by the consumption of additional unit of a thing ‘or’ one more unit of a thing. The change in the total utility is also called marginal utility.
   \[ MU_x = \frac{\Delta TU}{\Delta P} \]
   \[ Or \]
   \[ MU_n = TU_n - TU_{n-1} \]

Table explanation:

<table>
<thead>
<tr>
<th>Units</th>
<th>Total utility</th>
<th>Marginal utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>70</td>
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</tr>
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</tr>
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<td>4</td>
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</tr>
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<td>0</td>
</tr>
<tr>
<td>6</td>
<td>90</td>
<td>-10</td>
</tr>
</tbody>
</table>

Diagrammatic Explanation:

**Fig:** Marginal Utility & Total Utility Curve
Main Points:
1. When total utility increases, then the marginal utility diminishing. So, T.U. Curve is upwards left to right and M.U curve slope downwards from left to right.
2. When the total utility reached the maximum, then the marginal utility is zero. At this point T.U curve reached the peak stage and M.U curve intercepts 'X' axis.
3. When the total utility goes on diminishing then the M.U becomes negative. So, the T.U curves slopes downwards and M.U curve crossed the x-axis.

Assumptions:
1. The units are Homogeneous.
2. The units must be reasonable size.
3. There is a onetime gap between one unit of consumption and other unit of consumption.
4. There is no changes in the taste, preferences of consumer.

Exceptions:
1. Collection of the rare goods.
2. Hobbies
3. Misers
4. Money and gold
5. Reading ‘or’ books

Importance:
1. Value paradox
2. Basis for economic laws
3. Finance Minister
4. Re-distribution of wealth

12. DEMAND FORECASTING:
The success of the business firm depends upon the successful demand foraging. Estimation of future demand for product at present is called demand forecasting.

Methods of Demand forecasting:
1. Expert opinion method
2. Survey of buyers intensions
3. Collective opinion method
4. Controlled experiments
5. Statistical method.

13. PRODUCTION POSSIBILITY CURVE (PPC):
The PPC is also called production possibility frontier, production possibility boundary and production transformation curve. The PPC curve shows the varies combinations of two commodities that can be produced by an economy with the given resources and given technology.
Main points:

1. The PPC curve always slopes downwards form left to right. Because when the production of one commodity is increase, the production of another commodity will be foregone.

2. It is concave to the origin because MRT goes on increasing.

3. The slope of the PPC at any given point is called Marginal rate of transformation (MRT). The slope defines the rate at which production of one good can be redirected into production of other. It is also called opportunity cost.

Note:

- If the PPC curve is straight line, the opportunity cost is constant.
- All the combinations which lie on the PPC curve are possible combinations.
- The points beyond the PPC curve are impossible combinations.
- Shift of the PPC curve is nothing but economic growth.
- Any point which lies below the PPC curve is possible combination. But if the economy is working below the PPC curve that indicates the unused resources ‘or’ unemployment.

I. Choose the correct answer

1. Who was the father of Economics
   (a) Marshall  (b) Adam smith  (c) Robbins  (d) Keynes

2. Normative Economic theory deals with .....
   (a) What to produce  (b) How to produce
   (c) Whom to produce  (d) How the problem should be solved

3. Cetris peribus means
   (a) Demand constant  (b) supply constant
   (c) Other thing being constant  (d) none
   (a) Economy as a whole  (b) Individual units  
   (c) Economic growth  (d) all the above
5. In economics goods includes material things which …
   (a) A can be transferred (b) can be visible  (c) both A & B  (d) None
6. Human wants are
   (a) limited  (b) unlimited  (c) undefined  (d) none
7. Nature of PPF curve is …
   (a) convex to the origin (b) concave to the origin (c) both (d) none
8. If PPF is linear it implies …
   (a) constant opportunity cost  (b) diminishing apart cost  
   (c) Increasing opportunity cost (d) none
9. Any point beyond PPF is …
   (a) attainable  (b) unattainable  (c) both  (d) none
10. If an economy is working at the point left to PPF curve that shows…
    (a) Full employment  (b) unemployment  (c) excess production (d) none

II. Fill in the blanks
1. According to __________ Economics is the study of science of wealth.
2. According to _______ definition economic is a social science.
3. According to ______ top priority is given to man.
4. According to ______ Robbins Economics must be ___ between ends.
5. Alternative uses of limited resources leads to ______
6. According to ____ definition Economics analytical science.
7. Growth definition is mostly associated with _____
8. ___definition includes welfare definition and scarcity definition.
9. In deductive method the logic proceed from ___ to ___.
10. In inductive method the logic proceed form ____ to ____.

III. State the statements true or False
1. According to Adam Smith man is economic man ( )
2. According to Marshall Economic is normative science ( )
3. Positive science related with J.B. Say ( )
4. The terms micro & macro are introduced by Ragnar Frisch ( )
5. Science is practical, but Art is theoretical ( )
6. Positive science does not related to value judgments ( )
7. Gross investment = net investment + depreciation ( )
8. Consumption depends not only on present income but also future income
9. Value paradox was depicted by law of demand
10. PPC is also called PPF

IV. Matching
1. Principles of economics ( ) A. Analytical method
2. Wealth of nations ( ) B. Price theory
3. An essay on the nature and significance of economic science ( ) C. Historical method
4. Economic an introductory analysis ( ) D. Marshall
5. Micro Economics ( ) E. MRT
6. Macro Economics ( ) F. Production
7. Deductive method ( ) G. Adam Smith
8. Inductive method ( ) H. P.A. Samuelson
10. Creation of utility ( ) J. Robbins

V. Give the answer in one (or) two sentences
1. Define wealth
The stock of goods under the ownership of a person ‘or’ a nation is called wealth. There are two types of wealth i.e.
1. Personnel wealth: Example: houses, buildings, furniture, cars etc.
2. National wealth: Example: natural resources, roads, parks, bridges etc.

2. What is money
Anything which is wide accepted in exchange of goods or in settling debts is regard as money. Once upon a time Barter system was prevailed.

3. Market
In ordinary language the term market refers to a place where the goods are bought and sold. But in economics it refers to a system by which the buyers and sellers established contact with each other directly ‘or’ indirectly with a view to purchasing and selling the commodity.

4. Real Investment
An increasing the real capital stock is called real investment. For example machines, raw material, buildings and other types of capital goods.

5. Portfolio Investment
The purchasing of new shares of a company is called portfolio investment.

11. Income
The income of a person means the net inflow of money (or purchasing power) of this person over a certain period. For instance, an industrial worker’s annual income is his salary income over the year. A businessman’s annual income is his profit over the year.
Important Question

1. Explain about wealth definition.
2. Explain about welfare definition.
3. Explain about scarcity definition.
4. Explain about Growth definition.
5. Distinguish between micro and macro economics.
6. State whether the economic is science of Art.
7. State whether the economics is positive or normative science.
8. Explain about the control problem of all economics.
9. Define the wealth and its types.
10. Explain the relationship between wealth and welfare?
11. What is money and state its constitutes?
12. Define the market and explain its functions.
13. What is meant by investment? And its types?
14. What is production and what are the factors of production?
15. What is consumption and its determination?
16. Relationship between income and wealth.
17. Relationship about consumer’s surplus.
18. Explain about the law of Diminishing marginal utility.
19. What is demand forecasting and state its methods?
20. Explain about production possibility curve.

Key:

1. B
2. D
3. C
4. B
5. C
6. B
7. B
8. A
9. B
10. B
II.
1. J.B. Say
2. Welfare
3. Marshall
4. Neutral
5. Problem of choice
6. Scarcity
7. P.A. Samuel Son
8. Growth
9. General to particular
10. Particular to general

III.
1. True
2. True
3. False
4. True
5. False
6. True
7. True
8. True
9. False
10. True

IV.
1. D
2. G
3. J
4. H
5. B
6. I
7. A
8. C
9. E
10. F
2.1 Demand
- Law of Demand
- Causes – Downward Sloping Demand Curve
- Exceptions
- Types
- Change in Demand and Change in Quantity Demand
- Elasticity of Demand

2.2 Supply
- Law of Supply
- Exception
- Change in Law of Supply
- Determinants of Supply
- Elasticity of Supply

2.3 Equilibrium

2.1 DEMAND

Meaning of Demand
In order language demand means ‘desire’. But in economics demand means desire backed by the purchasing power and willing to pay the price.

Law of Demand:
It explains the functional relationship between price and quantity demanded. According to law of demand when all other things remain constant, if the price rises demand is decreased, if the price falls demand will be increased. It means there is an inverse relationship between price and demand.

\[ D_x = f \left[ P_x \right] \]

Demand Schedule:
It shows the various quantities of the goods that are demanded at various levels of prices. There are two types of demand schedules:
1. Individual Demand Schedule
2. Market Demand Schedule.

1. Individual Demand Schedule:
It shows the various quantities of goods that are demanded by an individual at various levels of prices in the market.

<table>
<thead>
<tr>
<th>Price</th>
<th>Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
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<td>40</td>
</tr>
<tr>
<td>1</td>
<td>50</td>
</tr>
</tbody>
</table>
Individual Demand Curve:
From the demand schedule we can derive demand curve

![Individual Demand Curve]

Fig: 2.1 Individual Demand Curve

2. Market Demand Schedule:
It shows the various quantities of the goods that are demand by all the consumers in the market at various levels of prices in the market. When the individual demands are added market demand can be obtained.

<table>
<thead>
<tr>
<th>Price of Good ‘x’</th>
<th>Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>8</td>
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<td>175</td>
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<tr>
<td>4</td>
<td>250</td>
</tr>
<tr>
<td>2</td>
<td>350</td>
</tr>
</tbody>
</table>
Whether the individual demand curve or market demand curve slopes downwards from left to right because there is an inverse relationship between price and demand.

**Causes for falling nature of Demand Curve ie. downward sloping demand curve:**

There are many reasons for the falling nature of demand curve. Some of the reasons are explained as follows:

1. **Law of diminishing marginal utility:**
   According to law of diminishing marginal utility when the quantity of goods is more the marginal utility of the commodity will be less. So the consumer demands more goods when the price is less. That is why, the demand curve slopes downwards from left to right.

2. **Substitution effect:**
   In the case of substitutes if the price of commodity ‘x’ rises relatively to the other good ‘y’ the consumer will buy less of commodity ‘x’ and buy more of the good ‘y’ which has become relatively cheaper. This is called substitution effect. So the demand curve slopes downward.

3. **Income effect:**
   The income effect tells that the real income of the consumer rises due to the fall in the price level. So they purchase more and more goods when the price falls. This is said to be the income effect.

4. **New buyers:**
   When the price of a commodity decreases the new consumers are attracted to that commodity because when the price level falls it becomes cheaper good than before. So the demand will rise with the price falls.

5. **Old buyers:**
   When the price of anything decreases the old buyers purchase more goods than before. So the demand will be increased. That is why, the demand curve slopes downward from left to right.

**Exceptions of the Law of Demand:**

The law of demand is a general statement stating that price and quantity demanded of a commodity are inversely related. But in certain situations, more will be demanded at a higher price and less will be demanded at a lower price. In such cases, the demand curve slopes upward from left to right which is called an exceptional demand curve as shown in the following diagram.
When price increases from OP to OP1, quantity demanded also increases from OQ to OQ1. This is contrary to the Law of Demand. The following are the exceptions to the Law of Demand.

1. **Giffen Paradox (Necessary goods):**
   In the case of necessary goods the law of demand cannot be operated. This is observed by British economist, the Sir Robert Giffen. He observed in London the law paid workers purchases more of bread when its price rises. That’s why, this situation is known as Giffen Paradox.

2. **Speculation:**
   Sometimes the price of a commodity might be increasing and it is expected to increase still further. The consumer will buy more of the commodity at the higher price than they did at the lower price. It is contrary to law of demand.

3. **Conspicuous:**
   These are certain goods which are purchased to project the status and prestige of the consumer. For e.g.: expensive cars, diamond jewellery, etc. such goods will be purchased more at a higher price and less at a lower price.

4. **Shares or Speculative market:**
   It is found that people buy shares of that company whose price is rising on the anticipation that the price will rise further. On the other hand, they buy less shares in case the prices are falling as they expect a further fall in price so such shares. Here the law of demand fails to apply.

5. **Bandwagon effect:**
   Here the consumer demand of a commodity is affected by the taste and preference of the social class to which he belongs to. If playing golf is fashionable among corporate executive, then as the price of golf accessories rises, the business man may increase the demand for such goods to project his position in the society.

6. **Illusion:**
   Sometimes, consumers develop a false idea that high priced goods will have a better quality instead of a low priced good. If the price of such a good falls, they feel that its quality also deteriorates and they do not buy, which is contrary to the law of demand.

**Demand function:**

The demand function explains the functional relationship between demand for a commodity and determinants of the demands. This can be explained by the following equation.
Dn = f (Pn, Psc, Y & T)

Dn = Demand for commodity ‘n’
f = functional relationship
Pn = Price of commodity ‘n’
Psc = Prices of substitute and complementary goods.
Y = Income of the consumer.
T = Tastes and preference of the consumer.

Determinants of demand:
The demand for any commodity is depend upon so many factors. These factors are called determinants of demand. They are:

1. Price of the goods:
The demand for any commodity firstly depends upon its price. When the price rises demand decreases, when the prices falls demand increases.

2. Prices of the substitute goods:
The demand for any commodity not only depends upon its price but also the prices of its substitute goods. For example, tea and coffee. Here the demand for tea depends upon price of the coffee.

3. Prices of the complementary goods:
The demand for a commodity also depends upon the price of its complementary goods. For example, car and petrol. Here demand for petrol depends upon price of the car.

4. Income of the consumer:
The income of the consumer also influences the demand for a commodity. When the income rises people purchase the more quantity of goods. When the income falls they purchase less quantity of goods.

5. Tastes and preferences of the consumer:
The tastes and preference of the consumer can also determine the demand for a commodity. When the tastes are changed, the demand for goods also changed.

6. Population:
When the population is increased, the demand for goods also increases. When the population decreases demand also decreases.

7. Climate:
The climatic conditions also can influence the demand. In hot climatic conditions cool drinks are demanded. In rainy season umbrellas are demanded.

Types of Demand:
There are three types of demands. They are:

1. Price demand
2. Income demand
3. Cross demand

1. Price Demand:
Price demand explains the relationship between price of a commodity and demand for that commodity. There is an inverse relationship between price and demand. So, the price demand curve slopes downwards from left to right.

Dx = f (Px)
2. Income Demand:

Income demand explains the functional relationship between income of consumer and demand for goods. Generally if the level of income rises the consumer purchases more of goods. If the level of income decreases he purchases less quantity goods. It means there is a direct proportional relationship between income of consumer and demand of goods. So, normally the income demand curve slopes upwards form left to right.

\[ D_x = f [y] \]

The income demand curve is in two types:

In case of superior goods ‘or’ normal goods the income demand curve [I.D.] slopes upwards from left to right. Superior goods mean ‘best quality goods’.

In the case of Inferior goods the I.D. slopes downwards form left to right inferior goods means “less quality goods”.

**Inferior goods**

### Normal goods/ superior goods

![Graph of Normal goods/ superior goods](image)

**Fig: 2.5**
3. Cross Demand:

It shows the relationship between price of one commodity and demand for another commodity. It means the demand for one commodity not only depend upon its price but also depend upon the prices its substitute goods and complementary goods.

\[ D_x = f [P_y] \]

The cross demand curve is in two types:

1. **Substitute goods:**
   - If one good is used in the place of other good to satisfy the same want they are called substitute goods.
   - **Example:** Tea & coffee, pen & pencil etc.
   - In the case of substitute goods there is a direct proportion relationship between price of one commodity and demand for another commodity. So, the crossed demand curves [CD] In this case upward from left to right.

2. **Complementary goods:**
   - If two ‘or’ more goods are used to satisfy the single want they are called complementary goods.
   - **Example:** Milk, sugar, tea powder etc., are complementary for tea, cement, bricks, iron etc., are complementary for construction work. In this case of complementary there is inverse relationship between price of one commodity and demand for another commodity. So, C.D In this case slopes downwards from left to right.

![Complementary Goods and Substitute Goods Diagram](image)

**Changes in Demand and Change in Quantity Demand:**

If there is a change in the determinants of a demand that leads to the change in demand. These changes in demand are two types. They are

1. Extension and contraction of demand
2. Increase and decrease of demand
1. **Extension and Contraction of Demand:**

When all other things remain constant if there is a change in the price that leads to the change in demand. These changes in demand are called extension and contraction of demand. When the price is decreased the demand is extended when the price is increased the demand is contracted. To explain the extension and contraction of demand a single demand curve is enough.

![Diagram](image1)

**Fig: 2.7**

2. **Increase and decrease of demand**

When the price is constant. If there is a change in the other determinants that lends to change in demand. These changes in demand are called “Increase and decrease of demand”. To explain the increase and decrease of demand single demand curve is not enough. It means new demand curves are formed.

1. When the demand is increased, the new demand curve is formed towards right to old demand curve ‘or’ preceding demand curve.
2. In the same way when the demand is decreased the new demand curve is formed towards left to old demand curve ‘or’ preceding demand curve.

![Diagram](image2)

**Fig: 2.8**
Elasticity of Demand

Meaning of Elasticity of demand
Elasticity means sensitiveness ‘or’ responsiveness. Elasticity of Demand means response in demand. The elasticity of demand explains change in demand due to the change in the determinants of the demand.

Type of Elasticity of demand
There are three types of elasticity of demand. They are:
1. Price elasticity of demand.
2. Income elasticity of demand
3. Cross elasticity of demand.

1. Price Elasticity of Demand:
It shows the relationship between proportionate change in the demand and proportionate change in the price. It means it explains how much change in the price and it leads to how much change in the demand.

\[
E_p = \frac{\text{Proportionate Change in Demand}}{\text{Proportionate Change in Price}}
\]

\[
E_p = \frac{dq}{dp} \frac{P}{q}
\]

Definition:
“Elasticity of demand in a market great or small according to the demand increases much ‘or’ little for a given fall in the price and diminishes much ‘or’ little for a given rise in the price” – Marshall

“Elasticity of demand is a degree of responsiveness of demand as a result of change in price.
– Mrs. John Robinson

Types of price elasticity of demand:
There are five types of price elasticity of demand
1. Perfectly elastic demand (EP= ∞)
2. Perfectly Inelastic demand (EP = 0)
3. Relatively elastic demand (EP > 1)
4. Relatively Inelastic demand (EP< 1)
5. Unitary elastic demand (EP = 0)

1. Perfectly elastic demand (EP= ∞):
When the price is constant if there is a change in demand it is said to be perfectly elastic demand. It means the demand may be increase ‘or’ decrease without change in price. Here the value of EP is infinity.
The demand curve in this case parallel to OX axis>

2. Perfectly Inelastic demand (\( EP = 0 \)):

When the price is changed if there is no change in the demand it is said to be perfectly inelastic demand. It means the price may be increase ‘or’ decrease but the demand is constant. Here the value of \( E_P = 0 \).

The demand curve in this case parallel to OY axis.

3. Relatively elastic demand (ex: luxury goods):

If the proportionate change in demand is more than proportionate change in the price, it is said to be relatively elastic demand. It means a little change in the price leads to more change in demand. Here the value of \( E_P \) is greater than one. The demand curve in the case slopes downward from left to right.
4. Relatively Inelastic demand (ex: necessary goods)

If the proportionate change in demand is less than proportionate change in the price. It is said to be relatively inelastic demand. It means a more change in the price leads to less change in demand. Here the value of EP is less than one. The demand curve in this case slopes downwards from left to right. But is steeper than relatively elastic demand.

5. Unitary elastic demand:

If the proportionate change in the demand is equal to the proportionate change in the price. It is said to be unitary elastic demand. It means the change in the demand and change in price are same. Here the value of EP is 1. Generally comfort goods have unitary elastic demand unitary elastic demand curve also slopes downwards from left to right but it is rectangular Hyperbola.
Income elasticity of demand:

It shows the proportionate change in demand and proportionate change in income. It means it explains how much change in the income and it leads to how much change in demand

\[
E_p = \frac{\text{Proportionate Change in Demand}}{\text{Proportionate Change in Income}}
\]

\[
E_Y = \frac{dq}{dy} \cdot \frac{Y}{q}
\]

Types:

- Perfectly elastic Income demand \((E_Y = \infty)\)
- Perfectly Inelastic Income demand \((E_Y = 0)\)
- Relatively elastic Income demand \((E_Y > 1)\)
- Relatively Inelastic Income demand \((E_Y < 1)\)
- Unitary elastic Income demand \((E_Y = 1)\)

1. **Perfectly elastic Income Demand**

   When the income is constant if there is a change in the demand. It is said to be perfectly elastic income demand. It means the demand may be increase or decrease without change in income. Here the value of \(E_Y\) is infinity. The demand curve in this case parallel to OX- axis.

2. **Perfectly Inelastic Income demand**:

   When the income is changed if there is no change in the demand it is said to be perfectly inelastic income demand. It means the income may be increase or decrease but the demand is constant. Here the value of \(E_Y\) is zero. The demand curve in this case parallel to OY – axis.

3. **Relatively elastic Income Demand**:

   If the proportionate change in the demand is more than proportionate change in income. It is said to be relatively elastic income demand. It means a little change in the income leads to more change in demand. Here the value of \(E_Y\) is greater than one. The demand curve in this case slopes downwards from left to right.
4. Relatively Inelastic Income Demand:
If the proportionate change in the demand is less than proportionate change in income. It is said to be relatively inelastic income demand. It means a more change in the income leads to less change in demand. Here the value of EY is less than one. The demand curve in this case slopes upwards from left to right.

5. Unitary elastic income demand:
If the proportionate change in the demand is equal to proportionate change in income. It is said to be unitary elastic income demand. It means the change in the income and changes in the demand are same. Here the value of EY is one. The demand curve in this case also upward from left to right.

Cross elasticity of demand:
It shows proportionate change in the demand for one commodity and proportionate change in the price of other commodity. It means it explains how much change in the price of one commodity and it leads to how much change in the demand for another commodity.

\[ E_c = \frac{\text{Proportionate Change in Demand for goods 'x'} \times \text{Proportionate Change in Price for goods 'y'}}{\text{Proportionate Change in Price for goods 'y'}} \]

\[ E_c = \frac{dq_x}{dp_y} \times \frac{p_y}{q_x} \]

Methods of Measurement of elasticity of demand:
There are four methods to measure the elasticity of demand. They are:
1. Percentage method
2. Total outlay method
3. Point method
4. Arc method

1. Percentage Method:
In this method to measure the elasticity of demand firstly we should find out the change in demand and change in price in percentages. Then the following formula can be used.

\[ E_p = \frac{\text{Proportionate Change in Demand}}{\text{Proportionate Change in Price}} \]

2. Total outlay Method:
In this method on the basis of relationship between price and total expenditure Elasticity can be decided
- If the total expenditure increases with the falling of the price and decrease with the raising of the price. It is said to be relatively elastic demand (\( E_p > 1 \)).
- If the total expenditure is constant even the price increase ‘or’ decrease it is said to be unitary elastic (\( E_p = 1 \)).
- If the total expenditure decreases with the falling of the price and increase with the raising of the price. It is said to be relatively inelastic demand (\( E_p < 1 \)).
### Table

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<th>Total Outlay</th>
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<td>400</td>
</tr>
<tr>
<td>4</td>
<td>90</td>
<td>360</td>
</tr>
</tbody>
</table>

#### 3. Point Method:

In this method, the elasticity of demand can be measured at a particular point on the demand curve. In this method, the following formula can be used.

\[
E_p = \frac{\text{Lower Segment}}{\text{Upper Segment}}
\]

Let us assume the total length of the demand curve is - 40cm. AB is the demand curve in the diagram. How the elasticity of demand can be measured on the demand curve is explained in the following way.

![Diagram of demand curve with points labeled](image)

**Fig: 2.14**

\[
E_p \text{ at point '}p' = \frac{PB}{PA} = \frac{20}{20} = 1
\]

\[
E_p \text{ at point '}P_1' = \frac{PB}{PA} = \frac{10}{30} = 0.33
\]

\[
E_p \text{ at point '}P_2' = \frac{PB}{PA} = \frac{30}{10} = 3
\]

\[
E_p \text{ at point '}P_3' = \frac{PB}{PA} = \frac{40}{0} = \infty
\]

\[
E_p \text{ at point '}P_4' = \frac{PB}{PA} = \frac{0}{40} = 0
\]
4. Arc Method:

If there are small changes in demand and prices it is not possible to measure the elasticity of demand by the point method. So, the Arc method is introduced. In this method the following formula can be used.

\[ E_p = \frac{\text{change in demand}}{\text{1st demand} + \text{2nd demand}} + \frac{\text{change in price}}{\text{1st demand} + \text{2nd demand}} \]

\[ = \frac{q_2 - q_1}{q_1 + q_2} \div \frac{p_2 - p_1}{p_1 + p_2} \]

<table>
<thead>
<tr>
<th>Price</th>
<th>Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 p_1</td>
<td>1000 q_1</td>
</tr>
<tr>
<td>1 p_2</td>
<td>2000 q_2</td>
</tr>
</tbody>
</table>

\[ = \frac{1000}{1000 + 2000} \div \frac{-1}{112} \]

\[ = \frac{1000}{3000} \div \frac{3}{-1} = -1 \]

= unitary

**Importance of Elasticity of Demand**

The concept of elasticity of demand is of great practical importance in the sphere of government finance as well as in trade and commerce.

(i) Business Decision:

If the product has more elastic demand the business man fixes the less price, if the good has less elastic demand he will fix the more price.

(ii) Monopolist:

The monopolist fixes the more price in one market in which the elasticity of demand is less. And less price in more elastic demand market for the same thing (or) same good.

(iii) Determination of factor price:

The concept of elasticity of demand also helps in determining the price of various factors of production. Factor having in elastic demand gets higher price and factors having elastic demand gets lower price.

(iv) Route for international trade:

If demand for exports of a country in inelastic, that country will enjoy a favorable terms of trade while if the exports are more elastic than imports, then the country will lose in the terms of trade.

(v) To the government:

The concept of elasticity of demand also enable the government to decide as to what particular industries should be declared as ‘public utilities’ to be taken over and operated by the state.

**Determinants of Elasticity of Demand:**

(i) Nature of the commodity

(ii) Availability of substitutes

(iii) Variety of uses

(iv) Possibility of postponement of consumption

(v) Durable goods
(i) Nature of the commodity:
In the case of necessaries the demand is less elastic (or) comparatively inelastic. For example rice, salt, pulses, matchbox etc.

On the other hand the elasticity of demand for luxuries is more elastic. For example, TV, DVD players, Gold, Diamonds etc.

Comfort goods have unitary elastic demand.

(ii) Availability of substitutes:
If a commodity has substitute goods, the elasticity for that commodity is more elastic. For example, Lux soap, pears soap, ponds and Lakme creams.

(iii) Variety uses:
If the goods have several uses, the elasticity of demand for it is more elastic. For example, milk, coal, electricity etc.

(iv) Possibility of Postponement of consumption:
There are certain goods which can be postponed for purchase. In case of these goods, the demand is elastic. But in the case of life saving medicines the demand will be inelastic because we cannot postpone the purchase of such goods.

(v) Durable goods:
In case of durable goods the elasticity of demand will be less, but in case of perishable goods the elasticity of demand will be more.

2.2 SUPPLY

Meaning of supply:
There is a difference between stock of the goods and supply of goods. Supply means some of the part of stock of the goods which is prepared by a seller to sell at a particular price, at a particular market in a particular period of time.

Law of supply:
It explains the functional relationship between price of a good and supply of the good. When all other things remain constant. If the price rises supply also increase, if the price falls supply will be decrease. It means there is direct proportional relationship between price and supply.

Supply Schedule:
It shows the various quantities of the goods that are supplied at various levels of prices.

Types of supply schedule:
There are two types of supply schedule. They are
1. Individual supply schedule
2. Market Supply schedule
1. **Individual supply schedule:**

It shows various quantities of the goods that are supplied by an individual seller (or) producer at various levels of prices in the market.

<table>
<thead>
<tr>
<th>Price of x</th>
<th>Supply of ‘x’ goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>0</td>
</tr>
<tr>
<td>1000</td>
<td>10</td>
</tr>
<tr>
<td>1500</td>
<td>30</td>
</tr>
<tr>
<td>2000</td>
<td>55</td>
</tr>
<tr>
<td>2500</td>
<td>90</td>
</tr>
</tbody>
</table>

**Supply curve:** From the above supply schedule the supply curve can be drawn.

2. **Market Supply schedule:**

It shows the various quantities of the goods that are supplied by various producers (or) sellers at various levels of prices in the market. When we add the supply of all sellers then total supply ‘or’ market supply can be obtained.

Whether the individual supply curve ‘or’ market supply curve slopes upward from left to right as there is a direct proportional relationship between price and supply.

**Exception to the law of supply:**

- Land (or) Agriculture goods.
  
  In the case of land (or) Agriculture goods supply cannot be changed according the price. So in the case of land (or) Agriculture goods the supply curve is parallel to OY-axis.

- Rare goods.
  
  In the case of rare goods supply cannot be changed according the price. So in the case of rare goods the supply curve is parallel to OY-axis.

- Supply of labour.
  
  In the case of labour, the supply curve is backward bending. Because in the initial stage if the wage level is increased the supply of the labour also increased. Beyond a certain stage if the wages are increased they require the more leisure. So, the supply of labour will be decreased.

**Change in Supply:**

If there is a change in the determinants of the supply that leads to the change in supply.
These changes in supply are two types. They are:
1. Extension and contraction of the supply
2. Increase and decrease of the supply.

1. **Extension and contraction of the supply:**

When all other things remain constant if there is a change in the price that leads to change in the supply. These changes in the supply are called extension and contraction of the supply. When the price is increased the supply will be extended, when the price is decreased the supply will be contracted. To explain the extension and contraction of the supply a single supply curve is enough.

![Fig: 2.16](image)

2. **Increase and decrease of supply:**

When the price is constant if there is a change in any one of the determinants that leads to change in supply. These changes in supply are called increase and decrease of supply. To explain the increase and decrease of the supply a single supply curve is not enough. It means new supply curves are formed.

- When the supply is increased the new supply curve is formed towards right to the old supply curve.
- In the same way when the supply is decreased the new supply curve is formed towards left to the old supply curve.

![Fig: 2.17](image)
Supply function:
The supply function explains the relationship between the supply and the factors that determine the supply. This can be explained through an equation:

\[ S_x = f(P_x, P_I, T, W, GP) \]

In the above equation:
- \( S_x \) = supply of goods ‘x’
- \( f \) = functional relationship
- \( P_x \) = Price of ‘x’
- \( P_I \) = Price of inputs (factors)
- \( T \) = Technology
- \( W \) = Weather conditions
- \( GP \) = Government policy

Determinants of supply:
The supply of any commodity is depending upon some factors. They are called determinants of the supply. They are:

1. **Price of the goods:**
   Price of the goods is the main determinant of supply. Producers supply more goods if the prices are high. They supply fewer goods when the prices are low.

2. **Goals of the firm:**
   Firms may try to work on various goals for e.g., profit maximization, sales maximization, employment maximization. If the objective is to maximize profit, then higher the profit from the sale of a commodity, the higher will be the quantity supplied by the firm and vice-versa.

3. **Inputs Prices:**
   The producers supply more when the inputs prices are low, that is at lower costs of production. At higher inputs rises they supply less.

4. **Technology:**
   New technology generally helps to save inputs and reduces costs and time to produce the output. An improved technology enhances the supply of the goods.

5. **Government Policies:**
   Government policy of taxes and subsidies on goods brings about changes in supply, higher taxes on goods discourage producers and their supply will be less. On the other subsidies from government encourage producers to supply more.

6. **Expectation about future prices:**
   If the producers expect an increase in the price of a commodity, then they will supply less at the present price and hoard the stock in order to sell it at a higher price in the near future. This will be opposite in case if they anticipate fall in future price (e.g., fruit seller).

7. **Prices of the other commodities:**
   Usually an increase in the prices of other commodities makes the production of that commodity whose price has not risen relatively less attractive we thus, expect that other things remaining the same, the supply of one commodities falls the price of other goods rises.
8. Number of firms in the market:
Since the market supply is the sum of the suppliers made by individual firms, hence the supply varies with changes in the number of firms in the market. A decrease in the number of firm reduces the supply.

9. Natural factors:
Supply of goods depends on favourable weather conditions. Conditions like drought, floods, extreme weather, pests and diseases disturb crop production and raw material supply. This will affect the supply of goods.

Elasticity of supply:
It shows about the proportionate change in the supply and the proportionate change in price. It means it explains how much change in the price and it leads to how much change in the supply.

\[ E_s = \frac{\text{Proportionate change in supply}}{\text{Proportionate change in price}} = \frac{dq}{dp} \frac{p}{q} = \frac{dq}{dp} \times \frac{p}{q} \]

Types of elasticity of Supply:
There are five types of Supply elasticity of Supply:

1. Perfectly elastic Supply (Es = \(\infty\))
2. Perfectly inelastic Supply (Es = 0)
3. Relatively elastic Supply (Es > 1)
4. Relatively inelastic Supply (Es < 1)
5. Unitary elastic Supply (Es = 0)

6. Perfectly elastic Supply (Es = \(\infty\)):
When the price is constant if there is a change in Supply it is said to be perfectly elastic Supply. It means the Supply may be increase ‘or’ decrease without change in price. Here the value of EP is infinity. The Supply curve in this case parallel to OX axis.

7. Perfectly inelastic Supply (Es = 0):
When the price is changed if there is no change in the Supply. It is said to be perfectly inelastic Supply. It means the price may be increase ‘or’ decrease but the Supply is constant. Here the value of Es = 0. The Supply curve in this case parallel to OY axis.

8. Relatively elastic Supply (Es > 1):
If the proportionate change in Supply is more than proportionate change in the price. It is said to be relatively elastic Supply. It means a little change in the price leads to more change in Supply. Here the value of Es is greater than one the Supply curve in the case upwards from left to right.

9. Relatively inelastic Supply (Es < 1):
If the proportionate change in Supply is less than proportionate change in the price. It is said to be relatively inelastic Supply. It means a more change in the price leads to less change in Supply. Here the value of Es is less than one. The Supply curve in this case also slopes up wards from left to right.
10. Unitary elastic Supply:

If the proportionate change in the supply is equal to the proportionate change in the price. It is said to be unitary elastic supply. It means the change in the supply and change in price are same. Here the value of $E_s$ is 1. Unitary elastic supply curve also slopes downwards from left to right.

**Determine of elasticity of supply:-**

1. Nature of the commodity
   - If the good is durable the elasticity of supply will be more [$E_s > 1$], the perishable goods have less elastic [$E_p < 1$].

2. Time factor
   - In the long period the elasticity of supply will be more [$E_s > 1$] in the short period the elasticity of supply will be less [$E_s < 1$].

3. Availability of facilities
   - If they are more facilities [$E_s > 1$] (or) [$E_s < 1$].

4. Cost of production
   - If the cost of production is more the elasticity of supply will be less, if the cost of production is less [$E_s > 1$].

5. Nature of inputs
   - If the inputs are available in the market there is a more elastic supply otherwise less elastic supply.

6. Risk taking
   - If the entrepreneur takes the risks the elasticity of supply will be more otherwise less.

2.3 EQUILIBRIUM

Equilibrium price means constant price (or) unchanged price. According to classical economists the price of a good is determined by the combine actions of the buyers and sellers. It is nothing but demand and supply. The equilibrium price is determined when the demand and supply are equal. This can be explained by the following diagram.

![Equilibrium Diagram](image)

According to the above diagram both demand and supply are equal at $OQ$ level. So equilibrium price is determined as ‘$OP$’. At the price of $P_1$ the supply is more than the demand. At the Price of $P_2$ the demand is more than supply. So, $P_1$ and $P_2$ are not equilibrium prices.
Equilibrium price means constant price (or) unchanged price. But this equilibrium price also changed whenever there is a total change in the demand and total change in supply this can be explained by the following cases.

**Case – I**
When the supply is constant, and the demand is changed how the price is determined can be explained as follows:

![Diagram](image)

**Fig: 2.19**

When supply is constant if the demand is increased equilibrium price also increased. When the demand is decreased the equilibrium price also decreased.

**Case-II**
Demand is constant and supply is changed. If the demand is constant if the supply increase the price will be decreased and if the supply is decreased the price will be increased.

![Diagram](image)

**Fig: 2.20**
**Case-III**

When both demand and supply are change in the same proportion. When both demand and supply are increased in same proportion there must be not change in the equilibrium price. In the same way when both D/s are decreased in same proportion, price also constant.

![Diagram](image1.png)

**Fig: 2.21**

**Case – IV:**

When there is a more change in demand and less change in supply. If there is a more increase in demand and less increase in supply that leads to increase of the price.

![Diagram](image2.png)

**Fig: 2.22**

**Case – V**

If there is a more increase in the supply and less increase in the demand that leads to decrease of the price.
Case – VI
When the demand is increased and supply is decreased, the new equilibrium price will be increased. In the same way when the supply is increased and demand is decreased the equilibrium price will be decreased.

DEMAND AND SUPPLY

Give the answer in one/two sentences:

1. Demand function
   **Ans:** The demand function explains relationship between demand for commodity and determinants of demand.
   \[ D_x = f [P_x, P_{sc}, Y, T&A] \]

2. Market demand schedule
   **Ans:** It shows the various quantities of the goods that are demanded by all the consumers at various levels of prices in the market. When the individual demands are added market demand can be obtained.

3. Giffen goods
   **Ans:** Giffen goods are also called necessary goods. In case of necessary goods the law of demand is not operated. It was observed Sir Robert Giffen Hence they are called Giffen goods.

4. Conspicuous goods
   **Ans:** These are certain goods which are purchases to project the status and prestige of the consumer. For e.g.: expensive cars, diamond jewellery, etc. such goods will be purchased more at a higher price and less at a lower price.

5. Cross demand
   It shows the relationship between price of one commodity and demand for another commodity. It means the demand for one commodity not only depend upon price but also depend upon the prices its substitute goods and complementary goods.
   \[ D_x = f [P_y] \]
6. **Arc method**

If there are small changes in demand and prices it is not possible to measure the elasticity of demand by the point method. So, then Arc method is introduced. In this method the following formula can be used.

\[
E_p = \frac{\text{change in demand}}{\text{1st demand} + \text{2nd demand}} + \frac{\text{change in price}}{\text{1st price} + \text{2nd price}}
\]

\[
= \frac{q_2 - q_1}{q_1 + q_2} + \frac{p_2 - p_1}{p_1 + p_2}
\]

7. **Contraction of demand**

When all other things remain constant if there is an increase in the price that leads to decrease in demand. It is said to be contraction of demand.

8. **Supply**

There is a difference between stock of the goods and supply of goods. Supply means some of the part of stock of the goods which is prepared by a seller to sell at a particular price, at a particular market in a particular period of time.

9. **Supply function**

It explains the relationship between supply of the commodity and determinants of the supply.

\[
S_x = f [P_x, P_0, P_r, T \& G]
\]

10. **Supply of labour**

In the case of labour the supply curve is backward bending. Because in the initial stage if the wage level is increased the supply of the labour also increased. Beyond a certain stage if the wages are increased they require the more leisure. So the supply of labour will be decreased.

**II. Choose the correct answer:**

1. Point elasticity was propounded by
   (a) Adam Smith  (b) Marshall  (c) Robbins  (d) Keynes

2. Luxury goods have ____ degree of electricity
   (a) High  (b) low  (c) Moderate  (d) none

3. The demand for salt is inelastic, because
   (a) of low price  (b) absence of it makes food tasteless  (c) no substitutes  (d) All the three

4. Price elasticity demand of product will be more elastic if it
   (a) has no substitutes  (b) has number of substitutes
   (c) is an item of necessity  (d) is life saving product

5. If the price of burger rises for ₹ 12 per piece to ₹ 20 per piece as a result of which the daily sales decrease from 300 to 200 pieces per day. The price elasticity of demand can be estimated as
   (a) 0.5  (b) 0.8  (c) 0.25  (d) 2.10

6. An increase in price will result in an increase in total revenue if
   (a) percentage change in quantity demanded in greater than the percentage change in price
Theory of Demand and Supply

(b) percentage change in quantity demanded is less than the percentage change in price  
(c) percentage change in quantity demanded is equal to the percentage change in price  
(d) none  
7. If the price elasticity of demand for wine is estimated to be \(-6\), then a 20\% increase in price of wine will lead to .......... in quantity demanded of wine at that price  
   (a) 12\% increase  
   (b) 12\% decrease  
   (c) 19.6\% increase  
   (d) 20.6\% decrease  
8. Which of the following is not a factor in market supply of a product  
   (a) cost of production  
   (b) number of buyers  
   (c) market price of the product  
   (d) price of related products  
9. Which of these will have highly inelastic supply  
   (a) perishable goods  
   (b) consumer durables goods  
   (c) Items of elite class consumption  
   (d) All the three  
10. The supply function of a product \(x\) is as \(S_x = 5p_x + 3\). Where \(p_x\) stand for price. The quantity supplied corresponding to price of \(\text{₹} 2\) will be ..........
   (a) 18  
   (b) 13  
   (c) 15  
   (d) 23  

III. Fill in the blanks
1. According to law of demand, there is a ........ relationship between price and demand.  
2. If two or more than two goods are used to satisfy the same want are called ..........  
3. In case of inferior goods, if the income rises than the demand .....  
4. Increase in demand due to the change in other things is called ____ in demand curve.  
5. Total outlay method is also called ........  
6. Monopoly fixes the fewer prices if the demand is ____ elastic.  
7. If there is no possibility to postpone the consumption of the commodity than the elasticity is ____  
8. Supply curve in the case of labour is ____  
9. If the supply curve is parallel to ox-axis than the supply is ____  
10. Perfectly elastic demand curve is ______

IV. State the sentence true or false
1. In ordinary language demand means desire ( )  
2. There is an inverse relationship between income and demand ( )  
3. Consumers tastes can influence the demand ( )  
4. Change in the demand due to the change in price is called extension of demand ( )  
5. In case of exception of law of demand of the price demand curve slopes downwards from left to right ( )  
6. Comfort goods have more elastic demand ( )  
7. Price discrimination is possible due to elasticity ( )  
8. The supply curve in case of land is parallel to x-axis ( )  
9. If there is more increase in demand and less income in supply, then quantity and price rises ( )  
10. If there is more decrease in supply and less decrease in demand then quantity decrease and price rises ( )

FUNDAMENTALS OF ECONOMICS AND MANAGEMENT
V. Match the following

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. law of demand</td>
<td>( ) A. income demand</td>
</tr>
<tr>
<td>2. substitution effect</td>
<td>( ) B. movement on DD curve</td>
</tr>
<tr>
<td>3. superior goods</td>
<td>( ) C. Prime factor</td>
</tr>
<tr>
<td>4. Contraction of demand</td>
<td>( ) D. inelastic demand</td>
</tr>
<tr>
<td>5. Decrease in demand</td>
<td>( ) E. demand curve</td>
</tr>
<tr>
<td>6. Durable goods</td>
<td>( ) F. elasticity of demand</td>
</tr>
<tr>
<td>7. Unitary elastic DD curve</td>
<td>( ) G. Rectangular hyperbola</td>
</tr>
<tr>
<td>8. Business decision</td>
<td>( ) H. government policy</td>
</tr>
<tr>
<td>9. Supply</td>
<td>( ) I. Marshall</td>
</tr>
<tr>
<td>10. Electricity of supply</td>
<td>( ) J. shift of DD curve</td>
</tr>
</tbody>
</table>

Key

(II)
1. (b)
2. (a)
3. (c)
4. (b)
5. (a)
6. (b)
7. (a)
8. (b)
9. (a)
10. (b)

(III)
1. Inverse
2. Complementary goods
3. Decreases
4. Shift
5. Total expenditure
6. more
7. less
8. Backward bending
9. Unlimited
10. parallel to ox-axis
(IV)
1. (T)
2. (F)
3. (T)
4. (T)
5. (F)
6. (F)
7. (T)
8. (F)
9. (T)
10. (T)

(V)
1. (I)
2. (E)
3. (A)
4. (B)
5. (J)
6. (D)
7. (G)
8. (F)
9. (H)
10. (C)

Question:
1. Explain the law of demand and its exceptions.
2. State the determinants of demand.
3. Explain about income demand.
4. Explain about cross demand.
5. Explain about the changes in demand.
6. Explain the types of elasticity of demand.
7. Explain the types of price of demand.
8. Explain the types of income elasticity of demand.
9. State the method of measurement of Elasticity of demand.
10. State the importance of Elasticity of demand.
11. State the determinants of Elasticity of demand.
12. What is supply and explain about the law of supply?
13. State the types of elasticity of supply.
14. State the determinants of supply.
15. State the determinants of Elasticity of supply.
Study Note - 3

THEORY OF PRODUCTION

This Study Note includes

3.1 Meaning of Production
3.2 Factors of Production and its Classification
3.3 Production Functions
3.4 Law of Variable Proportion
3.5 Law of Return to Scale

3.1 THEORY OF PRODUCTION

Generally production means a process to change the raw materials into final goods (or) finished goods. But in economics making of the goods (or) creation of goods (material and immaterial) for the purpose of selling them in the market is called production.

3.2 FACTORS OF PRODUCTION AND ITS CLASSIFICATION

Land:

Land in common usage is soil or surface of the earth. As a factor of production it refers to all natural resources like forests, water, climate, minerals etc. It mainly supplies food to people, provides space for work and supplies raw material to industry.

Land has certain peculiar features:

1. Gift of nature:
   Land is a gift of nature. Location of land deposits of minerals at certain places. Climatic conditions are no doubt gift of nature.

2. Limited in supply:
   The total geographical area of a country remains the same. In fact certain resources like oil, gas, coal and some species of wild life may not be available after some time.

3. Immobile factor:
   Land cannot be moved from one place to another like other factor. However its ownership can be transferred and its use can be shifted from one crop to another crop.

4. Diminishing returns:
   Early economists held the view that land is subject to the law of diminishing returns. Increased use of capital and labour on any given quantity of land would give us diminishing returns.

5. Land differs in fertility:
   There will be differences in fertility of land. As a result, the output changes from one plot to the other. It is because of these peculiarities of land, the early economists considered land as a separate factor of production.
Labour
In the ordinary usage, labour stands for only physical labour. In economics, labour means physical as well as mental services engaged in production to earn income. Classical economists and Karl Marx have considered labour as the sole factor of production.

Features of Labour:
Labour as a factor of production possesses certain peculiar features:

1. Labour is inseparable:
Labour is inseparable from labourer but in the case of other factors i.e. land and capital are separable from land lord and capitalist.

2. Labour is perishable:
If a worker does not find work on a particular day, the labour is lost for that day. Like other factors of production, labour cannot be preserved.

3. Supply of labour:
Labourers offer more labour at lower wages. When wages rise beyond a certain level they prefer to enjoy leisure and supply less labour. It is observed that supply curve of labour is backward bending at higher wages.

4. Weak-bargaining power:
Labour has less bargaining power as it is a perishable thing. In the same way the trade unions are not strengthened so they cannot fight for better wages.

5. Differ in efficiency of labour:
Some labourers have more efficiency and some labourers have less efficiency.

Capital:
In the ordinary sense capital means money for an individual or a firm. Money is a form of capital when it is used to purchase machinery, tools, raw materials etc. Ultimately it is these man made goods i.e. Machinery, tools etc. that help in the production of goods. These are vital in raising productivity in different sectors.

Functions of capital:
Capital performs certain important functions in production.

1. Capital supplies tools and machines:
Capital supplies tools and machines that assist the labourers in working efficiently and producing more output. A labourer backed by better tools and machines will be more efficient in production.

2. Improves productivity of labourer:
Capital improves per capita productivity of labourer. This in turn increases the overall production.

3. Capital supplies raw materials:
Capital supplies raw materials, supply of raw material on continuous basis is required in production.

4. Generate more employment:
Additional tools and machines generate more employment to people. However in the modern production labour replacing machines reduce employment opportunities.

5. Provides transport facilities:
Capital in the form of roadways, railways, ships help to transport raw material to the site of the production and finished goods to the market.
6. Payments of factor:
Capital in the form of money is useful for the payment of advance wages to the labourers. Even before the goods are sold in the market.

Entrepreneur:
The person who organizes the production is called an entrepreneur. He is considered as a separate factor because he performs specific functions different from those of other factors. Now-a-days an entrepreneur is not considered as a separate factor but as special types of human labourer. Whenever the ownership and the management are one and the same entrepreneur has to perform certain specific functions.

Functions of the entrepreneur:
1. Entrepreneur initiate the business:
Entrepreneur has to initiate the business by mobilizing other factors. All the primary work to start the business will be undertaken by him.

2. Decision making:
Major decisions like the kind of good to be produced, size of the unit, quantity of output, price, marketing etc. have to be made by him.

3. Choosing the technology:
Choosing suitable technology, combining factors in right proportion to maximize output at minimum cost are the other functions of organizer.

4. Innovation:
He must be dynamic to introduce new methods, techniques, products etc.

5. Pay the rewards of factors:
As entrepreneur he has to pay the rewards to other factors. He has to bear the responsibility either for profit or loss in production.

3.3 PRODUCTION FUNCTION
Production function expresses the relationship between the physical inputs and physical output of a firm for a given state of technology. The production-function is a purely technical relation that connects factor-inputs and outputs.

The production-function can be written mathematically as follows:

$$Q_x = f (F_1, F_2, F_3, \ldots, F_n)$$

Here, $Q_x$ = the quantity of x commodity
$F_1, F_2, F_3, \ldots, F_n$ = different factor-inputs.

This equation tells that the output of x depends on the factor $F_1, F_2, F_3, \ldots, F_n$, etc.

There is functional relationship between factor-inputs and the amount of goods x.

Types of production functions:
Before analyzing the types of production-function it will be useful to understand the meaning of following important terms :

1. Short period production functions:
It shows the relationship between production and factors of production in the short period. In the short
period all factors may not be available, so the factors of production in the short period can be divided into two types they are:-

1. Fixed factors
2. Variable factor

1. **Fixed factors:**
The factors which are not available in the short period they can be kept as constant. So they are called fixed factors.

Example: land, building, machines etc.

2. **Variable factors:**
The factors which are available to change the output in the short period, they can be changed so they are called variable factors.

Example: capital, labour, raw materials etc.

3. **Long period production function:**
It explains the relationship between production and factors of production in the long period. It is also called as law of return to scale.

- The classification of fixed and variable factors is related to only short period. But in long period all factors are variable factors.

### 3.4 LAW OF VARIABLE PROPORTION

It explains the relationship between inputs and outputs in the short period. According to this law output can be changed by changing the some factors (variable factors) while other factors are constant. So it is called law of variable proportions. This law was developed by “**Alfred Marshall**”.

**Definition:**

“An increase in the amount of labour and capital applied in the cultivation of land causes in general a less than propionate increase in the amount of output raised unless it happens to coincide with the improvements in the arts of agriculture”. – **Marshall**

**Concepts in this law:**

**Total product:**

1. **Total Product** - It refers to the total output of the firm per period of time
2. **Average Product** - Average Product is total output per unit of the variable input. Thus Average Product is total product divided by the number of units of the variable factor.
   \[ AP = \frac{Q}{L} \]
   where Q is Total Product, L is the quantity of labour.
3. **Marginal Product** - Marginal Product is the change in total product resulting from using an additional unit of the variable factor.
   \[ MP = \frac{dQ}{dL} \]
   where d is the rate of change

It is the total amount of the output obtained by the firm ‘or’ producer by the employment of total units of factors of production (labour). When the marginal productivities of labour added then total productivity can be obtained

\[ TP = f [q_l] \] or \[ T_p = \sum mp \]
Average product:
It is the product per unit of labour when the total product is divided with no. of units of labour average product can be obtained.

\[ \text{Ap} = \frac{\text{TP}}{L} \]

Marginal Product:
It is an additional product obtained by the firm or producer by the employment of additional unit of labour or one more unit of labour. The change in the total product is also called marginal product.

\[ \text{MP} = \frac{\Delta \text{TP}}{\Delta L} = \text{TP}_n - \text{TP}_{n-1} \]

Explanation of the law
Marshall explained this law with an example. He applied this law in the cultivation of land. According to this law when land is kept as constant and go on increasing the labour in the first stage increasing returns, second stage diminishing returns, and third stage negative returns are occurred. This can be explained by the following table.

<table>
<thead>
<tr>
<th>Units of labour</th>
<th>Total product</th>
<th>Average product</th>
<th>Marginal product</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>22</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>36</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>4</td>
<td>48</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>55</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>6</td>
<td>60</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>60</td>
<td>8.6</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>56</td>
<td>7</td>
<td>-4</td>
</tr>
</tbody>
</table>

Diagrammatic explanation:

Main points in this law:
- In the 1st stage the T.P, A.P, M.P go on increasing but at the end of the 1st stage M.P starts to decline. The 1st stage was end when the M.P is equal to A.P.
- In the 2nd stage T.P goes on increasing but it increases with diminishing rate. A.P goes on diminishing, M.P also goes on diminishing at the end of the 2nd stage the T.P reached the maximum. When the T.P is maximum then the M.P is zero. It intersects the x-axis.
- In the 3rd stage the T.P and A.P go on diminishing but for the M.P becomes negative so the M.P curves crossed the x-axis.
• The M.P curve intersects the A.P curve when the A.P is maximum.
• The law of variable proportions is also called “law of diminishing marginal returns”.
• This law is not only applicable to agriculture sector but also applicable to industrial sector, service sector etc.

**Reasons for the diminishing returns:**
• All units of variable factors are not homogenous.
• Imperfect substitutions.
• The combination becomes wrong.

**Importance:**
• This law is useful to firm (or) producer for the decision making regarding the output.
• According to this law the firm (or) producer operates only in second stage. He never chooses the either first stage (or) third stage.

**Assumptions:**
• The units of the variable factor are homogenous.
• There is a possibility to change the some factors (Variable factors), while other factors are constants (fixed factors).
• There is a possibility to change the combination of fixed and variable factors.
• There must be no change in the level of technology.
• It is applicable to only short period.

### 3.5 LAW OF RETURNS TO SCALE

It shows the relationship between inputs and outputs in the long period. The change in the quantity of the factors is called scale. Change in the output is called returns. So law of returns to scale explains changes in the output due to changes in the inputs in the long period.

**Explanation of the law:**
According to this law when all inputs are increased in same proportions when the output is not increased in the same proportion. The changes in the output are classified in to three stages. They are
• Increasing returns to scale
• Constant returns to scale
• Diminishing returns to scale

This can be explained by the following table

<table>
<thead>
<tr>
<th>Scale of production</th>
<th>Inputs (Land + Labour)</th>
<th>Total productivity</th>
<th>Marginal Productivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1+2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>2+4</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>C</td>
<td>3+6</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>D</td>
<td>4+8</td>
<td>28</td>
<td>10</td>
</tr>
<tr>
<td>E</td>
<td>5+10</td>
<td>38</td>
<td>10</td>
</tr>
<tr>
<td>F</td>
<td>6+12</td>
<td>48</td>
<td>10</td>
</tr>
<tr>
<td>G</td>
<td>7+14</td>
<td>56</td>
<td>8</td>
</tr>
<tr>
<td>H</td>
<td>8+16</td>
<td>62</td>
<td>6</td>
</tr>
<tr>
<td>I</td>
<td>9+16</td>
<td>66</td>
<td>4</td>
</tr>
</tbody>
</table>
In the above table all inputs are changed in equal quantities or scale is changed. Changes in output can be observed from total and marginal returns output changes are clearer from the marginal returns. In the beginning when inputs are doubled marginal returns are more than doubled. Such a change in output is called increasing returns. But in the third and fourth combinations output has increased in the same proportion. Hence, there are constant returns later similar change in inputs are giving diminishing returns.

**Diagrammatic explanation:**

![Diagram](image)

In the above diagram scale or combination of inputs are presented on OX-axis and Marginal returns on Y-axis. As inputs are increased in the first part marginal returns curve rising i.e., they produce. In the next part the curve is stable showing constant returns finally further increase in input is resulting in decreasing returns.

**Increasing returns to scale:**

If the proportionate increase in the output is more than proportionate increase in the inputs it is said to be increasing returns to scale. It means when we double the inputs the output will be more than double.

**Cause for increasing returns:**

1. Specialization (or) Division of labour
2. Indivisible factors.
3. Dimensional economics
4. Volume discounts etc.,

**Constant returns to scale:**

If the proportionate increase in the output and proportionate increase in the inputs are same it is said to be constant returns to scale. It means when we double the inputs the output also will be double. There are no causes for constant returns. It is just an indicator for the ending of increasing returns and commencement of diminishing returns.

**Diminishing returns to scale:**

If the proportionate increase in the output is less than proportionate increase in the inputs it is said to be diminishing returns. It means when we double the inputs the output will be less than double.

**Cause for diminishing returns:**

1. Management problems.
2. Limit to human factor
3. Lack of corporation and co-ordination
4. Rise of the prices of inputs

**Distinction between Returns to a Variable Factor (or Law of Variable Proportions) and Returns to Scale**

The main differences between returns to a variable factor and returns to scale are as indicated below:

<table>
<thead>
<tr>
<th>Returns to a Variable Factor</th>
<th>Returns to Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Operates in the short run or it is related to short-run production-function.</td>
<td>1. Operates in the long-run or it is related to long-run production-function.</td>
</tr>
<tr>
<td>2. Only the quantities of a variable varied.</td>
<td>2. All factor-inputs are varied in the same factor proportion.</td>
</tr>
<tr>
<td>3. There is change in the factor-proportion. Suppose on 1 acre land 1 labour is employed, then the land labour ratio is 1 : 1. Now if we add one more unit of labour on the 1 acre land, then land-labour ratio would become 1 : 2.</td>
<td>3. There is no change in factor-ratio. For instance, if a firm is employing 1 unit of labour and 2 units of capital, then the labour-capital ratio is 1 : 2. Now if the firm increases its scale of operation and employed 2 units of labour and 4 units of capital, the labour-capital ratio still remains the same as 1 : 2.</td>
</tr>
<tr>
<td>4. No change in the scale of production. Because here all the factor-inputs are not changed.</td>
<td>4. There is change in the scale of production because here all the factor-inputs are varied in the same proportion.</td>
</tr>
</tbody>
</table>
Study Note - 4
THEORY OF COST

This Study Note includes
4.1 Meaning of Cost
4.2 Cost Functions
4.3 Cost Curves
4.4 Economies of Scale

4.1 MEANING OF COST

It is the expenditure incurred by the producer (or) firm to produce the goods and services. But it is the remunerations (or) income of factors of production point of view.

\[ C = f(Q) \]

Types of cost:

1. **Money:**
   If the remunerations of the factors of production are paid in the form of money it is called money cost. For example: rent paid to the land, wages to the labourers etc.

2. **Real cost:**
   The concept of real cost was introduced by Alfred Marshall. Exertions of all kinds of labour that are already indirectly involved in production process. All these efforts and sacrifices together will be called as real cost of production. For example exertions of all kinds of labour, waiting and sacrifices required for saving the capital.

3. **Economic costs:**
   Total expenses incurred by a firm (or) producer in producing a commodity are called economic costs. These economic costs includes
   (a) Explicit costs
   (b) Implicit costs
   (c) Normal profit.

**Explicit costs:**
Actual payments made by a firm for purchasing or hiring resources are called explicit costs. These costs are actual money expenses directly incurred for purchasing the resources for example rent to the land, wages to the labourer, expenditure on raw material interest on borrowed money etc..

**Implicit costs:**
These costs are imputed costs of the factors of productions owned by the producer himself which are generally left out in the calculation of expenses of the firm. For example rent for the use own land, interest on his own capital etc.

- Explicit costs are recorded in the account books but implicit costs are not recorded.
- Explicit costs are also called “Accounting costs”
Normal profits:
The minimum amount which is required to keep an entrepreneur in the production process is known as normal profit.

- Economic cost = Explicit cost + Implicit cost + normal profits.

4. Opportunity cost:
The opportunity cost of anything is next best alternative cost which is forgone. Individual point of view (or) nation point of view the resources are scarce. At that time to get the one commodity we have to forgo the another commodity. This is called opportunity costs.

Suppose a price of land can be used for growing wheat or rice. If the land is used for growing rice, it is not available for growing wheat. Therefore the opportunity cost for rice is the wheat crop foregone. This is illustrated with the help of the following diagram.

![Opportunity Cost Diagram](image)

Fig: 4.1

Suppose the farmer, using a price of land can produce either 50 quintals (ON) of rice of 40 quintals (OM) of wheat. If the farmer produced 50 quintals of rice (ON), he cannot produce wheat. Therefore the opportunity cost of 50 quintals (ON) of rice is 40 quintals (OM) of wheat. The farmer can also produce any combination of the two crops on the production possibility curve MN. Let us assume that the farmer is operating at point A on the production possibility curve where he produces OD amount of rice and OC amount of wheat. Now, he decides to operate at point B on the production possibility curve. Here he has to reduce the production of wheat from OC to OE in order to increase the production of rice form OD to OF. It means the opportunity cost of DF amount of rice is the CE amount of wheat.

Applications of Opportunity cost
The concept of opportunity cost has been widely used by modern economists in various fields.

1. Determination of factor prices:
The factors of production need to be paid a price that is at least equal to what they command for alternative uses. If the factor price is less than factor’s opportunity cost, the factor will quit and get employed in the better-paying alternative.

2. Determination of economic rent:
The concept of opportunity cost is widely used by modern economists in the determination of economic rent. According to them economic rent is equal to the factor’s actual earning minus its opportunity cost (or transfer earnings).

56

FUNDAMENTALS OF ECONOMICS AND MANAGEMENT
3. Decisions regarding consumption pattern:
The concept of opportunity cost suggests that with given money income, if a consumer chooses to have more of one thing, he has to have more of one thing; he has to have less of the other. Hence with the help of opportunity cost he decides the consumption pattern, that is, which goods should be consumed and in what quantities.

4. Decisions regarding production plan:
With given resources and given technology if a producer decides to produce greater amount of one commodity, he has to sacrifice some amount of another commodity.

5. Decisions regarding national priorities:
If a country decides that more resources must be devoted to arms production then less will be available to produce civilian goods. In this situation a choice will have to be made between arms production and civilian goods. The concept of opportunity cost helps in making such choices.

4.2 COST FUNCTION

Cost Function:
The cost function explains the functional relationship between cost of production and physical quantity of output.

\[ C = f(Q) \]

Short run costs:
In the short period cost of production can be divided into two types. They are

1. Fixed costs
2. Variable costs

1. Fixed costs:
The costs which don’t change with change of the output are called fixed costs. It means output may be increase (or) decrease but no change in these costs. When the output is stopped the producer must incurred this cost. Even the output is zero the fixed cost is positive. The fixed cost curve (TFC) will be parallel to ox-axis.

Example: expenditure on the land, building, salaries of permanent employees, interest payment, insurance premium etc.

2. Variable costs:
Costs which are changed with change of the output are called variable costs. It means when the output is increased these costs are also increased, when the output is decreased these costs are also decreased. When the output is zero these costs are also zero. The TVC curve will be sloped upwards from “left to right” And it is started from the origin.

Example: Expenditure on raw material, power, fuel, wage of daily laborers etc.

<table>
<thead>
<tr>
<th>Fixed costs</th>
<th>Variable costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fixed costs do not vary with quantity of output.</td>
<td>1. Variable costs vary with the quantity of output.</td>
</tr>
<tr>
<td>2. They are related with the fixed factors.</td>
<td>2. They are related with the variable factors.</td>
</tr>
<tr>
<td>3. They do not become zero. They remain same even when production is stopped.</td>
<td>3. They can become zero when production is stopped.</td>
</tr>
<tr>
<td>4. A firm can continue production costs are not recovered even fixed costs.</td>
<td>4. Production should at least recover the variable cost.</td>
</tr>
</tbody>
</table>
3. **Total costs:**

When the fixed cost are added with variable costs then the total cost can be obtained, when the output increases total costs are also increased and when the output decreases total costs are also decrease. The total cost curve will slope upwards from the left to right as there direct proportional relationship between output and total cost.

### 4.3 COST CURVES

- But the TCU curve is started above the origin and where TFC curve is started.

\[
TC = TFC + TVC
\]

<table>
<thead>
<tr>
<th>Output</th>
<th>TFC</th>
<th>TVC</th>
<th>TC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>20</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>18</td>
<td>38</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>52</td>
<td>72</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>65</td>
<td>85</td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>82</td>
<td>102</td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>106</td>
<td>126</td>
</tr>
<tr>
<td>8</td>
<td>20</td>
<td>140</td>
<td>160</td>
</tr>
</tbody>
</table>

### Other cost curves in short period:

We can derive the other costs (concepts) from the above table this can be explained by the following table.

<table>
<thead>
<tr>
<th>Output</th>
<th>TFC</th>
<th>TVC</th>
<th>TC</th>
<th>AFC</th>
<th>AVC</th>
<th>AC</th>
<th>ΔTC/MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>20</td>
<td>0</td>
<td>20</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1</td>
<td>20</td>
<td>18</td>
<td>38</td>
<td>20</td>
<td>18</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>30</td>
<td>50</td>
<td>10</td>
<td>15</td>
<td>25</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>40</td>
<td>60</td>
<td>6.66</td>
<td>13.33</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>52</td>
<td>72</td>
<td>5</td>
<td>13</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>65</td>
<td>85</td>
<td>4</td>
<td>13</td>
<td>17</td>
<td>13</td>
</tr>
</tbody>
</table>
4. **Average fixed cost:**

It is the average total fixed cost per unit of output when TFC is divided with no. of units of output. AFC can be obtained

\[
\text{AFC} = \frac{\text{TFC}}{Q}
\]

- The AFC curve slopes downwards from left to right and it is Rectangular hyperbola.

5. **Average variable cost:**

It is the average total variable cost per unit of output when the TVC are divided with no. of units of output. AVC can be obtained

\[
\text{AVC} = \frac{\text{TVC}}{Q}
\]

- The AVC curve will be in ‘U’ shape
6. **Average cost:**
It is the average total cost per unit of the output. When the total cost is divided with no. of units of outputs AC can be obtained.

\[ AC = \frac{TC}{Q} \quad \text{(Or) AFC + AVC} \]

- The average total cost curve is in ‘U’ shape

![Average Cost Diagram](image1)

7. **Marginal cost:**
It is the additional cost to produce the additional unit of a thing (or) one more unit of a thing. The change in the total cost is also called marginal cost.

\[ MC = \frac{\Delta TC}{\Delta Q} \quad \text{(or) TC}_n - TC_{n-1} \text{ units} \]

Marginal cost curve is also in ‘u’ shape

![Marginal Cost Diagram](image2)

**Difference between Marginal Cost and Average Cost:**

**Average cost:**
It is the average total cost per unit of the output. When the total cost is divided with no. of units of outputs AC can be obtained.
Marginal cost:

It is the additional cost to produce the additional unit of a thing (or) one more unit of a thing. The change in the total cost is also called marginal cost.

$$AC = \frac{TC}{Q} \text{ (or) AFC + AVC}$$

Marginal cost curve is also in ‘u’ shape

The difference between MC and AC can be explained by the following diagram

![Diagram showing Cost and Output relationship.

In the above diagram in the 1st stage both MC and AC go on diminishing. The MC is less than AC, so in the 1st stage MC curve is below and AC curve is above. In the second stage when MC and AC go on increasing. The MC is more than the AC. So in this stage the MC curve is above and AC curve is below. Changes in the MC are more than changes in AC. MC curve cuts the AC curve when the AC is minimum (abnormal profits).

Long run cost curves:

In a short period a firm has a fixed scale of plant the short run average cost curve corresponding to a particular scale of plant. So in short period the firm can operate on a particular scale of plant. But in the long run a firm can choose among possible sizes of plant (or) it can move from one scale of plant to another scale of plant. This can be shown by the following diagram.

![Diagram showing various short run average cost curves.

In the above diagram there are various short run average cost curves which correspond various sizes of plant. The LAC curve will be tangent to each of the short run AC curve. It shows the least possible AC producing a quantity of the output when scale of plant is varied.
Main points:
LAC curve is in ‘U’ shape. LAC curve is also called planning curve and envelop curve. Like the LAC curve the long run marginal cost curve (LMC) is also in ‘U’ shape.

4.4 ECONOMIES OF SCALE

Economies of large scale production:
When the factors of production [inputs] are employed in larger quantities then the output is in larger quantities. It is called large scale production. When the output is carried on larger quantities there are some advantages. These advantages are called economies of the large scale production. These economies are divided into 2 types. They are

1. Internal economies
2. External economies

Internal Economies:
When a firm expands its size of business (or) increases its output, it gets some advantages. They are called internal economies. These internal economies are related to a single firm and not related to all other firms in the industry.

Types of the internal economies:

1. Labour economies:
Division of labour and specialization are possible more in large-scale operations. Different types of workers can specialize and do the job for which they are more suited. As a result of this quality and speed of work both improve.

2. Technical economies:
A large firm will be able to install large capacity of machines in place of small sized machines. It also adopts latest technologies. These will give mechanical advantage over small firms and costs will be minimum.

3. Managerial economies:
Highly talented managers of specialized skills will be employed by large firms. It helps to make better decisions in the production.

4. Marketing economies:
Large scale purchase of raw materials and sale of finished goods gives the advantage of transport concessions to the firm. Advertisement costs will be less due to large output sales.

5. Financial economies:
Large firms will be able to borrow credit easily. These firms will be able to offer securities and their goodwill in the market enables them to borrow at reasonable rate of interest. They also raise capital by attracting investors.

6. Research and Development:
Improvements in technology efficient use of resources improvement in quality of products depend on research. Only large firms can afford to bear the expenditure on research.

7. Economies Related to Transport and Storage costs:
Large firms are able to enjoy freight concession from railways and road transport. Because a large firm uses its own transport means and large vehicles, the per unit transport costs would fall. Similar, a large firm can also have its own storage godowns and can save storage costs.
8. Risk bearing economies:
Generally large firms diversify their production into different goods and services. Therefore, even if there is a loss in one item of good it can be covered by profit in other goods.

Internal diseconomies:
Internal diseconomies are those disadvantages which are internal to the firm and accrue to the firm when it over expands its scale of production. The main internal diseconomies of scale are as follows:-

1. Management diseconomies
These diseconomies occur primarily because of increasing managerial difficulties with too large as scale of operations. It becomes difficult for the top management to exercise control and to bring about proper coordination.

2. Technical diseconomies
If a firm frequently changes in technology and used new technologies and new machines, it may increase its costs. After a certain limit, the large size or volume of the plant and machinery may also prove disadvantageous.

3. Risk bearing diseconomies
The business cannot be expanded indefinitely because of the principle of increasing risk. The risk of the firm increases because of reduction in demand change in fashion and introduction of new substitutes in the market.

4. Marketing diseconomies
A large firm is forced to spend more on bringing and storing of raw materials and selling of finished goods in the distant markets.

5. Financial diseconomies
A large firm has to borrow a large amount of money even at higher rate of interest. It imposes a burden on the financial position of the firm.

Impact of internal economics and internal diseconomies on LAC curve:
When a firm accrues internal economies with the expansion of its scale of output, the LAC curve would fall. And when after a certain point, a firm receives internal diseconomies with the expansion of its scale of output, the LAC curve would rise.

Thus, internal economies causes the LAC to fall and internal diseconomies cause the LAC to rise. Hence the internal economies and diseconomies are responsible for the U-shaped of the LAC curve. It is shown in the diagram.

![Fig: 4.9](image_url)
External Economics:

Firm is a unit, the group of firms is called industry, When industry is expended they are some advantages. These advantages are enjoyed by all the firms in the industry so they are called external economies. These economics are opened for all the firms it means they are not related to a single firm.

Types of external economics:

1. **Economies of localization (or) concentration**
   
   Location of several firms at one place makes available certain facilities. Local authorities may develop roads, communication, power, irrigation etc. Other facilities like banking, insurance, skilled labour will come up in the area. These arrangements benefit all the firms located in that place.

2. **Economies of disintegration (or) specialization**
   
   Production of goods can be split into different parts and each firm may take up one part of producing the goods. This will result in specialization and improve performance of each firm in the production. This division of labour helps to produce more output and reduces costs of production.

3. **Economies of related to information services**
   
   All the firms in the area are dealing with the same goods. Information can be shared among the firms about raw material, skilled labour, marketing etc. Expenditure on these items can be reduced and there will be mutual advantage to all the firms.

4. **Economies of producers’ organization**
   
   Collective research by all the firms on new products, technologies will help reduce expenditure. The fruits of research can be enjoyed by all the firms.

External diseconomies:

Diseconomies which accrue to the firms as a result of the expansion in the output of the whole industry are termed external diseconomies. The main external diseconomies are as follows:

1. **Increase in the input prices**
   
   When the industry expands, the demand for factor-inputs increases. As a result the input prices (such as wages, prices of raw materials and machinery equipments, interest rates, transport and communication rates etc.) shoot up. This causes the cost of production to rise.

2. **Pressure on infrastructure facilities**
   
   Concentration of firms in a particular region creates undue pressure on the infrastructure facilities – transportation water, sanitation, power and electricity etc. As a result, bottlenecks and delays in production process become frequent which tend to raise per unit costs.

3. **Economics due to exhaustible natural resources**
   
   Diseconomies may also arise due to exhaustible natural resources. Doubling the fishing fleet may not lead to a doubling of the catch of fish; or doubling the plant in mining or on an oil-extraction field may not lead to a doubling of output.

4. **Diseconomies of disintegration**
   
   When the production of a commodity is disintegrated among various processes and sub-process, it may prove disadvantageous after a certain limit. The problem and fault in any one unit may create limit. The problem and fault in any one unit may create problem for whole of the industry, Coordination among different concerns also poses a problem.
Impact of external economics and external diseconomies on LAC curve:

(i) As a result of external economies, the LAC curve of the firms shifts downwards. It is shown in the diagram below that because of external economies, LAC curve shifts downwards from LAC1 to LAC2.

(ii) As a result of external diseconomies the LAC curve of the firms shifts upwards. It is shown in the diagram below that because of external diseconomies, LAC curve shifts upwards from LAC1 to LAC3.

Concepts of Revenue

It is the income obtained by the firm or producer by the sale of goods and services in the market. There are three concepts in revenue. They are

1. **Total revenue:**

   It is the total amount of income obtained by the firm ‘or’ producer by the selling of total goods and services in the market. The sum of all marginal revenue is also called total revenue

   \[ TR = Q \times P \]

   \[ TR = \sum \text{MR} \]

2. **Average Revenue:**

   It is the revenue per unit of output to be sold in the market. When the total revenue divided with no. of units of output AR can be obtained

   \[ AR = \frac{TR}{Q} \]

3. **Marginal Revenue:**

   It is the additional revenue obtained by the firm (or) producer by the selling of additional unit of a thing (or) one more unit of a thing. The change in the total revenue is also called marginal revenue

   \[ MR = \frac{\Delta TR}{\Delta Q} \]

   \[ MR = TR_n - TR_{n-1} \text{ units} \]
4. Revenue curves under different markets:
The revenue curves are different from one market to another market. They are in one type in perfect competition market and another type in imperfect competition market.

AR and MR curves under perfect competition market
In perfect competition market the price is constant as the goods are homogeneous. So how the AR and MR are changed when the output is increased can be shown in following table.

<table>
<thead>
<tr>
<th>Output</th>
<th>Price</th>
<th>TR</th>
<th>AR</th>
<th>MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<tr>
<td>2</td>
<td>10</td>
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<td>10</td>
<td>30</td>
<td>10</td>
<td>10</td>
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<td>4</td>
<td>10</td>
<td>40</td>
<td>10</td>
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<td>5</td>
<td>10</td>
<td>50</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

From the above table AR and MR curves can be drawn in the following diagram.

In the above diagram AR = MR curve is parallel to ox-axis. Because the price is constant in this market.

MR and AR curves under imperfect market:
In imperfect market the price is changed. When the seller wants to increase the sales he must reduce the price. When the price is decreased, then the average revenue and marginal revenue are also decreased. This can be shown by the following schedule.

<table>
<thead>
<tr>
<th>Output</th>
<th>Price</th>
<th>TR</th>
<th>AR</th>
<th>MR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
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<tr>
<td>2</td>
<td>9</td>
<td>18</td>
<td>9</td>
<td>8</td>
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<tr>
<td>3</td>
<td>8</td>
<td>24</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>28</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>30</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>
From the above table AR and MR curves can be derived. This can be shown by the following diagram.

- In imperfect market both MR and AR curves slope downwards, from left to right. Here the MR curve is below the AR curve.
- The price is always equal to “Average revenue” \( P = AR \) in all markets.

**OBJECTIVES QUESTIONS:**

1. Choose the correct answer:

   1. \( \ldots \ldots \) is the functional relationship between physical inputs (i.e. factors of production), and physical outputs (i.e. quantity of good / service produced)
      
      (a) Input- Output Function  
      (b) Demand – Supply Function  
      (c) Production Function  
      (d) Cost Function

2. Variable factor means those factors of production-
   
   (a) Which can be only charged in the long run?
   (b) Which can be changed in the short run?
   (c) Which can be never be changed
   (d) All of the above

3. All Factor of production become variable in –
   
   (a) Medium – run  
   (b) Short- run  
   (c) Long –run  
   (d) none of the above

4. What is the maximum point of TP?
   
   (a) When AP become zero  
   (b) When MP become zero  
   (c) At the intersecting point of AP& MP  
   (d) None of these
5. At the point of inflexion, TP will generally-
   (a) Show increases trend  (b) Show decreasing trend  
   (c) Equal to Zero  (d) be negative

6. If the Marginal product of labour is below the Average product of Labour, it must be true that 
   (a) The Marginal product of Labour is negative  
   (b) The Marginal Product of Labour is Zero  
   (c) The Marginal Product of Labour is falling  
   (d) The Average product of Labour is negative

7. Why does the Law of Increasing Returns operate? 
   (a) Full use of Fixed Indivisible Factors.  (b) Efficiency of Variable Factors.  
   (c) Need to reach the right combination  (d) All of the above

8. A Rational Producer will operate in – 
   (a) Stage I  (b) Stage II  (c) Stage III  (d) All of the above

9. Internal Economies and Diseconomies arise due to – 
   (a) Overall industry-level changes  (b) Changes at the Firm Level  
   (c) Both (a) and (b)  (d) Neither (a) nor (b)

10. Identify the correct statement. 
    (a) Average product is at its maximum when Marginal Product is equal to Average Product.  
    (b) Law of Increasing Returns to Scale relates to the effect of changes in factor proportions.  
    (c) Economies of Scale arise only because of invisibilities of factor proportions.  
    (d) Internal Economies of scale can accrue only to the exporting sector.

II. Fill in the blanks:
1. _______ curve never touch the ox-axis  
2. Costs which do not involve any cash payment to outsiders are called _______  
3. Accounting costs equal to _______ costs.  
4. _______ cost must be paid even if the firm’s level of output is zero.  
5. When the total revenue equal to economic costs then the firm will earn _______  
6. Tcn - Tcn-1 is equal to _______ cost  
7. ATC curve will be in _______ shaped.  
8. The vertical difference between TVC and TC is equal to _______ cost.  
9. When the Ac=mc then the average cost is _______  
10. Variable cost is also called _____
III. State the sentence true or false

1. Production function explains the relationship between inputs and output (  )
2. The factor which are available in the short period are called fixed factors (  )
3. When the marginal product is divided with number of unity labour then AP can be obtained (  )
4. Imperfect substation is one of the reasons for diminishing marginal returns (  )
5. When the TP is maximum, then the AP is zero (  )
6. The main cause for the ‘U’ shape of LAC curve is internal economics and internal diseconomies (  )
7. As a reason of external economics the LAC curve shifts upwards (  )
8. In perfect market AR=MR curve is parallel to ox-axis (  )
9. In imperfect market MR curve is a below the AR curve (  )
10. In perfect market and imperfect market the price is equal to average reverse. (  )

IV. Matching:

1. Fixed factory (  ) A. increasing returns
2. Land (  ) B. average cost
3. $\sum mp$ (  ) C. opportunity cost
4. Indivisible factors (  ) D. economic cost
5. Implicit cost (  ) E. LAC curve
6. Normal profit (  ) F. short period
7. National priorities (  ) G. real cost
8. Planned curve (  ) H. total product
9. AFC+AVC (  ) I. rent to own land
10. Waiting of sacrifices (  ) J. fixed factor

V. Give the answer in one (or) two sentences

1. Marginal product

It is an additional productivity obtained by the firm or producer by the employment of additional unit of labor or one more unit of labour. The change in the total productivity is also called marginal productivity.

$$MP = \frac{\Delta TP}{\Delta L}$$

$$MP = TP_n - TP_{n-1}$$

2. Increasing returns to scale

If the proportionate increase in the output is more than proportionate increase in the inputs it is said to be increasing returns to scale. It means when we double the inputs the output will be more than double.
3. **Diminishing returns to scale**

If the proportionate increase in the output is less than proportionate increase in the inputs it is said to be diminishing returns. It means when we double the inputs the output will be less than double.

4. **Real costs**

The concept of real cost was introduced by Alfred Marshall. Exertions of all kinds of labour that are already indirectly involved in production process. All these efforts and sacrifices together will be called as real cost of production. For example exertions of all kinds of labour, waiting and sacrifices required for saving the capital.

5. **Explicit cost**

Actual payments made by a firm for purchasing or hiring resources are called explicit costs. These costs are actual money expenses directly incurred for purchasing the resources for example rent to the land, wages to the labourer, expenditure on raw material interest on borrowed money etc.,

6. **Opportunity cost**

The opportunity cost of anything is next best alternative cost which is forgone. Individual point of view (or) nation point of view the resources are scarce. At that time to get the one commodity we have to forgo the another commodity. This is called opportunity costs.

7. **Internal economics**

When a firm expands its size of business (or) increases its output, it gets some advantages. They are called internal economics. These internal economics are related to a single firm and not related to all other firms in the industry.

8. **External Economics**

Firm is a unit, the group of firms is called industry. When industry is expended they are some advantages. These advantages are enjoyed by all the firms in the industry so they are called external economies. These economics are opened for all the firms it means they are not related to a single firm.

9. **Marginal revenue**

It is the additional revenue obtained by the firm (or) producer by the selling of additional unit of a thing (or) one more unit of a thing. The change in the total revenue is also called marginal revenue

\[
MR = \frac{\Delta TR}{\Delta Q}
\]

(or)

\[
MR = TR_n - TR_{(n-1)} \text{ units}
\]

10. **Variable factors**

The factors which are available to change the output in the short period, they can be changed so they are called variable factors

**Example**: capital, labour, raw materials etc.,

**Theory of production**

**List of questions**

1. What is a production function?
2. What are the types of production functions?
3. What is land and explain the features of land?
4. What is Labour and explain the features of labour?
5. What is Capital and explain the functions of capital?
6. What is an Organization explain the functions of Organization?
7. Explain the law of variable proportions and its importance?
8. Explain the law of returns to scale?
9. What is meant by cost of production? And explain the types of costs?
10. State the importance of opportunity cost?
11. Distinguish between fixed costs and variable costs?
12. Explain about short run costs with suitable diagrams?
13. Explain about long run costs with suitable diagrams?
14. State the economics of large scale production?
15. Draw the AR and MR curves under different markets?

KEY

I. Choose the correct answer:
1. A
2. B
3. C
4. B
5. A
6. C
7. D
8. D
9. B
10. A

II. Fill in the blanks:
1. AFC
2. Implicit cost
3. Explicit
4. Fixed
5. Normal profit
6. marginal
7. ‘U’ shaped
8. Fixed
9. Maximum
10. Marginal cost
III. True or False:
1. T
2. F
3. F
4. T
5. F
6. T
7. F
8. T
9. F
10. T

IV. Matching:
1. F
2. J
3. H
4. A
5. I
6. D
7. C
8. E
9. B
10. G
This Study Note includes

5.1 Meaning of Market
5.2 Perfect Competition
5.3 Imperfect Competition

5.1 MEANING OF MARKET

PRICING STRATEGIES IN VARIOUS FORMS OF MARKET

Meaning of market:
The term market refers to a system by which the buyers and sellers of a commodity can came into touch with each other either directly or indirectly for the exchange of a commodity or service.

Classification of market:
On the basis of various concepts markets can be classified into various types. They can be explained as follows:

(a) On the basis of area or locality:
Markets can be classified into three types. They are
1. Local markets
2. National markets
3. International markets

1. Local Market: Sometimes a particular commodity is exchanged in the locality where it is produced. Then the commodity is said to have a local market. Vegetables, flowers, fruits may be produced and marketed in the same area.

2. National Market: A commodity will have national market if it is demanded and supplied by people in different parts of the country. Commodities like wheat, sugar, cotton have national market.

3. International market: If a commodity is sold and purchased in different countries it is said to have international market for example gold, silver, wheat, cotton have international market.

(b) On the basis of time element:
Markets can be classified into three types
1. Very short period market
2. Short period market
3. Long period market.
(c) On the basis of competition among the seller or producers of firms
Markets can be classified into two types. They are
1. Perfect competition market
2. Imperfect competition market

### 5.2 PERFECT COMPETITION

Where there a large number of buyers and sellers are engaged in the exchange of homogeneous goods without any restrictions is called perfect competition market.

**Definition:**

“The more nearly perfect market is the stronger tendency for the same price to be paid for the same thing in all parts of the market” – *Alfred Marshall*.

**Features of Perfect Market:**
The perfect competition market has the following features.

1. **Large number of sellers and buyers:**
   There will be a large number of sellers and buyers for a good in this market. It means the output of a buyer or a seller is a small part of the total output. A single producer or seller cannot change the price by his actions. None of them is large enough to influence the price. Therefore a seller takes the price decided by the market. The producer is a price taker.

2. **Homogeneous Commodities:**
   Products in this market are similar in every aspect. A consumer gets the same good whenever he purchases. As a result there will be one price all over the market.

3. **Free entry and exit:**
   Any firm can enter into the production as per its desire. Finally it can leave the production at any time. This helps new firms to enter into business when conditions are favourable. As long as a firm earns super normal profits, it usually stays in competition. But when the firm ends up with losses, it would leave the market.

4. **Mobility of factors of production:**
   Factors of production will move from one production to another easily. This is also useful for free entry and exit of firms factors (land, labour, capital) move to the production activities where they get higher incomes.

5. **Absence of transport cost:**
   Under perfect market transport costs should not be added in the price. If transport costs are added the goods are available at the fewer prices at the near markets and they are available at the higher prices at distant markets. Existing of two prices for the same thing in different parts is against for perfect market. So transport cost should not be added.

6. **Perfect knowledge of market:**
   Buyers and sellers in this market will have a clear knowledge about market conditions. So that there will be one price throughout the market. Because of perfect knowledge, sales and purchases of commodities take place as one price.
Price determination:

In a perfect situation price is decided by the market. Market brings about a balance between the commodities that come for sale and those demanded by consumers. It means the forces of supply and demand determine the price of the good. Equilibrium price is established at the point where the supply and demand are equal. A table helps us to understand and the changes in supply, demand and equilibrium price.

<table>
<thead>
<tr>
<th>Price</th>
<th>Quantity demanded</th>
<th>Quantity supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>50</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>40</td>
<td>20</td>
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<td>3</td>
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<td>50</td>
</tr>
</tbody>
</table>

The above table shows the demand and supply schedule of good. Changes in price are always causing a change in supply and demand. As price increases there is a fall in the quantity demanded. It means price and quantity demanded have negative relation. But rise in prices has increased the supply of goods. The relation between price and supply of goods is positive. Every time a change in price is causing some change in the supply as well as demand. At one price $3 it can be observed that quantity supplied and demanded are equal. This is called equilibrium price. This process is explained with the help of a diagram.

In the above diagram demand and supply are shown on OX-axis, price is shown on OY-axis. In the diagram DD is the demand curve and SS is the supply curve. Both curves intersect at point E. It means the demand, supply are equal at OM level. So the equilibrium price is determined as OP.

5.3 IMPERFECT COMPETITION

Imperfect Competition Market:
The imperfect market is appeared in various forms. They are
1. Monopoly
2. Duopoly
3. Oligopoly
4. Monopolistic competition
Monopoly Market:
The word Monopoly is derived from two words ‘Mono’ and ‘Poly’. Mono means Single and Poly means seller. Where there is an only one seller or one producer or one firm it is said to be monopoly market. The single seller supply the commodities to the entire market the product supplied by the monopolist is not have close substitutes. They are some many restrictions for other produces to enter into the market as a result monopoly has no competition in the market.

Features of Monopoly:
The monopoly market has the following features:

1. Single firm:
A single firm produces the commodity in the market there is only one seller or one producer or one firm.

2. No close substitutes:
The produce supplied by the monopolist will not have close substitutes in the market. A consumer will not find a substitutes commodity for the monopoly products.

3. Strong barriers to enter:
New firms cannot enter in the production due to the certain restrictions in market i.e. huge investment, lack of technology; patents etc. prevent the new firms to enter the market.

4. Firm and Industry are same:
As there is one firm in monopoly market there is no difference between firm and industry.

5. Price maker:
In this market the producer can determine the price of the commodity so the producer in the market is said to be price maker.

6. Nature of AR & MR curves:
The average Revenue Curve (AR) and Marginal Revenue Curve (MR) both are slopes downwards from left to right because when a seller wants to sell the more of output he must reduce the price when the price is decreased both AR & MR are declining.

7. Price discrimination:
The monopolist can charge the different prices from the different customers for the same thing or services. The price is not uniform as in the perfect market competition.

8. Maximum profits:
The main aim of monopoly is to earn to get the maximum profits.

Price and output determination:
In monopoly market as there is a single producer, he can control either the price of the commodity or supply of the commodity. But he can’t control both at the same time. He can increase the price by decreasing the output or he can sell more output by decreasing the price. Maximization of profits is the sole objective of the monopolist. This can be shown by the following diagram.

In the below diagram output is shown on OX-axis. Cost, Revenue and Price are shown on OY-axis. In the diagram MR is the Marginal Revenue Curve MC is Marginal Cost Curve. It intersects the MR curve at point E so the equilibrium level of output is determined as OM at this level of output the average revenue is at point Q. So the price is determined as OP the average cost is OS. Here AR > AC as the monopoly is to earn maximum profits.
Abnormal profits $= TR - TC$
$= O \times AR - Q \times AC$
$= OM \times OP - OM \times OS$
$= OPQM - OSRM$
$= PQRS$

**Monopolistic Competition Market:**

The concepts of monopolistic competition was introduced by Prof. Chamberlin. It is a market with many sellers for a product but the products are different in certain respects. The features of monopoly and competition are combined in this market. Hence, it is called monopolistic competition. Example: Cosmetics, Soaps etc.

**Characteristics of Monopolistic Competition:**

The main features are:

1. **A considerable number of producers:**
   A commodity is produced by a considerable number of producers. Since there are more number of producers no one controls the output in the market. Competition will be high among the producers.

2. **Product differentiation:**
   The commodity of each producer will be different from that of other producers. The difference may be due to material used, colour design, smell, packaging, trademark etc. Because of this each product will have specific identification in the market.

3. **Entry and exist:**
   Firms are allowed to enter into production and leave the market. When profits are high new firms will join. In case of losses inefficient firms will leave.

4. **Selling costs:**
   An important feature of this market is every firm makes expenditure to sell more output. Advertisement through newspapers, journals, electronic media, sales representatives, exhibitions, free sampling help to promote the sales. Lot of expenditure is made on these items under this market.

5. **Imperfect knowledge:**
   Buyers will have an imperfect knowledge about commodities. Sometimes products may be the same
but consumers think that a particular good is superior than another. Due to the advertisements and other devices consumers purchase the commodities.

6. **Price decision:**

Each firm produces a commodity with small differences. It is due to this reason that a firm will decide the price for its product. The demand curve for a firm will be downwards sloping and more elastic.

**Duopoly Market:**

Where there are two sellers or two producers or two firms it is said to be duopoly market. It is also one of the forms of oligopoly markets.

**Oligopoly Market:**

The word oligopoly is derived from two Greek words oligo and pollien, oligo means “A few”, Pollien means seller. Where there are a few firms or few producers or few sellers, it is said to be oligopoly market.

**For example:** automobile industry, gas industry etc.

A market with a small number of producers is called oligopoly. The product may be homogeneous or there may be differences. Since producers are a few each firm produces a large portion of the output. It is a market with competition among the few. This market exists in automobiles, electrical and cigarettes etc.

1. **Less number of firms:**

The numbers of producers are a few that is around fine in this market. Each one produces a large part of the total output. He can control the output in the market. A firm can change the price by supplying either more or less.

2. **Interdependence:**

In the oligopoly market the decisions of every producer affect other producers. This is due to less number of producers in the market. A change in the decisions of a producer (output or price) makes the other producers to change their decisions.

3. **Selling costs:**

Sometimes commodities are produced with small differences. Then each firm makes a huge expenditure on advertisements. It is in the oligopoly that we can see the highest expenditure on selling costs.

4. **Uncertainty:**

It will be difficult to guess what kind of demand curve will be there for a firm. Every time when a producer changes his decision, other producers will also change their decision. Therefore, it is not possible to expect price, output conditions to be the same in this market.

5. **Rigid price:**

In this market firms will not change the price, they follow a rigid price. A firm cannot increase price because other firms will not raise their prices. The firm that increases the price will be put to loss. If one firm reduces its price others will also do the same. Therefore, all the firms will follow a price without making any changes in it. Hence it is called rigid prices.

**Equilibrium of the firm under perfect Market:**

Equilibrium means constant position (or) unchanged position. The firm reached the equilibrium position when it gets maximum output. To determine the maximum output two conditions must be satisfied. They are:

1. Marginal cost is equal to Marginal Revenue ($MC = MR$)
2. $MC$ curve cuts the $MR$ curve from below.
The equilibrium of the firm can be shown by the following diagram.

In the above diagram output is shown on OX-axis. Costs and Revenues are shown on OY-axis. In the diagram MR is the Marginal Revenue curve and MC is the Marginal Cost Curve. It intersects the MR curve from below at point E₁. It means at point E₁ two conditions are satisfied. So the equilibrium output is determined as M₁.

**Type of Equilibrium:**
The equilibrium firm can be divided into two types. They are:
1. Short period equilibrium and
2. Long period equilibrium.

In the short period equilibrium the firm can get either abnormal profits or losses. But in the long period equilibrium it gets only normal profits.

(a) **Abnormal profits:**

When the firm is in the short period equilibrium sometimes it can get abnormal profits. This can be shown by the following diagram.
In the above diagram output is shown on OX-axis. Costs, Revenue and prices shown on OY-axis. In the diagram MR is the Marginal Revenue curve MC is the Marginal Cost curve. It intersects the MR curve from below at point Q. So the equilibrium output is determined as OM at this output the price (AR) is determined as OP. The average costs (AC) is as here AR>AC. So the firm can get abnormal profits.

Abnormal profits \( = TR - TC \)
\( = Q \times P \times (AR) - Q \times AC \)
\( = OM \times OP - OM \times OS \)
\( = OPQM - OSRM \)
\( = PQRS \)

(b) Losses:
When the firm is in the short equilibrium sometimes it may get losses. This can be shown by the following diagram.

Long period equilibrium – Normal Profits:
When the firm is in the long period equilibrium it gets only normal profits. This can be shown by the following diagram.
In the above diagram output is shown on OX-axis Costs, Revenue, Price is shown on OY-axis. In the diagram LMR is the long run Marginal Revenue curve. LMC is the long run Marginal Cost Curve. It intersects the LMR from below at point Q. So the equilibrium output is determined as OM at this level of output the price (AR) is OP. The average (AC) is also OP. Here AR = AC. It means the total revenue (OPQM) is equal to total cost (OPQM). So the firm will get only normal profits.

**PRICE DISCRIMINATION UNDER MONOPOLY**

If the seller charges different prices from the different customers for the same thing or services, it is said to be price discrimination. It is possible only in monopoly market. Hence it is called discriminating monopoly.

**Classification of price discrimination:**

Prof. Pigou has classified the price discrimination into three types:

1. **Price discrimination of first degree:**
   
   If the seller charges the different prices from the different customers on the basis of paying capacity of the consumer, it is said to be price discrimination of first degree.

2. **Price discrimination of second degree:**
   
   In this case the seller charges one price up to a limit of goods purchased, after that limit he charges the another prices, it is called price discrimination of second degree.

3. **Price discrimination of third degree:**
   
   Irrespective of the paying capacity of the consumer and quantity of the goods purchased, if the seller charges the different prices it is said to be price discrimination of third degree.

   The price discrimination of third degree was commonly prevailed in the society.

**Conditions for price discrimination:**

A monopoly firm can sell the same product at two different prices to two different groups of buyers. This
type of price discrimination becomes possible under the following circumstances:

(a) **Different price elasticities of demand:**

The monopolist charges higher price for the product in a market where price elasticity of demand is relatively inelastic. On the other hand, he charges relatively lower price in a market where the price elasticity of demand is relatively elastic.

(b) **Tariff barrier:**

If two markets are separated by a tariff wall, the monopolist can follow this principle of price discrimination. For example, the monopolist can sell its product at a lower price in the foreign market, and at a higher price in the domestic market.

(c) **Geographical distance between the markets:**

Price discrimination is also possible when two markets are separated from one another by geographical distance. In this case, the monopolist can sell its product at a lower price in a distant market and at higher price in the local market.

(d) **Impossibility of resale of a product (particular service items):**

If it is not possible on the part of any buyer to resale the product sold by the monopolist, then the monopolist can easily follow the policy of price discrimination. This happens particularly in case of service items. For example, a renowned doctor can charge different fees for rendering similar service to two different patients.

(e) **Ignorance of the consumers:**

If the consumers remain ignorant about the difference in prices of the same product in two different markets, then also the monopolist can easily follow the policy of price discrimination.

(f) **Typical behavior of the consumers:**

In some cases, a group of consumers consider higher price as an indicator of higher quality (the so called Veblen effect). Such typical behavior of the consumers creates an opportunity for the monopolist to follow the policy of price discrimination.

**Price and output determination under monopolistic competition market:**

**Demand curves:**

There are two types of the demand curves under monopolistic completion markets

1. Perceived demand curve.
2. Proportional demand curve

1. **Perceived demand curve:**

This demand curve shows the different combinations between quantity demand and price such that neither of the firms as any further initiative to deviate from their decisions.

2. **Proportional demand curve**

This demand curve captures the impact of the all firms simultaneously changing the same price and hence it takes into accounts the affects of the actions of the rivals.
When the perceived demand curve (dd) and proportional demand curve (DD) are interest, then the price is determined in monopolistic competition market.

**Equilibrium condition under monopolistic competition:**

Like the perfect competition market the firm in this market also satisfies the two conditions to reach the equilibrium position. They are

- Marginal cost = marginal revenue (MC = MR)
- MC curve cuts the MR curve from below

![Diagram](image)

\[
\text{TR} = Q \times P \quad (P \text{ (AR) } \text{ TC} = Q \times AC
\]

\[
= Oq \times OP = Oq \times Oc
\]

\[
= OPaq = Ocbq
\]

Abnormal profit = Pabc

In the long run the firms enjoy super normal profits. It operates less than its full utilization level. This call for the emgerance of the excise capacity in the market.
According to the above diagram the difference between $q_{mc}$ and $q_{pc}$ captures the extent of excess capacity.

**Price and output determination under Oligopoly Market:**

1. **Cournot’s Model:**
   According to Cournot each duoplist believes that regardless of his actions and they effect upon the market of the product the other will go on producing the same commodity. Cournot output is two-thirds of the competitive output and the price is two-thirds of most profitable i.e., monopoly price.

2. **Stackelberg Model:**
   In this case, the producer under duopoly structure incorporate the decision level of his rival, incorporates in its own profit margin.

3. **Bertrand Model:**
   According to this model each producer can always lower the price until price is equal to cost of production.

4. **Edgeworth Model:**
   According to this model each duopolistic believe that his rival will continue to change the same price as he just doing irrespective of what he himself sets in.

5. **Collusive Oligopoly:**
   According to this model a cartel is formed when firms jointly fixes the price and output with a view to maximize joint profit.

   **For example:** OPEC countries form a cartel.

**Pricing Strategies:**

- **Cost-plus pricing:**
  Cost-plus pricing is the simplest pricing method. The firm calculates the cost of producing the product and adds on a percentage (profit) to that price to give the selling price.

- **Limit pricing:**
  A limit price is the price set by a monopolist to discourage economic entry in to a market. The limit price is often lower than the average cost of production of just low enough to make entering not profitable.
• **Penetration pricing:**
  Setting the price low in order to attract customers and gain market share. The price will be raised later once this market share is gained.

• **Price discrimination:**
  Setting a different price for the same product in different segments to the market. For example, this can be for different classes, such as ages, or for different opening times.

• **Psychological pricing:**
  Pricing designed to have a positive psychological impact. For example, selling a profit at ₹ 3.95 or ₹ 3.99, rather than ₹ 4.00.

• **Dynamic pricing:**
  A flexible pricing mechanism made possible by advances in information technology, and employed mostly by internet-based companies.

• **Price leadership:**
  An observation made of oligopolistic business behavior in which one company, usually the dominant competitor among several, leads the way in determining prices, the others soon following.

• **Target pricing:**
  Pricing method where by the selling price of a product is calculated to produce a particular rate of return on investment for a specific volume of production. The target pricing method is used most often by public utilities, like electric and gas companies, and companies whose capital investment is high, like automobile manufacturers.

• **Absorption pricing:**
  Method of pricing in which all costs are recovered. The price of the product includes the variable cost of each item plus a proportionate amount of the fixed costs and is a form of cost-plus pricing.

• **High-low pricing:**
  Method of pricing for an organization where the goods or services offered by the organization are regularly priced higher than competitors, but through promotions, advertisements, and coupons, lower prices are offered on key items.

• **Marginal cost pricing:**
  In business, the practice of setting the price of a product to equal the extra cost of producing an extra unit of output.

**MARKETS**

1. **Choose the correct answer:**
   1. Which of the following is/are an essential feature of the market
      (a) Buyers  (b) Sellers  (c) Price  (d) All the three

2. In the long run price is governed by ...........
   (a) Cost of Production  (b) Demand supply forces  (c) Marginal utility  (d) None
3. In the long run a firm in perfect competition earns
   (a) Normal profit only   (b) Abnormal profit
   (c) Average profit of past five years   (d) 12.33% profits on capital employed
4. A firm faces the shut down situation when
   (a) Price is less than average variable cost   (b) Price is more than the average variable cost
   (c) Price is equal to fixed cost   (d) Price is more than the average fixed cost
5. A firm that makes profit in excess of normal profit is earning
   (a) Economic profit   (b) Costing profit   (c) Normal profit   (d) Super normal profit
6. The market state that satisfy all the essential features of a perfect competitive market except identity of product is known as
   (a) Oligopoly   (b) Duopoly   (c) Monopoly   (d) Monopolistic competition
7. In the short run if the price is above the average total cost in a monopolistic competitive market, the firm makes
   (a) Profits and new firms join the market   (b) Profit and bar entry to new firms
   (c) Makes losses and exit the market   (d) Quick profit and disappears
8. Which of these is associated with a monopolistic competitive market –
   (a) Product differentiation   (b) Homogeneous Product
   (c) Normal in short run   (d) Single buyer
9. In a competitive market .......... is the price maker
   (a) Firm   (b) Industry   (c) Consumer   (d) Trade association
10. A Monopoly demand curve is
    (a) Same as its average revenue curve   (b) Same as its supply curve

II. Fill in the blanks
1. According to Adam Smith invisible hands are also called ____
2. In _____ market the firm has excess production capacity in the long run
3. If the demand curve of pure monopoly is elastic, MR will be _________
4. Average Revenue curve is also known as _______
5. Toilet soaps industry is an example of ___ market
6. Electricity supply service is an example of _____ market
7. Price rigidity is the feature of _____ market
8. In _____ market the firm has no definite demand curve
9. The demand for monopoly product is _______ elastic
10. The demand for monopolistic completion product is _____ elastic
III. State the sentence true or false:
1. Railways is an example of perfect market
2. Sugar cane is an example of monopolistic completion
3. Free entry to exit is not the feature of monopoly
4. When mc=mr the firm will get maximum profits
5. The firm is monopoly is price takes
6. Price discrimination is possible in monopoly market only
7. Pure oligopoly is one where there are few sellers producing homogeneous product
8. Kinky demand curve is the feature of monopoly
9. The firm in monopolistic competition earns abnormal profits in long run
10. The firm under perfect market earns normal profits in short

IV. Matching
1. Proportional demand curve ( ) A. less price
2. Price discrimination ( ) B. duopoly
3. Homogeneous product ( ) C. advertisements
4. Interdependence ( ) D. high price
5. Two firms ( ) E. Monopoly
6. Limit price ( ) F. long period
7. Skimming price ( ) G. perfect market
8. Selling costs ( ) H. price discrimination
9. Tariff barriers ( ) I. monopolistic completion market
10. AR=MR=P=MC ( ) J. oligopoly

V. Give the answer in one or two sentences
1. What is market
   The term market refers to a system by which the buyers and sellers of a commodity can came into touch with each other either directly or indirectly for the exchange of a commodity or service.

2. Penetration pricing
   Setting the price low in order to attract customers and gain market share. The price will be raised later once this market share is gained.

3. Dynamic pricing
   A flexible pricing mechanism made possible by advances in information technology, and employed mostly by internet based companies.

4. Perceived demand curve
   Perceived demand curve shows the different combinations between quantity demand and price such that neither of the firms as any further initiative to deviate from their decisions.
5. **Monopoly**

The word Monopoly is derived from two words ‘Mono’ and ‘Poly’. Mono means Single and Poly means seller. Where there is an only one seller or one producer or one firm it is said to be monopoly market. The single seller supply the commodities to the entire market the product supplied by the monopolist is not have close substitutes. They are some many restrictions for other produces to enter into the market as a result monopoly has no competition in the market.

6. **Product differentiation**

The commodity of each producer will be different from that of other producers. The difference may be due to material used, colour design, smell, packaging, trademark etc. Because of this each product will have specific identification in the market.

7. **Selling costs**

An important feature of this market is every firm makes expenditure to sell more output. Advertisement through newspapers, journals, electronic media, sales representatives, exhibitions, free sampling help to promote the sales. Lot of expenditure is made on these items under this market.

8. **Cost plus pricing**

Cost-plus pricing is the simplest pricing method. The firm calculates the cost of producing the product and adds on a percentage (profit) to that price to give the selling price.

9. **Collusive oligopoly**

In oligopoly market the firms formed in to a cartel to fix the price and output with a view to maximize joint profits. It is called collusive oligopoly.

For example: OPEC countries form a cartel to jointly control the supply of oil like a pure monopolist and maximize joint profits.

10. **Price leadership:**

An observation made of oligopolistic business behavior in which one company, usually the dominant competitor among several, leads the way in determining prices, the other s soon following.

List of questions:

1. What is market? And explain the various forms of market?
2. Define perfect competition market? And state how the price is determined under this market?
3. What is monopoly? State its features and how the price and output is determined under monopoly?
4. Explain the features of monopolistic completion market?
5. State the features of oligopoly market?
6. Explain about the equilibrium of the firm under perfect market?
7. Equilibrium condition under monopolistic competition market?
8. What is price discrimination? And state the types of price discrimination?
9. Pricing strategies under oligopoly market?
10. Explain about different pricing strategies?
Key

I. Choose the correct answer:
1. (D)
2. (A)
3. (A)
4. (A)
5. (D)
6. (D)
7. (A)
8. (A)
9. (B)
10. (A)

II. Fill in the blanks:
1. price mechanism
2. monopolistic competition
3. positive
4. demand curve
5. monopolistic competition
6. monopoly
7. oligopoly
8. oligopoly
9. less
10. more

III. State the sentence true or false:
1. (F)
2. (F)
3. (T)
4. (T)
5. (F)
6. (T)
7. (T)
8. (F)
9. (T)
10. (F)
V. Matching:

1. I
2. E
3. G
4. J
5. B
6. A
7. D
8. C
9. H
10. F
6.1 DEFINITION OF MONEY

DEFINITION OF MONEY, TYPES, FEATURES AND FUNCTIONS

Before the introduction of money barter system was in vogue or prevailed. If the goods are exchanged for the goods it is said to be barter system. There are so many inconveniences in barter system.

Difficulties of the Barter System:

The difficulties of the barter system which may be enumerated as follows:

1. Lack of coincidence of wants.
2. Lack of store of value.
3. Lack of divisibility of commodities.
4. Lack of common measure of value.
5. Difficulty in making deferred payments.

1. Lack of coincidence of wants:

Under the barter system the buyer must be willing to accept the commodity which the seller is willing to offer in exchange. The wants of both the buyer and the seller must coincide. This is called double coincidence of wants.

2. Lack of store of value:

Some commodities are perishables. They perish within a short time. It was not possible to store the value of such commodities in their original form under the barter system. They should be exchanged before they actually perish. Otherwise, they would not be available for exchange when the need actually arises in future.

3. Lack of divisibility of commodities:

Depending upon its quantity and value, it may become necessary to divide a commodity into small units and exchange one or more units for other commodity. But all commodities are not divisible. This is particularly true in the case of animals.

4. Lack of common measure of value:

Under the barter system there was no common measure of value. To make exchange possible, it was necessary to determine the value of every commodity in terms of every other commodity.
5. Difficulty in making deferred payments:
Under barter system future payment for present transaction was not possible, because future exchange involved some difficulties. For examples, suppose it was agreed to sell specific quantity of rice in exchange for a goat on a future date keeping in view the present value of the goat. But the value of goat may decrease or increase by that date.

Functions of money
Money plays a significant role in the modern economic life of the human beings.

Evolution of Money:
The term ‘Money’ was derived from the name of Goddess “Juno Moneta” of Rome.

Definition of Money:
Money was invented to overcome the difficulties of the barter system. Several economists defined money in several ways:
1. Robertson: Robertson defined money as “anything which is widely accepted in payments for goods or in discharge of other kinds of business obligations”.
2. Seligman: According to Seligman’s definition, “Money is one that possesses general acceptability”.
3. Walker: According to Walker, “Money is what money does”.

6.2 FUNCTIONS OF MONEY

Functions of Money:
Money has many important functions to perform. These functions may be classified as follows:
1. Primary Functions.
   (a) Medium of Exchange.
   (b) Measure of Value.
2. Secondary functions
   (a) Store of value.
   (b) Standard of deferred payments.
   (c) Transfer of money.
3. Contingent functions.
   (a) Measurement and distribution of national income.
   (b) Money equalizes marginal utilities/productivities.
   (c) Basis of credit.
   (d) Liquidity

1. Primary functions:
The primary functions of money are really the technical and important functions of money. They are of two types:

(a) Medium of Exchange:
Money serves as a medium of exchange. Money facilitates exchange of commodities without double coincidence of wants. Any commodity can be exchanged for money. People can exchange goods and services through the medium of money.
(b) Measure of Value:
The value of each commodity is expressed in the units of money. We call it the price. In view of this function of money, the values of different commodities can be compared and the ratios between the prices of different commodities can be determined easily.

2. Secondary functions:
Money has the following secondary functions:

(a) Store of value:
The value of commodities and services can be stored in the form of money. Certain commodities are perishable. If they are exchanged for money before they perish, their value can be preserved in the form of money.

(b) Standard of deferred payments:
Money serves as a standard of deferred payments. In the modern economies most of the business transactions take place on the basis of credit. An individual consumer or a business man may now purchase a commodity and pay for it in future. Similarly one can borrow certain amount of money now and repay it in future.

(c) Transfer of money:
Money can be transferred from one person to another at any time and at any place.

3. Contingent functions:
Besides the primary and secondary functions, money has certain contingent functions also. They may be stated as follows:

(a) Measurements and distribution of national income.
Nations income of a country can be measured in money by aggregating the value of all commodities. Similarly national income can be distributed to different factors of production by making payments to them in money.

(b) Money equalizes marginal utilities/productivities:
The consumers can equalize the marginal utilities of different commodities purchased by them with the help of money. They can thus maximize their satisfaction. Similarly the firms can also equalize the marginal productivities of different factors of production and maximize their profits.

(c) Basis of credit:
Credit is created by banks from out of the primary deposits of money. The supply of credit in an economy is dependent on the supply of nominal money. It is not possible to create credit if there is no reserve money.

(d) Liquidity:
Money is the most important liquid asset. In terms of liquidity it is superior to all other assets. Money is cent percent liquid.

6.3 COMPONENTS OF MONEY SUPPLY

Money supply includes all money in the economy. The components of money supply may vary from country to country. Broadly speaking, money supply composes of the following:

1. Currency issued by the Central Bank.
2. Demand deposits created by commercial banks.
1. **Currency issued by the Central Bank:**

In any country the Central Bank issues currency. Currency consists of paper notes and coins. In India Reserve Bank of India which is the Central Bank of the country issues notes in the denominations of Rs. 1000, Rs 500, Rs 100, Rs 50, Rs 20, Rs 10 and Rs 5 and Rs 2. The one rupee note and coins are issued by the Finance Department of the Government of India.

2. **Demand deposits created by Commercial banks:**

Bank deposits are a prominent component of money supply. Commercial banks create credit from the primary deposits of money received from the public. Credit is created in the form of deposits called derived or secondary deposits.

**Monetary aggregates:**

In India money supply is measured in terms of the following monetary aggregates:

- **M1** = Currency + Demand deposits + Other deposits.
- **M2** = M1 + Time liability portion of savings deposits with banks + Certificates of Deposits issued by banks + term deposits maturing within one year.
- **M3** = M2 + term deposits over one year maturity + call/term borrowings of banks.

**Value of Money:**

The purchasing power of money is called value of money. It is nothing but exchange value. How much of goods and services can be obtained in exchange of a unit of money is called value of money. The value of money mainly depends upon price level. The inverse value of P is called value of money (1/P).

**Types of value of money:**

1. Internal exchange value
2. External exchange value

1. **Internal Exchange Value:**

How much goods and services can be obtained in exchange of a unit or money domestically is called internal external value.

2. **External Exchange value:**

How much foreign currency can be obtained in the exchange of a unit of domestic currency is called external exchange value.

**Form of money:**

1. Cash money and credit money.
2. Other financial assets (NBFI) e.g.: Units of UTI, insurance policy etc.
3. Paper money and coins
4. Near money (or) money substitutes (bank cheque)

**Gresham’s law:**

The Law states that bad money drives good money out of circulation. This is true is case of bimetallism where two metal standard (gold and silver) operate side by side. In such a case one metal currency drives the other out of circulation. It also means cheap money drives out dear money. If a country uses both money as well as mental money, People will use the paper and hold the metal money.
6.4 Quantity Theory of Money

Quantity Theory of Money:

1. Quantity theory by Irving Fisher:

The quantity theory of money explains about the value of money. Irving Fisher gave an equation to determine the value of money.

Irving Fisher used an equation \[ MV = PT \]

- \( M \) = Money supply issued by the legal authority
- \( V \) = Velocity of money
- \( P \) = Price level
- \( T \) = Total output

Fisher used the equation to show the relationship between money supply and price level as direct and proportional.

The rate of change in money supply \( \frac{dm}{m} \) is equal to rate of change in \( P \) \( \frac{dp}{p} \).

Main points:
1. There is a direct proportion relationship between money supply and price level.
2. There is an inverse relationship between money supply and value of money.
3. There is an inverse relationship between price level value of money.

Assumptions of Fisher equations:
1. \( V \) velocity of money is constant.
2. Gross national product \( T \) is also constant
3. This theory assumes that money demand for transaction purpose only.

Criticisms:
1. Fisher’s equation is abstract and mathematical truism. It does not explain the process by which \( m \) affects \( P \).
2. It is presumed that entire \( M \) is used up in buying \( T \) instantly. It is unreal. No one spends all money the moment he earns it.
3. The concept full employment is myth. There is natural rate of unemployment in every country.
4. Even with full employment, a country can rise national output by bringing those factors which are not available within economy from abroad.
5. It is presumed that money is used for transactions only. Hence the theory is often referred to as cash transaction theory. This ignores the other roles of money.

Quantities theory of money cash balance approach (or) Cambridge equation:

Cambridge university professors gave another equation which explains the value of money i.e.

\[ M = PKT \]

- \( M \) = money supply for a specific period of time
- \( P \) = Price level
K = cash balance, it is the part of total income
T = total output

Meaning of K:
The part of money supply which is kept in the form of cash to meet the unforeseen expenditure is called “K”.

When M & T are constant if there is a change in the ‘K’ that leads to the change in price level.
If K is more the value of money should increase, if K is less the value of money also less.

Quantity theory by Keynes:
According to J.M. Keynes the money supply effects the rate of interest when the money supply increases rate of interest will be decreased. It leads to the increase of investments then level of employment, income, demand, price level etc., when the price level increases there is a decrease in the value of money.

According to Keynes the rate of interest place a dominant role in determination of value of money.
The Keynesian version of the Quantity Theory integrates monetary theory with the general theory of value.

In a broader sense, the term inflation refers to persistent rise in the general price level over a long period of time. Some of the important definitions are given below:

Definition:
Crowther: Crowther defined as a state in which the value of money is falling, that is the prices are rising.
Samuelson: According to Samuelson, “Inflation denotes a rise in the general level of prices”.

Causes of Inflation:
Primary Causes:
1. When demand for a commodity in the market exceeds its supply, the excess demand will push up the price (‘demand-pull inflation’).
2. When factor prices rise, costs of production rise (‘Cost –push inflation’) 
Let us now discuss in detail the various causes that may bring about inflation –

Increase in public spending:
1. Government’s spending is an important part of total spending in any modern economy.
2. It is an important determinant of aggregate demand.
3. In less developed economies, government expenditure has shown an upward trend.
4. This has created inflationary pressure on the economy.

Deficit financing of government spending:-
1. Government spending increases beyond what can be financed by taxation.
2. In order to be able to incur the extra expenditure, the government resorts to deficit financing.
3. For instance, it prints money and spends it. This adds to the pressure of inflation.
**Increased velocity of circulation**

1. Total use of money = money supply by the government \( \times \) velocity of circulation of money.
2. In boom phase, people speed money at a faster rate.
3. The velocity of circulation of money is increases.

**Population growth:**

1. It increases total demand in the market.
2. The pressure of excess demand will create inflation.

**Hoarding:**

1. Excess demand is sometimes artificially created by hoarders.
2. They stockpile commodities
3. They do not release them to the market.
4. This leads to excess demand and inflation.

**Genuine shortage:**

1. If the factors of production are in short supply, production will be affected.
2. Supply will be less than demand, prices will rise.

**Exports:**

1. If the total output of a commodity is not sufficient to meet both domestic and foreign demand.
2. Then exports will create inflation in the domestic economy.

**Trade unions:**

1. By demanding an increase in the wage rate, they increase the cost of production.

**Tax reduction:**

1. Governments sometimes reduce taxes to gain popularity.
2. This leaves more money in people’s hands.
3. This leads to inflation if there is no corresponding increase in production.

**Imposition of indirect taxes:**

1. Government may imposes indirect taxes (such as excise duty, value-added tax etc.)
2. Then producers of sellers raise the product prices to keep their profits unchanged.

**Price-rise in international market:**

1. The imported price of some commodities or factors of production may rise in the world market.
2. It would lead to inflation in the domestic market.

**Non-economic reasons:**

1. For instance, at times of natural calamities (flood) crops are destroyed, reducing the supply of agricultural products.
2. Prices of these commodities tend to increase.
Money

List of question:
1. What are the difficulties of barter system?
2. Define money and explain the function of money.
3. Explain the forms of money.
4. Explain about Fisher’ theory.
5. Explain about cash balance approach.
7. What are the components of money supply (or) monetary aggregates?

Objective Question:

1. Choose the correct answer
   1. Which of the following is near money?
      (a) Bill of exchange   (b) Saving bonds   (c) Gilt edged securities (d) All the three

2. Optional money is a
   (a) Legal tender money   (b) Non-legal tender money
   (c) Limited legal tender money (d) Full bodied money

3. Which of the following function does money serve when used to measure the prices of different goods and services?
   (a) Store of value    (b) Medium of exchange
   (c) Standard of value   (d) Display of power

4. Which of these affects the demand for money?
   (a) Real income   (b) Price level   (c) Rate of interest   (d) All the three

5. Which of these would lead to fall in demand for money?
   (a) Inflation    (b) Increase in real income
   (c) Increase in real rate of interest   (d) Increase in wealth

6. Supply of money refers to
   (a) Total money held by the public   (b) Total money held by RBI
   (c) Total money with all the commercial banks and RBI   (d) Total money in Government account
II. Fill in the blanks
1. Money means any things that passes __________
2. Bonds, Government securities refer to _______ money.
3. ______ Market is also called the credit market.
4. If someone keeps some money for bad days, the demand for money is known by _____ motive of money.
5. _____ function of money leads to saving and investment.
6. The inverse value of price is called ______
7. According to fisher theory money is demanded for ______ purpose

III. State the sentence True (or) false
1. According to walker, money is what money does ( ).
2. Money is treated as means of trade and commerce ( )
3. Examples of NBFI are cash money and credit money ( )
4. According to Cambridge equation if ‘K’ is more the value of money should increase ( )
5. According to Keynes the rate of interest cannot decide the value of money ( )
6. There is a direct relationship between price level and value of money ( )
7. During the inflation period borrowers will gain ( )
8. Public expenditure come under the money policy ( )
9. Tax policy come under Fiscal policy ( )
10. M₁ is considered as the most important measure of money( )

IV. Matching
1. Liquidity preference ( ) A. public debt
2. M₃ ( ) B. loss of barrowers
3. M₂ ( ) C. credit money
4. Fiscal policy ( ) D. Highest moniners
5. Deflation ( ) E. m₂+ time deposit
6. Demand deposit ( ) F. Bimetalism
7. Commercial banks ( ) G. Keynes
8. Near money ( ) H. Cheque
9. Graphsm law ( ) I. m₁+ post office saving
Answers:

I. Choose the Correct Answers
1. D
2. B
3. B
4. C
5. C
6. A
7. D
8. C
9. A
10. A

II. Fill in the Blanks
1. General Acceptability.
2. Near
3. Money
4. Precautionary
5. Standard of Deferred Payment.
6. Value of Money
7. Transaction

III. True or False.
1. True
2. True
3. False
4. True
5. False
6. False
7. True
8. False
9. True
10. True
IV. Match the following:

1. H
2. F
3. J
4. A
5. B
6. D
7. C
8. E
9. G

V. Give the answer in one or two sentences

1. **Gresham’s law**
   The Law states that bad money drives good money out of circulation. This is true in case of bimetallism where two metal standards (gold and silver) operate side by side. In such a case one metal currency drives the other out of circulation. It also means cheap money drives out dear money. If a country uses both money as well as mental money, people will use the paper and hold the metal money.

2. **Liquidity preference**
   Liquidity means the feature of the thing which can be exchanged into others. Money has more liquidity when compared to all other assets. So people prefer the money to keep it as cash. It is called liquidity preference. The concept of liquidity preference was introduced by J.M Keynes. According to him money is demanded for only liquidity preference.

3. **Repo Rate**
   When the RBI lends the money to the commercial banks on the basis of securities, it charges some remuneration from the commercial banks, it is called Repo Rate. It is related to short period only.

4. **Deflation**
   If the prices are decreasing continuously, it is said to be deflation. In the period of deflation almost all economic activities are down trend. But unemployment increases more and more.

5. **Stagflation**
   During the inflationary tendencies the price level increases but unemployment decreases. During the deflation situation price level decreases but unemployment increases. But price level increases and simultaneously unemployment also increases, this situation is called stagflation.

6. **Internal value of money**
   How much goods and services can be obtained in exchange of a unit or money domestically is called internal external value.
7. **External value of money**
How much foreign currency can be obtained in the exchange of a unit of domestic currency is called external exchange value.

8. **Semi inflation**
True inflation is formed after the full employment situation; semi inflation is formed before reaching the full employment. There may be inflationary price rise in some sectors of the economy.

9. **Open inflation**
When the government does not control the prices through administrative measures and leave it to the market forces such type of inflation is called open inflation.

10. **Deficit finance**
When the government makes the borrowings from the RBI or issue the new currency to fill the gap of the budget deficit, it is said to be deficit finance.
7.1 MEANING OF BANKING

Bank

A commercial bank is a financial intermediary. It accepts the deposits from the surplus units and lends these financial resources to the deficit units.

The main aim of the commercial banking sector is profit making.

Functions of commercial banks:

A bank is a financial institution. It is a profit-making business firm dealing with money. Modern banks in India are joint stock companies registered under the Indian Companies Act.

Definition of Bank:

Sayers define bank as, “an institution whose debts (bank deposits) are widely accepted in settlement of other people’s debts”.

According to Crowther, a bank “collects money from those who have it to spare or who are saving it out of their incomes and lends this money to those who require it”.

7.2 COMMERCIAL BANKS

Commercial Banks play a very prominent role in the financial system of an economy. They perform a variety of functions as discussed below:

1. Acceptance of deposits:

One of the primary functions of a commercial bank is to accept deposits from the public. The deposits accepted by the banks are of the following types.

(a) Current deposits:

These are the deposits made into the current account of a bank. They are most convenient to the businessmen, public authorities and joint stock companies because there are no restrictions on the number and the amount of withdrawals.

(b) Savings deposits:

These deposits are made into a savings bank account of the bank. They are most convenient to the small businessman, salaried employees, artisans and people belonging to the low and middle income groups. The interest paid on these deposits is comparatively low and is around 4% per annum.
(c) Term deposits:
They are also called fixed deposits because the money is deposited with the bank for a fixed period of time. The deposit can be withdrawn after the expiry of maturity period. The minimum period of deposit is 15 days. The rate of interest varies from 6% per annum to 12% per annum.

(d) Recurring or cumulative deposits:
These are the variants of fixed deposits. These deposits are very convenient to those who cannot save huge amounts at a time. These deposits carry interest at a rate more than that of savings bank and less than that of a term deposit.

2. Payment of loans and advances:
Another primary function if the commercial bank is to give loans and advances to different sections of the public like traders, industrialists, farmers, artisans etc.

(a) Demand loans/call loans:
A demand loan is a loan that should be repaid on demand by the bank. It does not have a specified maturity period. This loan is a kind of advance made with or without security. These are also called call loans. Normally call loans are given to other banks or financial institutions for a day or a few days.

(b) Short term loans:
These loans are given for a specified short period. They are sanctioned to businessmen and farmers etc. to finance working capital. Individuals may also receive such loans as personal loans. They are given against security.

(c) Cash credits:
A cash credit refers to an arrangement by which the bank allows its customer to borrow money upto a specified limit from an account opened for the purpose. The customer need not withdraw the entire amount in one installment.

(d) Overdraft:
This is a facility allowed by the bank to the current account holders. They are allowed to withdraw money with or without security in excess of the balance available in their account up to a limit. Interest is charged on the amount of actual withdrawal.

(e) Discounting of bills of exchange:
Bills of exchange are undertakings written by the buyers and given to sellers when the transaction is made on credit basis. The buyer undertakes to make payment after a specified period or on a specified future date. The traders who posses such bills of exchange with them may approach the banks for discounting of the bills of exchange when they need money.

(d) Credit cards:
Now-a-days, the banks have devised new methods of giving loans to the customers. One such popular method is issuance of the credit card. A credit cardholder can use his card to purchase goods on credit from specified firms and shops and also withdraw cash subjects to certain regulations.

3. Creation of Credit:
The commercial banks create credit. This is a unique function of commercial banks. Credit is created from out of the primary deposits of money the customers received from the public. Part of the total amount of these deposits is given as loans and advances to its customers.
4. **Agency Functions:**

Commercial banks perform certain agency functions also:

(a) Collection of cheques, drafts, bills of exchange etc. of their customers from other banks.

(b) Collection of dividends and interest from business and industrial firms.

(c) Purchase and sale of securities, shares, debentures, government securities on behalf of the customers.

(d) Acting as trustees and keeping their funds in safe custody, acting as executors and executing the will of the customers after their death.

(e) Making payments such as insurance premium, income-tax, subscriptions etc. on behalf of their customers as per their advice.

5. **General Utility Functions:**

Besides the above agency functions, the commercial banks provide certain general utility services to their customers.

(a) Provide locker facility for the safe custody of the silver, gold ornaments, important and valuable documents.

(b) Transfer money of the customers from one bank to the other by way of demand drafts, mail transfer.

(c) With the use of computers and internet facility, now-a-days the banks are facilitating on-line transfer of money from one bank to the other.

(d) Issue letters of credit to enable the customers to purchase commodities on the basis of credit.

(e) Endorse and provide guarantee to the shares issued by the joint stock companies and help them in rising capital.

(f) Traveler’s cheques are issued by the commercial banks to avoid the risk of carrying of cash.

(g) Provide foreign exchange to the customers for exports and imports in connection with their business.

(h) Convey information on behalf of their customers to the businessmen operating in other places and also collect information of such businessmen and provide it to the customers.

(i) Recently the commercial banks have been establishing ATMs (Automated Teller Machines) at different locations so as to enable their customers to withdraw cash from their accounts at any ATM at any time in a day.

**Principles of Commercial Banks:**

1. **Principles of liquidity:**

   Deposits are repayable on demand or after expiry of a certain period. Everyday depositors either deposit or withdraw cash. To meet the demand for cash, all commercial banks have to keep certain amount of cash in their custody.

2. **Principles of profitability:**

   The driving force of commercial enterprise is to generate profit. So it is true in case of commercial bank also.

3. **Principles of Solvency:**

   Commercial bank should have financially sound and maintain a required capital for running the business.
4. **Principles of safety:**
   While investing the fund, banks are to be cautious because bank’s money is depositor’s money.

5. **Principles of collection of savings:**
   This is a very important principle for today’s banking business. Commercial banks always seek huge amount of idle money from the clients. Now a day’s banks fix up the target for their employees to generate more savings from the people.

6. **Principles of loan and investment policy:**
   The main earning sources of commercial banks are lending and investing money to the viable projects. So commercial banks always try to earn profit through sound investment.

7. **Principles of economy:**
   Commercial banks never go for any unnecessary expenditure. They always try to maintain their functions with economy that increase their yearly profit.

8. **Principles of providing services:**
   A better service brings great reputation for the bank.

9. **Principles of secrecy:**
   Commercial bank maintains and keeps the clients accounts secretly. Nobody except the legitimized person is allowed to see the accounts of the clients.

10. **Principles of modernization:**
    It is the age of science and technology. So to cope up with the advanced world the commercial bank has to adopt modern technical services like online banking, credit card etc.

11. **Principles of specialization:**
    It is an age of specialization. Here commercial banks segments their whole functions into various parts and place their human resources according to their efficiency.

12. **Principles of location:**
    Commercial banks choose a suitable site where the availability of customers is large.

13. **Principles of relation:**
    Commercial banks always try to maintain a good relation with their clients and potential customers.

14. **Principles of publicity:**
    It is an age of publicity. If you would like to earn more money, you have to give more advertisement through various media. In that case, commercial banks follow this kind of principles to increase their customers.

**Essentials of a sound Banking System:**
A sound banking system promotes all round economic development of an economy. A good bank must have the following features:-

(a) **Adequate Liquidity** –
   A bank must keep sufficient cash in hand to meet the claim of depositors, otherwise they would be insolvent. A bank failure not only affects depositors but banks also. People would not more keep funds with banker. It ensures safety of a bank. Unless a bank is safe it cannot render its social services.
(b) Expansion of banking-

Banking facilities should spread throughout the economy. It must also cover all sections of people in need of funds and all productive activities. The less-developed regions should get more banking facilities than others. Thus, diffusion of banking offices is essential.

(c) Investment and loan policies –

A sound banking system must have a sound investment policy whereby it can optimize the twin goals of liquidity and profitability. If loan and investments are wrong, a bank suffers loss or face liquidity shortage. A prudent banker should carefully determine the composition and character of its loans and advances so as to optimize earning without endangering safety and solvency.

(d) Human factor –

The soundness of a bank depends much on the quality of banker. Banking being a practical affair, rigid application of bank laws are not always fruitful. Much depends on the discretion of men piloting the ship. Sound banking thus, depends more on banking personnel than on banking laws.

Credit Creation by Commercial bank:

- A commercial bank is called a dealer or credit.
- It can create credit i.e. can expand the monetary base of a country.
- It does so not by issuing new money but by its loan operations.
- Banks create money on the basis of the cash deposits.
- The process of credit creation is that the depositors think they have so much money with banks and borrowers from bank say they have so much money with them.
- Summing the two, we find an amount more than the cash deposit.
- Suppose a bank receive a sum of ₹ 1,000 as deposit, keeps with it 20% (₹ 200) as CRR (cash reserve ratio) and lends and rest.
- Depositor will claim he has ₹ 1,000 and bank borrower too possesses ₹ 800.
- Thus total money supply appears to be ₹ 1,800 only. It is the credit creation by a single bank.
- The above example can be extended to cover the banking system as whole. Suppose ₹ 800 is deposited to another bank.
- This bank’s base will now expand. It will keep 20% of ₹ 800 (₹ 160) as cash reserve and will lend ₹ 640.
- This sum is redeposited to a third bank which keeps 20% of ₹ 640 (₹ 128) and grants a loan of ₹ 512.
- This process will continue and the mount of fresh deposit will go on falling.
- A time will come when deposited sum will be equal to CRR.
- The process will then come to an end.

Limitations of Credit Creation:

Size of the cash reserve ratio:

Much depends on the six of the cash reserve ratio. Credit creation is inversely related to CRR.

Amount of loan given:

Credit creation depends upon the amount of loan given. If borrowers cannot offer security against loan, bank cannot lend.
Size of the cash deposit:
Size of the cash deposit is also important in this context. The smaller the cash base the smaller scope a bank gets for credit creation. If people prefer physical assets or prefer to keep cash in their hand, bank deposits suffer much, so bank cannot lend much.

Acceptable securities:
A bank can lend money against acceptable securities. A borrower gets a loan from a bank only against come securities the value of which must be equal to the amount of the loan.

Controlled by the Central Bank:
A central Bank possesses certain instruments by the use of these it can increase or decrease the volume of credit created by banks.

Credit Control by Central Bank
- A central bank possesses a number of instruments for controlling credit money.
- These are of two types – Quantitative and Qualitative.
- Quantitative techniques seek to regulate total quantity of credit while qualitative measures affect the availability of credit.

Bank Rate Policy:
- As a banker’s bank, a central bank lends money or rediscounts the bills of commercial banks.
- The rate of interest charged by the central bank is known as Bank rate or Discount rate.
- By manipulating bank rate central bank can regulate the credit creating power of member banks.
- If bank rate is raised by the central bank, commercial banks are to borrow at a higher cost.
- Then the y will increase their lending rate. This rate is known as the market rate.
- The difference between market rate and bank rate is the profit margin of commercial banks.
- When bank rate rises market rate also rises and vice versa.
- Demand for bank loan will reduce.
- On the other hand, for credit expansion, bank rate is reduced.
- The effectiveness of this technique depends on the extent to which commercial banks depend on central bank for loan and rediscounting.
- If banks can collect funds from other sources at relatively cheaper rate, they need not depend on central bank credit.
- Again if investment opportunities are not present, the market demand for credit will weak, a fall in the bank rate may not raise the level of bank credit.

Open Market Operations:
- It implies purchase and sale of securities in the stock market.
- When the central bank appears in the market as a seller of government securities, people buy such securities by withdrawing money from banks or the banks themselves invest in such securities instead of granting loan to public.
- In either case the powers of creating credit will be restricted.
- On the other hand, if central bank buys securities money flows out thus enlarging the cash base of members banks.
• Credit expansion depends upon external business environment and borrowers attitudes over which banks have no influence.

Variation or Reserve ratio:
• Commercial banks are legally bound to keep a portion of their deposits in the form of cash reserve.
• It is the most liquid asset in their hand and at the same time it is zero earning assets.
• Naturally by altering the CRR, the central bank can expand or reduce the funds bank can lend.
• There exists an inverse relation between the size of cash reserve and the amount of credit given by a bank, assuming a given amount of deposit.
• In under developed money market this technique is more suitable than open market operation or bank rate policy.

Qualitative Credit controls:
• A central bank also possesses certain techniques by which it can control the direction and distribution of credit – purpose wise or areas wise.
• The purpose of selective controls is the rational allocation of scarce bank credit and its economic utilization.
• Further sectorial development of credit and controlling in other directions serve the purpose of preventing speculative activities with the help of bank finance and favoring productive activities.
• These techniques are very helpful in a less-developed economy where overall credit restriction may hinder growth by preventing the flow of credit for investment.

Moral Suasion:
• Moral suasion is a qualitative technique.
• The central bank ‘requests’ banks to lend more or not to lend in some sectors.
• There is no legal compulsion behind their acceptance.
• Generally if a request is not carried out by the number bank, the guardian of the banking system may take such steps as banks are forced to accept.
• The central bank is often empowered to issue directives to member banks.
• Such direct orders are in the form of directional control, prohibiting loans of particular type of giving advice to grant loan to priority sectors.

7.3 CENTRAL BANK

Central Bank is the apex of the banking system in a country. It controls, regulates and supervises the activities of the banks and the country’s banking system.

In our country the Central Bank was established in 1935 under private management. It was nationalized by the Government in 1949 and named as RBI.

Objectives of the Central Bank:
The Central Bank functions with the objectives given below:
1. To maintain the internal value of currency.
2. To preserve the external value of currency.
3. To ensure price stability.
4. To promote financial institutions.
5. To promote economic development.

**Functions of a Central Bank:**
A Central Bank has the following functions:

1. **Note Issue:**
The Central Bank alone is authorized to issue the currency notes in a country. It has the monopoly of note issue as no other bank is permitted to do so. It also enables the Central Bank to control the supply of money as per the requirements of the economy.

2. **Banker to Government:**
The Central Bank acts as a banker, agent and financial advisor to government in the following ways:
   (a) It maintains the accounts of the government funds.
   (b) It receives money and makes payments on behalf of the government.
   (c) It gives ‘ways and means’ advances to the government.
   (d) It issues new loans on behalf of the government.
   (e) It manages the public debt.
   (f) It undertakes foreign exchange transactions on behalf of the government.
   (g) It acts as the agent of the government in dealing with the international financial institutions like IMF and World Bank.
   (h) It advises the Government on all financial matters.

3. **Banker’s Bank:**
The Central bank acts as a banker’s bank in the following manner.
   (a) Every bank maintains a certain minimum of cash reserves with the Central Bank as a statutory obligation.
   (b) It serves as a lender of last resort. This helps the commercial banks to overcome the problems of liquidity and will be able to meet the demand for withdrawals even in times of financial stringency.
   (c) It acts as a clearing house for the commercial banks to settle their inter-bank accounts. This is possible because all commercial banks have account with the Central Bank in which the Central Bank keeps their cash balances.

4. **Lender of last resort:**
The Central Bank serves a lender of last resort not only to commercial banks but also to discount houses, and other credit institutions. They may approach the central bank when they face the problem of liquidity.

5. **Controller of credit:**
This is the most important function of the Central Bank. It controls the volume of credit in the economy through appropriate monetary policy. It takes steps to reduce the credit in case of inflation.

6. **Custodian of foreign exchange reserves:**
The Central bank maintains the reserves of foreign exchange and regulates their use. It has the responsibility to maintain the stability of the exchange rate of the native currency in terms of the foreign currency.
Distinction between the Central Bank and the Commercial Bank –

<table>
<thead>
<tr>
<th>Basis of distinction</th>
<th>Central banks</th>
<th>Commercial banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary Authority</td>
<td>Enjoys supreme monetary authority with wide powers</td>
<td>No authority, hence no such power is enjoyed.</td>
</tr>
<tr>
<td>Profit motive</td>
<td>It does not exist to make profits of its for owners</td>
<td>It exists and is organized for profits their owners</td>
</tr>
<tr>
<td>Money supply to the economy</td>
<td>It is the ultimate source of money supply to the economy.</td>
<td>No such function is performed by it.</td>
</tr>
<tr>
<td>Services rendered</td>
<td>It acts as a banker to the government</td>
<td>It acts as a banker to private industrial and institutions</td>
</tr>
<tr>
<td>Chance of failure</td>
<td>It is the lender of last resort and hence never fails</td>
<td>It often undertakes risky business activities and sometimes may fail.</td>
</tr>
<tr>
<td>Service to the public</td>
<td>It neither does accept deposits from public, nor lends money to the public.</td>
<td>Accepting deposits and lending money to the public are the most important functions of commercial banks.</td>
</tr>
<tr>
<td>Ownership and managing Authority</td>
<td>It is generally subordinate to the state, i.e. state owned and state managed.</td>
<td>It is mostly privately owned and privately managed.</td>
</tr>
<tr>
<td>Nature of operation</td>
<td>It issues paper notes in fact it enjoys the monopoly power in this matter</td>
<td>Its nature operation is credit creation and cannot issue paper notes.</td>
</tr>
<tr>
<td>Basis of operation</td>
<td>The basis of cash money issued is gold and foreign reserve.</td>
<td>The basis of credit money generated is cash deposit.</td>
</tr>
</tbody>
</table>

7.4 FINANCIAL INSTITUTION

1. **Industrial finance corporation of India (IFCI) – 1948**
   It was established in 1st July 1948 the main object of IFCI is to make medium and long term credit to the industrial units.
   **Function:**-
   1. Granting loans and advances for the period of 25 years.
   2. Subscribing to the shares and debentures floated by industrials concerns.
   4. Guaranteeing for differed payments in respect of import of capital goods.

2. **State Financial corporation (SFC) – 1953**
   The first SFC was established in 1953 in Punjab, at present there are 18 SFC’s. The main object of the establishment of SFC is to meet the requirements of medium and small scale industries in various states.

3. **Industrial credit and investment corporation of India (ICICI) – 1955**
   It was established in 1955 the main aim of the ICICI is to develop the industries under the private sectors only. It is a private bank.

4. **State Industrial Development cooperation (SIDC) – 1960**
   The main object for the establishment of SIDC is to achieve the rapid industrialization in the state at present there are 28 SIDC’s in India.
5. **Unit Trust of India (UTI) – 1964**

It was established in 1st February 1964. The main object of the UTI is to encourage and mobilized the savings of the community and canalized them into productive corporate investment.

**Function of UTI:**

1. Mobilized the saving of the relatively small investors.
2. Channelized these small savings into productive investments.
3. Distribute the large scale economies among small income groups.

6. **Industrial Development Bank of India (IDBI) - 1964:**

It was established in July 1964. It is the apex bank in the industrial credit, upto 1976 it the subsidiary bank to RBI but after 1976 it was formed as autonomous cooperation.

**Functions of the IDBI:**

1. It can establish the co-operation & Co-ordination among the industrial financial institutions.
2. It provide the direct finance to industrial units.
3. It saves the weaker industrial units through the development assistant fund.
4. It assists in the creation, expansion & modernization of industrial units under private sectors.
5. It also provides the export finance.

7. **Export and Import Bank of India (EXIM bank) - 1982:**

It was established in 1st March 1982. It is a non-bank financial intermediary (NBFI) confined its area of operations to foreign trade of India. It also performs other functions.

1. Export rediscounting
2. Re-finance supply credit
3. Bulk import finance
4. Foreign currency pre-shipment credit.
5. Product equipment finance programme.
6. Business advisory technical assistance (BATA)

8. **National Bank Agriculture and Rural Development (NABARD) - 1982**

It was established in July 1982 on the basis of the recommendations’ of CRAFI CARD.

1. It is the apex body in the agricultural credit
2. It taking over the functions of agriculture credit department of RBI and Agriculture re-finance development corporation (ARDC).
3. It provides all sources of refinance to the cooperatives, commercial banks and regional rural banks (RRB)
   - It also promoting the research in agriculture and rural development.

9. **Life Insurance Corporation of India (LIC) – 1956**

It was established in 1956 by nationalizing 245 private insurance companies. The primary object of nationalization was to protect the interest of the policy holders and avoid the misuse of funds secondly, the object of nationalization was to direct the investments of funds in government security (87.5%), leaving a small part for private sector (12.5%).
10. General insurance company (GIC)-1972
It was formed as Government Company in 1972. Before nationalization a few big companies and about 100 small companies were in this business. At present GIC is provided 4 companies they are
(i) National Insurance Company (NIC)
(ii) New India Assurance company (NIAC)
(iii) Oriental fire and general insurance company
(iv) United India fire and general insurance company
The main feature of GIC is to sell insurance services against some forms of risk like loss of physical assets of various kinds i.e. The fire accident, and against personal sickness and accidents.

11. Securities and Exchange Board of India (SEBI) – 1988
It was setup in 1988. It got statuary reorganization in 1992. The main purpose of the SEBI is regulating business in stock markets & other securities market.

1. It was established in 1966
2. The main aim for the establishment of ADB is to promote the socio and economic progress of number countries in Asia & pacific.
3. It is owned by governments of 37 countries form region and 16 countries from outside the region.
4. Its head quarters is manila, Philippines
5. Poverty reduction is now the main mission of DAB

13. International Monetary Fund (IMF) – 1947
It was established in March 1947 one of the outcomes of Breton wood conference was IMF. The main object of IMF is to administer a code of fair practice in the sphere of foreign exchange and to make loans to the economies experiencing temporary deficit in their balance of payments.

Quota:
It is the membership contribution fixed in terms of its national income and internal trade members are required to subscribe quota partly in gold (25%) party in domestic currency (75%).

Exchange rate:
Members of IMF had to declare the par value of national currency in terms of gold or American dollars. Once the par value of different currencies is fixed it becomes easy to determine the rate of exchange between two countries.

Special Drawing Rights (SDRs) – 1969:
SDR’s was first introduced in 1969. It is the special currency issued by IMF. For two reasons IMF created SDR. They are
1. To overcome the shortage of gold in the world economy
2. To avoid the movement of gold across national boundaries.

SDRs are in Coupons:
It is used in the place of gold. Hence it is called paper gold.

14. World Bank:
It was established in 1947 one of the outcomes of Breton wood conference was establish of World Bank.
The main aim of the establishment of World Bank is to help re-construction of the member countries damages due to the Second World War. The original name of World Bank is international bank for reconstruction and development (IBRD).

15. **International development Association (IDA)**

It was established in 1960 and it is affiliated to World Bank. The main aim for the establishment of IDA is to provide assistance to low developed countries (LDC) whose per –capita income in less than (dollar) $ 520 (1975). It also grants the credit on cheap terms compared to World Bank loans.

**Banking**

**List of questions:**

1. What is commercial Bank? And explain the function of commercial banks?
2. What are the principles of commercial banks?
3. What are essential conditions of sound banking system?
4. What is meant by credit creation? And state the limitations of credit creation?
5. What are the functions of central bank?
6. What are the instruments used by RBI to control the credit creation?
7. Distinction between Central Bank and commercial banks?
8. Explain about IFCI (expansion)
9. Explain about IDBI
10. Explain about SFC
11. Explain about EXIM Bank
12. Explain about NABARD
13. Explain about ADB
14. Explain about IMF
15. Explain about SEBI

**Objective Questions:**

1. Choose the correct Answer:
   1. Which is the apex bank for agricultural credit in India?
      (a) RBI  (b) SIDBI  (c) NABARD  (d) IDBI
   2. RBI check inflation by
      (a) Increasing bank rate  (b) Increasing CRR  (c) Both  (d) None
   3. If the country is passing through recession, the RBI would
      (a) Buy bonds  (b) Reduce CRR  (c) Ease out bank rate  (d) All or any of the above three
   4. Manipulation in CRR enables the RBI to ……
      Influence the lending ability of the commercial banks
      (b) Check unemployment growth  (c) Check poverty  (d) Increase GDP
5. EXIM Bank is authorized to raise loan from
   (a) RBI (b) Government of India (c) International market (d) Trading activities

6. RBI was nationalized in
   (a) June 1947 (b) Jan. 1949 (c) March 1954 (d) April 1936

7. FERA has been replaced by
   (a) FINA (b) FEMA (c) FENA (d) MRTP

8. Repo transaction means
   (a) Sale of securities by the holder to the investor with the agreement to purchase them at a predetermined rate and date.
   (b) Sale of securities by the holder to the investor with the agreement to resell them at a predetermined rate and date.
   (c) Sale and purchase of securities by the holder to the investor with the agreement to purchase them at the prevailing rate and date
   (d) Sale of securities by the holder to the investor with the agreement to purchase them at market driven rate.

9. Reverse Repo transaction means
   (a) Sale of securities by the holder to the investor with the agreement to purchase them at a predetermined rate and date.
   (b) Sale or purchase of securities by the holder to the investor with the commitment to sell or purchase them at a predetermined rate and date
   (c) Sale and purchase of securities by the holder to the investor with the agreement to purchase them at the prevailing rate and date
   (d) Sale of securities by the holder to the investor with the agreement to purchase them at market driven rate.

10. Given a reserve ratio of 20% in initial deposit of ₹1000 in a banking system would create secondary deposit of ₹…………..
    (a) ₹ 3,000 (b) ₹ 5,000 (c) ₹ 4,000 (d) ₹ 6,000

II. Fill in the blanks:
1. SIDBI is a subsidiary bank of _______________
2. ___________ is the apex bank in banking system.
3. The tow primary functions of a bank are deposit function and _____ function.
4. Credit creation is the function of _____ bank.
5. A bank must keep ____ cash in hand to meet the closing of depositors.
6. Central bank enjoys the exclusive power of ____ issue
7. If the bank rate increases, the demand for bank loan ____
8. ICICI is a ____________ sector bank
9. ARDC was merged in ________ bank
10. IDA is affiliated to ____bank
III. **State the sentence True or False**
1. Bank is said to be dealer in debt ( )
2. Bank impose a limit on the amount and number of withdrawals on saving bank a/c ( )
3. Fixed deposits are followed by business people ( )
4. Over draft facility is given to small income people ( )
5. Banks keep the wills of their customers and execute them after their death ( )
6. CRR cannot control the credit creation ( )
7. RBI issues the one rupee notes and coming ( )
8. Moral situation is a qualitative technique ( )
9. Profit is the main motto of central Bank ( )
10. IMF secure the stability of foreign exchange rate ( )

IV. **Matching**
1. Commercial Bank ( ) A. Lender of last resort
2. Credit creation ( ) B. Exim bank
3. Central Bank ( ) C. 1982
4. UTI ( ) D. manila
5. Foreign trade ( ) E. ARDC
6. ADB ( ) F. 1969
7. SDR ( ) G. commercial bank
8. LIC ( ) H. Discounting bills
9. NABARD ( ) I. Small investment
10. EXIM Bank ( ) J. 1956

**Answers:**

I. **Choose the correct Answer:**
1. C
2. C
3. D
4. A
5. B
6. D
7. B
8. A
9. B
10. C

II. **Fill in the blanks:**
1. IDBI
2. RBI
3. Loan
4. Commercial
5. Idle
6. Note
7. Decrease
8. Private
9. NABARD
10. World

III. True or False:
1. True
2. True
3. False
4. False
5. True
6. False
7. False
8. False
9. False
10. True

IV. Matching:
1. I
2. G
3. A
4. J
5. B
6. D
7. F
8. H
9. E
10. C

V. Give answer in one or two sentences.
1. Monetary policy
   The Policy which is prepared by the RBI and implemented by the RBI to control the money supply is called Monetary Policy. This is in two types
   1. Expansionary Credit Policy
   2. Concretionary Credit Policy

2. Fiscal policy
   The policy which is prepared by the government and implemented by the government to control the purchasing power of money is called Fiscal policy. Any measurement which is related to public revenue (tax policy), public expenditure and public debt is come under Fiscal policy.
3. **ICICI**
   It was established in 1955 the main aim of the ICICI is to develop the industries under the private sectors only. It is a private bank. It also provide the loans in foreign currency and also develop the under writing facilities.

4. **SIDC**
   The main object for the establishment of SIDC is to achieve the rapid industrialization in the state. At present there are 28 SIDC’s in India. These intuitions are providing assistance to entrepreneurs and those industrial under takings that are set up in back ward regions.

5. **L.I.C**
   It was established in 1956 by nationalizing 245 private insurance companies. The primary object of nationalization was to protect the interest of the policy holders and avoid the misuse of funds secondly, the object of nationalization was to direct the investments of funds in government security (87.5%), leaving a small part for private sector (12.5%).

6. **G.I.C**
   It was formed as Government Company in 1972 before nationalization a few big companies and about 100 small companies were in this business. At present GIC is provided 4 companies they are
   (i) National Insurance Company (NIC)
   (ii) New India Assurance company (NIAC)
   (iii) Oriental fire and general insurance company
   (iv) United India fire and general insurance company
   The main feature of GIC is to sell insurance services against some forms of risk like loss of physical assets of various kinds i.e. the fire accident, and against personal sickness and accidents.

7. **SDR**
   SDR’s was first introduced in 1969. It is the special currency issued by IMF. For two reasons IFM created SDR. They are
   (i) To overcome the shortage of gold in the world economy
   (ii) To avoid the movement of gold across national boundaries
   SDRs are in Coupons: It is used in the place of gold. Hence it is called paper gold.

8. **Quota**
   It is the membership contribution fixed in terms of its national income and internal trade members are required to subscribe quota partly in gold (25%) party in domestic currency (75%).

9. **World bank**
   It was established in 1947 one of the outcome of Breton wood conference was establish of World Bank. The main aim of the establishment of World Bank is to help re-construction of the member countries damages due to the Second World War. The original name of World Bank is international bank for reconstruction and development (IBRD).

10. **Over draft**
    This is a facility allowed by the bank to the current account holders. They are allowed to withdraw money with or without security in excess of the balance available in their account up to a limit. Interest is charged on the amount of actual withdrawal.
This Study Note includes
8.1 Meaning of Market
8.2 Structure and Functions of Indian Money Market

8.1 MEANING OF MONEY MARKET

Introduction
Money market is the nerve center of the financial system. A well organized money market is the basis for an effective monetary policy. Money market mobilizes savings from different sources and makes them available for investment. It is the mechanism through which funds flow from surplus units to deficit units in the economy.

Meaning of Money Market:
Financial markets are functionally classified into
(a) Money market and
(b) Capital market.
This classification is on the basis of the term of credit, i.e., whether the credit is supplied for a short period or long period. Money market refers to institutional arrangements which deal with short-term funds. Capital market, on the other hand deals in long-term funds. Money market is a short-term credit market which deals with relatively liquid and quickly marketable assets such as, short-term government securities, treasury bills, bills of exchange, etc.

Definition:
1. According to Crowther, “The money market is a collective name given to the various firms and institutions that deal with various grades of near-money”.
2. The Reserve Bank of India defines money market “as the center for dealing, mainly of a short-term character, in monetary assets; it meets the short-term requirements of borrowers and provides liquidity of cash to the lenders.

Objectives of Money Market:
A well-developed money market serves the following objectives:
(i) Provides an equilibrium mechanism for ironing out short-term surplus and deficits.
(ii) Provides a focal point for the intervention of the central bank for influencing liquidity in the economy.
(iii) Provides access to user of short term money to meet their requirements at a reasonable price.

Characteristics of Money Marketing:
Indian money market has major features:
1. Short-term funds are borrowed and lent.
2. No fixed place for conduct of operations. Transactions are conducted even over the phone.
3. Dealing may be conducted with or without the help of brokers.
4. The short-term financial assets that are dealt in are close substitutes for money.
5. Funds are loaned for a maximum period of 1 year.
6. Presence of a large number of sub-markets.

**8.2 STRUCTURE AND FUNCTIONS OF INDIAN MONEY MARKET**

**Functions of Money Market:**
1. It links lenders and borrowers of short-term funds. It is purely a market for short term funds or financial assets.
2. It provides working capital requirements of industry, trade and agriculture.
3. It provides financial assets with high degree of liquidity- call money, treasury bills, commercial bills etc.
4. It helps trade and commerce by developing a bill market, and acceptance market.
5. It enables the Government to raise short-term loans with Treasury bill market.
6. It is controlled and regulated by RBI.
7. It makes the monetary policy effective.
8. It provides opportunities for lending the surplus funds of individuals, banks and other institutions.
9. It helps the central bank in maintaining stability of the value of the currency unit.

A well developed money market can perform the above functions effectively.
Organized Sector:

It is called organized because its activities are systematically coordinated by the RBI. Many players are there in the organized sector. They are:

(i) The organized modern sector of Indian money market comprises: (a) the Reserve Bank of India; (b) The State Bank of India and its associate banks; (c) the Indian joint stock commercial banks (Scheduled and non-scheduled) of which 27 scheduled banks have been nationalized; (d) the exchange banks which mainly finance Indian foreign trade; (e) cooperative bank; (f) other special institutions, such as, Industrial Development Bank of India, State Finance Corporations, National Bank for Agriculture and Rural Development, Export-Import Bank, etc., which operate in the money market indirectly through banks; and

(ii) Non-bank financial institutions such as the LIC, the GIC and subsidiaries, the UTI operate in this market, but only indirectly through banks, and not directly.

(iii) Quasi-Government bodies and large companies also market their short-term surplus funds available to the organized market through banks.

(iv) Cooperative credit intuitions occupy the intermediary position between organized and unorganized parts of the Indian money market. These institutions have a three tire structure. At the top, there are State cooperative banks. At the local level, there are primary credit societies and urban cooperative banks. Considering the size, methods of operations, and dealings with RBI and commercial banks, only state and Central cooperative banks should be included in the organized sector. The cooperative societies at the local level are only loosely linked with it.

Unorganized Sector:

The unorganized sector consists of indigenous banks and money lenders. It is unorganized because activities of its parts are not systematically coordinated by the RBI. The money lenders operate throughout the country, but without any link among themselves indigenous banks are somewhat better organized because they enjoy rediscount facilities from the commercial banks which, in turn, have link with the RBI. But this type of organization represents only a loose link with the RBI.

Constituents of Money market: Lenders & Borrowers

Money market is a center where short-term funds are supplied and demanded. Thus, the main constituents of money market are the lenders who supply and the borrowers who demand short-term credit.

1. Supply of Funds:

There are two main sources of supply of short-term funds in the Indian money market: (a) unorganized indigenous sector, and (b) organized modern sector.

2. Demand for Funds:

In the Indian money market, the main borrowers of short-term funds are: (a) Central Government, (b) State Government, (c) Local bodies, such as municipalities, village panchayats, etc., (d) traders, industrialists, farmers, exporters and importers, and (e) general public.

III. Sub- Markets of Organized Money Markets:

The organized sector of Indian money market can be further classified into the following sub-markets. It has the following money market instruments:

<table>
<thead>
<tr>
<th>Instrument of Indian Money Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call money and notice money</td>
</tr>
<tr>
<td>Commercial bills</td>
</tr>
<tr>
<td>Treasury Bills</td>
</tr>
<tr>
<td>Commercial Papers</td>
</tr>
<tr>
<td>Certificate of deposit</td>
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<tr>
<td>Interbank participation certificate</td>
</tr>
<tr>
<td>Collateral loan market</td>
</tr>
</tbody>
</table>
1. **Call and Notice Money Market:**

The call and Notice Market constitutes the core of the Indian Money Market. Call money represents the amount borrowed by commercial banks from each other for short periods to meet their cash reserve requirements. Those banks whose cash reserves decline below the statutory requirement borrow from such banks which have surplus cash reserves. Funds are thus borrowed and lent for one day (call) and for a period up to 14 days (notice) without any collateral security. The market has thus two segments—(i) call or overnight market and (ii) short notice market. The rate at which funds are borrowed and lent in this market is called call money rate. The rate is determined by demand and supply.

2. **Commercial Bill Market:**

These are Bills of exchange drawn by the seller (drawer) on the buyer (drawee and acceptor) for the value of goods sold. When once the bill is accepted by the buyer of goods (drawee), it becomes a legal document acknowledging indebtedness. It is a negotiable instrument. Such bills are drawn generally for 90 days. During the tenure of the bill, if the holder is in need of cash he can discount it with a commercial bank. The bank will deduct interest (called a negotiated discount rate) for the period the bill is yet to run. The bank will receive the face value on the due date from the drawee. Meanwhile, if the bank is in need of funds, it can rediscount it in the commercial bill rediscount market at the market-related discount rate. Banks arrange their bill portfolio in such a manner that some bills mature every day. These trade bills (commercial bills) are considered liquid assets as they can be converted into cash quickly by rediscounting.

3. **Treasury Bills Market:**

Treasury bills are short-term promissory notes issued by the Government at discount generally for a period of 91 days. They are issued to meet short-term financial needs of the Government. Since November 1986, 182 days Treasury Bills are issued by the Reserve Bank of India. Longer maturity Treasury Bills with varying maturities up to 364 days are introduced in April 1992. These bills are issued as a part of public debt operations of the Government. They are issued at discount and therefore do not carry interest payment obligation.

4. **Commercial Paper:**

On the recommendations of Vaghul working Group, commercial paper is introduced in the Indian money market in January 1990. The need for the introduction of this instrument has arisen out of the changing industrial scenario. In the environment created by Liberalization policies of the Government, the industrial sector launched plans of diversification, expansion and modernization of their units. This has lead to an enhanced demand for funds and to satisfy the demand C.P is introduced. Commercial papers are unsecured promissory notes issued by corporate entities to raise resources for their short-term needs instead of borrowing from banks. It is a certificate evidencing an unsecured corporate debt of short maturity. It represents a promise by the borrowing company to repay loan at a specified date.

5. **Certificate of Deposit:**

The Reserve Bank of India introduced the Certificates of Deposits Scheme in June 1989. The object is to further widen the range of money market instruments and to give investors further opportunity of deploying their short-term funds. C.D’s are deposit receipts issued by banks against deposits kept by individuals, companies, P.S.U’s and other institutions. Non-resident Indian can also subscribe to C.Ds but only on a non-repatriation basis.

6. **Inter-bank Term Money Market:**

This is a market in which banks alone both commercial and co-operative banks participate. They borrow and lend funds for a period over 14 days and generally up to 90 days. No collateral security is insisted upon. The rates of interest are market determined. Deposited receipts are exchanged. As per the Indian Banks Association (I.B.A) rules, lenders cannot prematurely call back these loans. Hence, this instrument is not liquid.
7. **Collateral Loan Market:**

It deals in collateral loans—loans backed up security. In this market, commercial banks provide loans against the Government securities and bonds.

**Defects of Indian Money Market**

The Indian money market is inadequately developed, loosely organized and suffers from many weaknesses. Major defects are discussed below:-

1. **Dichotomy between Organized and Unorganized Sectors:**

   The most important defect of the Indian money market is its division into two sectors: (a) the organized sector and (b) the unorganized sector. There is little contract, coordination and cooperation between the two sectors. In such conditions it is difficult for the Reserve Bank to ensure uniform and effective implementations of its monetary policy in both the sectors.

2. **Predominance of Unorganized Sector:**

   Another important defect of the Indian money market is its predominance of unorganized sector. These indigenous bankers, which constitute a large portion of the money market, remain outside the organized sector. Therefore, they seriously restrict the Reserve Bank's control over the money market.

3. **Wasteful Competition:**

   Wasteful competition exists not only between the organized and unorganized sectors, but also among the members of the two sectors. The relation between various segments of the money market is not cordial; they are loosely connected with each other and generally follow separatist tendencies. Similarly, competition exists between the Indian commercial banks and foreign banks.

4. **Absence of All-Indian Money Market:**

   Indian money market has not been organized into a single integrated all-Indian market. It is divided into small segments mostly catering to the local financial needs. For example, there is little contract between the money market in the bigger cities, like Mumbai, Chennai, and Kolkata, and those in smaller towns.

5. **Inadequate Banking Facilities:**

   Indian money market is inadequate to meet the financial needs of the economy. Although there has been rapid expansion of bank branches in recent years particularly after the nationalization of banks, yet vast rural areas still exist without banking facilities. As compared to the size and population of the country, the banking institutions are not enough.

6. **Shortage of Capital:**

   Indian money market generally suffers from the shortage of capital funds. The availability of capital in the money market is insufficient to meet the needs of industry and trade in the country.

7. **Seasonal Shortage of Funds:**

   A major drawback of the Indian money market is the seasonal stringency of credit and higher interest rates during a part of the year. On the contrary, during the slack season, from July to October, the demand for credit and the rate of interest decline sharply.

8. **Diversity of Interest Rates:**

   Another defect of Indian money market is the multiplicity and disparity of interest rates. The interest rates also differ in various centers like Mumbai, Kolkata etc. Variations in the interest rate structure are largely due to the credit immobility because of inadequate, costly and time-consuming means of transferring money. Disparities in the interest rates adversely affect the smooth and effective functioning of the money market.
9. **Absence of Bill Market:**

The existence of a well-organized bill market is essential for the proper and efficient working of money market. Unfortunately, in spite of the serious efforts made by the reserve bank of India, the bill market in India has not yet been fully developed. The short-term bills form a much smaller proportion of the bank finance in India as compared to that in the advanced countries.

**Measures to Improve Indian money market:**

In view of the various defects in the Indian money market, the following suggestions have been made for its proper development:

(i) The activities of the indigenous banks should be brought under the effective control of the Reserve Bank of India.

(ii) Hundies used in the money market should be standardized and written in the uniform manner in order to develop an all-India money market.

(iii) Banking facilities should be expanded especially in the unbanked and neglected areas.

(iv) Discounting and rediscounting facilities should be expanded in a big way to develop the bill market in the country.

(v) For raising the efficiency of the money market, the number of the clearing houses in the country should be increased and their working improved.

(vi) Adequate and less costly remittance facilities should be provided to the businessmen to increase the mobility of capital.

(vii) Variations in the interest rates should be reduced.

**I. Choose the correct Answer**

1. Money market deals with the .........
   
   (a) Short term credit (b) Long term credit (c) both A & B (d) None

2. Money market includes .........
   
   (a) Government securities (b) treasury bill (c) bills of exchange (d) All the above

3. In Indian money market, who are the main borrowers of short term funds
   
   (a) central government (b) State government (c) local bodies (d) All the above

4. Money market is controlled by ..... 
   
   (a) Government (b) R.B.I (c) S.B.I (d) all the above

5. In April 1999 the government of India introduced the bills for the period of ..... 
   
   (a) 91 days (b) 182 days (c) 364 days (d) None

6. In call money market funds are borrowed of rent without any security for the period of...
   
   (a) one day (b) 14 days (c) a & b (d) NONE

124  FUNDAMENTALS OF ECONOMICS AND MANAGEMENT
7. If buyer of the goods is called ……
   (a) Drawer  (b) drawee  (c) payee  (d) none

8. Certificate of deposits are issued by the banks to ……
   (a) individual  (b) companies (c) P.S.U.S  (d) All the above

9. Which are unsecured promissory notes
   (a) Commercial paper  (b) Certificate of deposits (c) Treasury bills  (d) all the above

10. Commercial banks provide collateral loans against ……
    (a) bonds  (b) govt. security  (c) both A & B  (d) None

II. Fill in the blanks
   1. Financial market are classified into money market and capital market on the basis of ____. 
   2. The short term financial assets that are dealt in are _________ for money
   3. ______ provide working capital requirement s of industry, trade and agriculture.
   4. Call money represent the amount borrowed by ______ from each other for the short term requirement.
   5. Generally commercial bills are prepared for the period of _____ days.

II. True (or) false
   1. The instrument commercial paper has risen out of the changing industrial scenario ( )
   2. R.B.I introduced the certificates of deposits in June 1998 ( )
   3. Collateral loans are given by commercial banks without security ( )
   4. In Indian money market there is a multiplicity and disparity of interest rates ( )
   5. The short term bills form a much smaller proportion of the bank finance in India as compared to advanced countries ( )

III. Matching:
    | Column A                 | Column B                  |
    |--------------------------|---------------------------|
    | Corporate bank           | A. Money market           |
    | Commercial paper         | B. R.B.I                  |
    | Seller                   | C. Local bodies           |
    | Demand for money market  | D. Organized sector       |
    | Monetary policy          | E. Drawer.                |
V. **One sentence answer:**
1. Commercial bill market
2. Call money market
3. Treasury bills
5. Certificate of Deposit

**List of question:**
1. Define money market and state the objectives of money market.
2. Define money market and state the capitalistic of money market.
3. What is money market and explain the functions of money market?
4. Explain the structure of money market.
5. What are the constitutes of money market?
6. What are instruments of Indian money market?
7. Explain the defects of Indian money market.
8. Explain the measures to improve the Indian money market.

**Answers:**

I. Choose the correct answer:
1. (A)
2. (D)
3. (D)
4. (B)
5. (C)
6. (C)
7. (B)
8. (D)
9. (A)
10. (C)

II. Fill in the blanks:
1. Term of credit
2. Close substitute
3. Money market
4. 5. 90

III. True (or) False
1. (T)
2. (F)
3. (F)
4. (T)
5. (T)

IV. Matching the following:
1. (D)
2. (A)
3. (E)
4. (C)
5. (B)
Section - B
FUNDAMENTALS OF MANAGEMENT
(Syllabus - 2016)
9.1 INTRODUCTION

“The conventional definition of management is getting work done through people, but real management is developing people through work”. - Agha Hasan Abedi

Management has developed and grown in leaps and bounds from a nearly insignificant topic in the previous centuries, to one of the integral ones of our age and economy. Management has evolved into a powerful and innovative force on which our society depends for material support and national well-being. The period between 1700 and 1850 is highlighted by the industrial revolution and the writings of the classical economists.

- Hicks define management as “the process of getting things done by and through others.
- Massie defines management as “the process by which cooperative group directs actions toward common goals. This process involves techniques by which a distinguishable group of people (managers) co-ordinates activities of other people; managers seldom actually perform the activities themselves”.
- Koontz and O’Donnell state that management means getting things done through and with people”.
- We may define management as a process by which responsible people (managers) in an organization get things done through the efforts of other people in grouped activities.

In recent times, management has become a more scientific discipline having certain standardized principles and practices.

The following is a breakdown of the evolution of management thought during its developmental period:

- Early management approaches which are represented by scientific management, the administrative management theory and the human relations movement.
- Modern management approaches which are represented by scientific management, the administrative/management science approach, the systems approach and the contingency approach.
Management - science, art, profession

According to the nature of management, there is a controversy that whether management is a science or an art. This controversy is very old & is yet to be settled.

Management as a Science

1. Universally accepted principles: Scientific principles represent basic truth about a particular field of enquiry. These principles may be applied in all situations, at all time & at all places. Management also contains some fundamental principles which can be applied universally like the Principle of Unity of Command i.e. one man, one boss. This principle is applicable to all type of organization – business or non business.

2. Experimentation & Observation: Scientific principles are derived through scientific investigation & researching i.e. they are based on logic. Management principles are also based on scientific enquiry & observation and not only on the opinion of Henry Fayol. They have been developed through experiments & practical experiences of large no. of managers, e.g. it is observed that fair remuneration to personal helps in creating a satisfied work force.

3. Cause & Effect Relationship: Principles of science lay down cause and effect relationship between various variables. E.g. lack of parity (balance) between authority & responsibility will lead to ineffectiveness.

4. Test of Validity & Predictability: Validity of scientific principles can be tested at any time or any number of times i.e. they stand the time of test. Each time these tests will give same result. Moreover future events can be predicted with reasonable accuracy by using scientific principles.

E.g. principle of unity of command can be tested by comparing two persons – one having single boss and one having 2 bosses. The performance of 1st person will be better than 2nd.

Management as an Art

1. Practical Knowledge: Every art requires practical knowledge therefore learning of theory is not sufficient. It is very important to know practical application of theoretical principles. E.g. A manager can never be successful just by obtaining degree or diploma in management; he must have also known how to apply various principles in real situations, by functioning as a manager.

2. Personal Skill: Although theoretical base may be same for every artist, but each one has his own style and approach towards his job. That is why the level of success and quality of performance differs from one person to another. E.g. Every manager has his own way of managing things based on his knowledge, experience and personality, that is why some managers are known as good managers (like Aditya Birla, Rahul Bajaj) whereas others as bad.

3. Creativity: Every artist has an element of creativity in line. That is why he aims at producing something that has never existed before which requires combination of intelligence & imagination. Management is also creative in nature like any other art. It combines human and non-human resources in a useful way so as to achieve desired results. It tries to produce sweet music by combining chords in an efficient manner.

4. Perfection through practice: Practice makes a man perfect. Every artist becomes more and more proficient through constant practice. Similarly managers learn through an art of trial and error initially but application of management principles over the years makes them perfect in the job of managing.

5. Goal-Oriented: Every art is result oriented as it seeks to achieve concrete results. In the same manner, management is also directed towards accomplishment of pre-determined goals. Managers use various resources like men, money, material, machinery & methods to help in the growth of an organization.
Management as both Science and Art

Management is both an art and a science. The above mentioned points clearly reveal that management combines features of both science as well as art. It is considered as a science because it has an organized body of knowledge which contains certain universal truth. It is called an art because managing requires certain skills which are personal possessions of managers. Science provides the knowledge & art deals with the application of knowledge and skills.

Management as Profession:

Any specialized activity becomes a profession provided it satisfies the following characteristics:
1. There must be a systematized body of knowledge which is used either in instructing, advising or guiding others,
2. Existence of a formal method and system for teaching and training people with that knowledge and skill,
3. A scope for creating posts of consultants for that skill,
4. Formation of an association by such consultants,
5. Existence of a code of conduct among such professional men and
6. Readiness to respond to the needs of man.

By closely studying the position of management we find that it does not satisfy all the characteristics in full although attempts are going on to develop it into a fully fledged profession.

Principles of Scientific Management: Fredrick Taylor

Fredrick Winslow Taylor has been accepted as the father of scientific management, who, for the first time proved through experiments that scientific methodology can be applied to the field of management.

A scientific process consists of observation, analysis, experimentation and generalization. Taylor wanted to introduce these elements into management also to establish a casual relationship between efforts and results.

To be precise, scientific management is not any system to increase production or to pay wages, or to figure neither costs nor it is merely a time study or motion study, but it is a mental revolution both for the employer and for the employees. Such a mental revolution has the following objectives in view:

(a) Rule of thumb to be replaced by rule of science to improve the standard of performance.
(b) There should be perfect harmony among the activities of different individuals and not discord.
(c) An atmosphere of perfect cooperation among different workers has to be created for mutual interest sublimating personal interests.
(d) Production has to be maximized and not restricted output.
(e) There should be encouragement to greatest efficiency and prosperity of every individual, both employer and employees.
(f) Proper selection and training of workers.
(g) Equitable division of work and responsibility between the management and the employees.

Taylor was criticized by people of different sectors including both the employers and the employees. The main points of criticism are as follows:-

(i) It deals with factory management only.
(ii) Separation of planning from doing is a misleading concept.
(iii) It lays too much emphasis on engineering side ignoring the importance of human aspect in production.
(iv) Functional foremanship is not a direct improvement on the concept of line theory of organization.
(v) He considered human elements as cogs of a machine.
(vi) It created condition of industrial autocracy.
(vii) It creates unfair distribution of benefits between the employers and the employees.
(viii) It is doubtful whether standard of work can be really measured.
(ix) It is antisocial because it is aimed at efficient workers only.
(x) It is not possible to find out ‘one best way’ to do a job. What is true for one may not be true for another.
(xii) It is not really scientific management but scientific approach to management.

Principles and Techniques of Management: Henri Fayol.

The name of Henri Fayol can perhaps be unhesitatingly mentioned as the pioneer of comprehensive thinking on the philosophy of management.

Fayol focused on principles that could be used by managers to coordinate the internal activities of organizations. His contribution can be diagrammatically represented as below:-

Fayol’s fourteen Principles of Management

In order to put into practice the elements of management, Fayol enunciated fourteen principles which should be applied carefully and selectively. They are explained below:-

(1) Division of work – Division of work is necessary to enjoy the benefits of specialization.
(2) Authority and responsibility – Authority means the power to give orders and to ask for obedience. Responsibility means the sense of dutifulness which is correlated with authority. There must be parity between the two.
(3) Discipline – The three requisites are necessary for maintaining discipline – (a) good supervisors, (b) clear and fair agreements and (c) proper application of sanctions or penalties.
(4) Unity of Command – It means that one individual employee must receive orders from one individual superior only.
(5) Unity of direction – One and same objective for the whole unit of organization and for that there should be one leadership and one plan.
(6) Subordination of individual interest to general interest – Individual or group interest must be surrendered to general interest.
(7) Remuneration – Remuneration should be fair and satisfactory to both the employees and the employer.
(8) Centralization – By centralization there is optimum utilization of the available resources.
(9) Scalar chain – It is the chain of superior existing from the highest authority to the lowest ranks.
(10) Order – It means that inside an organization there should be a place for everything and everything in its place.
(11) Equity – The sense of equity must prevail throughout all the levels of the organization and the management should see to it.
(12) Stability of tenure of personnel – An employee needs time to get himself accustomed to a line of work and then he can show his ability. Therefore the personnel are stable.
(13) Initiative – The initiative of the personnel must be roused at every level even by sacrifice of vanity by the managers.
(14) Esprit de Corps – Teamwork is essential for the success of an organization.

Bureaucratic Management: Max Weber

According to German Scientist, Max Weber, a bureaucracy is a highly structured, formalized and impersonal organization. He instituted the rigorous belief that an organization should have a defined hierarchical structure governed by a clearly defined rules, regulations and lines of authority. Weber’s ideal bureaucracy possesses the following distinct characteristics:

• Specialization of labour
• Formal rules and regulations
• Well defined hierarchy
• Impersonality in application of rules.

Bureaucratic structures evolved from traditional structures with the following changes:

1. Jurisdictional areas are clearly specified, activities are distributed as official duties (unlike traditional form where duties delegated by leader and changed at any time).
2. Organization follows hierarchical principle — subordinates follow orders or superiors, but have right of appeal (in contrast to more diffuse structure in traditional authority).
3. Abstract rules govern decisions and actions. Rules are stable, exhaustive, and can be learned. Decisions are recorded in permanent files (in traditional forms few explicit rules or written records).
4. Means of production or administration belong to office. Personal property separated from office property.
5. Officials are selected on basis of technical qualifications, appointed not elected, and compensated by salary.
6. Employment by the organization is a career. The official is a full-time employee and looks forward to a life-long career. After a trial period they get tenure of position and are protected from arbitrary dismissal.

Bureaucratic Form According to Max Weber — His Six Major Principles

Max Weber’s principles spread throughout both public and private sectors. Even though Weber’s writings have been widely discredited, the bureaucratic form lives on. Weber noted six major principles.

1. A formal hierarchical structure - Each level controls the level below and is controlled by the level above. A formal hierarchy is the basis of central planning and centralized decision making.
2. Management by rules - Controlling by rules allows decisions made at high levels to be executed consistently by all lower levels.
3. Organization by functional specialty - Work is to be done by specialists, and people are organized into units based on the type of work they do or skills they have.
4. An “up-focused” or “in-focused” mission - If the mission is described as “up-focused,” then the organization’s purpose is to serve the stockholders, the board, or whatever agency empowered it. If the mission is to serve the organization itself, and those within it, e.g., to produce high profits, to gain market share, or to produce a cash stream, then the mission is described as “in-focused.”
5. Purposely impersonal - The idea is to treat all employees equally and customers equally, and not be influenced by individual differences.
6. Employment based on technical qualifications - Selection and Promotion is based on Technical qualifications.
Bureaucratic organization is criticized because of the following reasons:-

1. Too much emphasis on rules and regulations. The rules and regulations are rigid and inflexible.
2. No importance is given to informal groups. Nowadays, informal groups play an important role in all business organisations.
3. Bureaucracy involves a lot of paper work. This results in lot of wastage of time, effort and money.
4. There will be unnecessary delay in decision-making due to formalities and rules.
5. Bureaucratic model may be suitable for government organisations. But it is not suitable for business organisations because business organisations believe in quick decision making and flexibility in procedures.
6. Too much importance is given to the technical qualifications of the employees for promotion and transfers. Dedication and commitment of the employee is not considered.
7. There is difficulty in coordination and communication.
8. There is limited scope for Human Resource (HR).

Definition of Management – In management literature, large number of definitions of the term “management” exists as covered by different experts from time to time. Some of the popular definitions of management are; ‘Management is that process by which managers create, direct, maintain and operate purposive organization through systematic, coordinated and co-operative human effort.” Management as “The art of getting things done through others, and with people in formally organized groups. It is the art of creating and environment in which people can perform as individuals, and yet co-operate towards attainment of group goals.”

In the words of George Terry, “Management is a distinct process performed to determine and accomplish stated objectives by the use of human beings and other resources.”

Henry Fayol, the pioneer of Administrative Management viewed management as a process consisting of five functions which every manager performs, “To manage is to forecast and plan, to organize, to command, to co-ordinate, and to control.” Though modern authors do not consider co-ordination as a separate function of management, but the essence of managing.

Management: Meaning – Ordinarily, the term management denotes utilization of available resources to achieve some objectives. Every individual person has to manage his individual problems. It is more common in group life, as we find it in the business, factory, school, hospital, trade union, etc., as well as in the Government. It started to exist in human life since man started his sedatory habits and forming into a society.

Management is a distinct function and so it can be separately studied. It consists of some basic and interrelated activities. It is a way or a discipline, which adds effectiveness to human efforts and brings order to them. As a process it has a dynamic aspect. It is developing as a distinct branch of sociology. But there are some difficulties with regard to the terminology. The people who perform management are also known as ‘the management.’ It is perhaps better to use the word ‘managing’ to denote the function of management.

Peter Drucker, a modern exponent of management thoughts goes a step further and considers management “as an essential, a distinct and a leading institution” which has a pivotal position in social history. Drucker says “Management, which is the organ of society specifically charged with making resources productive, therefore reflects the basic spirit of the modern age.”

Lawrence Appley has written that “Management has been defined in very simple terms as ‘getting things done through the efforts of other people’ and that function breaks down into at least two major responsibilities, one of which is planning, the other control.”
Common to all these definitions is the contention that management involves activities that are directed towards determination and accomplishment of organizational goals. From these definitions emerge the functions of management which are namely:-

(i) Planning

(ii) Organising

(iii) Staffing

(iv) Leading

(v) Controlling

- Planning involves precisely determining the objectives, i.e. deciding in advance what is to be done, when it is to be done, and how it is to be done.

- Organising refers to the identification of activities and creation of departments. Thus, it also leads to creation of authority and responsibility relationships throughout the enterprise.

- Staffing involves manpower planning, employment of personnel through recruitment and selection, placement, induction, orientation, training, development, performance appraisal, industrial relations etc.

- Leading or leadership is an indispensable activity which every manager has to perform for directing the people under him towards accomplishment of common goals. It includes communication, supervision, motivation etc.

- Controlling involves setting standards of performance, comparing actual performance against these standards, identifying derivation and taking corrective actions to ensure that activities are carried out in conformity with the plans. Thus, control is a comparison and verification process.

### 9.2 PLANNING

Planning is an important function of management. Planning is an activity by which managers analyze present conditions to determine ways of reaching a desired future state. Planning is both an organisational necessity and a managerial responsibility. Through planning, organizations choose goals based on estimates or forecasts of the future. Concern for future is intensified by the fact of relentless, unremitting change. The purpose of planning, in the words of Dalton McFarland, is twofold: to determine appropriate goals, and to prepare for adoptive and innovative change.

**Definition and Characteristics:**

Planning is an intellectual process, the conscious determination of course of action, basing of decisions on purpose, facts and considered estimates. (Harold Koontz and Cyril O’Donnell).

The plan of action is, at one and the same time, the line of action to be followed, the stages to go through, and methods to use. It is a kind of future picture wherein approximate events are outlined with some distinctness, whilst remote. According to George Terry, “Planning is the foundation of most successful actions of all enterprises”.

Planning is defined as the activity by which managers analyse present conditions to determine ways of reaching a desired future stage. It embodies the skills of anticipation, influencing, and controlling the nature and direction of change. (Dalton McFarland)

Planning is the function that determines in advance what should be done. It consists of selecting the enterprise objectives, policies, programmes, procedures, and other means of achieving the objectives.

In planning, the manager must be able to manipulate abstract ideas and anticipate the impact of the many possible outcomes as they affect the enterprise as a whole. (Theo Haimann).
Characteristics or Features of Planning

(i) Planning is a primary function of management: When planning, the manager decides which of the alternatives should be followed, which policies, procedures, programmes, projects and so on would be set up.

(ii) Planning is goal oriented: Planning is aimed at defining the organisational goals and design appropriate action plans in order to achieve these goals.

(iii) Planning is an intellectual process: In the words of Theo Haimann, “Planning requires a mental predisposition to think before acting, to act in the light of facts rather than of guesses, and generally speaking to do things in an orderly way.”

(iv) Planning is pervasive: Planning is all pervasive and it embraces all segments and levels in the organisation.

(v) Planning is continuous function: To keep the organization as a going concern, it is essential that planning must be done continuously.

(vi) Planning involves choice between alternatives: Planning involves choice among alternatives courses of action. If there is only one course, objective, policy, programme or procedure, perhaps then there exists no need for planning.

(vii) Planning is concerned with the accomplishment of group objectives: Planning is thus aimed at setting group goals and organisational goals rather than concentrating on individual goals.

(viii) Planning is flexible: No plan is rigid. When a plan is adopted, it chalks out a definite course of action. But the future assumptions upon which the planning is based may force managers to change the original plan.

Limitations of Planning:

(i) Inaccuracy: Formulation of future plans on the basis of wrong forecasts may not lead to the desired results.

(ii) Time-consuming: Planning involves determination of the major goals to be achieved. It is time consuming and it involves energy, time and mobilization of different kinds of resources.

(iii) Rigidity: Planning often gives some amount of rigidity to its policies, procedures, programmes and methods. A balance between stability and flexibility in planning is to be maintained.

(iv) Costly: Planning is costly because it requires money, time and information.

(v) Attitudes of Management: Good planning is an agonizing process - it is an intellectual activity. It requires tremendous amount of paper work and time. Most managers would not like to undergo such a painful process and prefer to become doers rather than thinkers.

(vi) Faulty design of planning system: Some of the limitations due to the design of planning system can be listed as under:

   • Lack of reward: Planning system may not have reward mechanism and as such managers tend to address their attention to short run results of their performance which carried reward.
   • Lack of participation: When planning is imposed from the authorities, it may lead to resentment and resistance among those who are forced to execute.
   • Lack of specific activities: Planning cannot be effective unless the goals are specific and clear.
   • Competence of the planner: A planner must possess not only skill, but intelligence and breadth of vision, and for long-range master planning must have the ability to forecast.

(vii) Planning prevents innovation: Planning demands total commitment to written policies, procedures, rules etc. It restricts a manager unnecessarily to defined areas.
(viii) **Lack of orientation and training for managers:** For most of the managers planning is easy to put off, as it is not at all exciting or action-oriented.

(ix) **Uncertainty:** Planning has to reckon with numerous uncertainties in the environment.

Finally, planning is a mere ritual in a fast changing environment. The sudden and dramatic changes in technology, competition, government regulations, political, legal, ethical and social changes reduces the effectiveness of the planning effort.

**Prerequisites of Effective Planning**

Planning does not substitute facts for judgment. It does not substitute science for the manager. However, some general principles can be followed to make planning effective.

- Make plans simple and easy to understand. When the plan itself is complicated, it invites misunderstandings among the members of organization.
- Be selective in the plan. Successful managers never try to cover too much territory.
- Plan should be geared to meet, the needs of those who implement it.
- A plan should be thorough, it should not omit any function or sub-function and should not overlook any necessary details. At the same time, controversial statements should be avoided/ignored.

According to Gary Dessler, to plan effectively the managers should consider the following points:

(i) **Develop accurate forecasts:** Forecasting can be made accurate by educating the forecasting users in the art of relating the forecasting techniques to practical problems and also encouraging the people who are entrusted with the forecasting job to look into the informational needs of managers.

(ii) **Gain acceptance for the plan:** It is necessary to secure the acceptance and commitment from them. This can be done by soliciting the subordinate’s participation in the planning process itself.

(iii) **Plan must be sound one:** To increase the efficiency of plans, managers are advised to follow an open-system approach where they recognize and pay concentration to the complex environment in which their organisation is functioning, apart from judging pros & cons of a plan.

(iv) **Develop an effective planning organisation:** Planning involves answers to several questions. The solution for these questions requires a blueprint for planning and a ‘planning organisation’ as such.

(v) **Be objective:** The managers should not hesitate to verify the truth behind the pessimistic notions or beliefs. To see that planning is successful, managers must be objective.

(vi) **Measure firm’s market value:** One of the primary responsibilities of a manager is to measure the total market and see that the organization’s share in the market is as large as possible. For this the manager should estimate the firm’s share in the market.

(vii) **Decide in advance the criteria for abandoning a project:** A plan should always include a specification, agreed on in advance for abandoning the plan. Managers should least hesitate in disconnecting the unproductive connections in the product/project structure.

(viii) **Set up a monitoring system:** Plans should preferably be subjective to regular appraisal and review. Every plan should be refined and restructured on the basis of accurate and timely information.

(ix) **Revise the long-term plans every year:** Management should review long-term plans annually so as to match external opportunities with organisational resources in a proper way. By reviewing the progress made on the plan, the reasons for under performance or over-performance can be found out.

(x) **Fit the plan to the situation:** These days planning has become situational. A change in any part of the environment must be sensed and appropriate strategy must be determined to cope with the change."
Steps in Planning Process:
The process of planning consists of a series of interrelated steps which varies depending on the size and complexity of the organization. The basic steps involved in the process of planning are –

1. **Analysis of opportunities** – Planning starts with analysis of opportunities in the external environment as well as within the organization. Goals can be set only when a proper scanning of the environment, that reveals the opportunities that exist.

2. **Establishing Objectives** – The next step in planning process involves establishing objectives for the whole organization, and for the different departments. Organisational objectives provide direction to the major plans.

3. **Determining planning Premises** – Planning premises refer to the environment in which the plans are to be implemented. The task of determining premises should only be continued to those aspects that are critical to the plan.

4. **Identifying alternatives** – Different feasible alternatives need to be identified in order to achieve a particular objective, since there may be multifarious ways in which a particular goal can be accomplished.

5. **Evaluation of alternatives** – Alternatives needs to be evaluated in the light of goals. Those are set, and objectives to be achieved considering the various constraints and uncertainties that exist.

6. **Selection of the best alternative** – The choice of the best alternative, i.e. the selection of the most appropriate course of action. Sometimes two or more contingency plans are kept as a backup considering. The unpredictability of the future.

7. **Implementing the plan** – Implementation or execution entails putting the plan into action. Managers need to consider a series of important decisions during implementation of the actions stated in the plan.

8. **Reviewing the Plan** – Reviewing the plan help managers to evaluate the effectiveness of the plan. A system of thorough review and scrutiny can help in detecting derivations from the set plans and remedial measures can be taken accordingly.

**Approaches to Planning**

Independent of the above philosophies of planning, we may identify four different approaches to planning in actual practice in various organisations. These approaches are described as follows:

(a) **Top-down approach** :- As the name indicates, top management takes the initiative in formulating major objectives, strategies, policies and derivative plans in comprehensive manner and communities them down the line to middle and supervisory management levels for translating them into performance results. Managers other than those at top levels have little role in planning; they have only to concentrate on implementation and day-to-day control.

(b) **Bottom-up approach**: - This is a virtual reversal of the above approach in the sense that the plan proposals originate at the supervisory management level, travel up the management hierarchy in a step-by-step manner and reach the top management level for review and approval. In this approach top management generally refrains from giving any guidelines to lower management levels on what to plan and how.

(c) **Composite approach** :- Here the top management provides broad parameters and guidelines to line executives at middle and lower management levels, allows the needed flexibility and support to formulate tentative plans, which are reviewed and finalized by top management in consultation with all the managers at the appropriate levels. The approach is useful to evolve corporate-wide plans also, which partly draw inspiration from the planning ideas and perspectives generated at the lower level.
(d) Team approach: In the approach, the task of planning is entrusted to a select team of managers, whether they are line managers or staff experts. The team functions under the leadership of the chief executive. It does not finalize plans as such but initiates the planning process, identifies the areas of problems and opportunities, examines the internal and external environment, collects information, solicits ideas and formulates tentative proposals for consideration by the chief executive. The team is used by the latter as his brains trust; it may even be asked to monitor the progress of plans and review performance.

Types of Plans:
To provide guidance to the managers to make decisions, take action and solve problems, various plans are drawn up. These plans help the managers in managing day to day affairs, utilizing resources of organization efficiently and in regulating working behaviour of subordinates. These plans do provide unifying and consistent base for managerial decision and action. These may be grouped into single use plans and standing plans.

Standing Plans
Standing plans are the recurring plans and they are used repeatedly in situations of a similar nature. A standing plan is used again and again over a long period of time. It is a standing guide to thinking and action. A standing plan is standing answer to recurring problems and it is of permanent or long term nature. Standing plans simplify the decision making process as they decide in advance what and how of a variety of operations. They make it possible for managers to spend their most creative efforts on single use plans. Standing plans are essential for smooth operations. Objectives, policies, procedures and rules are important standing plans.

Single use Plans
A single use plan is used once and then it is discarded. It is designed to fit the demands of a specific situation or goal and is ‘used up’ when the goal is achieved or the situation is over. A single use plan is used for a short period of time. Budgets, schedules; projects etc. are the examples of single use plans. Standing plans are prepared for repetitive activities while single use plans are meant for non-repetitive activities.

Planning Premises
Planning premises are basic assumptions about the environment in which plans are expected to be implemented. Certainly, planning has to take into account numerous uncertainties in its environment. Premises guide effectively planning. As pointed out by Harold Koontz, planning premises spell out stage of the expected future event which is believed will exist when plans operate. They are the expected environment of plans. Planning premises are largely derived from forecasting. The effectiveness of planning to a great extent depends on how accurately the premises are developed from out of the forecasting data. Though it is not possible to predict accurately future environmental conditions, planning has necessarily to be based on certain assumptions about the environment. These assumptions are captured in the form of planning premises.

Planning premises can be categorized into three heads —

- internal and external premises
- controllable, semi controllable and uncontrollable premises
- tangible and intangible premises

(a) Internal and External premises: The factors which exist within the business organisation furnish the basis for internal premises. These include sales forecast, cash flows, capital budgeting, advertising expenditure, product line, marketing mix, competence of the managerial personnel etc. On the other hand external premises are concerned with the general business climate comprising of economic, social, political, technological conditions in the economy.
(b) **Controllable, semi-controllable and uncontrollable premises**: The premise which can be controlled by the management are known as controllable premises. These include the internal policies, credit policies, investment plans, research projects, rules etc. which are within the jurisdiction of management. Semi-controllable premises are those over which the management has some control. Some of the examples of these premises are union management relations, firm's share in the market, market strategies, labour turnover etc. Finally premises over which a firm has no control are known as uncontrollable premises. Examples in this category include the natural calamities, wars, strike, innovations, emergency legislation etc.

(c) **Tangible and intangible premises**: The premises that can be expressed in tangible physical terms (monetary units) such as labour hours, production units are known as tangible premises. On the other hand, intangible premises are those that defy quantification! Examples of intangible premises are public relations, employee morale, reputation of the firm, competitive strength of the firm, etc. though the intangible premises cannot be quantified in specific terms; these cannot be ignored while planning.

9.3 **ORGANISING**

As an important function of management, organizing is defined as the dividing and subdividing up of duties and responsibilities which are necessary to any purpose and arranging them in groups which are assigned to individual. In the words of Koontz and O’Donnell “organizing involves the establishment of an internal structure of roles through determination and enumeration of activities required to achieve the goals of an enterprise and each part of it; the grouping of these activities, the assignment of such groups of activities to manager, the delegation of authority to carry them out, and provision for coordination of authority and informational relationships horizontally and vertically, in the organization structure”.

George Terry defines organizing as “establishing the effective authority relationships among selected works, persons, and workplaces in order for the group to work together effectively". Thus, organizing function consists of dividing work among groups and individuals (division of labour) and providing for the required coordination between individual and group activities. In the words of Louis Allen, “organizing ‘is the process of identifying and grouping the work to be performed, defining and delegating responsibility and authority, and establishing relationships for the purpose of enabling the people to work most effectively together in accomplishing the objectives”. In essence, organizing is the managerial function that deals with the allotment of duties, co-ordination of tasks, delegation of authority, sharing of responsibility etc.

Orientation involves the introduction of new employees to the enterprise, its functional tasks and people. Large firms usually conduct a formal orientation programmed which are conducted usually by the HR Department Orientation acts as a function of organizational socialization serving three main purposes –

(i) Acquisition of work skills and abilities
(ii) Adoption of appropriate role behavior
(iii) Adjustment to the norms and values of the work group.

Placement, on the other hand may be defined as ‘determination of the job to which an accepted candidate is to be assigned, and his assignment to that job’. A proper placement is instrumental in reducing employee turnover, absenteeism and boosts employee morale.

**Process of Organising:**

As a function of management, i.e. as a process, organizing includes the following steps:

- identifying the work
• grouping the work
• establishing formal reporting relationships
• providing for measurement evaluation, and control
• delegation of authority and responsibility
• coordination,

(i) **Identifying the work** – The first step in the organizing process is to identify the work to be performed in the organisational unit i.e. enterprise. Every organisation is created deliberately to achieve some predetermined objectives. It is absolutely essential to identify the work to be performed to achieve the goals. Work must be divided and distributed because no one individual can perform the total work in an organisation single handed. Identification and classification of work enables managers to concentrate on important activities, avoiding the unnecessary duplications, overlapping and wastage of effort.

(ii) **Grouping the work** – Dividing work is the essence of organizing function. After making the vision, similar activities shall be grouped together in order to provide for a smooth flow of work. Departments and divisions are created in an organisation based on the principle of similarity and relatedness of the activities performed. These departments or divisions are then managed under the direction of an individual called manager of the particular department. Depending on the size of the organisation, there could be several departments for every separate function. In small organisation, various departments may be grouped together and headed by only one or a few individuals.

(iii) **Establishing formal reporting relationships** – One of the steps in organizing function is to establish formal reporting relationships among individual members in the enterprise. After establishing these formal relationships it would be possible to know the details relating to the work. Establishment of formal reporting system should pave way for assigning the duties and responsibilities to individual in an unambiguous fashion.

(iv) **Providing for measurement, evaluation and control** – Organising function involves providing the basis for measurement, evaluation and control of the activities. It should establish signposts and control points in the organisation so that the performance of individuals (and groups) can be measured evaluated, and controlled at periodical intervals. The purpose of such evaluation is to take necessary rectification measures if there are serious deviations in the actual performance.

(v) **Delegating authority** – Authority is the right to act, and extract obedience from others. A manager may not be able to perform tasks without granting authority to him by the organisation. While assigning duties the manager should clearly specify authority and responsibility limits.

(vi) **Coordination** – Individuals and groups in an organisation carry out their specialized functions and this necessitates coordination. While performing the organizing function, the manager should see that all the activities are properly coordinated and there exists ‘no conflicts. Both individuals and groups may come in conflict while performing their respective duties or functions in the organisation. While organizing the functions, the manager should see that no conflicts exist among various departments and that all the departments’ function as a coordinated, unified whole.

#### 9.4 STAFFING

Staffing is defined as the process of obtaining and maintaining the capable and competent people to fill all positions from top to operative level. In the words of Dalton McFarland staffing is the function by which managers build an organisation through the recruitment, selection, development of individuals as capable employees. According to Koontz and O’Donnell staffing is the executive function
which involves recruitment, selection, compensating, training, promotion, retirement of subordinate managers. Weirich define staffing as “filling and keeping filled, positions in the organization structure”. Thus, staffing is concerned with the placement, growth and development of all those members of the organization whose function is to get things done through the efforts of other individuals.

**Importance of Staffing**

Undoubtedly, staffing is a vital function of management more importantly because:

1. It facilitates discovery of competent and qualified people to take up various positions the organisation;
2. It enhances productivity by placing right people on the right jobs;
3. It helps in estimating the staffing requirements of the organisation in future (through manpower planning);
4. It prepares the personnel to occupy the top positions within the organisation.
5. It helps development of people through the programmes of training and development;
6. It helps the organisation to make the best use of existing workforce;
7. It ensures adequate and equitable remuneration of workforce.
8. It results in high employee morale and job satisfaction by placing the right people on right jobs;
9. It makes the top management aware of the requirements of manpower arising from transfer, promotion, turnover, retirement, death etc. of the present employees.

When the staffing function is performed effectively, the above payoffs would accrue to the organisation.

**Staffing Process**

Staffing process is concerned with providing the organisation with the right number of people at the right place, and at the right time so that the organisation would be able to achieve its goals effectively. Just one wrong decision in the process would prove to be costly to the entire enterprise. A wrong placement in the organisation would adversely affect the productivity of the organisation as a whole.

Staffing process involves the following steps.

**(i) Manpower Planning** – Also known as human resource planning, the manpower planning is “a process of determining and assuring that the organisation will have an adequate number of qualified persons, available at the proper times, performing jobs which meet the needs of the entire enterprise and which provide satisfaction for the individuals involved” (Dale S. Beach).

Manpower planning consists of the following steps:-

   (a) Determination of the organisational objectives;
   (b) Determination of the skills and expertise required to achieve the organisational objectives;
   (c) Estimating the additional human resource requirements in the light of the organisation’s current human resources;
   (d) Development of action plans to meet the anticipated human resource needs.

The main points in human resource planning are: current assessment, future assessment of the human resource needs and the development of future programme as well as career development.

**(ii) Recruitment** – Recruitment involves seeking and attracting a pool of people from which qualified candidates for job vacancies can be selected. Development and maintenance of adequate manpower resources is the main task of recruitment. According to Dale Yoder, recruitment is “the process of discovering the sources of manpower to meet the requirements of staffing schedule and to employ effective measures for attracting the manpower in adequate numbers to facilitate effective selection of an efficient working force”.
(iii) Selection – It is probably the most critical step in the staffing process as it involves choosing candidates who best meet the qualifications and requirements of the job.

(iv) Training – It is the process of increasing the knowledge and skills of an employee for doing a particular job. The objective of training is to achieve a change in the behaviour of those trained.

(v) Placement & Induction – Placement refers to assigning rank and responsibility to an individual, identifying him with a particular job. If the person adjusts to the job and continues to perform per expectations, it means that the candidate is properly placed. However, if the candidate is seen to have problems in adjusting himself to the job, the supervisor must find out whether the person is properly placed as per the latter’s aptitude and potential.

Induction refers to the introduction of a person to the job and the organisation. The purpose is to make the employee feel at home and develop a sense of pride in the organisation and commitment to the job.

Proper induction would enable the employee to get off to a good start and to develop his overall effectiveness on the job and enhance his potential.

Sources of Recruitment

The important sources of recruitment are internal and external sources.

(A) Internal Sources:
The internal sources include the employees on the payroll. People from within are generally upgraded whenever any vacancy arises. By reviewing the personnel records and skills the manager would be in a position to know the suitable candidates for the vacant position. Transfers, promotions of present employees are the basic internal sources of recruitment. Further, inside moonlighting and employee’s friends and relatives are also given a chance to serve the organisation, if any new vacancy arises. The internal sources of recruitment have the following merits:

- Recruitment from within encourages the employees to work efficiently to reach top positions;
- The organisations would be able to choose the right people for the vacant positions on the basis of the track records of the employees;
- Employees need little training as they know the major operations and functions of the organisation;
- The expenditure is relatively less when compared to external sources of recruitment;
- Internal recruitment improves the morale of the employees as they are sure that they would be preferred over the outsiders for higher positions.

The internal sources of recruitment have the following limitations:

- In the long run it is not a healthy sign for the organisation to rely on the existing employees. It discourages new blood from entering into the organisation. The organisation may be deprived of young talent that flows into the industry.
- The internal sources of recruitment promote sycophancy and favoritism. Workers may be recruited not because of their suitability for the jobs but because they may maintain good relations with the top management.
- The skills of existing employees may become obsolete and the organisation may have to resort the external recruitment inevitably.
- One universally accepted disadvantage of internal recruitment is the Peter Principle which states that people are promoted until they finally reach to the level of incompetence.

(B) External Sources:

Normally recruitment from external sources would be done when either the existing employees are...
inadequate to occupy the vacant positions or they are not properly qualified and skilled enough to
occupy the positions, or they are unfit (either by virtue of their age or specialization.

The important external sources of recruitment include —

1. **Employment exchanges** – Employment exchanges run by government are regarded as a potential
   source of recruitment especially for unskilled, semiskilled and skilled operative jobs.

2. **Advertisement** – Advertisement in newspapers or trade and professional journals is another popular
   source of recruitment. Especially for the senior positions to lower-middle level positions.

3. **Educational Institutions** – Recruitment through educational institutions is also known as campus
   recruitment.

4. **Employee walk-ins** – It is commonly found that some people send unsolicited applications to the
   organisations enjoying goodwill and reputation. Organisation, if they find necessary, can consider
   these applicants for the suitable positions.

5. **Employee referrals** – Some organisations prefer using employees as the source of recruitment. They
   maintain informal system of recruitment where word-of-mouth would do when compared to formal
   system of organisation.

6. **Miscellaneous** – Among other methods of recruitment, ‘gate hiring’ is the most popular one in
   which people are hired at the factory gate itself.

The external sources of recruitment offer the following advantages:

(i) Organisations can choose from wider spectrum under the external source of recruitment. The
   number of applicants would be very large and the organisation can choose the better candidates
carefully after weighing the pros and cons of all the candidates.

(ii) Organisations can avoid bias to some personnel by following the external sources of recruitment
   objectively. Here, there is no scope for subjective judgment and selection of the candidates.

Some of the limitations of the external sources of recruitment include:

(i) Personnel chosen from external sources may cause dissatisfaction among the existing employees.
   It would be demoralizing to the existing employees when they come to know that organizations
   are considering the outsiders for filling up the top positions.

(ii) External sources of recruitment is quite costly to the enterprise. Firms have to spend heavily on
   advertisements and sometimes the response from the potential candidates may be dismal and
   disappointing. It is customary to pay (to and fro) the expenses of the candidates for attending
   interviews and a substantial part of it is a mere waste of resources.

**Selection**

Perhaps the most crucial stage in staffing process is the selection. Selection is very crucial because
any errors in selection may prove to be costly to the organisation itself. This explains the reason why
selection has occupied a place of prominence in the management literature.

Selection is a process of rejection and hence it is called a negative process. It divides the people
into two categories viz. those who would be selected and those who would be rejected. A manager
should exercise special skill in selecting the candidates.

The process of selecting the candidates for employment in organisations is a long-process. It consists of
the following steps: Sucharita’dí, this detailing can be wiped out if you think so.

1. **Application blank** – Every candidate is required to fill up a blank application which provides a
   written record of the candidate’s qualifications, etc. It is a traditional widely accepted device for
   eliciting information from the prospective applicants to enable the management to make proper
   selection of the candidates. An application blank is a personal history questionnaire.
2. **Preliminary interview** – To eliminate the unsuitable candidates in the very beginning preliminary interviews of brief duration are conducted. A majority of the applicants would be rejected in this stage. If the applicant is eliminated at this very stage, organisation would be saving from the expenses of processing the candidate further. Even the unsuitable candidate would save himself from the trouble of passing through the long selection procedure.

3. **Employment tests** – To match the individual’s mental and physical characteristics with the job appropriately, employment tests are essential. Here, intelligent tests, aptitude tests, proficiency tests, personality tests, and tests of interests and hobbies etc. are included. These days’ psychological tests occupy the place of prominence in these employment tests.

4. **Final Interviews** – An evaluation interview is perhaps the most crucial step in the selection process. A careful assessment of the candidate is made in the personal interview with the candidate. The purpose of conducting the employment interviews is to assess the candidate’s strengths and weaknesses for the position. Apart from finding out the suitability of the candidate, the face-to-face interview also provides an opportunity to the interviewer to know more about the candidate. At the same time, the candidate would also be in a position to know about the terms and conditions of his employment, organisational policies and the employer-employee relations etc.

5. **Background Investigation** – Normally, in every curriculum vitae (bio-data) the candidate is asked to mention the name of references. A referee is potentially an important source of information about the stability, integrity, and personality of the candidate. Before a candidate is finally selected, organisations prefer to contact the references or dig up into the candidate’s past history, past employment, financial condition, police record, personal reputation etc. which will be helpful in verifying the candidature of the person.

6. **Medical examination** – The pre-employment physical examination in terms of medical test of a candidate is an important step in the selection process. This examination isolates the medically unfit people from the rest.

7. **Final selection and placement** – If a candidate has cleared all minor hurdles in the selection procedure he is formally appointed and letter appointment is given to that effect. In the letter of appointment will be stated the terms and conditions of employment (such as pay scale, period of probation, starting salary, allowance and other perquisites, etc.)

### Training and development

One of the important managerial activities in modern organisation is the training and development programmes. It is common that organisation first recruits and select the employees and provide them some of training to increase their versatility, knowledge, adaptability skills so that the jobs they perform becomes appreciable. Training is the systematic acquisition of knowledge, skills, rules, and attitudes that have specific or narrow applicability to a limited set of situations in a specific job environment. Training constitutes significant part of organisation’s investment in human resources.

Edwin Flippo contends that ‘training is an act of increasing the knowledge and skill of an employee for doing a particular job’:

Every training programme is aimed at fulfilling the following purposes.

1. to increase the productivity of workforce;
2. to improve the quality lot products being manufactured;
3. to help an organisation to fulfill its future personnel needs;
4. to improve the health of workers;
5. to promote the safety of workers on the job;
6. to prevent the obsolescence of employees at work;
8. to maintain personal growth of employees in the enterprise;
9. to improve overall organisational climate.

According to O. Jeff Harris “Training of any kind should have as its objective the redirection or improvement of behaviour so that the performance of the trainee becomes more useful and production for himself and for the organisation of which he is a part. Training normally concentrates on the improvement of either operative skills interpersonal skills, or decision making skills, or a combination of all these skills”. Operative skills are required for the successful completion of a given task. Interpersonal skills are related to the maintenance of successful relationship between peers and subordinates. Finally, decision-making skills are related to the problem identification and prescribing an appropriate solution.

**Methods of Training**

There are several methods of training. One important point to note here is that these methods of training are not competitive, rather they are complementary. Some of the most commonly used methods of training are —

A. On-the-job training
B. Off-the-job training

**(A) On-the-job Training** – Actually, training begins the first day when an employee starts his job. Every employee learns a lot on the job. On-the-job training is normally given by the superior or supervisor. One notable feature is that there is no artificial location. Everything is a reality. The methods employed to make the on-the-job training are as under:

- coaching
- apprenticeship training
- job rotation
- vestibule training
- self-improvement programmes

**Merits of on-the-job training** – Some of the payoffs of on-the-job training are listed as under:-

1. One of the biggest advantages of on-the-job training is that trainee learns on actual working environment rather than on artificial environment.
2. The trainee observes the rules, regulations, and systems being followed in day-to-day organizational life.
3. Additional personnel are not required for training the employees when on-the-job method of training is used. Therefore, there is an advantage of economy by using this method.

**Demerits of on-the-job training** – On-the-job training suffers from the following demerits:-

1. The trainee may learn in a haphazard manner. Since there is no direction under which the trainee learns while performing job, there would be disorganized learning on the part of the trainee.
2. Sometimes, inexperienced handling of machines and tools by the trainees may result in colossal losses to the organisation. For example, if an employee is asked to work on an ‘Apple’ computer, just by giving a few directions to operate the computer, it is quite likely that the machine would go out of order within no time. This would be costly to the enterprise as such.
3. The productivity of employees who is undergoing training on-the-job would be dismal and disappointing. Further it affects the flow of work when the production undergoes different processes.
4. Sometimes it becomes very difficult for the trainee to work as well as learn. In spite of these limitations, on-the-job training is considered suitable to supervisors, operatives, and lower-level executives.
(B) Off-the-job training – As the name itself indicates, off-the-job training refers to training conducted away from the actual work setting. Some of the popular methods of off-the-job training are:

- Lectures and classroom instruction
- The conference method
- Group discussions
- Role playing
- Case studies
- T-group training (or sensitivity training)

Merits of Off-the-Job Training

1. This type of training gets employees away from their work environment to a place where their frustrations and bustle of work are eliminated. This more relaxed environment can help employees to absorb more information as they feel less under pressure to perform.

2. Can be a source to supply the latest information, current trends, skills and techniques for example current employment legislation or other company law and regulations, current computer software or computerized technologies or improved/innovative administrative procedures. These new skills can be brought back and utilized within the company.

3. Experts in their field would cover these courses, and this would mean that training for staff members would be taught to a reasonable standard.

4. As the courses are held externally, our company would not have added costs incurred as a result of extra equipment or additional space.

5. Sending an employee on a course could help to make an employee feel more valued as they would feel as if they are receiving quality training.

6. As many courses or seminars invite employees from other companies to attend, this would allow employees to network and perhaps drum-up business.

Demerits of Off-the-Job Training

1. Depending on the course, the overall cost could prove quite expensive for example; many courses may require an overnight stay at a hotel if the course is outside the area or the course itself may prove to be expensive due to the level of expertise or equipment need to deliver the course.

2. As there is no real way to know the abilities both as a trainer and their subject knowledge of the people delivering the external training courses, there is no guarantee that sufficient skills of knowledge will be transfers or valuable.

3. The different learning speeds of individuals who are usually forced to progress at a compromise rate.

4. Not all the learners will be starting at the same knowledge or skill level and there is a risk that those starting at the lowest levels, if account is not taken of this, will be lost from the start.

Placement, Orientation and Induction

After a candidate is selected for a particular job in an organisation what needs to be done in staffing process is to induct him in his new job. Placement and induction represents the last stage in the staffing process. Orientation involves the introduction of new employees to the enterprise, its functional tasks and people. Large firms usually conduct a formal orientation programme which is conducted usually by the HR Department. Orientation acts as a function of organizational socialization serving three main purposes: (i) acquisition of work skills and abilities, (ii) adoption of appropriate role behavior (iii) adjustment to the norms and values of the work group. Placement, on the other hand may be defined
as ‘determination of the job to which an accepted candidate is to be assigned, and his assignment to that job. A proper placement is instrumental in reducing employee turnover, absenteeism and boosts employee morale. Here, the selected candidate is given a copy of the policies, procedures and rules and regulations of the enterprise in question. The candidate will be given a complete and unambiguous description of the nature of job assigned to him, to whom he is accountable, who are accountable to him etc. Thus, the employee will come to know the exact authority-responsibility-accountability relationships.

9.5 LEADING

Leading is another of the basic function within the management process “Leading is the use of influence to motivate employees to achieve organizational goals” – Richard Daft. Managers must be able to make employees want to participate in achieving an organization’s goals. Three components make up the leading functions:

- Motivating employees
- Influencing employees
- Forming effective groups.

The leading process helps the organization move toward goal attainment.

9.6 CONTROL

From president to supervisor, controlling is the function that is performed utmost carefully by ever’ manager. Control refers to the task of ensuring, that activities are producing the preset targets or goals. Controlling is aimed at monitoring the outcome of activities, reviewing feedback information about this outcome, and if necessary takes corrective action. In the words of Anthony, control is “the process by which managers assure that recourses are obtained and used effectively and efficiently in the accomplishment of the organisational objectives”.

According to Haynes and Massie, control is any process that guides activity toward some predetermined goal. Hicks and Gullet content that “controlling is the process by which management sees if what did happen was what was supposed to happen. If not, necessary adjustments are made”.

Koonts and O’Donnell contend that “Managerial control implies the measurement of accomplishment against the standard, and the correction of deviations to assure attainment of objectives according to plans.”

Control function is closely connected to planning. In fact, control is an effective counterpart to planning. Planning and control are so entwined that it becomes almost impossible to determine where one leaves off and the other begin. Planning without corresponding controls are apt to hollow hopes.

The Control Process

A control system follows the following sequence —

(I) Establishment of Standards: The first step in control process is the establishment of standards or objectives or targets against which the actual performance is measured. Fred Luthansa contends that “standards are used to control the objectives, objectives are used to control goals, and goals are used to control purpose”. Before setting standards, managers take necessary steps such as studying the work characteristics, setting the acceptable levels of goal performance etc. Further, a manager should see that standards are not rigid, rather they are rationally flexible.
(ii) **Measurement of actual performance**: Another crucial step in controlling is the measurement of actual performance of employers. A manager has to measure the work against which appropriate standards are set. Measurement of performance is particularly difficult for less technical tasks.

(iii) **Comparing the actual performance with standards**: The comparison may reveal some deviations from the standards established. In very rare occasions only actual performance matches perfectly with the standards. While comparing the actual performance with the standards, a manager should see that the deviation does not go beyond an acceptable range.

(iv) **Taking corrective action**: If the actual result is far from the desired result (whether the deviation is positive or negative) corrective action is called for. If there is a negative deviation an enquiry should be made as to why actual results were not meeting the standards. If there is positive deviation, it does not mean that the performance is very good. The positive deviation may be due to substandard being fixed. This too calls for corrective action. Standards should be revised. A manager has to assess the causes of deviation and take necessary rectification measures.

Corrective action includes —

- re-setting the standards
- reallocation of duties to employees
- changing the organisation structure
- providing motivation to employees
- Training and selecting the employees.

**Controlling Responsibilities**

**What to Control?**

In any organisation or a work unit, managers have to decide in advance the area or points of activity which need to be controlled —these are to be selected based on their importance in relation to the whole activity and desired results. This leads us to examine two concepts: critical point control and control of exception.

(a) **Critical point control**: In a simple operating system, all aspects of the activity can be watched and controlled in a close manner. But as a system becomes more complex, it may not be possible or necessary or economical to control each and every aspect of the activities. In such cases controls have to be selective. A few key areas or aspects of the activity and their performance have to be identified and control attention has to be focused on them. The underlying assumption is that the selected key areas or aspects are critical to the survival and success of the system in the sense of being limiting or bottleneck factors and that by paying attention to them it is possible to ensure planned performance of the whole operation. The selected key areas for control are variously called key result areas, key success factors, critical points or strategic points. In the area of inventory control, ABC analysis is an example of critical point control.

(b) **Control by exception**: Also known as ‘management by exception’, the principle is widely practiced by managers in organizations. It means that managers at each level should pay attention to only exceptional and significant deviations from planned results. Only exceptional instances of off-line functioning of the system should deserve managerial attention and remedial action. Performance which is largely within the permissible standards in spite of the presence of minor deviations or disorders need not be referred to managerial attention. The idea behind the principle of control by exception is that ‘no news is good news’. If there is nothing to report, the presumption is that the system is functioning alright.
Kinds of Control
Three kinds of control systems are used by Modern organisations, namely
(i) Historical (or) Feedback control
(ii) Concurrent control and
(iii) Predictive feed forward control.

(i) Feedback control: In all physical and biological systems, some message is transmitted in the form of mechanical transfer of energy, a chemical reaction, or any other means which is known as ‘cybernetics’. In social systems also, some information is sent back to exercise control. Any good managerial system controls itself by information feedback which discloses errors in accomplishing goals and initiates corrective action. Feedback is the process of adjusting future action based upon information about past performance. Though feedback is ‘after the fact’ it is vital to the control process. Sometimes, input variables are immeasurable (e.g., the values an employee brings to the job) or are not detected at the feed forward control point. Feedback is necessary in any continuous activity as it enables to take corrective action which is essential for the accomplishment of goals of the system.

The concept of feedback is important to the development of an effective control in any organisation. This is also known as ‘post control’ which refers to gather information about completed activity, to evaluate information and to take corrective actions to improve similar activity in future.

In other words, it permits the manager to use information on past performance to bring future performance in line with planned objectives and standards. Post control helps in testing validity and appropriateness of standards. To make post-control more meaningful and effective, analysis of post-performance is required to be made as quickly as possible and control reports should have been submitted to the manager without loss of time.

(ii) Concurrent Control: It is known as ‘real time’ or ‘steering’ control. It is concerned with the adjustment of performance before any major damage is done. For instance, the navigator of a ship adjusts its movements continuously or the driver of a car adjusts its steering continuously depending upon the direction of destination, obstacles and other factors. In a factory, control chart is an example of concurrent control. Concurrent control occurs while an activity is still taking place.

(iii) Feed forward control: Feed forward control involves evaluation of inputs. Feed forward follows the simple principle that an organisation is not stronger than its weakest link. For instance, if a machine is not functioning properly, the operator will look for certain critical components to see whether they are working well or not. The same logic applies to feed forward control, it is essential to determine and monitor the critical inputs into any operating system. Preventive maintenance programme is an important example of feed forward control. It is employed to prevent a breakdown in machinery. Another example of feed forward control is formulation of policies to prevent critical problem from occurring. For instance, a policy on absenteeism may be communicated to new employees to help and prevent potential problems created by absenteeism.

Prerequisites of an Effective Control System
Any control system should meet certain requirements in order to be effective, which are indicated below:

1. There should be a match between the type of function and the system of control at all levels of the organisation.
2. The control system should be sensitive enough to point out deviations from plans immediately so that corrective action can be initiated with little loss of time and before any damage is caused.
3. The control system should be flexible and forward looking just like the planning system, to enable the organisation and its sub-systems to adapt and adjust their goals and the means of reaching them in turn with the change in the environment i.e., to maintain a sort of dynamic equilibrium.
(4) The control system should focus on strategic and key activity areas or points which are critical to overall performance.

(5) The control system should enable managers to utilize their time and talent most effectively by concentrating on major or exceptional deviations from plans.

(6) The control system should be formal and objective as far as possible, in fairness to those whose performance is monitored, regulated and evaluated. To some extent, quantification of performance standards meets this requirement.

(7) The control system should be consistent with the organisational structure. It should be built into the horizontal activity relationships and vertical authority relationships. In a sense, the organizational structure is a control system, designed to achieve certain pre-determined goals effectively.

(8) Controls are nothing more than means to certain ends. They are not ends in themselves. They should constantly focus on goals to be achieved, on values to be preserved and on interests to be promoted.

(9) The control system should be economical to operate; economy need not however be exercised at the cost of effectiveness. Sometimes, a simple inexpensive control system may match with expensive, highly sophisticated one in terms of effectiveness.

(10) The control system should give due allowance to factors or variables which cannot be controlled but which affect the performance of people.

(11) The control system should be designed to measure and evaluate the diverse dimensions of performance of individuals and activity areas, giving appropriate weightage to all the relevant variables having a bearing on performance: qualitative variables or factors deserve to be taken into consideration, while evaluating performance.

(12) The means adopted to achieve goals should also be kept under watch by the control system, because both means and ends are important.

(13) Finally, the control system should be understandable to those whose performance is sought to be regulated. The requirements of control should be communicated in a simple and straightforward manner to those who are to abide by the system.

Principles of Control

The following principles of control summaries the substantive parts of the above discussion on the controlling function.

1. **Principles of assurance of objective:** The task of control is to ensure that plans succeed by detecting deviations from plans and furnishing a basis for taking action to correct potential or actual deviations.

2. **Principle of future-directed controls:** The more a control system is based on feedback rather than simple feedback of information, the more managers have the opportunity to perceive undesirable deviations from plans before they occur and to take action in time to prevent them. Control, like planning, should ideally be forward-looking, because of time lags in the system of information feedback. Hence control should be directed towards the future by devising proper information, forecasting, early warning and rapid response mechanisms.

3. **Principle of control responsibility:** The primary responsibility for the exercise of control rests in the manager charged with performance of the particular plans involved. There is unity of planning and control in each managerial position.

4. **Principle of efficiency of controls:** Control techniques and approaches are efficient if they detect and illuminate the nature and causes of deviations from plans with a minimum of costs or other unsought consequences. The results of control should be worth their costs—both in monetary
and human terms. The adverse human consequences of control have especially to be guarded against.

5. **Principle of direct control:** Higher the quality of every manager in a managerial system, they would ensure a high quality of managerial decision making and action behaviour.

6. **Principle of reflection of plans:** The more the plans are clear, complete and integrated, and the more the controls are designed to reflect such plans, the more effectively controls will serve the needs of managers. Clear, complete and integrated plans facilitate better control.

7. **Principle of organisational suitability:** The more that an organisational structure is clear, complete and integrated, and the more that controls are designed to reflect the place in the organization structure where responsibility for action lies, the more they will facilitate correction of deviations from plans. Responsibility for execution of plans and for correction of deviations must be pinpointed clearly in the organisational structure.

8. **Principle of individuality of controls:** The more that control techniques and information are understandable to individual managers who must utilise them for results, the more they will be actually used and the more they will result in effective control. Control techniques should be tailored to the personality and orientations of managers; at least they should be intelligible to them and within their power of understanding.

9. **Principle of standards:** Effective controls require objective, accurate and suitable standards. Measurement of performance by reference to standards should be verifiable, specific and simple. Standards should earn the respect of people who have to abide by them.

10. **Principle of critical point control:** Effective control requires attention to those factors critical to appraising performance against an individual plan. Managers should concentrate on salient features of performance in selective areas, picked up as of strategic importance.

11. **Principle of exception:** The more managers concentrate control efforts on exceptions, the more efficient will be the results of their control. This principle suggests that managers should concentrate on significant deviations, both positive and negative, from plans.

12. **Principle of flexibility of controls:** If controls are to remain effective, despite failure or unforeseen changes of plans, flexibility is required in their design. Since plans have to be flexible to order to be effective, control has also to be flexible.

13. **Principle of action:** Control is justified only if indicated or experienced deviations from plans are corrected through appropriate planning, organising, staffing and leading. The principle affirms the essential unity of management.

**Techniques of Control**

Managers use different methods and systems to exercise control of different levels. Now, we will touch upon some of the tools and mechanisms devised by managers and others, over the years to control specific aspects of activity and performance of an enterprise or work units.

“Budgets are formal quantitative statements of the resources allocated for the execution of activities over a given period of time, and include information about projected income, expenditure and profits.”

1. **Budgetary Control:** Budgets are useful as tools of control to the extent that they, permit, monitoring, measurement, evaluation, regulation and correction of enterprise activity along desired pre determinate directions.

   The essential elements of budgetary control are outlined as follows:

   (i) Translation of enterprise goals into sub goals of the various operating units which are further operationalised as standards of performance, and targets of achievement (sales, market share, production, profit etc.), over a short period of time say, six months or one year.
(ii) Determination of the volume of resources required to achieve the operational goals - funds, material, labour, equipment, time and so forth.

(iii) Accord of general sanction for the acquisition and allocation of budgetary resources to various activity units over the budgetary period.

(iv) Devolution of necessary authority and fixing up of accountability for the planned performance standards and targets, among the various executive positions.

(v) Establishment of appropriate system for monitoring, measuring and evaluating the pace and quality of operations on a continuous basis. This includes initiation of required measures to ensure that actual performance is in conformity with budgeted performance. Deviations and variances are analysed and remedial measures are taken to set them right.

2. **Financial Statements:** The annual financial statements of enterprises - Trading and Profit and Loss Account and Balance Sheet are powerful tools of control. They epitomize the financial dimension of enterprise operations at periodic intervals of time. The profit and loss during a specified period while the Balance Sheet is a position statement of the financial status of the enterprise at the end of the specified period-Managers could analyse the financial statements of the previous period - historical statements to know the dynamics of revenue generation and incidence of expenditure as also the trends of changes in the liabilities, assets and net worth of the enterprise. Projected financial statements for the next year may also be prepared on the basis of forecasts and plans of the enterprise and these could also be used to monitor and regulate financial events and transactions which take place in the enterprise.

3. **Break-even analysis:** Also called Cost-Volume Profit analysis, break-even Analysis is a tool of control to size up the behaviour of costs, revenues and profit various levels of activity. It enables management to understand the amount of profit that can be expected at various volumes of operations, the appropriate volume of operations needed to obtain a target level of profit, and the impact of changes in product prices and costs on the volume of operations and profitability.

   Simple break-even graphs can be prepared on a rough basis by using the available or projected data of fixed and variable costs and sales volumes of the enterprise to arrive at the breakeven point - the point at which the total revenue is equal to total cost. It is a no profit no loss point. More complex break even analysis can be undertaken with the help of computers to project how small changes in unit prices, target profits and levels of activity influence one another.

   Break-even analysis is adopted as a tool of profit planning. It is thus a technique of both planning and control.

4. **Management information System (MIS):** MIS can helpful to managers in carrying out the planning, controlling and operational functions by gathering storing and converting data into useful information.

   MIS incorporates, historical, current and projected information—quantitative or non-quantitative. It provides information in summary or detailed form as needed by managers. It provides information for all types of decision issues-strategic, administrative and operational. It enables managers to improve the quality and timeliness of their decisions in particular and to systematize even their day to-day functioning in general. It adds to the alertness, awareness and intelligence of managers by supplying information in the form of progress and review reports on on-going activity. Another role of MIS is to provide only that much information as called for by managers specifically for purposes of decision making. This means that the question of information overload does not arise and that only optimum information is provided. The information is also updated on a continuous basis so as to make it more relevant. MIS avoids furnishing of overlapping information as it will create confusion in the minds of managers. There is thus the desired degree of focus and selectivity in the information content.
5. **Management Audit**: The term ‘Management Audit’ is defined as a systematic evaluation of the functioning, performance and effectiveness of management of an organisation. It is thus an independent appraisal of an organization’s management by an outside firm.

Depending on the preferences and perspectives of top management audit may cover all or some major facts of functioning of the organisation and its management. A few major areas which could be exposed to the search lights of management audit are listed as follows:

1. Formulation of organisational objectives, strategies, policies and programmes of action and the manner in which they are pursued, as also the extent of success achieved.

2. Design and operation of organisational structures of roles, activities and relationships.

3. The manner and efficiency with which resources and assets are mobilised, developed, allocated, utilised and safeguarded, including the human resources.

4. Design and functioning of various systems and operations within the organisation.

5. The manner in which the management team anticipates and sizes up external environmental elements and designs appropriate adaptive strategies to cope with them.

6. The internal organisational climate - to what extent it is conducive for co-operation, harmony, creativity, productivity and satisfaction.

7. The quality of managerial decisions: their soundness, timeliness and effectiveness.

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### Communication

The term communication is derived from the Latin word ‘communis’ which means “common”. The word communication stands-for the sharing of ideas in common. Communication of ideas establishes a common ground for understanding the people in organisations. Communication is vital to all managerial actions. Communication is the artery of an organisation through which the decisions and instructions of the management flow down to the lowest levels. It also conducts upward the pulse of workforce in organisations. Communication is a process of passing information and understanding from one person to another.

According to Dalton McFarland “communication is the process of meaningful interaction among human beings. More specifically, it is the process by which meanings are perceived and understandings are reached among human beings”.

Herbert A. Simon contends that communication is the “process whereby decisional premises are transmitted from one member of an organisation to another”.

In the words of Newman and Summer, “Communication is an exchange of facts, ideas, opinions or emotions by two or more persons.

Louis A. Allen, a well-known management expert, defines communication as the “sum of all the things one person does when he wants to create understanding in the mind of another. It is a bridge of meaning. It involves a systematic and continuous process of telling, listening and understanding”. Simply, communication is the act of making one’s ideas and opinions known to others.

### Importance of Communication

Communication is very important because it is a process by which the managerial functions of planning, organising, directing and controlling are accomplished. Without formal system of communication it is not possible for an organisation to exist. Secondly, communication is an activity to which the manager devotes an overwhelming proportion of his precious time. The importance of communication in organisations is summed up by Keith Davis in the following words: “Just as a man gets arteriosclerosis, a hardening of the arteries which impairs his efficiency, so an may organisation get into sclerosis, a
hardening of the communication arteries, which produces similar impaired efficiency”. Communication is important because:

- In organisations, communication ties people and structure together.
- Communication is a bridge of meaning between two or more people.
- Communication involves understanding and acceptance of ideas to act in it.
- Effective communication is a substance of good management; communication is not a substitute for good management.

**Communication Process**

The basic elements in the communication process are:

1. **The Communicator or Sender** – The process of communication starts with the communicator. In an organisation, communicators can be managers, non-managers, departments, the outside public, customers etc. Without communication, an organisation cannot function. The communicator has a message, or an idea or information to be communicated.

2. **Encoding** – The second important element in the communication process is encoding. Encoding involves the selection of language in which the message is to be given. The medium of expression may be speaking, writing, signaling, gesturing, physical contacting, handshake, hitting etc. Encoding should be done in such a way that the receiver may correctly understand the message communicated to him.

3. **Message** – The message is what a communicator is communicating. Without this, there is no communication. The message sent by the person should be stated in clear and unambiguous terms. Managers have several purposes of communicating viz. to have others understand their ideas, to understand the ideas of others, to gain the acceptance of their ideas, and finally to produce action.

4. **Medium** – The medium is said to be the carrier of message sent by a person to another. The medium may be face-to-face communication, telephone, group meetings, computers, memorandums, policy statements, production schedules, and sales forecasts. Sometimes, nonverbal media such as facial expressions, body language, tone of voice, gesturing etc., are also used. Thus, the transmission of message may be done orally, in writing, or by gesturing.

5. **Decoding** – It involves interpretation of the message by the receiver. Interpretation of message largely depends on the perception, past experience and attitudes of the receiver.

6. **The receiver** – A communicator has to communicate with some other person called, the receiver. While communicating, the person should carefully understand the receiver. The communicator should take into account the receiver, his decoding abilities, his understanding capacity of the message being transmitted. Effective communication is always receiver-oriented; not message oriented. The communicator should see that the receiver receives the message accurately and properly. If the receiver is unable to receive the message, the fault lies in the communicator, not the receiver. The communicator should send the message in that language which the receiver understands.

7. **Feedback** – Communication process includes feedback also. Feedback is an essential to see that no distortion between the intended message and received message exists.

8. **Noise** – It is a disturbance that tends to obstruct the smooth flow of communication and reduces the clarity of the message. It may be the result of poor network, in attention of the receiver etc.

**Types of Organisational Communication.**

Communication may be of several types. On the basis of relationship between the parties communicating each other, the communication may be formal or informal. On the basis of flow of direction, communication can be downward, upward or horizontal.
(a) **Formal and Informal Communication**

Formal communication is the official message that is communicated by a manager by virtue of his position in the organisation structure. On the other hand, communication is said to be informal when it grown up spontaneously from personal and group interests.

(b) **Downward, Upward and Horizontal Communication**

When communication flows from top to bottom it is called downward communication, when it flows from bottom to up it is named as “upward communication”. Lateral or horizontal communication refers to the flow of communication between various departments or people on the same level in an organisation.

(c) **Verbal and Written Communication**

Two methods of communicating a message may be verbal or written. Popular forms of oral communication include face-to-face talks, formal groups’ discussions, and grapevine. On the other hand, written communication is a formal method of putting the orders, instructions, and reports in writing. It creates a record of evidence.

**Barriers to Communication**

Although a communicator may take great care in sending the message to the receiver properly, there may exist some barriers to communication. A poorly transmitted message often leads to misunderstanding. This would pave way to strained relations and frictions among the employees. This detrimentally affects morale of the employees. Some of the barriers to communication are —

(i) **Filtering**: The information may be filtered by sender deliberately to mislead the receiver. A manager filters the information by hiding some meaning and disclosing in such a fashion that the information is appealing to the employee. When the sender tries to filter the information, he is said to alter the communication in his favour at the cost of the real message. Filtering the message is a powerful barrier to communication.

(ii) **Selective perception**: This time the fault lies in the receiver who may indulge in selective perception. The receiver may like to perceive in what he is interested. Perceptual selection may sometimes lead to perceptual distortion. Perpetual distortions and fallacies may become endemic and vitiate the entire system. This affects the organisational effectiveness adversely.

(iii) **Language**: Communication is said to be poor and distorted if the message is not properly expressed. When information is worded in a manner not understandable to the receiver it is quite likely that the message may be misunderstood. Further, semantic problems may also distort the message.

(iv) **Semantic Barrier**: The language, words, symbols and expressions used in communication may distract attention from the actual meaning of the message. Moreover, the tendency of people to interpret the same message in different ways may also act as a semantic barrier.

(v) **Emotions**: Emotions of both the sender and receiver influence the message that is transmitted and received. The receiver is likely to take into account the emotion of the sender and interpret the information accordingly. Extreme emotions and jubilation or depression have probability of hindering the effectiveness of communication.

(vi) **Information overload**: When managers furnish the heavy information to subordinates, they become unable to distinguish between important and unimportant and this way the entire exercise of communicating would be redundant and wasteful.

(vii) **Non-verbal cues**: They are very important sources of hindering the message especially when these cues are inconsistent with the message. Normally, the receiver expects some consistency in the non-verbal cues with the message being transmitted.
(viii) **Time Pressures:** Often in organization the targets have to be achieved within a specified time period, the failure of which has adverse consequences. In a haste to meet deadlines, the formal channels of communication are shortened, or messages are partially given, thus hampering effective communication.

**Effective Communication**

In order to make communication effective it is absolutely essential for the managers to overcome the barriers. The following are the ways to overcome the barriers:

- Fostering interpersonal trust
- regulate the flow of information
- have feedback, both verbal and non-verbal
- simplifying language
- effective listening
- see the emotions do not cloud and distort the message
- understand the non-verbal cues.

### 9.8 CO-ORDINATION

Coordination is the effort to ensure a smooth interplay of the functions and forces of all the different component parts of an organisation so that its purpose will be realised with a minimum of friction and a maximum of collaborative effectiveness. “It makes diverse elements and sub-systems of an organisation to work harmoniously towards the realisation of common objectives”. “Coordination is the process whereby an executive develops an orderly pattern of group effort among his subordinates and secures unity of action in the pursuit of common purpose”.

Coordination is a conscious and rational process of pulling together the different parts of an organization and unifying them into a team to achieve predetermined goals in an effective manner. According to Henry Fayol, ‘To coordinate is to harmonise all the activities of a concern so as to facilitate its working and its success. In a well-coordinated enterprise, each department or division works in harmony with others and is fully informed of its role in the organisation. The working schedules of various departments are constantly tuned to circumstances.’ Coordination is the orderly synchronization of efforts of the subordinates to provide the proper amount, timing and quality of execution so that their unified efforts lead to the stated objective, namely the common purpose of the enterprise. It involves blending the activities of different individuals and groups for the achievement of common objectives.

George Terry and Theo Haimann consider coordination as a permeating function of management passing through the managerial functions of planning, organising, staffing, leading and controlling. Thus, according to them, co-ordination is not a separate function of management as it transverses the entire process of managing - it is thus the essence of management.

**Features of Co-ordination**

(i) Coordination is not a distinct function but the very essence of management. It is inherent in managerial job and embodied in all the functions of management.

(ii) Coordination is the basic responsibility of management and it can be achieved through the managerial functions. No manager can evade or avoid this responsibility.

(iii) Coordination does not arise spontaneously or by force. It is the result of conscious and concerted action by management. It cannot be left to chance.

(iv) The heart of coordination is the unity of purpose which involves fixing the time and manner of performing various activities,
(v) Coordination is a continuous or on-going process. It is also a dynamic process involving give and take.

(vi) Coordination is required in group efforts, not in individual effort. It involves the orderly arrangement of group efforts. There is no need for coordination when an individual works in isolation without affecting anyone’s functioning.

(vii) Coordination is a systems concept in the sense that it regards an organisation as a system of cooperative efforts. It recognises the diversity and interdependence of organisational systems and the need for fusion and synthesis of efforts.

**Principles of Coordination:**

Principles for achieving effective coordination can be enumerated as below:

1. **Principle of Early Stage** - According to this principle, coordination must start at an early stage in the management process. It must start during the planning stage. This will result in making the best plans and implementing these plans with success.

2. **Principle of Continuity** - According to this principle, coordination must be a continuous process. It must not be a one-time activity. The process of coordination must begin when the organisation starts, and it must continue until the organisation exists.

3. **Principle of Direct Contact** - According to this principle, all managers must have a Direct Contact with their subordinates. This will result in good relations between the manager and their subordinates. This is because direct contact helps to avoid misunderstandings, misinterpretations and disputes between managers and subordinates.

4. **Principle of Reciprocal Relations** - The decisions and actions of all the people (i.e. of all managers and employees) and departments of the organisation are inter-related. So, the decisions and actions of one person or department will affect all other persons and departments in the organisation. Therefore, before taking any decision or action all managers must first find out the effect of that decision or action on other persons and departments in the organisation. This is called the Principle of Reciprocal Relations. Co-ordination will be successful only if this principle is followed properly.

5. **Principle of Effective Communication** - Co-ordination will be successful only in the presence of an effective communication. Good communication must be present between all departments, within employees themselves and even between managers and their subordinates.

6. **Principle of Clarity of Objectives** - Co-ordination will be successful only if the organisation has set its clear objectives. Everyone in the organisation must know the objectives very clearly. No one must have any doubts about the objectives of the organisation. Clear objectives can be achieved easily and quickly.

**9.9 DIRECTING**

Another important function of management is directing. It is that managerial function which imitates organized action. Directing involves issuing orders to subordinates and supervise how these orders are carried out by them, and if necessary, motivate the employees for higher performance and hence to the accomplishment of the organisational objectives effectively.

According to Joseph Massie “directing concerns the total manner in which a manager influences the actions of subordinates. It is the final action of a manager in getting orders to act after all preparations have been completed.”

In the words of Theo Haimann, directing consists of “the processes and techniques utilized in issuing instructions and making certain that operations are carried on as originally as planned”. According to Keith Davis, direction is a complex function that includes all those activities which are designed to
encourage subordinates to work effectively and efficiently in both the short and long run. Directing is just telling people what to do and seeing that they do it to the best of their ability. Direction is also known as activating (as contended by Charles E. Redfield from Chicago University) and deals with the steps a manager takes to get subordinates and others to carry out plans.

**Importance of ‘Directing’ as a Function of Management**

Direction is an indispensable managerial function because it deals with human resources. Most importantly it deals with human relations and suggests ways of improving the performance by the employees in an enterprise. Direction is aimed at maintaining harmony among employees and groups in an organisation. It is the process around which all other management functions revolve. Direction is a kin to ‘nucleus’ of an organisation. The individual goals and organisational objectives are integrated only through directing function. This integration is achieved through the elements of direction viz communication, motivation, leadership, and supervision.

**Principles of direction:**

The principles of direction can be summed up as under:—

(i) **Harmony of objectives**— One very important principle of direction is to harmonise the objectives or goals of individuals with that of the enterprise. A manager should foster the sense of belonging to the organisation among individuals and groups and see that the members identify themselves with the organisation. Goal incongruence may lead to ineffectiveness and inefficiency.

(ii) **Unity of command**— Another sound principle of direction is that the subordinates should receive orders from one and only one superior or boss. Presence of dual subordination inevitably brings chaos and disorder. For achieving efficiency, unity of direction should be strictly followed.

(iii) **Direct Supervision**— When manager is directly involved in supervising the employees i.e. when he comes into personal contact with the employees, especially in the work-related areas, a sense of belonging gets developed in the minds of employees and this paves way for escalated morale and making sub-ordinate happy. Direct supervision also ensures quick feedback of necessary information; the manager would get first hand information from the employees through face-to-face communication.

(iv) **Appropriate leadership style**— Leadership is a process of influencing the employees in the work environment. A manager should exhibit appropriate leadership style to direct the employees to achieve the organisational goals effectively. Leadership style is a function, of characteristics of leader, characteristics of subordinates, and the situation.

(v) **Use of motivational techniques**— One of the principles of effective direction states that the manager should employ some motivational techniques such as pay, status, job enrichment, etc., so that the productivity and the quality of the commodity (or service) produced by the employee increases. Motivation leads to higher job satisfaction.

(vi) **Follow up**— The last, but not least important, principle of direction is ‘follow-up’ because without such a follow up, it is quite likely that the subordinates just receive orders and do not follow them at all.

**Answer the following Questions:**

1. Explain the principles of Scientific Management.
2. Explain Henri Fayol’s 14 principles of Management.
4. Discuss Management as a Science, Art or Profession.
6. What are the limitations of Planning?
7. Explain the pre requisites of effective planning in an organization.
8. What are the steps in Planning Process?
9. Discuss the different approaches to planning.
10. Explain the different types of plans.
11. What is meant by planning premises? Into how many types the planning premises are categorized.
12. Define Organisation. Explain organization as a process.
13. What is meant by Staffing? Explain the importance of Staffing.
14. Explain the steps in the Staffing process.
15. What is meant by Recruitment? Explain the different sources of Recruitment.
16. Define Selection. Explain the process of selecting the candidates for employment in an organization.
17. Explain the merits and demerits of On the Job Training.
18. What are the merits and demerits of Off the Job Training?
20. What are the different types of Control used by Modern Organisations?
21. What are the prerequisites of an effective control system?
22. Explain the principles of control.
23. Explain the different techniques of Control
24. Define Communication. Explain the importance of Communication in an organization.
25. Explain the steps in Communication Process.
26. Explain the different types of Organisational Communication.
27. What are the different types of barriers to Communication?
28. How to overcome barriers in Communication?
29. Define Coordination. Explain the features of Coordination.
30. Explain the principles for achieving effective Coordination in an organization.
31. Define Direction. Explain the principles of direction.

Fill in the blanks:
1. Management is both an art and a ______
2. Father of Scientific Management ______
3. Father of Modern Management ______
4. Father of Bureaucratic Management ______
5. Individual or group interest must be surrendered to _____ interest.
6. ______ is the chain of superior existing from the highest authority to the lowest ranks.
7. ______ to be replaced by rule of science to improve the standard of performance.
8. In case of Bureaucratic Management rules and regulations are ______
9. Planning is an important function of ________
10. Last step in planning process is ________
11. ________ plans are the recurring plans and they are used repeatedly in situations of a similar nature.
12. ________ are basic assumptions about the environment in which plans are expected to be implemented.
13. The first step in the organizing process is ____________
14. The process of obtaining and maintaining the capable and competent people to fill all positions from top to operative level is called _________.
15. Manpower planning is also called _________.
16. ________ involves seeking and attracting a pool of people from which qualified candidates for job vacancies can be selected.
17. ________ refers to assigning rank and responsibility to an individual, identifying him with a particular job.
18. The internal sources of recruitment include the employees on the _________
19. The most crucial stage in staffing process is the ________
20. T – group training is also known as _________
21. ________ involves issuing orders to subordinates and supervise how these orders are carried out by them and if necessary motivate the employees for higher performance.
22. Direction is a kin to ________ of an organization.
23. The term communication is derived from the Latin word ________
24. The process of communication starts with the ________
25. ________ involves the selection of language in which the message is to be given.
26. ________ involves interpretation of the message by the receiver.
27. ________ is aimed at monitoring the outcome of activities, reviewing feedback information about this outcome and if necessary take corrective action.
28. Control function is closely connected to ________
29. The first step in control process is ________
30. CPC means _________
31. Control by exception is also known as _________
32. In all physical and biological systems some message is transmitted in the form of mechanical transfer of energy, a chemical reaction, or any other means which is known as ________
33. Concurrent control is also known as ________
34. MIS means _________
35. Cost Volume Profit Analysis is also known as ________
36. Break even analysis is adopted as a tool of ________
37. Co-ordination is a continuous or ________ process.
38. The selected key areas for control are variously called ________
39. ABC analysis is an example of ________
40. ________ control involves evaluation of inputs.
Multiple Choice Questions:

1. _____ is the process whereby an executive develops an orderly pattern of group effort among his subordinates and secures unity of action.
   (a) Control (b) Co-ordination (c) Reporting (d) Organising

2. Who considered co-ordination as a permeating function of management passing through the managerial functions of planning, organizing, staffing, leading and controlling?
   (a) George Terry and Theo Haimann (b) Henry Fayol
   (c) Haynes and Massie (d) Hicks and Gullet

3. Which is inherent in managerial job and embodied in all the functions of management?
   (a) Planning (b) Organising (c) Control (d) Co-ordination

4. According to Mary Parker Follett which one is not the principle for achieving effective co-ordination?
   (a) Continuity (b) Early beginning (c) Self-co-ordination (d) Managerial Audit

5. The process of co-ordination must begin in the early stages of
   (a) Control (b) Planning (c) Organising (d) Staffing

6. Co-ordination must be carried on through the entire process of management from _____ to _____
   (a) Planning to control (b) Organising to Control (c) Planning to Leadership (d) None of the above

7. _____ has emphasized the principle of self-co-ordination.
   (a) Henry Fayol (b) George Terry (c) Brown (d) Peter Drucker

8. According to Brown, Self co-ordination means:
   (a) a particular department affects other departments and is in turn affected by them.
   (b) a particular department affects every department and is in turn affected by them.
   (c) every department affects a particular department.
   (d) none of the above

9. The heart of co-ordination is the _____ of purpose which involves fixing the time and manner of performing various activities.
   (a) Unity (b) Integrity (c) Achievement (d) None of the above

10. _____ involves issuing orders to subordinates and supervises how these orders are carried out by them, and if necessary motivate the employees for higher performance.
    (a) Supervision (b) Directing (c) Leading (d) None of the above

11. _____ is aimed at maintaining harmony among employees and groups in an organization.
    (a) Direction (b) Supervision (c) Co-ordination (d) Control

12. _____ is a kin to ‘nucleus’ of an organization.
    (a) Supervision (b) Planning (c) Direction (d) Organising

13. Which of the following is the principle of direction?
    (a) Harmony of objectives (b) Unity of Command
    (c) Follow up (d) All of the above
14. Who emphasized harmony of objectives is crucial to the success of direction?
   (a) F.W. Taylor  (b) Henry Fayol  (c) Peter Drucker  (d) George Terry

15. Goal incongruence may lead to _____
   (a) Ineffectiveness    (b) Inefficiency
   (c) Both (a) and (b)    (d) None of the above

16. Presence of ____ subordination inevitably brings chaos and disorder.
   (a) Dual    (b) Single    (c) Both (a) and (b)    (d) None

17. A manager has to exhibit the style of leadership depending on the
   (a) Performance    (b) Time    (c) Situation    (d) Period

18. ____ leads to higher job satisfaction.
   (a) Planning    (b) Budgeting    (c) Supervision    (d) Motivation

19. The last, but not least important principle of direction is
   (a) Unity of command    (b) Follow up
   (c) Direct supervision    (d) Appropriate Leadership Style

20. The term communication is derived from the Latin word
   (a) Common    (b) Communis    (c) Communication    (d) None

21. ____ is the artery of an organization through which the decisions and instructions of the
    management flow down to the lowest levels.
   (a) Communication    (b) Information
   (c) Message    (d) None of the above

22. “Communication is an exchange of facts, ideas, opinions or emotions by two or more persons”
    according to:
   (a) A. Simon    (b) Dalton Mc Farland
   (c) Newman and Summer    (d) Louis A. Allen

23. Communication is the “process whereby decisional premises are transmitted from one member
    of an organization to another” – according to
   (a) A. Simon    (b) Dalton Mc Farland
   (c) Newman and Summer    (d) Louis A. Allen

24. ____ is a bridge of meaning between two or more people.
   (a) Communication    (b) Information
   (c) Planning    (d) Reporting

25. The process of communication starts with
   (a) Supervisor    (b) Sender
   (c) Receiver    (d) None of the above

26. ____ involves the selection of language in which the message is to be given.
   (a) Medium    (b) Decoding
   (c) Encoding    (d) Feed back
27. A thirsty person may use body language by lifting the thumb to face in order to communicate that he needs a glass of drinking water. This process is called:
   (a) Medium    (b) Encoding
   (c) Decoding   (d) Feedback

28. Which is said to be the carrier of message sent by a person to another?
   (a) Medium    (b) Encoding
   (c) Decoding   (d) Feedback

29. _____ involves interpretation of the message by the receiver, who will give meaning to the words, body language etc.
   (a) Medium    (b) Encoding
   (c) Decoding   (d) Feedback

30. Effective communication is always
   (a) Receiver oriented (b) Sender oriented
   (c) Message oriented (d) None of the above

31. _____ is an essential to see that no distortion between the intended message and received message exists.
   (a) Medium    (b) Encoding
   (c) Decoding   (d) Feedback

32. Feedback may be
   (a) Direct      (b) Indirect
   (c) Either (a) or (b) (d) Both (a) and (b)

33. Which communication is the official message that is communicated by a manager by virtue of his position in the organization structure?
   (a) Formal communication   (b) Informal communication
   (c) Grapevine communication (d) Written communication

34. Formal communication is always
   (a) Written     (b) Oral
   (c) Both (a) and (b) (d) None of the above

35. Informal means of circulating the information is also called as
   (a) Grapevine  (b) Verbal
   (c) Horizontal (d) Written

36. When communication flows from top to bottom it is called _____
   (a) Horizontal communication (b) Upward communication
   (c) Downward communication   (d) None of the above

37. When communication flows from bottom to up it is called _____
   (a) Horizontal communication (b) Upward communication
   (c) Downward communication   (d) None of the above
38. When communication flows between various departments or people on the same level in an organization, it is called _____
(a) Horizontal communication  (b) Upward communication
(c) Downward communication  (d) None of the above

39. Horizontal communication is also known as
(a) Verbal communication  (b) Lateral communication
(c) Written communication  (d) None of the above

40. _____ communication helps an organization to coordinate the activities of various departments by sharing relevant information.
(a) Downward communication  (b) Upward communication
(c) Lateral communication  (d) All of the above

41. Which communication usually passes through written orders, reports and manuals?
(a) Downward communication  (b) Upward communication
(c) Lateral communication  (d) All of the above

42. Which communication creates a record of evidence?
(a) Verbal  (b) Written
(c) Formal  (d) All of the above

43. The message to be transmitted through verbal medium may be
(a) Orders  (b) Instructions
(c) Reports  (d) All of the above

44. Oral communication include
(a) Face-to-face talks  (b) Formal group discussions
(c) Grapevine  (d) All of the above

45. Formal communication is generally expressed in
(a) Writing in manuals  (b) Bulletins
(c) Annual reports and hand books  (d) All of these

46. Filtering means
(a) Hiding some meaning  (b) Disclose the information
(c) Sending the message  (d) None of the above

47. Which one is not the barrier to communication?
(a) Filtering  (b) Emotions
(c) Message  (d) Language

48. Tendency of people to interpret the same message in different ways may act as a _____ barrier.
(a) Semantic  (b) Emotions
(c) Time pressure  (d) Selective perception

49. Which of the following are barriers to communication?
(a) Information overload  (b) Non-verbal cues
(c) Time pressures  (d) All of these
50. _____ is defined as the process of obtaining and maintaining the capable and competent people to fill all positions from top to operative level.
   (a) Staffing (b) Selection (c) Recruitment (d) Training

51. According to Koontz and O'Donnell staffing is the _____ function.
   (a) Organisational (b) Management
   (c) Executive function (d) None of the above

52. _____ is concerned with providing the organization with the right number of people at the right place, and at the right time so that the organization would be able to achieve its goals effectively.
   (a) Recruitment (b) Staffing
   (c) Selection (d) Development

53. Manpower planning is also known as _____
   (a) Human Resource Accounting (b) Human Resource Management
   (c) Human Resource Planning (d) None of the above

54. Selection is a process of rejection and hence it is called a _____ process
   (a) Positive (b) Negative
   (c) Either (a) or (b) (d) None of the above

55. T-group training is also known as
   (a) Classroom Training (b) Apprenticeship Training
   (c) Internship Training (d) Sensitivity Training

56. Training conducted away from the actual work setting is called
   (a) On-the-Job Training (b) Off-the-Job training
   (c) Step-by-Step Training (d) Job-Instruction Training

57. Which of the following are the methods of off-the-job training?
   (a) Role playing (b) Case studies
   (c) Lectures, classroom instruction (d) All of the above

58. External sources of recruitment include:
   (a) Employment Exchanges (b) Advertisements
   (c) Employee walk-ins (d) All of the above

59. _____ refers to the introduction of a person to the job and the organization.
   (a) Induction (b) Placement
   (c) Orientation (d) None of the above

60. The process of increasing the knowledge and skills of an employee for doing a particular job is known as
   (a) Training (b) Development
   (c) Education (d) None of the above
61. The process which involves growth of an employee
   (a) Training    (b) Development
   (c) Education    (d) None of the above

62. _____ refers to assigning rank and responsibility
   (a) Training    (b) Development
   (c) Education    (d) Placement

63. Which activity brings the job-seeker and employer in contact with one another?
   (a) Recruitment    (b) Selection
   (c) Induction    (d) Placement

64. The process of choosing candidates who best meet the qualifications and requirements of the job is
   (a) Recruitment    (b) Selection
   (c) Induction    (d) Training

65. The process involves seeking and attracting a pool of people from which qualified candidates for Job Vacancies can be selected is
   (a) Recruitment    (b) Selection
   (c) Induction    (d) Placement

66. _____ is vital for determining personnel needs of the organization in future.
   (a) Manpower Planning    (b) Recruitment
   (c) Staffing    (d) None of the above

67. Which one is not the step in the staffing process?
   (a) Selection    (b) Man power planning
   (c) Training and development    (d) Education

68. The basic internal sources of recruitment are:
   (a) Transfers    (b) Promotions
   (c) Dependents    (d) All of the above

69. Who contends that “Training is an act of increasing the knowledge and skill of an employee for doing a particular job”?
   (a) Edwin Flippo    (b) Michael J. Jucius
   (c) O. Jeff Harris    (d) Andrew Carnegie

70. _____ skills are related to the problem identification and prescribing an appropriate solution.
   (a) Decision making skills    (b) Interpersonal skills
   (c) Operative skills    (d) All of the above

71. _____ skills are required for the successful completion of a given task.
   (a) Decision making skills    (b) Interpersonal skills
   (c) Operative skills    (d) All of the above
72. _____ skills are related to the maintenance of successful relationship between peers and subordinates.

(a) Decision making skills  (b) Interpersonal skills
(c) Operative skills  (d) All of the above

73. On-the-Job training is normally given by the

(a) Superior (or) supervisor  (b) Management
(c) Organisation  (d) None of the above

74. Which of the following methods are employed to make on-the-job training?

(a) Coaching  (b) Job rotation
(c) Self-improvement programmes  (d) All of the above

75. The assignment of a specific person to act as either an instructor or resource person for the trainee is

(a) Coaching  (b) Apprenticeship training
(c) Vestibule training  (d) Job rotation

76. When an individual learns several different jobs within a work unit or department is known as

(a) Coaching  (b) Apprenticeship training
(c) Vestibule training  (d) Job rotation

77. Job rotation is recommended for _____ managers in almost all organizations.

(a) Lower Level  (b) Middle Level
(c) Top Level  (d) At all levels

78. Vestibule training is considered as a part of:

(a) Off-the-Job training  (b) On-the-Job Training
(c) Both (a) and (b)  (d) None of the above

79. Determination of the job to which an accepted candidate is to be assigned and his assignment to that job is

(a) Placement  (b) Orientation
(c) Induction  (d) None of the above

80. The task of ensuring that activities are producing the preset targets or goals is known as

(a) Directing  (b) Control  (c) Co-ordination  (d) None

81. “Control is any process that guides activity toward some predetermined goal” – by

(a) Anthony  (b) O’ Doneel
(c) Haynes and Massie  (d) Hicks and Gullet

82. Control function is closely connected to

(a) Planning  (b) Organising
(c) Co-ordination  (d) All of the above
83. _____ without corresponding controls are apt to hollow hopes.
(a) Planning  (b) Organising
(c) Co-ordination  (d) Directing

84. Control system follows the following sequence:
(b) Establishment of standards – Measurement of actual performance – Take corrective action – Comparing the actual performance with standards.
(c) Establishment of standards – Comparing the actual performance with standards – Measurement of Actual performance – Take corrective actions – None of the above.
(d) None of the above

85. The first step in control process is
(a) Measurement of actual performance  (b) Establishment of standards
(c) Taking corrective action  (d) Comparing the actual performance with standards.

86. Standards (or) objectives (or) targets against which the actual performance is measured may be expressed in terms of:
(a) Physical standards  (b) Monetary standards
(c) Time standards  (d) Any of the above

87. What techniques are used for measuring the qualitative factors such as motivation, job satisfaction, leadership, morale?
(a) Personal observation  (b) Sampling
(c) Appraisal by results  (d) All of the above

88. If the actual result is far from the desired result corrective action is called for and it includes:
(a) Re-setting the standards  (b) Re-allocation of duties to employees
(c) Providing motivation to employees  (d) Any of the above

89. CPC means
(a) Critical path control  (b) Critical point control
(c) Critical point complaint  (d) Critical point complex.

90. The selected key areas for control are called
(a) Key result areas  (b) Key success factors
(c) Strategic points  (d) All of the above

91. ABC analysis is an example of
(a) Critical point control  (b) Control by exception
(c) Budgetary Control  (d) Break Even Analysis

92. Under ABC analysis, control attention is sought to be focused on ____ inventory items which are small in number but large in value.
(a) ‘A’ category  (b) ‘B’ category
(c) ‘C’ category  (d) All of the above
93. ‘Control by exception’ is also known as
   (a) Management by objectives  (b) Management by exception
   (c) Critical point control  (d) None of the above
94. According to ‘Control by Exception’, managers at each level should pay attention to only.
   (a) Exceptional deviations  (b) Significant deviations
   (c) Exceptional and significant deviations (d) None of the above
95. Post control is also known as
   (a) Feedback control  (b) Concurrent control
   (c) Pre-control  (d) Feed Forward Control
96. Pre-control is also known as
   (a) Feedback control  (b) Concurrent control
   (c) Post-control  (d) feed forward control
97. Which control is based on the notion that we can have control over events that will take place
and not on events which have already taken place?
   (a) Post control  (b) Concurrent control
   (c) Pre-control  (d) Feed Forward control
98. Concurrent control is also known as
   (a) Post control  (b) Pre-control
   (c) Real-Time control  (d) Feed Forward control
99. Inventory control, production control, quality control etc. are administered as
   (a) Post control  (b) Real time control
   (c) Pre-control  (d) None of the above
100. Current control may also be regarded as
    (a) Steering control  (b) Internal control
    (c) External control  (d) none of the above
101. Preventive control is also known as
    (a) Post control  (b) Pre-control
    (c) Concurrent control  (d) Steering control
102. The term ‘Cybernetics’ was coined by
    (a) Norbert Weiner  (b) George Terry
    (c) Theo Haimann  (d) None of the above
103. The Thermostat in a refrigerator operates on the principle of
    (a) Steering control  (b) Preventive control
    (c) Cybernetic control  (d) Real Time control
104. Engineering process controls, computerized controls and procedure/rule based operational controls are examples which apply principles of
(a) Steering control   (b) Preventive control
(c) Real-time control   (d) Cybernetic control

105. Which of the following are techniques of control?
(a) Budgetary control   (b) Management Information System
(c) Management Audit   (d) All of the above

106. Break-even analysis is also called as
(a) Cost volume profit analysis   (b) Ratio Analysis
(c) Financial Analysis   (d) None of the above

107. Break even analysis is adopted as a tool of
(a) Profit planning   (b) Cost planning
(c) Sales planning   (d) None of the above

108. Break even analysis is a technique of both
(a) Planning and co-ordination   (b) Control and decision making
(c) Planning and control   (d) Planning and budgeting

109. A systematic evaluation of the functioning, performance and effectiveness of management of organization is known as:
(a) Management Information System   (b) Management Audit
(c) Internal Audit   (d) None of the above

110. The process of dividing and subdividing up of duties and responsibilities which are necessary to any purpose and arranging them in groups which are assigned to individual is
(a) Planning   (b) Co-ordination
(c) Organising   (d) Staffing

111. The process that involves introduction of a new employee to the enterprise is
(a) Orientation   (c) Placement
(c) Staffing   (d) None of the above

112. Determination of the job to which an accepted candidate is to be assigned, and his assignment to that Job is
(a) Orientation   (c) Placement
(c) Induction   (d) Staffing

113. The first step in the organizing process is
(a) Division of work   (b) Grouping the work
(c) Identifying the work   (d) Establishing Formal reporting relationships

114. _____ enables managers to concentrate on important activities, avoiding the unnecessary duplications, overlapping and wastage of effort.
(a) Grouping the work   (b) Division of work
(c) Assignment of duties   (d) Identification and classification of work.
115. ____ is the primary force within the organization which tends to lead it towards achievement of goals.
   (a) Decentralization   (b) Management
   (c) Centralization     (d) Delegation of authority

116. ____ is both an organizational necessity and a managerial responsibility.
   (a) Planning   (b) Organising
   (c) Control     (d) Co-ordination

117. ____ involves deciding in advance what is to be done, where, how and by whom it is to be done.
   (a) Organising   (b) Decision making
   (c) Planning     (d) None of the above

118. Which is the primary function of management?
   (a) Planning   (b) Organising
   (c) Directing   (d) Controlling

119. Who takes the initiative in formulating major objectives, strategies, policies and derivative plans?
   (a) Middle management   (b) Top Management
   (c) Lower management    (d) All of the above

120. MBO stands for
   (a) Management by Objectives   (b) Management by Objection
   (c) Both (a) and (b)           (d) None of the above

121. MBO is a concept introduced by
   (a) Henri Fayol       (b) F.W. Taylor
   (c) Peter Drucker     (d) George Terry

122. The concept of MBO is introduced in
   (a) 1964   (b) 1954   (c) 1854   (d) 1984

123. PERT stands for
   (a) Programme Evaluation and Review Technique
   (b) Planning Evaluation and Review Technique
   (c) Programme Evaluation and Review Theory
   (d) None of the above

124. CPM stands for
   (a) Critical Path Method   (b) Critical Path Management
   (c) Control Path Method    (d) Critical Planning Method

125. PERT and CPM techniques were developed in
   (a) UK   (b) USSR   (c) USA   (d) Russia

126. Which of the following are called standing Plans?
   (a) Policies   (b) Procedures   (c) Rules   (d) All of the above
127. Which of the following are called Single Use Plans?
   (a) Programs  (b) Budgets  (c) Projects  (d) All of the above

128. The basic assumptions about the environment in which plans are expected to be implemented is known as
   (a) Decision making  (b) Forecasting
   (c) Planning premises  (d) None of the above

129. Planning premises can be categorized into:
   (a) Internal and External premises
   (b) Controllable, Semi Controllable and Uncontrollable premises
   (c) Tangible and Intangible Premises
   (d) All of the above

130. The premises which can be controlled by the management are known as
   (a) Internal premises  (b) External premises
   (c) Controllable premises  (d) Tangible premises

131. The premises on which management has some control is known as
   (a) Controllable premises  (b) Semi-controllable premises
   (c) Uncontrollable premises  (d) Intangible Premises

132. The premises over which a firm has no control are known as
   (a) Controllable premises  (b) Semi-Controllable premises
   (c) Uncontrollable premises  (d) None of the above

133. ____ are guidelines for decision making.
   (a) Policies  (b) Rules
   (c) Procedures  (d) Methods

134. ____ are guidelines for sequential action
   (a) Policies  (b) Rules
   (c) Procedures  (d) Methods

135. Policies are generally formulated at
   (a) Middle Level  (b) Top Level
   (c) Lower Level  (d) At all levels

136. Procedures are laid down at
   (a) Top level  (b) Lower level
   (c) Middle level  (d) At all levels

137. ____ are bridges between organisational purpose and performance.
   (a) Policies  (b) Procedures
   (c) Methods  (d) Rules
138. _____ serve as bridges between activities and outcomes.
   (a) Policies         (b) Methods
   (c) Procedures       (d) Rules

139. The term strategy has a ___ origin
   (a) Military         (b) Air force
   (c) Navy             (d) None of the above

140. Flexibility and Pragmatism are two important pre-requisites of success of ____ planning.
   (a) Strategic        (b) Operations
   (c) Corporate        (d) Long range

141. _____ planning is done within the framework of long range, strategic planning, goals and objectives.
   (a) Corporate        (b) Strategic
   (c) Long range        (d) Operations

142. Operational planning is also known as
   (a) Corporate        (b) Long range
   (c) Short-range       (d) Strategic

143. PERT gives more attention to ____ dimension of a project planning and control.
   (a) Time             (b) Cost
   (c) Both (a) and (b) (d) None of the above

144. CPM gives more attention to ____ dimension of a project planning and control.
   (a) Time             (b) Cost
   (c) Both (a) and (b) (d) None of the above

145. ____ was developed by du pont and Remington Rand Companies to help the process of scheduling maintenance of chemical plants.
   (a) CPM              (b) PERT
   (c) MBO              (d) MBE

146. ____ was developed by US Navy Engineer’s to plan and control the huge Polaris Submarine Program.
   (a) MBO              (b) MBE
   (c) CPM              (d) PERT

147. In which approach, top management takes the initiative in formulating major objectives, strategies, policies and derivative plans.
   (a) Top down approach (b) Bottom up approach
   (c) Composite approach (d) Team approach

148. In which approach, the task of planning is entrusted to a select team of managers.
   (a) Top down approach (b) Bottom up approach
   (c) Composite approach (d) Team approach
149. Which is a blend of top-down and bottom up approach in planning?
   (a) Top down approach   (b) Bottom up approach
   (c) Composite approach   (d) Team approach

150. Planning function is pervasive in the sense it is performed by managers at
   (a) All levels   (b) Lower level
   (c) Middle level   (d) Top Level

True or False:
1. Fredrick Winslow Taylor has been accepted as the father of modern management.
2. Rule of thumb to be replaced by rule of science to improve the standard of performance.
3. Division of work is necessary to enjoy the benefits of specialization.
4. Unity of direction means that one individual employee must receive orders from one individual superior only.
5. Authority means the power to give orders and to ask for obedience.
6. Max Weber’s principles spread throughout both public and private sectors.
7. According to Bureaucratic Management selection and promotion is based on personal qualifications.
8. Planning enables people within an enterprise to work effectively and harmoniously for the accomplishment of the individual goals.
9. Planning is costly because it requires money, time and information.
10. Planning premises refer to the environment in which the plans are to be implemented.
11. Objectives, Policies, Procedures and rules are important Single Use Plans.
12. The premises that can be expressed in tangible physical terms are known as intangible premises.
13. The first step in the process of organizing is identifying the work.
14. Selection is probably the most critical step in the staffing process as it involves choosing candidates who best meet the qualifications requirements of the job.
15. Development is an act of increasing the knowledge and skill of an employee for doing a particular job in an organization.
16. Apprenticeship training is best example for Off the Job Training.
17. Directing involves issuing orders to subordinates and supervises how these orders are carried out by them and if necessary, motivate the employees for higher performance.
18. Communication is an exchange of facts, ideas, opinions or emotions by two or more persons.
19. Decoding is said to be the carrier of message sent by a person to another.
20. Emotions of both the sender and receiver influence the message that is transmitted and received.
### Match the following:
#### 1. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Placement</td>
<td>(A) Introduction of a person to a job.</td>
</tr>
<tr>
<td>2. Training</td>
<td>(B) Assigning rank and responsibility</td>
</tr>
<tr>
<td>3. Induction</td>
<td>(C) Transfer</td>
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<tr>
<td>4. Internal Sources</td>
<td>(D) Increasing the knowledge and skills of an employee.</td>
</tr>
<tr>
<td>5. External Sources</td>
<td>(E) Employment exchange</td>
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</tbody>
</table>

#### 2. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
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<tbody>
<tr>
<td>1. Group discussions</td>
<td>(A) Selection of language</td>
</tr>
<tr>
<td>2. Filtering</td>
<td>(B) Oral communication</td>
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<tr>
<td>3. Decoding</td>
<td>(C) Hiding some meaning</td>
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<td>4. Medium</td>
<td>(D) Interpretation of the message.</td>
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<tr>
<td>5. Encoding</td>
<td>(E) Carrier of the message</td>
</tr>
</tbody>
</table>

#### 3. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
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<tbody>
<tr>
<td>1. Control by exception</td>
<td>(A) Cost Volume Profit</td>
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<tr>
<td>2. Concurrent control</td>
<td>(B) Management by exception</td>
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<tr>
<td>3. Break even analysis</td>
<td>(C) Steering control</td>
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<td>4. Sensitivity Training</td>
<td>(D) One Superior and one subordinate</td>
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<td>5. Unity of Command</td>
<td>(E) T – Group Training</td>
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#### 4. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
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<tr>
<td>1. Time Consuming</td>
<td>(A) Limitation of Planning</td>
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<td>2. Determining Planning Premises</td>
<td>(B) Standing Plans</td>
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<td>3. Strategies</td>
<td>(C) Step in Planning process</td>
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<tr>
<td>4. Controllable Premises</td>
<td>(D) Single use plans</td>
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<tr>
<td>5. Schedules</td>
<td>(E) Investment Plans</td>
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</table>
5. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
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<tbody>
<tr>
<td>1. Father of Modern Management</td>
<td>(A) Functional foremanship</td>
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<tr>
<td>2. Features of Scientific Management</td>
<td>(B) German Sociologist</td>
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<tr>
<td>3. Espirit de corps</td>
<td>(C) Henry Fayol</td>
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<tr>
<td>4. Max Weber</td>
<td>(D) Rigid rules and regulations</td>
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<tr>
<td>5. Bureaucratic Management</td>
<td>(E) Team work</td>
</tr>
</tbody>
</table>

Define just in one sentence

1. Planning Premises
2. Standing Plans
3. Single Use Plans
4. Unity of Command
5. Unity of Direction
6. Span of Control
7. Scalar Chain
8. Espirit de Corps
9. POSDCORB
10. On the Job Training
11. Off the Job Training
12. Selection
13. Recruitment
14. Placement
15. Induction
16. Encoding
17. Decoding
18. Semantic Barrier
19. Filtering
20. Verbal Communication
21. Critical Point Control
22. Control by Exception
23. Concurrent Control
24. Feedback Control
25. Feed forward control
Answers:

Fill in the blanks:

1. Science
2. F. W. Taylor
3. Henri Fayol
4. Max Weber
5. General
6. Scalar chain
7. Rule of Thumb
8. Rigid and Inflexible
9. Management
10. Reviewing the plan
11. Standing
12. Planning premises
13. Identifying the work
14. Staffing
15. Human Resource Planning
16. Recruitment
17. Placement
18. Payroll
19. Selection
20. Sensitivity Training
21. Directing
22. Nucleus
23. Communis
24. Communicator
25. Encoding
26. Decoding
27. Controlling
28. Planning
29. Establishment of Standards
30. Critical Point Control
31. Management by Exception
32. Cybernetics.
33. Real time or steering control
34. Management Information System
35. Break Even Analysis
36. Profit Planning
37. On-going
38. Key result areas
39. Critical Point Control
40. Feed forward

Choose the correct answer:

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Introduction:
The term “power” is often considered as synonymous to authority. Really speaking, there is a difference between the two terms. Power refers to the ability or capacity to influence the behavior or attitudes of other individuals. A manager’s power may be considered as his ability to cause subordinates to do what the manager wished them to do. Power is a broader concept than authority. Authority is derived from position whereas power may be derived from many sources like technical competence, seniority etc. a manager’s power may be measured in terms of his ability to –

(a) Give rewards,
(b) Punish individuals,
(c) Withdraw rewards, etc.

Thus, reward, coercion, dominating personality, expertise, etc. are the main sources of power. Authority may be described as an institutionalized power since it is formally bestowed by the organization.

10.1 CONCEPT OF AUTHORITY

In management, authority may be defined, as the right to guide and direct the actions of others and to secure from them responses which are appropriate to the attainment of the goals of the organization. It is the right to utilize organizational resources and to make decisions. Authority is the right to decide and to direct others to perform certain duties in achieving organizational goals. It refers to the right to make decisions and to get the decisions carried out. It is the right to act. According to Barnard, “Authority is the character of communication (order) in a formal organization by virtue of which it is accepted by a contributor to, or member of the organization as generating the action he contributes, that is, as governing or determining what he does or is not to do so far as the organization is concerned. “In the words of Simon, “Authority may be defined as the power to take decisions which guide the actions of others.”

Characteristics of Authority:
The main characteristics of authority are as follows:

1. The authority given to a position is legal and legitimate. It is supported by tradition, law or standards of authenticity. Authority is formal.
2. The authority (right) enjoyed by a position is not unlimited. The extent and limits of authority of a position are defined in advance. The position holder is expected to use his authority as per rules, regulations, policies and norms of the organization.
3. Authority is a relationship between two individuals – one superior and the other subordinate. The superior frames and transmits decisions with the expectation that the subordinates will accept them. The subordinate executes such decisions and his conduct is determined by them.

4. Authority is used to achieve organizational goals. The basic purpose behind the use of authority is to influence the behavior of the subordinates in terms of doing right things at right time so that organizational objectives are achieved. A person with authority influences the behavior of others that might otherwise not take place.

5. Actions and behaviors of his subordinates. It provides the basis for getting things done. Authority is also the means of coordination is an organization. Lines of authority serve to link and integrate the various parts of the organization to achieve common goals.

6. Authority gives right of decision-making because a manager can give orders only when he decides what his subordinates should or should not do. In the words of Terry, “Authority is exercised by making decisions and seeing that they are carried out.”

7. Authority in itself is an objective thing but its existence is always subjective. Its exercise depends upon the personality factors of the manager who can use it and on the subordinates with whom it is to be exercised.

10.2 CONCEPT OF POWER

Power, like authority, is a means of exercising influence on the behavior of people. But power is stronger than influence. Influence is a psychological force while power is a personal force that enables a person to change the behavior of others. Authority is the means to exert influence.

Power is an important means to enforce obedience to the rules, regulations and decisions of the organization. Power may be derived on personal or institutional bases. The use of power may affect the behavior of people in the desired manner. However, it does not necessarily imply that the people are in agreement with the exercise of power that a person is dependent upon another, he or she is subject to the other person’s power.

Sources of Power:

There are several bases or sources of power. John French and Bertram Raven have identified five bases of sources of power.

1. **Reward power:** The ability to grant or withhold rewards is a key source of power. Rewards may be financial, social or psychological. Financial rewards include salaries, wages, fringe benefits, etc. Support, praise, recognition, status, etc., are non-financial rewards. Persons seeking rewards are dependent on the individual who is in a position to offer the reward. He offers rewards in exchange of some behavioral act like effort, performance, obedience, loyalty and so on. Those who refuse to carry out his orders are denied rewards. A person may be in a position to offer rewards by virtue of being a manager, a leader or a relatively wealthy person.

2. **Coercive power:** This is the ability to punish others for not carrying out orders or for not meeting certain requirements. The person who is in a position to coerce others forces or compels them to do or not to do something. The person who feels coerced complies for fear of punishment. For example, management may force workers to call off the strike by giving an ultimatum that otherwise they will be suspended. Coercive power is the opposite of reward power. Coercion may be direct or indirect, physical or psychological.

3. **Expert power:** A person having expertise or specialized knowledge or information has power over those who seek his expertise. For example, a teacher has expert power over students, a chartered accountant over his clients and a doctor over his patients.
4. Referent power: This is based on the personality attributes or personal virtues of a person. Such a person has a charisma which attracts people towards him. For example, Mahatma Gandhi became powerful and had a huge following due to his charisma. Reference as a source of power is a group or an institutional situation. The goals, values, work patterns, etc., of a group become frames of reference for some persons and they look to the group for inspiration and guidance. The group thereby commands power and any ‘manager of such a group acquires power by virtue of his association with the group.

5. Legitimate power: This is derived from the formal position of a person in the organization. Formal legitimate power is called authority and it is vested on the individual.

10.3 DELEGATION OF AUTHORITY

Delegation of authority is “the process a manager follows in dividing the work assigned to him so that he performs that part which only he, because of his unique organisational placement, can perform effectively and so that he can get others to help with what remains.”

Delegation has the following characteristics:

1. Delegation takes place when a superior grants some discretion to a subordinate. The subordinate must act within the limits prescribed by the superior. He is not free to use authority arbitrarily but has to use it subject to the policies and rules of the organisation.
2. A manager cannot delegate the entire authority to his subordinates because if he delegates all his authority he passes his position to the subordinates.
3. Generally authority regarding routine decisions and for execution of policies is delegated to subordinates. A manager retains the authority to take policy decisions and to exercise control over the activities of subordinates.
4. The extent of authority which is delegated depends upon several factors, e.g., the ability philosophy of management, the confidence of the superior in his subordinates, etc.
5. Delegation does not imply reduction in the authority of a manager. A superior retains authority even after delegation. Delegation does not mean a manager loses control and power. He can reduce, enhance or take back the delegated authority.
6. Delegation may be specific or general, written or implied, formal or informal. Delegation does not mean avoiding decisions or abandonment of work.
7. Delegation does not mean abdication of responsibility. No manager can escape from his obligation by delegating authority to subordinates. Therefore, he must provide a means of checking upon the work that is done for him to ensure that it is done as he desires.

Importance of Delegation

Delegation is the dynamics of management and the essence of sound organisation. The importance of delegation is due the following advantages that it provides:

1. It enables the managers to distribute their workload to others. By reducing the workload for routine matters, they can concentrate on more important policy matters.
2. Delegation facilitates quick decisions because the authority to make decisions lies near the point of action. Subordinates need not approach the boss every time need for a decision arises.
3. Delegation helps to improve the job satisfaction, motivation and morale of subordinates. It helps to satisfy their needs for recognition, responsibility and freedom.
4. By clearly defining the authority and responsibility of subordinates, a manager can maintain healthy relationships with them. Delegation increases interaction and understanding among managers and subordinates.

5. Delegation binds the formal organisation together. It establishes superior-subordinate relationships and provides a basis for efficient functioning of the organisation.

6. Delegation enables a manager to obtain the specialized knowledge and expertise of subordinates.

7. Delegation helps to ensure continuity in business because managers at lower levels are enabled to acquire valuable experience in decision making. They get an opportunity to develop their abilities and can fill higher positions in case of need. Thus, delegation is an aid to executive development. It also facilitates the expansion and diversification of business through a team of competent and contented workers. But for delegation firms would remain small.

**Steps in the Process of Delegation**

The process of delegation involves the following steps:

1. **Determination of results expected**– First of all, a manager has to define the results he wants to obtain from his subordinates for achievement of organisational objectives.

2. **Assignment of duties**– The manager then assigns specific duties or tasks to each subordinate. He must clearly define the function of each subordinate. While assigning duties and responsibilities, he must ensure that the subordinates understand and accept their duties. Duties should be assigned according to the qualifications, experience and aptitude of the subordinates.

3. **Granting of authority**– Assignment of duties is meaningless unless adequate authority is given to subordinates. They cannot discharge their responsibilities without adequate authority. Enough authority must be granted so that subordinates can perform their duties. By granting authority, subordinates are permitted to use resources, to take decisions and to exercise discretion.

4. **Creating accountability for performance**– The subordinates to whom authority is delegated must be made answerable for the proper performance of assigned duties and for the exercise of the delegated authority. The extent of accountability depends upon the extent of delegation of authority and responsibility. A person cannot be held answerable for the acts not assigned to him by his superior. An information and control system is established to check and evaluate performance of the subordinates to whom authority is delegated.

Thus, duty, authority and accountability are three fundamental components of delegation. All the three phases of delegation are interdependent. “These three inevitable attributes of delegation are like a three-legged stool each depends on the others to support the whole and no two can stand alone.”

**Difficulties in Delegation**

**On the Part of Delegator (Non-delegation) –** Managers are often reluctant to delegate adequate authority due to the following reasons:

1. Some managers may not delegate authority because of their lure for authority. They are autocrats and think that delegation will lead to reduction of their influence in the organisation. They want to make their presence felt and desire that subordinates should come frequently for approval. They like to dominate the whole show.

2. Some managers feel that none can do the job as well as they can do. They think that if they delegate, work will not be done as it ought to be done. They consider themselves indispensable and do not want to give other people’s ideas, a chance.

3. When a manager is incompetent his work methods and procedures are likely to be faulty. He keeps all the authority to himself for fear of being exposed. He is afraid that if he lets the subordinates make decisions they may outshine him. He is afraid of losing his importance.
4. Few managers are inclined to accept the risk of wrong decisions which the subordinates might take. Therefore, they do not delegate authority and take all the decisions themselves. They are unwilling to take calculated risk.

5. A manager may not delegate authority because he feels that his subordinates are not capable and reliable. He lacks confidence in his subordinates.

6. A manager is not likely to delegate authority when he cannot issue suitable directions to guide the activities of subordinates. Such lack of ability to direct shows that he is unfamiliar with the art of delegation.

7. Effective delegation requires adequate controls and a means of knowing the proper use of authority. A manager will hesitate to delegate authority if he has no means to ensure that the authority is being properly used by the subordinates.

On the Part of Subordinates (Non-acceptance of Delegation) – Subordinates may not like to accept delegation and shoulder responsibility due to the following reasons:

1. Subordinates may be reluctant to accept delegation when they lack self-confidence.

2. Some subordinates are unwilling to accept authority due to the desire to play safe by depending on the boss for all decisions. They have a love for spoon-feeding.

3. A subordinate who is afraid of committing mistakes and does not like to be criticised by the boss is likely to avoid delegation of authority.

4. When the subordinates are already overburdened with duties, they do not like additional responsibility through delegation.

5. Subordinates are likely to avoid delegation when adequate information, working facilities and resources are not available for proper discharge of duties.

6. Subordinates may not come forward to accept delegation of authority when no incentives are available to them.

Effective Delegation

Delegation of authority cannot be effective unless certain principles are followed in practice. While delegating authority, a manager should observe the following principles:

1. **Functional definition** – Before delegating authority a manager should define clearly the functions to be performed by subordinates. The objectives of each job, the activities involved in it and its relationship with other jobs should be defined.

2. **Delegation by results expected** – Authority should be delegated only after the results to be achieved by the subordinates are decided. This will enable them to know by what standards their performance will be judged.

3. **Parity of authority and responsibility** – There must be a proper balance between authority and responsibility of a subordinate. Responsibility without authority will make a subordinate ineffective as he cannot discharge his duties. Similarly, authority without responsibility will make the subordinate irresponsible. Therefore, authority and responsibility should be co-extensive.

4. **Absoluteness of responsibility** – Responsibility cannot be delegated. No manager can avoid his responsibility by delegating his authority to subordinates. After delegating authority he remains accountable for the activities of his subordinates. Similarly, the subordinates remain accountable to their superior for the performance of assigned duties.

5. **Unity of command** – At one time a subordinate should receive command and be accountable to only one superior. If a person reports to two superiors for the same job, confusion and conflict will arise. He may receive conflicting orders and his loyalty will be divided. Therefore, dual subordination should be avoided.
6. **Well-defined limits of authority**—The limits of authority of each subordinate should be clearly defined. This will avoid overlapping of authority and will allow the subordinate to exercise initiative. He should refer those matters to the superior which are outside the limits of his authority.

7. **Authority level principle**—Managers at each level should make all decisions within their jurisdiction. They should avoid the temptation to refer to their superiors’ decisions which they are authorized to take themselves. Only matters outside the scope of authority should be referred to superiors.

**Centralization and Decentralization of Authority**

Centralisation and decentralisation are opposite terms. They refer to the location of decision-making authority in an organisation. Centralisation implies the concentration of authority at the top level of the organisation while decentralisation means dispersal of authority throughout the organisation. According to Allen, “Centralisation is systematic and consistent reservation of authority at central points within an organisation. Decentralisation applies to the systematic delegation of authority in an organisation wide context.” Decentralisation refers to the systematic effort to delegate to the lowest levels all authority except that which can only be exercised at central points. It is the distribution of authority throughout the organisation.

Centralisation and decentralisation are relative terms because every organisation structure contains both the features. There cannot be complete centralisation or decentralisation in practice. Absolute centralisation means each and every decision is to be taken by top management which is not practicable. Similarly, absolute decentralisation implies no control over the activities of subordinates which cannot be possible. Therefore, effective decentralisation requires a proper balance between dispersal of authority among lower levels and adequate control over them. Decentralisation should not be confused with dispersion of physical facilities and operations.

**Distinction between Delegation and Decentralisation**

Decentralisation is much more than delegation. Delegation means transfer of authority from one individual to another. But decentralisation implies diffusion of authority throughout the organisation. The main points of distinction between delegation and decentralisation are presented as follows:

1. Delegation is the process of devolution of authority whereas decentralisation is the end result which is achieved when delegation is systematically repeated up to the lowest level.

2. Delegation can take place from one individual (superior) to another (subordinate) and -be a complete process. But decentralisation is completed only when the fullest possible delegation is made at all levels of organisation.

3. In delegation control rests entirely with the superior. But in decentralisation the top management exercises only overall control and delegates the authority for day today control to the departmental managers.

4. Delegation is a must for management as subordinates must be given sufficient authority to perform their duties. But decentralisation is optional in the sense that top management may or may not disperse authority.

5. Delegation is a technique of management used to get things done through others. However, decentralisation is both a philosophy of management and a technique.

**Advantages of Decentralisation**

The main benefits of decentralisation are as follows:

1. **Relief to top executives**—Decentralisation helps in reduction of the workload of top executives. They can devote greater time and attention to important policy matters by decentralising authority for routine operational decisions.

2. **Motivation of subordinates**—Decentralisation helps to improve the job satisfaction and morale of
lower level managers by satisfying their needs for independence, participation and status. It also fosters team—spirit and group cohesiveness among the subordinates.

3. **Quick decisions**– Under decentralisation authority to make decisions are placed in the hands of those who are responsible for executing the decisions. As a result, more accurate and faster decisions can be taken as the subordinates are well aware of the realities of the situation. This avoids red tapism and delays.

4. **Growth and diversification**– Decentralisation facilitates the growth and diversification of the enterprise. Each product division is given sufficient autonomy for innovations and creativity. The top management can extend leadership over a giant enterprise. A sense of competition can be created among different divisions or departments.

5. **Executive development**– When authority is decentralised, subordinates get the opportunity of exercising their own judgment. They learn how to decide and develop managerial skills. As a result, the problem of succession is overcome and the continuity and growth of the organisation are ensured. There is better utilisation of lower-level executives.

6. **Effective communication**– Under decentralisation, the span of management is wider and there are fewer hierarchical levels of organisation. Therefore, communication system becomes more effective. Intimate relationships between superiors and subordinates can be developed.

7. **Efficient supervision and control**– Managers at lower levels have adequate authority to make changes in work assignments, to change production schedules, to recommend promotions and to take disciplinary actions. Therefore, more effective supervision can be exercised. Control can be made effective by evaluating the performance of each decentralised unit in the light of clear and predetermined standards. Decentralisation facilitates management by objectives and self-control.

**Disadvantages of Decentralisation**

Decentralisation suffers from the following limitations:

1. **Expensive**– Decentralisation increases the administrative expenses. Each division or department has to be self-sufficient in terms of physical facilities and trained personnel. There may be duplication of functions and underutilization of facilities. Therefore, a decentralised set-up is better suited to large enterprises.

2. **Difficulty in co-ordination**– Under decentralisation, each department or division enjoys substantial autonomy. Therefore, coordination among the departments becomes more difficult.

3. **Lack of uniformity**– Decentralisation may lead to inconsistencies when uniform procedures are not followed by various departments. Each department may formulate its own policies and procedures.

4. **Narrow product lines**– Decentralisation requires that product lines should be broad enough to permit creation of autonomous units. Therefore, it is not suitable for small firms having narrow product lines. Similarly, decentralisation may not be possible when there is lack of competent managers at lower levels in the organisation.

5. **External constraints**– Decentralisation may not be possible due to external factors like market uncertainties, trade union movement, government intervention, etc.

**Factors Determining Decentralisation**

While deciding the degree of decentralisation in a particular organisation, the following factors should be taken into consideration:

1. **Size and complexity of the organisation**– In a large and complex organisation there is greater need for decentralisation. But in a relatively small and simple organisation, top management can make most of the decisions and creation of autonomous units may be a very costly scheme.
2. **Dispersal of operations**—When the production and sales of an enterprise are geographically scattered, centralised control becomes very difficult and there is greater pressure for decentralisation of authority. But if all the activities are located in one building centralised control is much easier.

3. **Degree of diversification**—In a company having several diverse product lines, decentralisation is not only necessary but beneficial. High degree of standardisation, on the other hand, results in centralisation.

4. **Availability of competent personnel**—It is advisable to decentralize authority only when managers at lower levels are able and experienced. Lack of trained executives will restrict decentralisation.

5. **Outlook of top management**—When the top executives believe in individual freedom, there will be a high degree of decentralisation. But if top management is conservative and prefers centralized control it is likely to centralize authority.

6. **Nature of functions**—Generally, basic functions like production and sales are more decentralized than staff functions such as personnel, finance, research and development.

7. **Communication system**—An effective communication system is required to co-ordinate and control the activities of operational units. In case communication system is ineffective, centralisation should be advocated. However, computerised management information system has enabled centralised decision-making.

9. **Planning and control procedures**—If the organisation has clear objectives and policies, superiors are more willing to allow subordinates to make decisions independently. Decentralisation can be successful when there is a sound system of control. Such a system would enable the top management to determine the effectiveness of decisions made by subordinates.

10. **Complexities of the situation**—Environmental factors exercise significant influence on the degree of decentralisation. For example, where business conditions are highly uncertain, high degree of freedom to operating units may endanger the very existence of the enterprise.

**Purposes of Centralisation**

1. **To facilitate personal leadership**. In the early stages of an enterprise and in small firms, the success depends largely on the personal leadership of a dynamic and talented leader. Authority may be centralised to give full scope to facilitate personal leadership which may result in quick decisions and imaginative action.

2. **To provide integration**. Co-ordination of individual efforts is essential to the success of every organisation. Centralised direction is an effective means of unification and integration of individual efforts. It acts as a binding force on the various units of the organisation.

3. **To achieve uniformity of action**. Where uniformity of policy and action is required, authority may be centralised at the top. Such uniformity is often desirable in personnel, purchasing and advertising. Therefore, authority in these tends to be centralised.

4. **To improve efficiency**. Centralisation helps to avoid overlapping efforts and duplication of work. It enables the management to exercise effective control in order to minimize waste and to achieve economy in operations.

**Effective Decentralisation**

Effective decentralisation requires fulfillment of the following conditions:

1. **Appropriate centralisation**—Decentralisation can be effective when there is a centralised authority for overall planning and control. The central authority ensures close coordination between various operating units. Without such a cementing force, the decentralised organisation may fall apart into pieces.

2. **Development of managers**—Effective decentralisation requires a large number of highly competent managers who are capable of working independently. In order to develop such executives, top
management must delegate authority and allow the subordinates to learn through experience in making decisions.

3. **Open communication**—A sound communication system should be established to ensure continuous interaction between superiors and subordinates. Necessary feedback on operating results should be made available to superiors. Open communication system will enable managers to provide advice and guidance to subordinates.

4. **Coordination**—Decentralisation tends to create rivalry and cooperating divisions. Departmental managers compete for scarce resources. Effective coordination is essential to prevent such disintegrating tendencies. Interdepartmental coordination helps to prevent the danger of fragmentation. Committees, liaison officers and other mechanisms of coordination may be used to ensure coordination.

5. **Adequate controls**—Effective decentralisation needs an appropriate control system that will distribute the resources, lay down standards of performance and exercise control to ensure that the various operating units are working in the desired direction.

**Span of Management**

Span of Management also known as span of control, span of supervision or span of authority represents the numerical limit of subordinates to be supervised and controlled by a single supervisor. It is an important principle of building a sound organization. The principle is based on the theory of relationships propounded by Graicunas—a French management consultant who analysed the superior—subordinate relationship based on a mathematical formula.

\[
\text{No. of direct relationships} = n
\]
\[
\text{No. of cross relationships} = n \times (n-1)
\]
\[
\text{No. of group relationships} = n \times (2n - 1 - 1)
\]
\[
\text{Total No. of relationships} = n \times (2n/2 + (n-1))
\]

Where \(n\) represents the number of subordinates.

The concept of span of management is central to the classical organization theory. Proper span of management is considered a necessity for effective supervision, co-ordination and control. It is therefore critical to determine the ideal span. If the span of control is narrow, there will be more organizational levels which in turn may impede communication. If the span is widened, the supervisory load may become too heavy. Thus, sound organization structure required striking an optimum balance between organization levels, and supervisory work load.

**10.4 Concept of Responsibility**

**Concept of Responsibility**

The term responsibility is used in management literature in two different senses. Some writers have defined it as duty or task assigned to a subordinate by virtue of his position in the organization. According to M.E. Hurley, “Responsibility is the duty to which a person is bound by reason of his status or task. Such responsibility implies compliance with directives of the person making the initial delegation.”

In a more comprehensive sense responsibility may be defined as the obligation of an individual to perform the duty assigned to him. According to Koontz and O’Donnell, “Responsibility may be defined as the obligation of a subordinate, to whom duty has been assigned to perform the duty.” Responsibility is an obligation to perform certain functions and to achieve certain results. According to R. C. Davis, “Responsibility is the obligation of an individual to perform assigned duties to the best of his ability under the direction of his executive leader.”
The main characteristics of responsibility are as follows:

1. Responsibility can be assigned to human beings only. Non-living objects such as a machine cannot be assigned responsibility.

2. Responsibility arises from a superior-subordinate relationship. By virtue of his superior position, a manager has the authority to get the required work done from his subordinates. Therefore, he assigns duties to subordinates who are bound by the service contract to perform the assigned duties.

3. Responsibility may be a continuing obligation or confined to the performance of a single function. For example, a sales person has continuing obligation to the sales manager. On the other hand, the responsibility of a management consultant to a company comes to an end as soon as the consultancy assignment is completed.

4. Responsibility may be defined in terms of functions or targets or goals. For example, the responsibility of labour officer is in the terms of a function. On the contrary, the responsibility of a worker who is assigned the job of producing 50 units daily is in terms of targets. As far as possible responsibility should be expressed in terms of targets. This will enable the subordinates to know by what standards their performance will be evaluated.

5. The essence of responsibility is obligation of a subordinate to perform the duty assigned to him.

6. Responsibility is a derivative of authority. When a subordinate is delegated authority he becomes responsible to his superior for the performance of assigned task and for proper use of delegated authority. Therefore, responsibility should be commensurate with authority.

7. Responsibility is absolute and cannot be delegated. A subordinate may himself perform the duty assigned to him or he may get it done from his own subordinate. But he remains responsible to his own superior in both the cases. According to R.C. Davis, "Responsibility operates somewhat like the table of the magic pitcher in which the water level always remains the same, no matter how much water is poured out."

8. Responsibility flows upward. A subordinate is always responsible to his superior.

9. The person who accepts responsibility is accountable for his performance. Accountability arises out of responsibility and the two go together.

Management can use various techniques to define responsibilities so as to actively involve members of an organization in its coordination effort. Two such techniques are: (1) responsibility charting, and (2) role negotiation. Moreover, new organizational positions may be created and line and staff conflict resolved by enhancing the degree of coordination.

1. **Responsibility Charting** – A responsibility chart is a nice way of summarizing the relationship between tasks and actors (performers). The chart lists activities that are complicated or the decisions that must be made and the individuals who are responsible for each of them. On the vertical axis we show the tasks and on the horizontal axis we show the actors.

The following four roles are important:

1. The individual is responsible for the activity (decision).
2. The individual must approve the activity or decision.
3. The individual must be consulted before completing the activity or making the decision.
4. The individual has to be informed about the activity or the decision.

2. **Role Negotiation** – Role negotiation is an important technique that can supplement the use of responsibility charting. If used properly, it can lead to clear definitions of tasks and the responsibilities associated with them.

The basic promise of the technique is that nobody gets anything without promising something in
exchange. Organizational members meet at periodic intervals to list rededication of tasks so that coordination can be maximized. The primary objective of this approach is to identify the independent clusters of tasks completed by the organization. The second objective is to match the personal needs and work preference of individuals with the tasks that must be completed.

10.5 AUTHORITY, RESPONSIBILITY AND ACCOUNTABILITY

**Authority**: This is the power to assign duties to subordinates and to ensure that they are carried out, and involves the acceptance of accountability for the proper exercise of this authority. The precise extent of the authority must be clearly defined to the holder and he/she must act only within those limits. Authority, unlike responsibility, can be delegated, and flows downwards through the organization structure. At all times authority must be commensurate with the accountability imposed and all subordinate staff subject to the authority must be made aware of it and of its extent.

Henri Fayol regarded authority as ‘the right to give orders and the power to exact obedience’. H. A. Simon regarded it as ‘the power to make decisions which guide the actions of another’.

It is obvious that authority over people can be effective only when they accept it. Many instructions are obeyed because of custom, but acceptance of authority may in some cases, be ensured only by resorting to the use of power. Authority is not power. Power is the product of personality in a specific situation.

Authority can be regarded as the right or power to delegate responsibility and it emanates in a company from the shareholders to the board of directors, and down the scalar chain.

**Responsibility** – In the context of organization this term can be considered to be the same as accountability. It is the obligation to make sure that authority is properly used and that duties are properly carried out. It carries with it the prerogative to delegate authority and duties, but does not carry the right to avoid accountability. In this sense, responsibility flows from the bottom of the organizational structure to the top since each supervisor or manager is accountable to his immediate superior for the proper use of his authority and the proper performance of those duties, whether done personally or not, for which he is responsible. In this way the chief executive carries the full and ultimate responsibility for the effective functioning of the organization.

In short, responsibility and obligation are given to use authority to see duties are performed. It is an obligation to perform owed to a person’s superior.

**Accountability** – is the liability created for the use of authority. It is the answerability for performance of the assigned duties. Accountability is concerned with the fact that each person who is given authority and responsibility must recognize that the executive above him or her will judge the quality of his/her performance.

By accepting authority, a person denotes the acceptance of responsibility and accountability. The person who is delegating authority requires subordinates to allow their performance to be reviewed and evaluated and holds them accountable for result.

**Answer the following questions:**

1. Define Authority and explain the characteristics of authority.
2. What are the different sources of power?
3. Explain the differences between Power and Authority.
4. Define Responsibility and explain the characteristics of Responsibility.
5. What are the different techniques to define Responsibility in an organization?
6. Briefly compare between Authority, Responsibility and Accountability.
7. Define Delegation of Authority. Explain the characteristics of Delegation of Authority.

8. Explain the importance of Delegation of Authority.

9. Explain the steps in the process of Delegation of Authority.

10. What are the difficulties in the Delegation of Authority?

11. Explain the differences between Delegation and Decentralisation.

12. What are the advantages and disadvantages of decentralization?

13. What factors should be taken into consideration while deciding the degree of decentralization in an organization?

14. Write about Span of Management.

**Fill in the blanks:**

1. The term power is often considered as synonymous to ________.

2. _____ refers to the ability or capacity to influence the behavior or attitudes of other individuals.

3. The authority enjoyed by a position is not ________.

4. ________ is a relationship between two individuals – one superior and the other subordinate.

5. Coercive power is the opposite of ______ power.

6. Responsibility can be assigned to ______ only.

7. Responsibility flows ______.

8. A ______ is a nice way of summarizing the relationship between tasks and actors.

9. ________ is an important technique that can supplement the use of responsibility charting.

10. ________ can be regarded as the right of power to delegate responsibility and it emanates in a company from the shareholders to the board of directors, and down the scalar chain.

**Multiple Choice Questions:**

1. ____ and ____ are created in organization based on the principle of similarity and relatedness of the activities performed.
   - (a) Departments, Divisions
   - (b) Centralisation, Decentralisation
   - (c) Power and Authority
   - (d) None of the above

2. _____ is the right to act and extract obedience from others.
   - (a) Power
   - (b) Authority
   - (c) Responsibility
   - (d) None of the above

3. The process of assigning work to others and giving them authority to do is
   - (a) Control
   - (b) Organising
   - (c) Power
   - (d) Delegation of Authority

4. Delegation takes place between
   - (a) Superior and Subordinate
   - (b) Superior and Superior at same levels
   - (c) Subordinates and peers
   - (d) All of the above
5. Delegation may be
(a) Specific or general   (b) Written or implied
(c) Formal or Informal   (d) All of the above

6. What activity enables the managers to distribute their work load to others?
(a) Centralisation   (b) Decentralisation
(c) Delegation of authority   (d) None of the above

7. Delegation helps to improve the job satisfaction, motivation and morale of _____
(a) Subordinates   (b) Superiors
(c) Peers   (d) None of the above

8. _____ increases interaction and understanding among managers and subordinates.
(a) Centralisation   (b) Decentralisation
(c) Co-ordination   (d) Delegation

9. Delegation enables a manager to obtain the specialized knowledge and expertise of ____
(a) Superior   (b) Subordinates
(c) Peers   (d) None of the above

10. Duty, authority and accountability are three fundamental components of:
(a) Delegation of authority   (b) Power
(c) Control   (d) Co-ordination

11. Duties should be assigned according to ____ subordinates.
(a) Qualifications.   (b) Experience
(c) Aptitude of   (d) All of the above

12. Assignment of duties is meaningless unless adequate authority is given to
(a) Subordinates   (b) Peers
(c) Superiors   (d) All of the above

13. The process of delegation involves the following steps.
(a) Determination of results expected.   (b) Assignment of duties
(c) Granting of Authority   (d) All of the above

14. Managers are reluctant to delegate authority due to the following reasons.
(a) Lack of confidence in his subordinates   (b) Afraid of losing his importance.
(c) When they like to dominate the whole show.
(d) All of the above

15. Subordinates may not like to accept delegation and shoulder responsibility due to the following reasons.
(a) Whey they lack self-confidence.
(b) When they are already overburdened with duties.
(c) When adequate information, working facilities and resources are not available.
(d) All of the above.
16. Authority should _____ with responsibility.
   (a) Commensurate   (b) Parity
   (c) More than   (d) None of the above

17. There should be ____ between Authority and Responsibility
   (a) Parity   (b) Commensurate
   (c) Both (a) and (b)   (d) None of the above

18. _____ cannot be delegated.
   (a) Authority   (b) Power
   (c) Responsibility   (d) Accountability

19. Authority and ____ should be co-extensive.
   (a) Power   (b) Responsibility
   (c) Accountability   (d) Command

20. Centralisation and decentralization are ____ terms.
   (a) Equal   (b) Different
   (c) Opposite   (d) None of the above

21. Concentration of authority at the top level of the organization is known as ____
   (a) Centralisation   (b) Decentralisation
   (c) Delegation of Authority   (d) Responsibility

22. ____ means dispersal of authority throughout the organization.
   (a) Centralisation   (b) Delegation of Authority
   (c) Decentralisation   (d) None of the above

23. ____ is wide delegation of Authority.
   (a) Centralisation   (b) Decentralisation
   (c) Span of control   (d) Scalar Chain

24. Transfer of authority from one individual to another.
   (a) Delegation   (b) Centralisation
   (c) Decentralisation   (d) Communication

25. ____ implies diffusion of authority throughout the organization.
   (a) Delegation   (b) Centralisation
   (c) Decentralisation   (d) None of the above

26. ____ is the end result which is achieved when delegation is systematically repeated upto the lowest level.
   (a) Decentralisation   (b) Delegation
   (c) Centralisation   (d) None of the above
27. Decentralisation is completed only when the fullest possible delegation is made at ___ of organization.
   (a) Lower levels    (b) Top level
   (c) Middle level    (d) At all levels

28. In delegation control rests entirely with
   (a) Subordinate    (b) Superior
   (c) Top Level      (d) Middle Level

29. ____ is a technique of management.
   (a) Delegation    (b) Decentralisation
   (c) Centralisation (d) All of the above

30. ____ is a philosophy of management.
   (a) Delegation    (b) Decentralisation
   (c) Centralisation (d) All of the above

31. Decentralisation helps in reduction of the work load of ___ executives.
   (a) Middle level    (b) Lower level
   (c) Top level       (d) None of the above

32. Quick decision making is possible in the case of
   (a) Centralisation  (b) Decentralisation
   (c) Delegation     (d) Both (b) and (c)

33. Decentralisation suffers from the following limitation.
   (a) Relief to top executive (b) Expensive
   (c) Quick decision     (d) Executive development

34. ____ helps to avoid overlapping effort and duplication of work.
   (a) Co-ordination    (b) Centralisation
   (c) Decentralisation (d) Delegation of Authority

35. Span of Management is also known as
   (a) Span of Control   (b) Span of Supervision
   (c) Span of authority (d) All of the above

36. ____ represents the numerical limit of subordinates to be supervised and controlled by a single supervisor.
   (a) Unity of Command  (b) Unity of Objective
   (c) Span of Control   (d) Scalar Chain

37. Span of Control is based on the theory of relationships propounded by ___
   (a) Graicunas    (b) George Terry
   (c) Barnard     (d) Simon
38. The concept of Span of Management is central to the ____ theory.
   (a) Neo-classical organization  (b) Classical organization
   (c) Systems theory  (d) Contingency theory

39. Proper Span of Management is considered a necessity for effective.
   (a) Supervision  (b) Control
   (c) Co-ordination  (d) All of the above

40. There will be more organizational levels which in turn may impede communication, if the span of control is
   (a) wide  (b) narrow
   (c) Optimum  (d) None of the above

41. The supervisory load may become too heavy if the Span of Control is
   (a) Wide  (b) narrow
   (c) Optimum  (d) None of the above

42. The term ‘Power’ is often considered as synonymous to
   (a) Responsibility  (b) Accountability
   (c) Authority  (d) Control

43. The ability or capacity to influence the behaviour or attitudes of other individuals is known as ___
   (a) Power  (b) Authority
   (c) Accountability  (d) Responsibility

44. ____ is derived from position.
   (a) Accountability  (b) Power
   (c) Authority  (d) None of the above

45. Manager’s power may be measured in terms of his ability to ____
   (a) Give rewards  (b) Punish individuals
   (c) Withdraw rewards  (d) All of the above

46. What are the main sources of power?
   (a) Reward  (b) Coercion
   (c) Dominating Personality  (d) All of these

47. The right to decide and to direct others to perform certain duties in achieving organizational goals is known as
   (a) Authority  (b) Power
   (c) Accountability  (d) Control

48. The authority enjoyed by a position is
   (a) Limited  (b) Unlimited
   (c) Either (a) or (b)  (d) None of the above
49. The relationship between two individuals – one superior and the other subordinate is called as
   (a) Power    (b) Authority
   (c) Control   (d) All of the above

50. The ability to grant or withhold rewards is a key source of ____ power.
   (a) Reward power    (b) Coercive power
   (c) Referent power   (d) Legitimate power

51. The ability to punish others for not carrying out orders or for not meeting certain requirements is
    known as ___ power.
   (a) Reward power    (b) Expert power
   (c) Referent power   (d) Coercive power

52. Management may force workers to call off the strike by giving on ultimatum that otherwise they
    will be suspended is
   (a) Reward power    (b) Expert power
   (c) Coercive power   (d) Legitimate power

53. Coercive power is the opposite of
   (a) Expert power    (b) Reward power
   (c) Referent power   (d) Legitimate power

54. A teacher has ____ power over students.
   (a) Reward Power    (b) Referent power
   (c) Expert power     (d) Coercive power

55. Which is based on the personality attributes or personal virtues of a person?
   (a) Expert power    (b) Referent power
   (c) Reward power    (d) Legitimate power

56. Which is derived from the formal position of a person in the organization?
   (a) Expert power    (b) Referent power
   (c) Reward power    (d) Legitimate power

57. Responsibility can be assigned to
   (a) Human beings    (b) Non-living objects
   (c) Both (a) and (b) (d) None of the above

58. ____ is absolute and cannot be delegated.
   (a) Authority       (b) Accountability
   (c) Responsibility   (d) None of the above

59. Responsibility may be defined in terms of
   (a) Functions       (b) Targets
   (c) Goals           (d) All of the above
60. Responsibility flows in ____
   (a) Downward direction   (b) Upward direction
   (c) All directions       (d) None of the above

61. Subordinate is always responsible to his __
   (a) Peers           (b) Foremen
   (c) Management      (d) Superior

62. The techniques to define responsibilities so as to actively involve members of an organization in its co-ordination effort are.
   (a) Responsibility charting   (b) Role Negotiation
   (c) PERT and CPM             (d) Both (a) and (b)

**True or False**

1. The ability to grant or withhold rewards is a key source of power.
2. The term power is often considered as synonymous to Responsibility.
3. The authority given to a position is legal and legitimate.
4. Authority means ability to do something.
5. Authority can be visible from organizational chart.
6. Referent power is derived from the formal position of a person in the organization.
8. Responsibility is absolute and can be delegated.
9. Responsibility chart is an important technique that can supplement the use of Role Negotiation.
10. Accountability arises out of responsibility and the two go together.
12. A superior is always responsible to his subordinate.

**Match the following:**

1. **Match the following:**

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authority</td>
<td>(A) Ability to do something.</td>
</tr>
<tr>
<td>Non Financial Rewards</td>
<td>(B) Example for Referent Power</td>
</tr>
<tr>
<td>Teacher</td>
<td>(C) Recognition and Status</td>
</tr>
<tr>
<td>Mahatma Gandhi</td>
<td>(D) Right to do something.</td>
</tr>
<tr>
<td>Power</td>
<td>(E) Example for Expert Power</td>
</tr>
</tbody>
</table>
2. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Responsibility Charting</td>
<td>(A) Flows Upward</td>
</tr>
<tr>
<td>2. Responsibility</td>
<td>(B) Flows in all directions</td>
</tr>
<tr>
<td>3. Authority</td>
<td>(C) Technique to define Responsibility</td>
</tr>
<tr>
<td>4. Power</td>
<td>(D) Superior and Subordinate</td>
</tr>
<tr>
<td>5. Delegation of Authority</td>
<td>(E) Flows downward</td>
</tr>
</tbody>
</table>

Define just in one sentence:
1. Responsibility Charting
2. Responsibility
3. Accountability
4. Authority
5. Role Negotiation
6. Power
7. Coercive Power
8. Referent Power
9. Reward Power
10. Centralisation
11. Decentralisation
12. Delegation of Authority
13. Span of Control

ANSWERS:

Fill in the blanks:
1. Authority
2. Power
3. Unlimited
4. Authority
5. Reward
6. Human beings
7. Upward
8. Responsibility Charting
9. Role Negotiation
10. Authority.
### Multiple Choice Questions:

|   | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | 15  | 16  | 17  | 18  | 19  | 20  | 21  | 22  | 23  | 24  | 25  | 26  | 27  | 28  | 29  | 30  | 31  | 32  | 33  | 34  | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  | 55  | 56  | 57  | 58  | 59  | 60  | 61  | 62  |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | a   | 2   | b   | 3   | d   | 4   | a   | 5   | d   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 6 | c   | 7   | a   | 8   | d   | 9   | b   | 10  | a   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 11| d   | 12  | a   | 13  | d   | 14  | d   | 15  | d   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 16| a   | 17  | a   | 18  | c   | 19  | b   | 20  | c   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 21| a   | 22  | c   | 23  | b   | 24  | a   | 25  | c   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 26| a   | 27  | d   | 28  | b   | 29  | a   | 30  | b   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 31| c   | 32  | d   | 33  | b   | 34  | b   | 35  | d   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 36| c   | 37  | a   | 38  | b   | 39  | d   | 40  | b   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 41| a   | 42  | c   | 43  | a   | 44  | c   | 45  | d   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 46| d   | 47  | a   | 48  | a   | 49  | b   | 50  | a   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 51| d   | 52  | c   | 53  | b   | 54  | c   | 55  | b   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 56| d   | 57  | a   | 58  | c   | 59  | d   | 60  | b   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 61| d   | 62  | d   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |

### True or False:

1. True
2. False
3. True
4. False
5. True
6. False
7. True
8. False
9. False
10. True
11. False
12. False

### Match the following:

1. **Match the following**

2. **Match the following**
Study Note - 11

LEADERSHIP AND MOTIVATION

This Study Note includes
11.1 Leadership
11.2 Characteristics of Leadership
11.3 Motivation

11.1 LEADERSHIP

Introduction

As management itself consists in getting things done through others, therefore, the human beings can be called the most dynamic elements of management and the other factors of production remain just dormant. In an organization direction means guiding, overseeing or looking at these human beings.

Directing the employees include:

(a) Supervising employees
(b) Leading employees
(c) Motivating employees
(d) Communicating with employees

Managers or supervisors at all levels act as leaders because they have under them subordinates whose efforts have to be organized and harmonized. Leadership as an activity is common to all organizations whether business or non business. Leadership is the art of influencing others to direct their will, abilities and efforts to the achievement of leader’s goals. In other words, leadership refers to the quality of the behaviour of the individuals whereby they guide people or their activities in organized effort. Leadership in another sense means the capacity of an individual to influence the thought and actions of others in some useful direction. Leadership has been defined by experts from time to time as follows:-

According to Davis, “Leadership is the ability to persuade others to seek defined objectives enthusiastically. It is the human factor which binds a group together and motivates it towards goals”.

According to the Haimann, “Leadership is the process by which an executive imaginatively directs, guides and influences the work of others in choosing and attaining specified goals by mediating between the individuals and the organization in such a manner that both will obtain maximum satisfaction.

According to Koontz and Donnell, “Leadership is the ability of a manager to induce subordinates to work with confidence and zeal”.

In essence, thus leadership may be defined in terms of totality of functions by managers as individuals and as a group. Leadership may be defined simply as influence, the art or process of influencing people so that they will strive willingly towards the realization of common goals. The essence of leadership is followership. Thus, leadership process is an interplay of three elements-the leader, the follower and the situation.
11.2 CHARACTERISTICS OF LEADERSHIP

An analysis of the definitions of leadership brings out following characteristics of leadership:

1. Leadership is a personal quality.
2. Leadership presupposes the existence of a group of followers. There can be no leadership without followers.
3. Leadership tries to influence the individuals to behave in a particular way. Successful leaders are able to influence the behaviour, attitudes and beliefs of the followers.
4. Leadership arises out of functioning for a common goal.
5. Leadership is a continuous process of influencing behaviour.
6. Leadership is related to a particular situation at a given point of time under a specific set of circumstances. Thus, leadership style will be different under different circumstances.

Difference between Leadership and Management

Leadership and management are different from each other. Following are the two points of distinction:

1. Leadership is a part of management. Leadership is one of the managerial functions.
2. Management is for the formal and organized groups while leadership can be of completely unorganized, informal groups. Leadership can be formal as well as informal.

Qualities of a Successful Leader

A leader must possess certain exemplary qualities by virtue of which he may be able to lead and guide his subordinates.

From a holistic perspective, the qualities which are necessary for a successful leader can be stated as follows:

1. **Physical energy and stamina** – A leader should have a good personality, charming manners, and ability to work hard. A leader will be successful only when he acts with the group as a member and works hard. A leader can help a business enterprise to achieve its objectives or goals.
2. **Intelligence** – Leaders should have somewhat higher intelligence than the average of their subordinates. They should possess the ability to think scientifically, analyse accurately and interpret clearly and concisely and problems faced by the group.
3. **Vision and foresight** – A leader should exhibit his trait of looking forward. He must have foresight to see and feel the future. He should take into account the happenings which are about to occur in future. This will enable him to maintain his influence over his subordinates.
4. **Initiative** – The main task of a leader is to initiate suitable sequence of actions in proper time. Hence, leaders must possess a strong, crucial motivation to keep accomplishing something.
5. **Self-confidence** – Self-confidence is essential to motivate the subordinates and boost up their morale. He should have confidence in himself whenever he takes any decision or initiates any cause of action. For this a leader should have conceptual clarity about the things, he is going to do. A confused leader may cause damage to the group or organization.
6. **Open mindedness or Flexibility** – A leader should be flexible or open-minded, i.e., he should be ready to absorb new ideas as may be demanded by the situation. He should be prepared to accommodate other’s view points and alter his decision, if need be.
7. **Sense of Responsibility** – A leader should be prepared to shoulder the responsibility for the consequences of any steps he contemplates or takes. He should be aware of the duties and obligations associated with the position held by him.
Human relations – A leader should possess the human relations attitude. He should be able to deal with people and secure their willing cooperation. He should try to develop social understanding with the people. He should try to achieve the voluntary cooperation of the subordinates.

Leadership Styles

On the basis of how leaders use their power, leadership styles can be classified into three broad categories -autocratic, participative and free-rein.

Autocratic or Authoritarian Leadership

An autocratic leader exercises complete control over the subordinates. He centralizes power in himself and takes all decisions without consulting the subordinates. He dominates and drives his group through coercion and command. He loves power and never delegates authority. The leader gives orders and expects the subordinates to follow them ungrudgingly and unquestioningly. He uses rewards and holds threat of penalties to direct the subordinates.

Advantages

(i) Autocratic leadership style permits quick decision making.
(ii) It provides strong motivation and satisfaction to the leader who dictates terms.
(iii) Less competent subordinates are needed at lower levels.
(iv) The style may yield positive results when promptness is required.

Disadvantages

(i) Autocratic style leads to frustration, low morale and conflict among subordinates.
(ii) Subordinates tend to shirk responsibility and initiative.
(iii) Full potential of subordinates and their creative ideas are not utilized.
(iv) Organisational continuity is threatened in the absence of the leader because a subordinate gets no opportunity for development.

Autocratic leadership style may be appropriate when subordinates are uneducated, unskilled and submissive. Lack of knowledge and experience on the part of subordinates make it necessary that the leader takes decisions himself. This style may also be desirable when the company endorses fear and punishment as accepted disciplinary techniques. When a leader prefers to be dominant in decision-making and there is little room for error in final accomplishment, autocratic leadership may enhance morale and improve productivity.

Democratic or Participative Leadership

A consultative or democratic leader takes decisions in consultation and participation with the subordinates. He decentralizes authority and allows the subordinates to share his power. The leader does what the group wants and follows the majority opinion. He keeps the followers informed about matters affecting them. A democratic leader provides freedom of thinking and expression. He listens to the suggestions, grievances and opinions of the subordinates.

Advantages

(i) Consultative leadership improves the job satisfaction and morale of subordinates.
(ii) It cultivates the decision-making ability of subordinates.
(iii) The leader multiplies his abilities through the contribution of his followers.
(iv) It develops positive attitudes of the leader and reduces resistance to change.
Leadership and Motivation

Advantages

(v) The quality of decisions is improved.
(vi) Labour absenteeism and labour turnover is reduced.

Disadvantages

(i) Democratic style is time-consuming and may result in delays in decision-making.
(ii) It may not yield positive results when subordinates prefer minimum interaction with the leader.
(iii) Over a period of time subordinates may develop the habit of expecting to be consulted.
(iv) Consultation may be interpreted as a sign of incompetence on the part of the leader to deal with problems.
(v) It may be used as a means of passing the buck to others and abdicating responsibility.
(vi) It requires considerable communicating and persuasive skills on the part of the leader.

Participative leadership is considered to be more effective than autocratic style though there is no empirical-proof for this. Consultative style is more compatible with the prevailing value system which favours freedom of expression and independent thinking. The choice of leadership style depends upon the immediate goal and on the subordinates. If the immediate goal is increase in productivity or subordinates have low need for independence, autocratic style may be preferable. But when the goal is job satisfaction and employees have a high need for independence, consultative style may be more effective. Consultative style is also appropriate where subordinates have accepted the goals of the organisation and the leader really wants to share decision-making with the subordinates.

Free-rein or Laissez-fair Leadership

Free-rein leadership involves complete delegation of authority so that subordinates themselves take decisions. The free rein leader avoids power and relinquishes the leadership position. He serves only as a contact to bring the information and resources needed by the subordinates.

Advantages

(i) Positive effect on job satisfaction and morale of subordinates.
(ii) Maximum possible scope for development of subordinates,
(iii) Full utilization of the potential of subordinates.
Disadvantages

(i) Subordinates do not get the guidance and support of the leader.

(ii) It ignores the leaders’ contribution just as autocratic style ignores the contribution of the subordinates.

(iii) Subordinates may move in different directions and may work at cross purposes which may degenerate into chaos.

Free rein style may be appropriate when the subordinates are well trained, highly knowledgeable; self motivated and ready to assume responsibility.

Leadership Continuum

Tannenbaum and Schmidt have developed the concept of leadership continuum to highlight the range of possible leadership styles. At the left end of the continuum there is ‘boss centered’ (autocratic) leadership style while at the right end is the ‘subordinate centered’ (free-rein) - style. As one move from the left extreme to the right extreme, the degree of control goes down and the freedom of subordinates goes up.

1. Manager makes decision and announces it. It is an extreme form of autocratic leadership whereby the boss takes the decision and asks the subordinates to implement it.

2. Manager sells the decision. In this style the boss alone takes the decision and persuades the subordinates to accept it.

3. Manager presents ideas and invites questions. This style involves greater involvement of subordinates. The boss arrives at the decision and asks subordinates to express their views on it.

4. Manager presents tentative decision subject to change. Herein the boss takes a tentative decision and modifies it in the light of views expressed by the subordinates.

5. Manager presents problems, gets suggestions and takes decision. In this case the boss takes the decision after hearing the suggestions from subordinates.

6. Manager defines the limits and asks the group to make decision. Under this style of leadership the boss gives the freedom to subordinates to take decision subject to predetermined limits.

7. Manager permits subordinates to function within the limits defined by him. This style involves full participation of subordinates. The boss defines overall limits. Subordinates are free to decide and act within these limits.

The continuum approach to leadership provides a wide range of leader behaviors. It identifies the behavioral alternatives available to a manager and highlights the dynamic nature of leadership. It also suggests that the leadership style should be adapted to the requirements of the particular situation. While choosing the appropriate style, a manager should consider the following factors –

1. **Forces in the manager** - Manager’s value system, his confidence in the subordinates, his leadership inclinations and his tolerance of ambiguity.

2. **Forces in the subordinates** - Subordinates’ need for independence, their tolerance for ambiguity, their willingness to assume responsibility for decision making, their interest in and understanding of problems, their understanding of and identification with organisational goals their experience with and expectations of leadership.

3. **Forces in the situation** - Type of organisation, nature of problems, group effectiveness, time pressure, etc.

Likert’s System of Management

Rensis Likert and his associates of the University of Michigan, U.S.A. conducted an extensive survey of management style and patterns in large number of organizations. Likert developed a continuum of four
system of management. These systems indicate the stages of evolution in the patterns of management in organisations. These are based on several variables namely leadership, motivation, communication, interaction, influence, decision-making process, goal-setting and control process. A brief description of the Likert’s four management systems is given below -

**System 1 - Exploitative Autocratic**– The managers under this system make all work-related decisions and order their subordinates to carry out the decisions. The managers also define standards and methods of performance. The subordinates have absolutely no say in the decision-making process. The communication between the manager and his subordinates is highly formal in nature and downward in direction. Such managers believe in threats and punishments to get things done. They exercise strict supervision and control over the subordinates.

**System 2 - Benevolent Autocratic**– System 2 managers are also autocratic but they are not exploitative. They adopt a paternalistic approach towards the subordinates. They allow some freedom to subordinates to carry out their tasks within the prescribed limits. The managers adopt patronizing attitudes towards the obedient and faithful subordinates. They are rewarded for accomplishment of goals. But the subordinates who do not do their tasks are treated harshly. Thus carrot and stick approach to motivation is adopted under this system.

**System 3 - Consultative**– Managers under this system set goals and issue orders after discussing them with the subordinates. They take major decisions themselves and allow subordinates to take the routine decisions. Subordinates are free to discuss the work-related matters with the managers. Thus there is two-way communication in the organisation. Managers’ trust subordinates to carry out their tasks. Greater emphasis is placed on rewards than on penalties to motivate the subordinates. The control system tends to be goal-oriented and flexible.

**System 4 - Democratic**– Under this system, goals are set and work-related decisions are taken by the subordinates. Supervision and control are group-oriented. Managers are friendly and supportive in their attitudes towards the subordinates. Subordinates are permitted self-appraisal on the basis of mutually set goals. In addition to economic rewards, subordinates are given a sense of purpose and feeling of worth. The communication system is completely open. Likert suggested that System 4 is the ideal system towards which organizations should Work.

**Contingency Approach to Leadership**

It is clear from the foregoing description that leadership is a product of many forces that act and interact simultaneously. Every manager must achieve some degree of integration of these varying and complex forces otherwise a void in his leadership may arise. An integrated model of leadership has been proposed by George Terry.

Leadership consists of four main variables:

1. **The leader.** Leader’s personal values (deep beliefs and convictions) shape his perceptions and behaviour. Leader’s confidence in the group members, extent of power sharing and general circumstances the leader prefers are important characteristics. Leader’s awareness of self is also significant.

2. **The followers.** The forces within the followers include identification with the leader’s objectives, interest and involvement in solving problems, knowledge and experience, need for independence, etc.

3. **The organisation.** Nature and type of organisation exercise significant influence on leadership. When the degree of interdependence between specialised units is high, lateral relationships are essential for coordination. This is because the followers tend to centre their attention in their own work and do not see the impact of their actions on others. Similarly, technology governs the degree to which the task is structured. In case of highly structured tasks, the leader has more
influence because, employees’ work behaviour is specified and major decisions are centralised. Standard operating instructions and detailed manuals are provided and little is left for the group members to decide. When the task is uncertain a permissive and passive leadership tends to be more effective because exact make-up of work is unknown.

4. **The environment.** Leadership should be in harmony with the external environment. Social values, economic and political conditions, etc., bring about changes that lead to a redefinition of acceptable and effective leadership.

**Leadership Effectiveness**

In business enterprises, managers at various levels, assume the role of leadership in relation to their subordinates for getting the right things done in a proper manner to achieve a certain set of goals. The effectiveness of managers as leaders is critical to organisational survival and success. Hence there is a high premium on leadership effectiveness in business enterprises.

There are at least three major views on the determinants of leadership effectiveness. One view is that effectiveness is a function of the personal qualities or traits of the individuals who assume the role of leadership.

The second view is that leadership effectiveness is a matter of what leaders do and how they behave. This is known as the behavioural approach. The two most important dimensions of the behaviour of leaders are productivity orientation and employee satisfaction orientation.

The third view is that leadership effectiveness is a function of interaction among at least three variables: the leader, the group of followers and the tasks situations. This is known as the situational or contingency approach to leadership as discussed earlier.

On a careful examination of the above discussed three views on the determinants of leadership effectiveness, we may make the following observations:

(a) Effective leadership requires certain basic qualities among persons who assume the role of leaders. These are necessary but not sufficient.

(b) There is no ideal leadership style or behaviour generally applicable for all situations. Leadership effectiveness can be secured or enhanced by tailoring the style to the demands of each situation.

(c) The important situational factors which exert considerable influence on leadership effectiveness are: task complexities, the skills and attitudes of the group of followers, their relations with the leader and the position power of the leader himself.

**Measures for Developing Leadership Ability of Managers**

It is at once necessary and possible for managers to develop and improve their leadership abilities. It is necessary because managers have to get things done through their subordinates. They will be able to get things done effectively if they have leadership ability. It is possible because they are several means and techniques of acquiring leadership abilities. Also, leadership abilities are not totally inborn or genetic. They can be acquired and learnt by training and by other means. The measures for developing leadership ability of managers are explained as follows:

(a) **Leadership training:** Training programmes are offered to expose managers to several leadership situations and teach them how to tackle them. The situations are partly simulated and partly real. The trainers create the situations wherein the managers undergoing leadership training are provided opportunities to diagnose problems, think of ways and means of tackling them which partly involve testing of various styles of leadership against realities. Leadership training gives insights and experiences of managers on appropriate attitudes and behaviour which they have to adopt in tackling diverse situations, on how to gain initiative and command over a situation how
to inspire and motivate people, that measures are necessary to inject discipline, cohesiveness and team work ethic in the group, and so on. The managers under training are to be given immediate feedback on their leadership performance.

(b) **Internal organisational exposure**: Another measure to develop the leadership ability of managers is to expose them within the organisation itself to critical situations calling for application of leadership abilities. Managers may be put in charge of committees assigned with the task of project implementation, coordination and control. Managers may also be placed in situations concerning people’s problems - for example, how to improve the lowered morale of a work group, how to resolve internal conflict, how to induce a sense of involvement of work groups in the organisation and so on.

(c) **Autonomy and accountability**: Managers may be able to sharpen their leadership abilities under conditions of relative freedom. They should be allowed a large amount of freedom to evolve their own methods of tackling situations calling for critical leadership abilities. At the same time they should be provided with the required organisational support in the form of authority (position power), status, and top management support and so on. They should be given adequate discretion dispensing rewards and penalties to their subordinates, within the framework of certain norms and rules.

(d) **Opportunities for interaction**: Managers should also have opportunities to interact with their subordinates in a more intense and continuous manner. This is partly a matter of availability to time. Many managers get themselves so extremely busy with their own work that they find little time to talk or listen to their subordinates, to guide them, to understand their viewpoints, to be supportive to them and to develop them.

11.3 **MOTIVATION**

**Meaning & Nature:**

The term ‘motivation’ has been derived from the word ‘motive’. Motive means the urge to do something. Motivation may be defined as the process of inducing or inspiring people to take the desired course of action.

According to Stephen Robbins, “Motivation is the willingness to exert high levels of effort towards organisational goals, conditioned by the efforts ability to satisfy some individual needs.”

The process of motivation begins with the awareness of a need. Feeling of an unsatisfied need causes tension. A person takes some action to satisfy his need. If the action succeeds to satisfy the need, the person feels motivated. In case the action fails, the person takes a different action. When the present need is satisfied, a new need arises and the process is repeated.
Thus, motivation involves interaction between needs and incentives. Incentives are the inducements which are used to motivate people. An incentive has motivational power because it helps to satisfy some need. Several financial and non-financial incentives are used to motivate people.

On the basis of the above description, the following characteristics of motivation can be identified:

1. **Motivation is a psychological concept**—It is based on human needs which generate within an individual. Needs are feelings in the mind of a person that he lacks certain things. Such feelings influence the behaviour and activities of the individual.

2. **Motivation is total, not piece-meal**. A person cannot be motivated in parts. An employee is an indivisible unit and his needs are interrelated. He cannot be motivated by fulfilling some of his needs partly.

3. **Motivation is a continuous process**—It is not a time bound programme or a touch-and-go affair. Human needs are infinite. As soon as one need is satisfied new ones arise. In the words of McGregor, “man is a wanting animal, as soon as one of his needs is satisfied another appears in its place. This process is unending.” Satisfaction of one need gives feeling of another and the process continues.

4. **Motivation causes goal-directed behaviour**—A person behaves in such a way that he can satisfy his goals or needs. A person will work so long as he feels his actions are fulfilling his strongly felt needs. He will not pursue the activity and will lose interest in his work if he feels that it is not satisfying his needs.

5. **Motivation may be financial or non-financial**—The form of motivation depends upon the type of needs. Financial incentives include pay, allowances, bonus and perquisites. Non-financial incentives consist of recognition, praise, responsibility, participation in decision-making, challenging job, etc.

6. **Motivation is a complex process**—There is no universal theory or approach to motivation. Moreover, individuals differ in what motivates them. Therefore, a manager has to analyse and understand a variety of needs and has to use a variety of rewards to satisfy them. He should not expect overnight results.

**Importance of Motivation**

Motivation is one of the most crucial factors that determine the efficiency and effectiveness of an individual in organisation. All organisational facilities will remain useless unless people are motivated to utilise these facilities in a productive manner. Motivation is an integral part of management process and every manager must motivate his subordinates to create in them the will to work. High motivation provides the following advantages:

1. **Higher efficiency**—Motivation is an effective instrument in the hands of management to maximize efficiency of operations. A worker may be very competent but no activity can take place until the individual is willing to perform that activity. What employees do depends largely on how much and why they want to do. Motivated employees give greater performance than demotivated ones.

2. **Optimum utilisation of resources**—Motivation inspires employees to make best possible use of different factors of production. They work wholeheartedly to apply their abilities and potential in minimizing waste and cost. The enterprise can make maximum use of its physical and financial resources.

3. **Reduction in labour turnover**—High motivation leads to job satisfaction of workers. Opportunities for need satisfaction make employees loyal and committed to the organisation. As a result labour absenteeism and turnover are low.

4. **Better industrial relations**—Increased labour productivity in turn results in higher wages for employees. Motivational schemes create integration of individual interests with organizational objectives. There arises a sense of belonging and mutual co-operation at all levels. Motivation will foster team spirit among workers. This will reduce labour unrest and create better relations between management and workers.
6. **Easier selection**—An enterprise that offers abundant financial and non-financial incentives enjoys reputation in the labour market. Therefore, it can easily attract competent persons for filling various vacancies.

7. **Facilitates change**—High motivation helps to reduce resistance to change. An organisation has to incorporate changes to cope with environmental changes. Properly motivated employees accept, introduce and implement these changes keeping the organisation effective.

**Theories of Motivation**

There are several theories of motivation. Some are called content theories and others are called process theories. These theories can be summed up as under:

1. Maslow’s need hierarchy theory
2. Herzberg’s two-factor theory
3. Theory X and Theory Y by McGregor
4. Alderfer’s ERG (Existence, Relatedness and Growth) theory
5. Achievement motivation model by McClelland
6. J. Stacy Adam’s Equity Theory
7. Victor Vroom’s Expectancy Theory

Only the first three theories have been discussed since they are the most important ones:

**McGregor’s Model**

Prof. Douglas McGregor has developed a theory of motivation on the basis of hypotheses relating to human behavior. According to McGregor, the function of motivating people involves certain assumptions about human nature. There are two alternative sets of assumptions which McGregor has described as Theory X and Theory Y.

**Theory X**—Theory X of motivation is based on the following assumptions:

1. The average individual is by nature indolent and will avoid work if he can.
2. The average person lacks ambition, dislikes responsibility, and prefers to be led.
3. An average human being is inherently self-centred, and indifferent to organisational goals.
4. Most people are by nature resistant to change and want security above all.
5. The average individual is gullible, not very bright, the ready victim of the schemer.

On the basis of these assumptions, the conventional view of management puts forward the following propositions:

1. Management is responsible for organising the elements of productive enterprise—money, materials, equipment, people—in the interest of economic gain.
2. With respect to people, management involves directing their efforts, motivating them, controlling their actions and modifying their behaviour to fit the needs of the organisation.
3. Without active intervention by management, people would be passive—even resistant to organizational needs. They must, therefore, be persuaded, rewarded, punished and controlled.

The above assumptions are negative in nature. Therefore, Theory X is a conventional or traditional approach to motivation. External control is considered appropriate for dealing with unreliable, irresponsible and immature people. According to McGregor, an organisation built upon Theory ‘X’ notions will be one in which there is close supervision and control of subordinates and high centralization of authority. Leadership in such an organisation will tend to be autocratic, and workers will have
very little (if any) say in decisions affecting them. The climate in a Theory X organisation would be impersonal—this theory implies use of ‘carrot and stick approach’.

**Theory Y** – Theory X is based on a faulty conception of human nature. McGregor recognised certain needs that Theory X fails to take into account. These relate to self-fulfilment, ego satisfaction and the social needs of individual workers. To meet these human needs in business, McGregor suggested a counter approach to management which he called Theory Y. The theory proposes that:

1. Management is responsible for organising the elements of productive enterprise in the interest of economic and social ends.
2. People are not by nature passive or resistant to organisational needs. They become so as a result of experience.
3. Motivation, potential for development, capacity for assuming responsibility and readiness to direct behaviour toward organisational goals are present in people, management does not put them there. It is the responsibility of management to make it possible for people to recognise and develop these characteristics for themselves.
4. The essential task of management is to arrange organisational conditions and methods of operations so that people can achieve their own goals best by directing their own efforts towards organisational goals.

Theory Y is based upon the following assumptions:

1. The expenditure of physical and mental effort is as natural as play and rest. The average human being has no inherent dislike for work. Work, if meaningful, should be a source of satisfaction and it can be voluntarily performed.
2. Man will exercise self-control and self-direction in the service of objectives to which he is committed. External control or threat of punishment is not the only means of motivating people to work and achieve organisational goals.
3. Commitment to objectives is a result of the rewards associated with their achievement. The most significant of such rewards, e.g., the satisfaction of ego and self-development needs, can be the direct result of effort directed towards the organisational objectives. Once the people have selected their goal, they will pursue it even without close supervision and control.
4. The average human being, under proper conditions, does not shun responsibility. He is ready not only to accept responsibility but also to seek it. Avoidance of responsibility, lack of ambition, etc., are consequences of experience rather than being inherent in human nature.
5. The capacity to exercise a relatively high degree of imagination, ingenuity and creativity in the solution of organisational problems is widely, not narrowly, distributed in the population.
6. Under conditions of modern industrial life, the intellectual potentialities of people are only partially utilised. In reality, people have unlimited potential.

**Comparison between Theory X and Theory Y:**

<table>
<thead>
<tr>
<th>Theory X</th>
<th>Theory Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Inherent dislike for work</td>
<td>Work is natural like rest or play.</td>
</tr>
<tr>
<td>2. Unambition and prefer to be directed by others</td>
<td>Ambition and capable of directing their others own behaviour.</td>
</tr>
<tr>
<td>3. Avoid responsibility</td>
<td>Accept and seek responsibility under proper conditions.</td>
</tr>
<tr>
<td>4. Lack creativity and resist change</td>
<td>Creativity widely spread.</td>
</tr>
<tr>
<td>5. Focus on lower level (Physiological and safety)</td>
<td>Both lower level and higher order needs need to motivate workers like social; esteem and selfactualisation are sources of motivation.</td>
</tr>
</tbody>
</table>
Leadership and Motivation

6. External control and close supervision required to achieve organisational objectives. | Self-direction and self-control.
---|---
7. Centralisation of authority and autocratic leadership | Decentralisation and participation in leadership decision-making. Democratic leadership.
8. People lack self-motivation | People are self-motivated.

Theory Y represents a modern and dynamic nature of human beings. It is based on assumptions which are nearer to reality. An organisation designed on the basis of Theory Y is characterised by decentralisation of authority, job enrichment, participative leadership and two-way communication system. The focus is on self-control and responsible jobs. Theory X places exclusive reliance on external control of human behaviour while Theory Y relies on self-control and self-regulation. “This difference is the difference between treating people as children and treating them as mature adults. After generations of the former we cannot expect to shift to the latter overnight.”

McGregor’s theory of motivation is simple. It helps to crystallize and put into right perspective the findings of the Hawthorne Experiments. It has generated wide ranging and lasting interest in the field of motivation. This theory offers a convenient framework for analysing the relationship between motivation and leadership style.

Despite its significance, McGregor’s theory has been criticised for various reasons.

- First, it tends to over-generalise and over-simplify people as being one way or the other. People cannot be put into two extreme patterns or stereotypes.
- Secondly, McGregor’s theory squeezes all managerial styles and philosophies into two extremes of conduct which is devoid of reality.
- Thirdly, McGregor suggests tacitly that job itself is the key to motivation. But all persons do not look for motivation in the job and not all work can be made intrinsically challenging and rewarding.
- Lastly, some managers may have Theory Y assumptions about human nature, but they may find it necessary to behave in a very directive and controlling manner with some people in the short run to help them grow up in a developmental sense until they are truly Y people.

A question often posed is which theory (X or Y) is better. Most people believe that Theory Y is more desirable and productive. But it may not be the best approach for all situations. Theory X might be more suitable in some crisis situations but less appropriate in more routine and formalised situations: In some under-developed countries like India Theory X may still be useful at the lower levels of organisation.

**Maslow’s Model**

Abraham H. Maslow, an eminent American psychologist, developed a general theory of motivation, known as the ‘Need hierarchy theory’. The salient features of this theory are as follows:

(i) The urge to fulfill needs is a prime factor in motivation of people at work. Human beings strive to fulfill a wide range of needs. Human needs are multiple, complex and interrelated.

(ii) Human needs form a particular structure or hierarchy. Physiological needs are at the base of the hierarchy while self-actualisation needs are at the apex. Safety (security) needs, social needs and esteem (ego) needs are positioned in between. As one proceeds from base towards apex, needs become less essential.

(iii) Lower-level-needs must at least partially be satisfied before higher-level needs emerge. In other words, a higher-level need does not become an active motivating force until the preceding lower-order needs are satisfied. Human beings strive to gratify their needs in a sequential manner starting from the base of the hierarchy. All needs are not felt at the same time.
(iv) As soon as one need is satisfied, another need emerges. This process of need satisfaction continues from birth to death. Man is a wanting animal.

(v) A satisfied need is not a motivator, i.e., it ceases to influence human behaviour. It is the unsatisfied needs which regulate an individual’s behaviour.

(vi) Various need levels are inter-dependent and overlapping. Each higher level need emerges before the lower level need is completely satisfied.

1. Physiological needs– These are biological needs required to preserve human life. Therefore, these needs are also known as survival needs. They include needs for food, drink, air, sleep, etc. These needs must be satisfied first of all and, therefore, they are a powerful motivating force when thwarted. ‘Man lives by bread alone’ when there is no bread. Physiological needs must be satisfied repeatedly but they are essentially finite. For example, an individual requires a limited amount of food but he requires it every day.

2. Safety needs– Once physiological needs are reasonably satisfied; a person wants protection from physical dangers and economic security. Safety needs are thus concerned with protection from danger, deprivation and threat. These needs are finite but they may serve as motivators in case of arbitrary and unpredictable management actions. Such actions create uncertainty and people seek job security. Organisations can influence these needs through pension schemes, insurance plans, fear of dismissal, etc.

3. Social needs– Man is a social animal as he seeks affiliation (association) with others. Social needs refer to need for belonging, need for acceptance, need for love and affection, etc. Such needs are infinite as they are considered as secondary needs because they are not essential to preserve human life. They represent needs of the mind and spirit rather than of the physical body. Organisations can influence these needs through supervision, communication system, work groups, etc.

Abraham Maslow’s Need Hierarchy Theory

Adopted from: “Maslow’s Hierarchy: Applications for the Workplace”
4. **Esteem needs**— Esteem needs are of two types: self-esteem and esteem of others. Self-esteem needs include self-respect, self-confidence, competence, achievement, knowledge and independence. Esteem of others includes reputation, status, and recognition. These needs are infinite and thwarting them results in feelings of inferiority, weaknesses and helplessness.

5. **Self-actualization needs**— These are the needs for realising one’s full potential, for continued self-development, for being creative. It is the desire of becoming what one is capable of becoming. It is an infinite and growth need. It is psychological in nature and very few persons satisfy it. The conditions of modern industrial life provide limited opportunity for the satisfaction of selfactualisation?

**Evaluation:** Need hierarchy represents a typical pattern that operates most of the time. It must not be viewed as a rigid structure to be applied in all situations.

Maslow’s need priority model of motivation has gained extensive popularity because it is simple and logical. It is compatible with the economic theory of demand. The theory helps to explain why a person behaves differently in two similar situations. It provides an insight into what is common to all. It extends to all areas of human life and is not limited to work situation alone. But there is little empirical support for it because its propositions could not be vigorously tested through empirical research. The theory could not be validated but it is said to contain some fundamental truths which do not require any proof. However, the theory is widely criticised for the following reasons:

(i) Needs are not the only determinant of behaviour. People seek objects and engage in behaviour that is in no way connected with the gratification of needs. There are other motivating factors like perceptions, expectations, experiences, etc.

(ii) The theory gives an over simplification of human needs and motivation. Need recognition and fulfillment do not always follow the specific sequence of hierarchy suggested by Maslow. Need classification is somewhat artificial and arbitrary as human needs cannot be classified into neat watertight compartments. Therefore, the theory may not have universal validity.

(iii) The hierarchy of needs is not always fixed. Different people may have different orders. For example, in case of creative people like singers, painters, etc., self-actualisation need may become a dominant motivating force even before the lower order needs are satisfied. Similarly, the need priorities of the same individual may change over time. As a result, a manager cannot keep up with a continuously revolving set of needs. Thus, Maslow’s model presents a somewhat static picture of need structure. The theory does not recognise individual differences. Individuals differ in the relative intensity of their different needs.

(iv) Maslow’s theory is based on a relatively small sample. It is a clinically derived theory and its unit of analysis is the individual. That is why Maslow presented his model with apologies to those who insisted on conventional reliability, validity, sampling, etc.

(v) There is no definite evidence that once a need is satisfied it loses its motivating force. It is also doubtful that satisfaction of one need automatically activates the next need in the hierarchy. Some persons will not aspire after their lower-order needs have been satisfied. Human behaviour is the outcome of several needs acting simultaneously.

The same need may not lead to the same response in all individuals. Similarly, one particular behavior may be the result of different needs. There is lack of direct cause and effect relationship between need and behaviour.

Despite these limitations, Maslow’s theory has a common sense appeal for managers. It is still relevant because needs are important for understanding behaviour. The theory provides a convenient conceptual framework for the study of motivation. It helps to explain inter-personal and intra-personal differences in human behaviour.

**Herzberg’s Model**

In the late fifties, Frederick Herzberg and his associates conducted interviews of 200 engineers and accountants in the Pittsburgh area of the United States. These persons were asked to relate elements of their jobs which made them happy or unhappy. An analysis of their answers re-veiled that feelings of unhappiness or dissatisfaction were related to the environment in which people were working. On the contrary, feelings of happiness or satisfaction were related to their jobs.
According to Herzberg, maintenance or hygiene factors are necessary to maintain a reasonable level of satisfaction among employees. These factors do not provide satisfaction to the employees but their absence will dissatisfy them. Therefore, these factors are called dissatisfiers. These are not intrinsic parts of a job but they are related to conditions under which a job is performed. They are environmental factors (extrinsic to the job) and are given in the following table:

<table>
<thead>
<tr>
<th>Maintenance Factors</th>
<th>Motivating Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Policy and Administration</td>
<td>Achievement</td>
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<tr>
<td>Technical Supervision</td>
<td>Recognition</td>
</tr>
<tr>
<td>Inter-personal relationship with peers</td>
<td>Advancement</td>
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<td>Inter-relationship with supervisors</td>
<td>Opportunity for growth</td>
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<tr>
<td>Inter-relationship with subordinates</td>
<td>Responsibility</td>
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<td>Salary</td>
<td>Work itself</td>
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<td>Job Security</td>
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<td>Working conditions status</td>
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</table>

On the other hand, motivational factors are intrinsic parts of the job. Any increase in these factors will satisfy the employees and help to improve performance. But a decrease in these factors will not cause dissatisfaction.

Herzberg noted that the two sets of factors are unidimensional, i.e. their effect can be seen in one direction only. He admitted that the potency of any of the job factors is not solely a function of the nature of the factor itself. It is also related to the personality of the individual who may be either a ‘motivation seeker’ or a ‘maintenance seeker’. A motivation seeker is motivated primarily by the nature of the task and has high tolerance for poor environmental factors. On the other hand, maintenance seeker is motivated primarily by the nature of his environment and tends to avoid motivation opportunities. He is dissatisfied with maintenance factors surrounding the job. He shows little interest in the kind and quality of work.

Herzberg’s theory has received a great deal of attention and it has become popular among managers. One striking conclusion of Herzberg’s theory is that one cannot achieve higher performance simply by improving wages and working conditions. The conclusion should be an eye opener to managers who go on improving wages and fringe benefits with the hope of improving efficiency.

Herzberg stressed upon the job as an intrinsic motivating factor. The key to job satisfaction and high performance lies in job enrichment. Herzberg’s two factor theory has made a significant contribution towards improving manager’s basic understanding of human behaviour. His theory is simple and based on empirical data. It offers specific actions for managers to improve motivation and performance. This theory has exercised tremendous impact in stimulating thought, research and experimentation in the area of work motivation.

Traditionally, job satisfaction and dissatisfaction were viewed as opposite ends of a single continuum. Herzberg’s findings indicate that dissatisfaction is not simply the opposite of satisfaction or motivation. Satisfaction and dissatisfaction are independent rather than opposite ends of the same continuum.
Criticisms of the theory – Herzberg’s theory has been criticised on the following grounds:

(i) The theory is based on a small sample of 200 accountants and engineers which is not representative of the work force in general. Other researchers have drawn different results from similar studies. The theory is most applicable to knowledge workers. Studies of manual workers are less supportive of the theory. Therefore, the theory is not universally applicable.

(ii) Herzberg’s model is method bound and is limited by the critical incident method used to obtain information. When satisfied people attribute the causes of their feelings to themselves. When they are dissatisfied they attribute their failures to outside forces. People tend to tell the interviewer what he would like to hear rather than what they really feel. The interview method used by Herzberg suffers from bias. The approach is highly subjective. Therefore, the empirical validity of the theory is doubtful.

(iii) The theory focuses too much attention on satisfaction rather than on performance level. There is no direct link between satisfaction, motivation and performance. Therefore, Herzberg’s two factor theory is an oversimplified presentation of the process of motivation.

(iv) The distinction between maintenance factors and motivating factors is not fixed. The same factor may be motivating for some people and maintenance factor for other people.

Comparison of Maslow and Herzberg Theories – Herzberg’s theory is an extension of Maslow’s need priority model. The two models are basically compatible or complementary. There is a close similarity between survival needs (physiological, safety and social needs and dissatisfaction) and dissatisfiers on the one hand and between growth needs (esteem and self-actualization needs) and satisfiers on the others.

Both Maslow and Herzberg models tend to over-simplify the motivational process. Maslow’s model is formulated in terms of human needs while Herzberg’s model is in terms of rewards or goals. Herzberg has attempted to refine and reinforce on the need priority model and has thrown a new light on the content of work motivation.

The two models show marked similarities as shown below:-

Answer the following
1. What is meant by Motivation? Explain the characteristics of Motivation.
2. Explain the importance of Motivation.
3. Write about Mc Gregor theory of Motivation.
5. Explain Herzberg’s Two Factory of Motivation.
6. Define Leadership and explain the characteristics of Leadership.
7. Explain the qualities of a Successful Leader.
8. Explain the difference between Leadership and Management.
9. Explain the different types of Leadership Styles.
10. Write about Leadership Continuum.
11. Explain about the Likert’s System of Management.
12. What are the measures to be taken for developing leadership ability of managers?

**Fill in the blanks:**
1. The term ‘motivation’ has been derived from the word ______
2. Motive means the urge to do ______
3. Motivation is a ______ Concept.
4. Motivation is a ______ Process.
5. ERG stands for ______
6. ______ has developed a theory of motivation on the basis of hypotheses relating to human behavior.
7. Theory ______ is based on a faulty conception of human nature.
8. ________ an eminent American Psychologist developed a General Theory of Motivation.
9. Esteem needs are of two types: self-esteem and ______
10. Frederick Herzberg and his associates conducted interviews of ________ engineers and accountants in the Pittsburgh area of the United States.

**Multiple Choice Questions**
1. The art of influencing others to direct their will, abilities and efforts to the achievement of goals is
   (a) Directing (b) Motivation (c) Leadership (d) Staffing
2. “Leadership is the ability of a manager to induce subordinates to work with confidence and zeal”–
   (a) Haimann (b) Koontz and O’Donnell
   (c) Davis (d) Rensis Likert
3. There can be no Leadership without
   (a) Managers (b) Subordinates (c) Followers (d) Superiors
4. Leadership process is interplay of three elements:
   (a) The Leader, the follower and the situation.
   (b) The Leader, the followers and the subordinates.
   (c) The Leader, the followers and the superiors.
   (d) None of the above
5. Leadership is a part of ______
   (a) Organisation  (b) Management
   (c) Both (a) and (b) (d) None of the above

6. Which one is not the quality of a successful leader?
   (a) Vision and foresight  (b) Human relations
   (c) Physical energy & Stamina (d) None of the above

7. Autocratic Leadership is also known as
   (a) Authoritarian Leadership (b) Democratic Leadership
   (c) Free-rein Leadership (d) None of the above

8. The leader who exercises complete control over the subordinates is
   (a) Authoritarian Leadership (b) Democratic Leadership
   (c) Free-rein Leadership (d) None of the above

9. Which leadership style permits quick decision making?
   (a) Democratic Style (b) Laissez – Fair Leadership
   (c) Authoritarian Leadership (d) None of the above

10. Which style leads to frustration, low morale and conflict among subordinates?
    (a) Democratic Leadership (b) Authoritarian Leadership
    (c) Laissez Fair Leadership (d) None of the above

11. Democratic Leadership is also known as
    (a) Authoritarian Leadership (b) Free-rein Leadership
    (c) Laissez Fair Leadership (d) Participative Leadership

12. _____ Style may be appropriate when the subordinates are well trained, highly knowledgeable, self-motivated-
    (a) Autocratic Style (b) Free-rein Style
    (c) Participative Style (d) All of the above

13. Leadership Continuum was developed by
    (a) Prof. Bernard (b) Prof. Terry
    (c) Tannenbaum and Schmidt (d) Stephen Robbins

14. Free-rein Leadership is also known as
    (a) Laissez Fair Leadership (b) Participative Leadership
    (c) Authoritarian Leadership (d) None of the above

15. Who avoids power and relinquishes the leadership position?
    (a) Autocratic Leader (b) Democratic Leader
    (c) Free Rein Leader (d) All of the above

16. Under which Leadership subordinates do not get the guidance and support of the Leader?
    (a) Free-rein Leadership (b) Autocratic Leadership
    (c) Participative Leadership (d) None of the above
17. Which style is appropriate where subordinates have accepted the goals of the organization?
   (a) Free-rein Leadership     (b) Autocratic Leadership
   (c) Participative Leadership  (d) None of the above

18. Labour absenteeism and Labour turnover are reduced in case of
   (a) Autocratic Leadership     (b) Democratic Leadership
   (c) Free-rein Leadership      (d) None of the above

19. Which leader takes decisions in consultation and participation with subordinates?
   (a) Autocratic Leadership     (b) Free-Rein Leadership
   (c) Democratic Leadership     (d) None of the above

20. ____ Leadership Style may be appropriate when subordinates are uneducated, unskilled and submissive.
    (a) Participative Leadership  (b) Autocratic Leadership
    (c) Free-rein Leadership      (d) None of the above

21. Which leader provides freedom of thinking and expression?
    (a) Democratic Leadership     (b) Autocratic Leadership
    (c) Free-rein Leadership      (d) None of the above

22. Rensis Likert and his associates of the University of Michigan, USA conducted an extensive survey on ___ Style.
    (a) Leadership    (b) Management
    (c) Both (a) and (b) (d) Neither (a) nor (b)

23. System 1 managers are
    (a) Exploitative Autocratic  (b) Benevolent Autocratic
    (c) Consultative Autocratic  (d) Democratic

24. System 2 managers are
    (a) Exploitative Autocratic  (b) Benevolent Autocratic
    (c) Consultative Autocratic  (d) Democratic Autocratic

25. System 1 Managers believe in
    (a) Rewards                  (b) Penalties to motivate the subordinates
    (c) Threats and Punishment   (d) All of these

26. According to Likert, which system of management is ideal system?
    (a) System 1     (b) System 2
    (c) System 3     (d) System 4

27. Under which system managers set goals and issue orders after discussing them with the subordinates?
    (a) Exploitative Autocratic  (b) Benevolent Autocratic
    (c) Consultative            (d) Democratic
28. Carrot and Stick approach to motivation is adopted under which system?
   (a) Exploitative Autocratic   (b) Benevolent Autocratic
   (c) Consultative   (d) Democratic

29. In which system, managers exercise strict supervision and control over the subordinates.
   (a) Exploitative Autocratic   (b) Benevolent Autocratic
   (c) Consultative   (d) Democratic

30. The system that adopts a paternalistic approach towards the subordinates is
   (a) Exploitative Autocratic   (b) Benevolent Autocratic
   (c) Consultative   (d) Democratic

31. An integrated model of Leadership has been proposed by:
   (a) Prof. Bernard   (b) George Terry
   (c) FEW Taylor   (d) Henry Fayol

32. Who conducted an extensive survey of management style and patterns in large number of organizations?
   (a) Rensis Likert and his associates   (b) George Terry
   (c) Prof. Bernard   (d) F.W. Taylor

33. ____ developed a continuum of four system of management.
   (a) George Terry   (b) Prof. Bernard
   (c) F.W. Taylor   (d) Rensis Likert

34. The term ‘Motivation’ has been derived from the word.
   (a) Motivate   (b) Motivated
   (c) Motive   (d) None of the above

35. ____ means urge to do something.
   (a) Power   (b) Motive
   (c) Authority   (d) None of the above

36. ____ is the reflection of needs and wants.
   (a) Power   (b) Authority
   (c) Motive   (d) None of the above

37. The process of inducing or inspiring people to take the desired course of action means
   (a) Motivation   (b) Staffing
   (c) Induction   (d) Training

38. The process of motivation begins with
   (a) Fulfillment of Need   (b) Discovery of need
   (c) Awareness of need   (d) Search for action.

39. ____ involves interaction between needs and incentives.
   (a) Motivation   (b) Control
   (c) Co-ordination   (d) None of the above
40. Motivation is a ____ concept.
   (a) Psychological          (b) Mental
   (c) Behavioural           (d) None of the above

41. Which of the following is not a financial incentive?
   (a) Pay             (b) Allowance
   (c) Recognition   (d) Bonus

42. Which of the following are non-financial incentives?
   (a) Participation in decision making  (b) Challenging job
   (c) Recognition  (d) All of the above

43. Is there any Universal Theory or approach to motivation?
   (a) Yes  (b) False (c) Partly True  (d) None of the above

44. High motivation provides
   (a) Optimum utilization of resources.  (b) Better industrial relations.
   (c) Reduction in Labour Turnover   (d) All of the above

45. Who developed a theory of motivation on the basis of hypotheses relating to human behavior?
   (a) Mc. Gregor’s  (b) J. Stacy Adam’s
   (c) Victor Vroom’s (d) Herzberg

46. The theory that implies use of ‘Carrot and Stick’ Approach is
   (a) Theory Y  (b) Theory X
   (c) Maslow’s Need Hierarchy Theory  (d) Herzberg’s Model

47. ____ is based on a faulty conception of human nature.
   (a) Theory X  (b) Theory Y
   (c) Maslow’s Need Hierarchy Theory  (d) Herzberg’s Two Factory Theory

48. Abraham H. Maslow, an eminent American Psychologist, developed a General Theory of Motivation known as
   (a) Theory X and Theory Y  (b) Need Hierarchy Theory
   (c) Herzberg’s Two Factory Theory  (d) J. Stacy Adam’s Equity Theory

49. ____ needs are at the base of the Hierarchy according to Maslow.
   (a) Safety needs  (b) Esteem needs
   (c) Physiological needs  (d) Self-actualisation needs

50. Need Hierarchy Theory is also known as –
   (a) General Theory of Motivation  (b) Victor Vroom’s Expectancy Theory
   (c) Theory X and Theory Y  (d) None of the above

51. Hierarchy of human needs –
   (a) Physiological needs – Security needs – Social needs – Self Actualisation Needs – Esteem needs.
Leadership and Motivation

52. Which needs are required to preserve the human life?
   (a) Safety Needs    (b) Social Needs
   (c) Physiological Needs    (d) Esteem Needs

53. Physiological needs are also known as
   (a) Biological needs    (b) Survival needs
   (c) Either (a) or (b)    (d) None of the above

54. Esteem Needs are classified into two types.
   (a) Self esteem and esteem of others.    (b) Safety and security needs.
   (c) Social needs and Esteem needs.    (d) None of the above

55. The example of Physiological need is
   (a) Pension Scheme    (b) Competence
   (c) Work Groups    (d) None of the above

56. The example of Esteem Need is
   (a) Reputation    (b) Recognition
   (c) Achievement    (d) All of the above

57. Which needs must be satisfied repeatedly?
   (a) Survival needs    (b) Social needs
   (c) Safety needs    (d) All of the above

58. Need for love and affection is __________
   (a) Survival needs    (b) Social needs
   (c) Safety needs    (d) All of the above

59. Which model is compatible with the economic theory of demands?
   (a) Theory X and Theory Y    (b) Alderfer’s ERG Theory
   (c) Herzberg Two Factor Theory    (d) Maslow’s Need Hierarchy Theory

60. Need recognition and fulfillment always follow the specific sequence of hierarchy suggested by Maslow:
   (a) True    (b) False    (c) Partly True    (d) None of the above

61. The hierarchy of needs is not always fixed.
   (a) True    (b) False    (c) Partly True    (d) None of the above

62. Maintenance factors are also known as
   (a) Hygiene Factors    (b) Motivating Factors
   (c) Both (a) and (b)    (d) None of the above
63. Identify the maintenance factors from the below:
   (a) Work itself       (b) Recognition
   (c) Advancement      (d) Salary

64. Identify the motivating factors from the below:
   (a) Achievement      (b) Opportunity for growth
   (c) Responsibility   (d) All of the above

65. Which factors are intrinsic parts of the Job?
   (a) Motivational Factors       (b) Maintenance Factors
   (c) Hygiene Factors           (d) None of the above

66. Maintenance Factors are called dissatisfiers.
   (a) True    (b) False (c) Partly True (d) None of the above

67. Frederick Herzberg and his associates conducted interviews of ____ engineers and accountants in the Pittsburgh area of the United States.
   (a) 600   (b) 200  (c) 20   (d) 2000

68. The distinction between maintenance factors and motivating factors is fixed.
   (a) True    (b) False (c) Partly True (d) None of the above

69. Herzberg’s Theory is an extension of __
   (a) Theory X and Theory Y       (b) Alderfer’s ERG Theory
   (c) Victor Vroom’s Expectancy Theory (d) Maslow’s Need Hierarchy Theory

70. Maslow’s Model is formulated in terms of
   (a) Human needs       (b) Wants
   (c) Rewards           (d) Goals

71. Herzberg’s Model is formulated in terms of
   (a) Human needs       (b) Wants
   (c) Rewards or Goals (d) None of the above

72. Herzberg suggested the use of ___ factors to avoid dissatisfaction.
   (a) Motivating factors (b) Environmental Factors
   (c) Maintenance Factors (d) None of the above

73. Reward Systems can be designed on ____
   (a) Individual basis       (b) Group basis
   (c) Either (a) or (b)       (d) None of the above

74. _____ reward systems can be in the form of piece work, production bonus and performance based commissions.
   (a) Individual       (b) Group
   (c) Either (a) or (b) (d) None of the above
Leadership and Motivation

75. ____ reward systems are generally in the form of gain sharing and profit sharing.
   (a) Individual (b) Group
   (c) Either (a) or (b) (d) None of the above

76. Under a group reward system every member of a group is paid the same reward on the basis of __
   (a) Individual performance (b) Group performance
   (c) Individual (or) Group performance (d) None of the above

77. Which of the following is not a maintenance factor?
   (a) Achievement (b) Responsibility
   (c) Advancement (d) All of the above

78. Which one is not the motivational theory?
   (a) Alderfer’s ERG Theory (b) Contingency Theory
   (c) J.Stacy Adam’s Equity Theory (d) Victor’s Vroom’s Expectancy Theory

79. Work is natural like rest or play according to
   (a) Theory Y (b) Theory X
   (c) Theory X and Theory Y (d) None of the above

80. Likert suggested that ____ is the ideal system towards which organizations should work.
   (a) System 1 (b) System 2 (c) System 3 (d) System 4

True or False:
1. The art of influencing others to direct their will, abilities and efforts to the achievement of goals is called Leadership.
2. Autocratic Leadership is also known as Democratic Leadership.
3. The leader who exercises complete control over the subordinates is called Autocratic Leadership.
4. Leadership Continuum was developed by Tannenbaum and Schmidt.
5. Participative Leadership Style may be appropriate when subordinates are uneducated, unskilled and submissive.
6. Carrot and Stick approach to motivation is adopted under Benevolent Autocratic system.
7. Maintenance factors are also known as Hygiene factors.
8. The distinction between maintenance factors and motivating factors is fixed.
9. Likert suggested that System 4 is the ideal system towards which organizations should work.
10. Work is natural like rest or play according to Theory X.
Match the following:

1. Match the following:

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
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<tbody>
<tr>
<td>1. Motive</td>
<td>A) System 1 Managers</td>
</tr>
<tr>
<td>2. Benevolent Autocratic</td>
<td>B) Urge to do something</td>
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<tr>
<td>3. Exploitative Autocratic</td>
<td>C) Abraham H. Maslow</td>
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<td>4. Free-rein</td>
<td>D) System 2 Managers</td>
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<td>5. General Theory of Motivation</td>
<td>E) Laissez Fair Leadership</td>
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2. Match the following

<table>
<thead>
<tr>
<th>Column I</th>
<th>Column II</th>
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<tbody>
<tr>
<td>1. Need for Acceptance</td>
<td>A) Esteem Needs</td>
</tr>
<tr>
<td>2. Self Confidence</td>
<td>B) Hygiene Factors</td>
</tr>
<tr>
<td>3. Physiological needs</td>
<td>C) Social Need</td>
</tr>
<tr>
<td>4. Theory X and Theory Y</td>
<td>D) Prof. Douglas McGregor</td>
</tr>
<tr>
<td>5. Maintenance Factors</td>
<td>E) Survival Needs</td>
</tr>
</tbody>
</table>

Define the following just in one Sentence:

1. Motivation
2. Leadership
3. Autocratic Leadership
4. Participative Leadership
5. Maintenance Factors
6. Motivating Factors
7. Free-rein Leadership
8. Leadership Continuum
9. Esteem Needs
10. Self-actualization needs

ANSWERS:

Fill in the blanks:

1. Motive
2. Something
3. Psychological
4. Continuous
5. Existence, Relatedness and Growth
6. Prof. Douglas McGregor
7. X
Leadership and Motivation

8. Abraham H. Maslow
9. Esteem by others.
10. 200

Multiple Choice Questions:

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True or False:

1. True
2. False
3. True
4. True
5. False
6. True
7. True
8. False
9. True
10. False

Match the following:

1. Match the following

2. Match the following
12.1 INTRODUCTION

One of the indispensable components of management of organizations is the decision making. Every manager is in decision-making. Herbert A. Simon equated management with decision making because whatever a manager does is nothing but decision-making. All the functions of management involve decision-making and hence it is all-pervasive in nature.

For instance, a manager has to decide the long-term objectives of the organization, strategies, policies and procedures to be adopted to achieve these objectives; he has to decide how the jobs should be structured to match the jobs with the individuals in the organization; he has to decide how to motivate the people to achieve higher performance; he has to decide what activities should be controlled and how to control these activities etc. In other words, decision-making is the substance of a manager’s job.

According to Felix M. Lopez “a decision represents a judgement: a final resolution of a conflict of needs, means, or goals; and a commitment to action made in the face of uncertainty, complexity and even irrationality”. Thus, a decision is a course of action which is consciously chosen for achieving a desired result. In the words of George R. Terry “Decision-making is the electing of an alternative from two or more alternatives, to determine an opinion or a course of action”. A more comprehensive definition of decision-making is given by Andrew Sziagyl in terms of the following: “Decision-making is a process involving information, choice of alternative actions, implementation, and evaluation that is directed to the achievement of certain stated goals”.

John McDonald stressing the importance of decision making opines. “The business executive by Profession is a decision maker. Uncertainty is his opponent, and overcoming it is his mission. Whether the outcome is a consequence of luck or wisdom, moment of revision is without doubt the creative event in the life of the executive.”

Thus, a decision is the selection of a course of action from several alternatives and the decision-making is the process of arriving at the final selection.

12.2 TYPES OF DECISION

There are several types of decisions:

Routine and strategic decisions: Tactical or routine decisions are made repetitively following certain established rules, procedures and policies. They neither require collection of new data nor conferring with people. Thus they can be taken without much deliberation. They may be complicated but are always one dimensional. They do not require any special effort by the manager. Such decisions are generally taken by the managers at the middle and lower management level. Strategic or basic decisions, on the other hand, are more important and so they are taken generally by the top management and
middle management. The higher the level of a manager, the more strategic decisions he is required to take. The strategic decisions relate to policy matters and so require a thorough fact finding and analysis of the possible alternatives. Finding the correct problem in such decisions assumes great importance. The managers are more serious about such decisions as they influence the decision making at the lower levels.

Programmed and non-programmed decisions: The programmed decisions are of routine and repetitive natures which are to be dealt with according to specific procedure. But the non-programmed decisions arise because of unstructured problems. There is no standard procedure for handling such problems. For example, if an employee absents himself from his work for a long time without any intimation the supervisor need not refer this matter to the chief executive. He can deal with such an employee according to the standard procedure which may include charge sheet, suspension, etc. But if a large number of employees absent themselves from work without any information such a problem cannot be dealt in routine manner. It has to be dealt with as an unstructured problem and the decision should be taken by the chief executive. Non-programmed decisions require thorough study of the problem and scientific analysis of the situational factors. There has to be adequate probing analysis of various alternatives before taking such decisions.

Policy and operating decisions: Policy decisions are of vital importance and are taken by the top management. They affect the entire enterprise. But operating decisions are taken by the lower management in order to put into action the policy decisions. For example, a bonus issue is a policy matter which is decided by the top management, but the calculations of bonus is an operating decision which is taken at the lower levels to execute the policy decisions.

Organisational and personal decisions: Organisational decisions are those which a manager takes in his official capacity. Such decisions can be delegated. But, personal decisions, which relate to the manager as an individual and not as a member of the organization, cannot be delegated.

Individual and group decisions: When a decision is taken by an individual in the organisation, it is known as individual decision. Such decisions are generally taken in small organisations and in those organisations where autocratic style of management prevails. Groups or collective decisions refer to the decisions which are taken by a group of organisational members, say Board of Directors or Committee.

12.3 THE DECISION-MAKING PROCESS

Decision making is every manager’s primary responsibility. To make good decisions, managers should invariably follow a sequential set of steps as presented below:-

(a) Identifying and diagnosing the real problems: The first step in the decision-making process is the identification of the problem. Diagnosing the problem implies knowing the gap between what we want to happen and what is likely to occur if no action is taken. As pointed out by Newman and Summer, identifying the ‘cause of the gap’ and understanding the problem solve the problem. According to Peter F. Drucker, critical factor analysis is helpful in identifying the causes of the problem properly. A decision maker should collect as much information as possible before attempting to solve it. If possible, in addition to facts, opinion should also be collected, which would aid in diagnosing the problem effectively.

(b) Developing alternatives: While selecting the alternative course of action a manager should consider the viable and realistic alternatives only. Further, he should consider the time and cost constraints and psychological barriers that would restrict the number of reasonable alternatives. Newport and Trewatha contend that the brain storing and group participants may be fruitfully employed in developing alternatives. Ingenuity, research and creative imagination are required to ensure that the best alternatives are considered before a course of action is selected for inclusion of it among the alternatives.
(c) **Evaluation of alternatives**: Perhaps one of the most important steps in decision making is the evaluation of each alternative. Here, the decision-maker draws balance sheet of every alternative by identifying the advantages as well as disadvantages of these alternatives. All pertinent facts about each alternative should be collected, the pros and cons must be considered and the important points must be distinguished from the trivial or peripheral matters. The purpose of all this exercise is to limit the number of alternatives to a manageable size and then consider the alternatives for the selection.

Some of the criteria for evaluating an alternative could be —

(i) resources available for implementing the alternative
(ii) economy of effort
(iii) element of risk involved
(iv) results expected
(v) time constraint
(vi) accomplishment of common goal
(vii) implementation problems etc.

(d) **Selection of an alternative**: The next important step in decision-making process is the selection of best alternative from various available alternatives. Indeed, the ability, to select the best course of action from several possible alternatives separates the successful managers from the less successful ones. Drucker mentions four criteria viz. the risk, economy of effort, timing, and limitation of resources, before one alternative is selected among the available ones.

(e) **Implementation and follow up of the decision**: The final step in decision making process is the implementation of the selected alternative in the organisation. The alternative-selected should be properly communicated to those members of organisation who are concerned with the decision. Acceptance of the decision by group-members is absolutely essential to the successful implementation. Further, after implementation of the decision it is necessary to follow up to see whether the decision is yielding the desired results or not. A manager should least hesitate to ride out a decision that does not accomplish its objective. A manager should see it necessary, that all organisational members participate in the decision making as decision implementation.

**Quantitative Techniques of Decision Making**

(i) **Linear programming**: It is the technique for optimization of an objective function under given resources and constraints. The objective function is either maximisation of some utility or minimization of some disutility. The technique is useful under conditions of certainty.

(ii) **Probability decision theory**: The basic premise of this theory is that the behaviour of the future is probabilistic and not deterministic. Various probabilities are assigned to the ‘state of nature’ on the basis of available information or subjective judgment and the likely outcomes of the alternative courses of action are evaluated accordingly before a particular alternative is selected. Pay-off Matrices and ‘Decision Trees’ are constructed to represent the variables.

(iii) **Game theory**: It is a useful aid to the decision maker under conditions of competitive rivalry or conflict. The adversaries in the conflict are supposed to be involved in a game of gaining at the total or partial expense of each other. There are ‘two-person’, ‘three-person’ and ‘n-person’ games as also zero-sum and non-zero sum games.

(iv) **Queuing theory**: The technique is designed to find solutions to waiting line problems for personnel, equipment or services under conditions of irregular demand. The objective is to find optimum volume of facilities to minimise the waiting period, on the one hand, and the investment associated with building up and maintaining the facilities, on the other. Public transport systems, hospitals, and big departmental stores are some of the possible users of this technique.
(v) **Simulation**: It is a technique for observing the behaviour of a system under several alternative conditions in an artificial setting. When the conditions of the environment are very complex and when it is not possible to find the one best way of doing things, it provides the manager a way out. The likely behaviour of events and variables is observed and evaluated in a simulated setting. It is possible to experiment with various possibilities or alternatives in a simulated setting rather than in a natural setting.

(vi) **Network techniques**: There are two powerful network techniques—Critical Path Method (CPM) and Programme Evaluation and Review Technique (PERT) which are useful for project planning and control. Complex projects involve considerable cost and time. The objective is to minimise both by working out a ‘critical path’ where managerial attention is to be concentrated. A diagrammatic net-work of activities required for completion of a project is prepared in detail to assess their interrelation, to segregate sequential activities from simultaneous ones and to estimate the probable time and cost of their completion.

Modern Techniques for Non-programmed Decisions

(i) **Creative techniques**: Creative thinking is needed for solving novel, non-routine problems. Creativity refers to ability to generate new ideas and new ways of doing things. Brainstorming is one of the creative techniques. It involves use of the brain to find different ideas which can solve a critical problem. It is a group based technique. Members of the group in a session are encouraged to throw up all possible alternative solutions to a problem. The ideas may be wild or impractical but they may lead to a creative solution ultimately.

(ii) **Participative techniques**: Employee participation in management and decision making is often hailed as industrial democracy. The participative approach has several positive attributes for problem solving purposes. Involvement of individuals and groups in decision-making improves the quality of decisions, fosters responsibility and commitment for implementing them, enhances employee motivation and morale, and results in more acceptable and timely decisions and so on.

(iii) **Heuristic techniques**: It is a sophisticated type of trial and error technique to find solutions to complex problems on a step by step basis. It recognises the fact that decision making in complex, strategic problems cannot be too rational and systematic. It is bound to be sporadic and fragmented because of information gaps, conflict in goals, perverse human behaviour and the uncertain nature of the environment. Certain rules of thumb or heuristics are developed to facilitate the transition towards decisions. There are great possibilities for using computers to employ heuristics technique for solving major strategic problems.

Guidelines for Effective Decision Making

One of the measures of effective management is the extent to which managers adopt effective decision making processes to make decisions. A decision making process and a decision is effective if it makes significant contribution to the achievement of managerial and organisational objectives at acceptable levels of costs and unsought consequences. Within this broad setting, we may identify the principles, guidelines or the ways and means of making the process effective, as follows:

1. Establishment of multiple decentralised centres of managerial decision making at appropriate organisational levels and delegation of adequate authority along with pinpointing of accountability for making decisions to managers at each centre.

2. Determination of appropriate decision-making work-load at each centre, so as to minimise the possibility of overloading at any centre.

3. Co-ordination of various decision making centres through communication and other means so as to ensure consistency and co-operation in making decisions.

4. Establishment of expert advisory staff units to provide the needed intellectual and professional inputs for decision making.
5. Formulation and communication of organisational objectives, policies, decision rules and procedures to serve as guidelines to managers in their decision making function.

6. Design and installation of decision support systems which include information and control systems so as to provide logistic support to managers.

**Answer the following Questions:**

1. Explain the different types of Decisions.
2. Explain the Steps in decision making process.
3. What are the quantitative techniques of Decision Making?
5. Briefly explain the guidelines for effective decision making.

**Fill in the blanks:**

1. ________ is needed for solving novel, non-routine problems.
2. ________ is a technique for observing the behavior of a system under several alternative conditions in an artificial setting.
3. The first step in decision making process is _____
4. Tactical decisions are also known as ______
5. Strategic decisions are also known as ______
6. Programmed decisions are of _____ in nature.
7. ________ decisions are those which a manager takes in his official capacity.
8. Group decisions are also called as ______
9. Matrices and Decision Trees are constructed to represent the _____
10. The final step in decision making process is ______

**Multiple Choice Questions**

1. Who equated management with decision making because whatever a manager does is nothing but decision making?
   (a) Felix M. Lopez  (b) John Mc Donald
   (c) Andrew Szliagyl  (d) Herbert A. Simon

2. A decision to launch a new production plant is
   (a) Programmed decision  (b) Non-routine decision
   (c) Personal decision  (d) Organisational decisions

3. Which decisions are repetitive and routine in nature?
   (a) Basic decisions  (b) Personal decisions
   (c) Programmed decisions  (d) Non-programmed decisions
4. _____ decisions are concerned with unique problems or solutions.
   (a) Basic decisions    (b) Organisational decisions
   (c) Programmed decisions    (d) Personal decisions

5. Decision to attend a wedding ceremony is
   (a) Basic decisions    (b) Organisational decisions
   (c) Programmed decisions    (d) Personal decisions

6. Programmed decisions are made by
   (a) Lower level managers    (b) Top level managers
   (c) Middle level managers    (d) None of the above

7. Non-programmed decisions are taken by
   (a) Lower level managers    (b) Top level managers
   (c) Middle level managers    (d) None of the above

8. Non-programmed decisions include
   (a) decision to take over a sick unit
   (b) to restructure the existing organization
   (c) how to fill up the recently vacated position of zonal manager
   (d) All of the above

9. _____ decisions are those that are repetitive and routine.
   (a) Organisational decision    (b) Non-routine decisions
   (c) Programmed decisions    (d) Non-programmed decisions

10. The first step in the decision making process is:
    (a) Identification and diagnosing the real problem.    (b) Evaluation of alternatives
    (c) Developing Alternatives    (d) Selection of an alternative

11. The sequential set of steps in decision making is
    (d) None of the above

12. The criteria for evaluating the alternative in decision making is:
    (a) Resources available for implementing the alternative.
    (b) Time constraint
    (c) Accomplishment of common goal
    (d) All of the above

13. Who suggested “Strategic factors refer to those that are most important in determining the
    action to be taken in solving a given problem”.
    (a) Chester I Barnard    (b) Louis Allen
    (c) George Terry    (d) None of the above
14. What strategic factors should a manager have to consider while evaluating the alternatives?
(a) Tangible (b) Intangible
(c) Both (a) and (b) (d) Either (a) or (b)

15. Drucker mentions four criteria for selection of an alternative.
(a) Risk, economy of effort, timing and limitation of resources.
(b) Risk, economy of cost, timing and limitation of human resources.
(c) Value, economy of effort, timing and limitation of resources.
(d) Safety, value, timing and limitation of resources.

16. The final step in decision making process is:
(a) Selection of an Alternative (b) Developing Alternative
(c) Evaluation of Alternative (d) Implementation and follow up of decision.

17. Decisions into programmed decisions and non-programmed decisions is adopted by
(a) Peter Drucker (b) Herbert Simon
(c) M. Lopez (d) John Mc Donald

18. _____ decisions refer to decisions techniques and rules.
(a) Programmed decisions (b) Non-programmed decisions
(c) Strategic decisions (d) Tactical decisions

19. The decisions which are made on situations and problems which are novel and non-repetitive are:
(a) Programmed decisions (b) Non-programmed decisions
(c) Strategic decisions (d) Tactical decisions

20. Strategic decisions are made at which level
(a) Middle level (b) Lower level
(c) Top level (d) At all levels

21. Strategic decisions includes decisions on
(a) Plant location (b) Introduction of new products
(c) Acquisition of outside enterprises (d) All of the above

22. Tactical decisions are also known as
(a) Operational decisions (b) Programmed decisions
(c) Non-programmed decisions (d) Strategic decisions

23. Tactical decisions are made to implement
(a) Programmed decisions (b) Non-programmed decisions
(c) Strategic decisions (d) Individual decisions
24. Disadvantage of group decision making are:
   (a) Delays in decision making
   (b) Lack of rationality and responsibility among group members.
   (c) Dilution of the quality of decisions.
   (d) All of the above

25. Which of the following are quantitative techniques of decision making?
   (a) Probability decision theory  
   (b) Queuing theory
   (c) Simulation               
   (d) All of the above

26. Which of the following are the modern techniques for non-programmed decisions?
   (a) Creative techniques
   (b) Participative techniques
   (c) Heuristic techniques
   (d) All of the above

27. Which is a sophisticated type of trial and error technique to find solutions to complex problems on a step by step basis?
   (a) Creative techniques
   (b) Participative techniques
   (c) Heuristic techniques
   (d) None of the above

28. PERT and CPM are _____ techniques.
   (a) Queuing Theory
   (b) Simulation
   (c) Linear Programming
   (d) Network

29. The technique for observing the behavior of a system under several alternative conditions in an artificial setting is known as
   (a) Game theory
   (b) Simulation
   (c) Probability Decision Theory
   (d) Linear Programming

30. Brain Storming is one of the _____ techniques.
   (a) Creative
   (b) Participative
   (c) Heuristic
   (d) None of the above

31. The technique that involves use of the brain to find different ideas which can solve a critical problem is
   (a) Participative technique
   (b) Heuristic technique
   (c) Creative technique
   (d) All of the above

True or False:
1. Brain Storming is one of the participative techniques.
2. Tactical decisions are made repetitively following certain established rules, procedures and policies.
3. Programmed decisions are of routine and repetitive nature which is to be dealt with according to specific procedure.
4. Policy decisions are of vital importance and are taken by the Middle Management.
5. The final step in decision making process is selection of an alternative.

**Define just in one sentence:**

1. Decision Making
2. Routine decisions
3. Strategic decisions
4. Programmed decisions
5. Non-programmed decisions
6. Policy decisions
7. Individual decisions
8. Simulation
9. Network techniques
10. Game theory

**ANSWERS:**

**Fill in the blanks:**

1. Creative thinking
2. Simulation
3. Identifying and diagnosing the real problems
4. Routine decisions
5. Basic decisions
6. Routine and Repetitive
7. Organisational
8. Collective decisions
9. Variables
10. Implementation and follow up of the decision.
Multiple Choice Questions:

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True or False:

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