



# ECONOMICS

## STANDARD ELEVEN



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# ECONOMICS

STANDARD ELEVEN



2019

**Maharashtra State Bureau of Textbook Production and Curriculum Research, Pune.**



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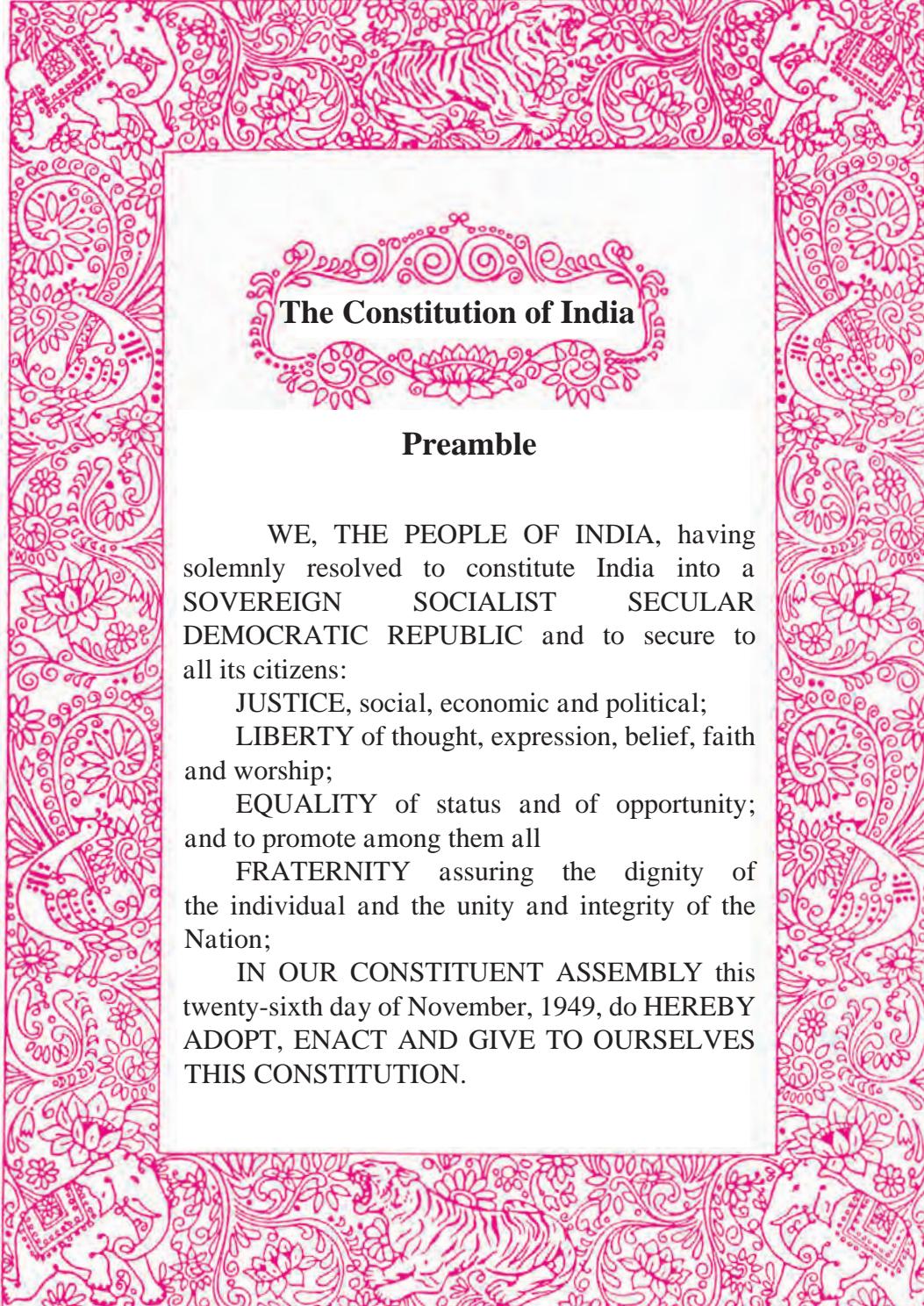
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## The Constitution of India

### Preamble

WE, THE PEOPLE OF INDIA, having solemnly resolved to constitute India into a SOVEREIGN SOCIALIST SECULAR DEMOCRATIC REPUBLIC and to secure to all its citizens:

JUSTICE, social, economic and political;

LIBERTY of thought, expression, belief, faith and worship;

EQUALITY of status and of opportunity; and to promote among them all

FRATERNITY assuring the dignity of the individual and the unity and integrity of the Nation;

IN OUR CONSTITUENT ASSEMBLY this twenty-sixth day of November, 1949, do HEREBY ADOPT, ENACT AND GIVE TO OURSELVES THIS CONSTITUTION.

## NATIONAL ANTHEM

Jana-gana-mana-adhināyaka jaya hē  
Bhārata-bhāgya-vidhātā,

Panjāba-Sindhu-Gujarāta-Marāthā  
Drāvida-Utkala-Banga

Vindhya-Himāchala-Yamunā-Gangā<sup>1</sup>  
uchchala-jaladhi-taranga

Tava subha nāmē jāgē, tava subha āsisa māgē,  
gāhē tava jaya-gāthā,

Jana-gana-mangala-dāyaka jaya hē  
Bhārata-bhāgya-vidhātā,

Jaya hē, Jaya hē, Jaya hē,  
Jaya jaya jaya, jaya hē.

## PLEDGE

India is my country. All Indians  
are my brothers and sisters.

I love my country, and I am proud  
of its rich and varied heritage. I shall  
always strive to be worthy of it.

I shall give my parents, teachers  
and all elders respect, and treat  
everyone with courtesy.

To my country and my people,  
I pledge my devotion. In their  
well-being and prosperity alone lies  
my happiness.

## Preface

Dear Students,

We welcome you all to Std. XI. For the first time, you are being introduced to the subject of Economics as a separate discipline. You have already been acquainted with some of the concepts of Economics from Std. V onwards, especially in the subjects of Geography and Mathematics.

This textbook aims to create awareness about the dynamic changes taking place in Indian economy. The National Curriculum Framework (NCF) was formulated in 2005, followed by the State Curriculum Framework (SCF) in 2010. Based on the given two frameworks, restructuring of the curriculum and preparation of a revised syllabus has been undertaken which will be introduced from the academic year 2019-20. The textbook incorporating the revised syllabus has been prepared and designed by the Maharashtra State Bureau of Textbook Production and Curriculum Research, (Balbharati), Pune.

The textbook introduces ‘Economics’ as an independent subject for the students of Std. XI. This will enable the students to understand various economic concepts thoroughly and correlate them with their practical life. The new syllabus focusses on realistic approaches to solve real world problems. Economic concepts such as money, economic growth, economic development, economic reforms, economic planning, statistics etc, have been discussed in detail. Besides this, the textbook also throws light upon various challenges before Indian economy. General teaching-learning objectives of the revised syllabus are determined on the basis of the ‘principle of constructivism’.

The curriculum and syllabus conforms to the maxims of teaching such as moving from concrete to abstract, known to unknown and from part to whole. For the first time, in the syllabus of Economics various activities have been introduced. These activities will not only help to develop the content knowledge but also provide scope for gaining relevant and additional knowledge. QR Code has also been introduced to facilitate e-learning. Besides this, ample scope has been provided for activity based learning, group learning, group discussions and self- learning processes.

No compromise is made in any manner over the use of language in the economic context, but at the same time, the textbook is presented in a very simple and lucid language too. Relevant diagrams, graphs, tables used in the textbook will bring about more clarity in the understanding of various terminologies and economic concepts. Glossary of economic terms and difficult words are also provided towards the end of the textbook. The efforts taken to prepare the textbook will not only enrich the learning experiences of the students, but also benefit other stakeholders such as teachers, parents as well as candidates appearing for the competitive examinations.

We look forward to a positive response from the teachers and students.

Our best wishes to all!



(Dr. Sunil Magar)  
Director

Maharashtra State Bureau of  
Textbook Production and  
Curriculum Research, Pune

Pune

Date : 20 June 2019

Indian Solar Date : 30 Jyestha 1941

## CLASS 11 ECONOMICS

| <b>Competence Statement</b>   |
|---|
| <ul style="list-style-type: none"><li>● Differentiate between Natural Sciences and Social Sciences</li><li>● Recognize and appreciate the diversity of views of various Economists</li><li>● Analyze the various definitions of Economics</li><li>● Differentiate between micro economics and macro economics</li><li>● Explain the basic concepts of micro economics and macro economics with realistic examples</li></ul>   |
| <ul style="list-style-type: none"><li>● Explain the difficulties of barter system and justify the introduction of money</li><li>● Explain the various definitions of money</li><li>● Explain the different stages in the evolution of money</li><li>● Describe the qualities of money</li><li>● Explain the primary, secondary and contingent functions of money</li><li>● Review measures to counter the problem of black money</li></ul>  |
| <ul style="list-style-type: none"><li>● Explain the meaning of Median, Quartiles, Deciles and Percentiles</li><li>● Explain the need for partition values and assess its superiority over averages</li><li>● Explain the use of partition values in economic data analysis</li><li>● Apply their quantitative skills to derive quartiles, deciles and percentiles for individual series, ungrouped and grouped data</li></ul>   |
| <ul style="list-style-type: none"><li>● Explain the structure of the economy of Maharashtra</li><li>● Compare the features of Maharashtra economy with that of other states</li><li>● Assess the performances of various sectors and their contribution to the state's economic development</li><li>● Explain the problems of agricultural, industrial and service sectors in the State</li><li>● Review recent policy measures undertaken by the Government of Maharashtra</li></ul> |
| <ul style="list-style-type: none"><li>● Explain the meaning, definition and significance of rural development</li><li>● Explain the classification of agricultural credit on the basis of purpose and tenure</li><li>● Differentiate between institutional and non-institutional sources of credit</li><li>● Assess the role of various agricultural finance institutions</li></ul>   |
| <ul style="list-style-type: none"><li>● Explain the stages of population growth based on various census data</li><li>● Explain the factors responsible for population explosion in India</li><li>● Assess various policy measures to check population explosion</li><li>● Explain the importance of human development</li></ul>   |
| <ul style="list-style-type: none"><li>● Define the concept of unemployment</li><li>● Explain the types of rural and urban unemployment</li><li>● Explain the major causes of unemployment in India</li><li>● Assess the various employment generation programmes</li></ul>  |
| <ul style="list-style-type: none"><li>● Explain multi-dimensional poverty</li><li>● Differentiate between Absolute and Relative poverty</li><li>● Explain Poverty line and its objectives</li><li>● Explain rural poverty and urban poverty</li><li>● Review the estimates of poverty</li><li>● Explain the major causes of poverty</li><li>● Assess the various poverty alleviation measures</li></ul>   |
| <ul style="list-style-type: none"><li>● Explain the objectives of the economic policy of 1991</li><li>● Explain the terms liberalization, privatization and globalization</li><li>● Explain the measures undertaken for liberalization, privatization and globalization</li><li>● Evaluate the economic policy of 1991</li></ul>  |
| <ul style="list-style-type: none"><li>● Explain the meaning and definitions of economic planning</li><li>● Explain the features of economic planning</li><li>● Assess the targets and achievements of various five year plans</li><li>● Analyze the targets of the twelfth plan</li><li>● Explain the functions of NITI Aayog</li><li>● Compare the framework of the Planning Commission with that of NITI Aayog</li></ul>  |

## - For Teachers -

### Dear Teachers,

We are happy to introduce the revised textbook of Economics for Std. XI. This book is a sincere attempt to follow the maxims of teaching as well as develop a ‘constructivist’ approach to enhance the quality of learning. Demand for more activity based, experiential and innovative learning opportunities is the need of the hour. The present curriculum has been restructured so as to bridge the credibility gap that exists between what is taught and what students learn from direct experience in the outside world. Guidelines provided below will help to enrich the teaching-learning process and achieve the desired learning outcomes.

- ✓ To begin with, get familiar with the textbook yourself.
- ✓ The present book has been prepared for constructivist and activity-based teaching.
- ✓ Teachers must skillfully plan and organize the activities provided in each chapter to develop interest as well as to stimulate the thought process among the students.
- ✓ Always teach with proper planning.
- ✓ Use teaching aids as required for the proper understanding of the subject.
- ✓ Follow the tentative number of periods mentioned in the page of 'Contents' to give due justice to the topic.
- ✓ Follow the order of the chapters strictly as listed in the contents because the units are introduced in a graded manner to facilitate knowledge building.
- ✓ Statistics is placed as the third unit to facilitate integrative learning through interdisciplinary approach. Application of statistical knowledge will help students to understand the complex nature of various problems faced by Indian economy in the latter chapters.
- ✓ Ask questions on statistical information

related to trends and patterns. Efforts have been made to provide the latest data available. Teachers must explain to the students the importance of data collection and data analysis.

- ✓ Major concepts of economics have a scientific base and they deal with abstractions. Encourage group work, learning through each other's help etc. Facilitate peer learning as much as possible by reorganizing the class structure frequently.
  - ✓ Teaching-learning interactions, processes and participation of all students are very necessary and so is your active guidance.
  - ✓ Do not use the boxes titled '**Do you know?**' for evaluation. However, teachers must ensure that students read this extra information.
  - ✓ Information provided in boxes with the title '**You Should Know**' should be considered for evaluation.
  - ✓ Exercises provided after each unit are prepared using different parameters such as observation, co-relation, critical thinking, analytical reasoning etc. Evaluation pattern should be based on the given parameters. Equal weightage should be assigned to all the topics. Use different combinations of questions. Stereotype questions should be avoided.
  - ✓ Use QR Code given in the textbook. Keep checking the QR Code for updated information.
  - ✓ Certain important links, websites have been given for references. Teachers as well as the students can use these references for extra reading and in-depth understanding of the subject.
  - ✓ Economic terms included in the Glossary are highlighted in blue colour in each chapter.
  - ✓ List of abbreviations is provided towards the end of the textbook for further clarification.
- Best wishes for a wonderful teaching experience!

## Contents

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| —       | • GLOSSARY OF ECONOMIC TERMS<br>• LIST OF ABBREVIATIONS<br>• REFERENCES, IMPORTANT WEBSITES/LINKS | 70 - 80  | <b>130</b>                  |

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**Front Page :** Students of standard ten have now come to standard eleven. They are going to study 'Economics' as an independent subject. The front cover is a visual presentation on the importance of Economics across all age groups. Visual images in this, represent the hierarchy of economic needs as per the age groups.

**Back Page :** Various economic activities.

# CHAPTER - 1 : BASIC CONCEPTS IN ECONOMICS

## Introduction :

Today's world is marked by scientific inventions and discoveries. This remarkable scientific progress enables to probe into the question, What is a science? Science is the systematic body of knowledge. There are two main types of sciences.

- Natural sciences      • Social sciences
- Natural science is one whose laws are universally acceptable and their validity can be tested in a laboratory under controlled conditions. Natural sciences are also called exact sciences because of their empirical approach to the study. e.g. Mathematics, Physics, Chemistry.
- Social Science is called abstract or behavioural science because it is related to the study of some or the other aspect of human behaviour. e.g. Psychology is related to 'mental' aspect of human behaviour. Sociology is related to the study of 'social' aspect of man as a member of society. Human behaviour can neither be empirically tested nor can be studied in the laboratory. Hence, the laws of social sciences are not universal but they are only statements of general human tendencies.

## Meaning of Economics :

Economics is a social science. The origin of the term 'Economics' lies in the Greek word, 'Oikonomia' which means management of the household.

Economics is referred to as 'Queen of Social Sciences' by Paul Samuelson. Economics deals with the economic aspect of human behaviour. It deals with how human beings satisfy unlimited wants with limited means.

Let us understand the nature of Economics with respect to some popular definitions.

## Refresh your memory :

Have you studied the following concepts in the previous textbooks?

Types of Economic Systems - Capitalism, Socialism and Mixed Economy.

## Kautilya's Views on Economics :



Fig 1.1  
Kautilya

Artha means 'Wealth' and Shastra means 'Science'. Arthashastra implies the science of acquiring and managing wealth. Essentially, Arthashastra is a treatise on Political Economy in its broadest sense.

## Key-points based on Kautilya's views :

- 1) Crucial role of the state or government.
- 2) Focus on creation of wealth as the means to ensure welfare of the state.
- 3) Need for efficient administrative machinery for good governance.
- 4) Compilation of political ideas into Arthashastra.

## Do you know?

Kautilya was a great statesman, philosopher, economist and royal advisor during the Mourya period. He is also known by the name Chanakya or Vishnugupta. Kautilya authored the ancient Indian political treatise, the 'Arthashastra'.

## Definitions of Economics :

### 1) Adam Smith's Wealth-Oriented Definition of Economics :



Fig 1.2  
Adam Smith

Classical economist Adam Smith, also regarded as the "Father of Economics", has given the wealth-oriented definition of Economics. Out of his many literary contributions to Economics, he

is most famous for his 1776 piece of work, "An Inquiry into the Nature and Causes of Wealth of Nations". Adam Smith defines Economics as "a science of wealth".

#### **Key-points of Adam Smith's definition :**

- 1) Laissez faire i.e. non-intervention of the government.
- 2) Capital and wealth accumulation
- 3) Nature's law in economic affairs.
- 4) Division of labour as an aspect of growth theory.

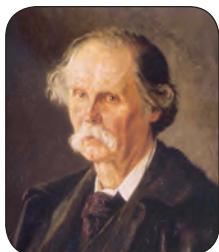
#### **Do you know?**

Paul Romer and William Nordhaus have won Nobel Memorial Prize in Economics for 2018. Paul Romer tends to be described as a growth theorist whereas Mr. Nordhaus has remarkably contributed to the field of Environmental Economics.

#### **Find out :**

Other Nobel Prize winners in Economics.

#### **2) Prof. Alfred Marshall's Welfare-Oriented Definition of Economics :**



**Fig 1.3  
Alfred Marshall**

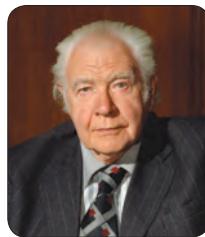
Neo-classical economist Prof. Alfred Marshall has given the welfare-oriented definition of Economics, in the book entitled "Principles of Economics" which was published in 1890. His definition states :

"Economics is a study of mankind in the ordinary business of life. It examines that part of individual and social action, which is closely connected with the attainment and use of material requisites of well-being".

#### **Key-points of Marshall's definition :**

- 1) Study of an ordinary man.
- 2) Economics is a behavioural science.
- 3) Study of material welfare.
- 4) Economics is not simply a study of wealth.

#### **3) Lionel Robbins' Scarcity-Oriented Definition of Economics :**



**Fig 1.4**

Lionel Robbins published in 1932 mentions about the scarcity-oriented definition of Economics.

"Economics is a science which studies human behaviour as a relationship between ends and scarce means which have alternative uses".

#### **Key-points of Robbins' definition :**

- 1) Wants (ends) are unlimited.
- 2) Means are comparatively limited.
- 3) Wants are gradable on the basis of priority.
- 4) Means have alternative uses.

#### **Do you know?**

| Thought  | Names of the Economists                                   |
|--|---|
| Classical School of Thought of 18 <sup>th</sup> century  | Adam Smith, David Ricardo, J. S. Mill, T. R. Malthus etc. |
| Neo-classical School of Thought of 19 <sup>th</sup> and 1 <sup>st</sup> half of 20 <sup>th</sup> century | Alfred Marshall, A. C. Pigou, Irving Fisher etc.          |
| Modern School of Thought from 20 <sup>th</sup> century till date.  | J. M. Keynes, Lionel Robbins, Paul Samuelson etc.         |

#### **Branches of Economics :**

In 1933, Sir Ragnar Frisch coined the terms Micro Economics and Macro Economics. These terms are derived from the Greek words 'Mikros' and 'Makros' respectively.

#### **A) Micro Economics :**

Micro means small. Micro Economics deals with the behaviour of the individual variables such as a household, worker, firm, industry etc.

## Kenneth Boulding's Definition of Micro Economics :

"Micro Economics is the study of particular firms, particular households, individual prices, wages, incomes, individual industries, particular commodities".

## Basic Concepts of Micro Economics

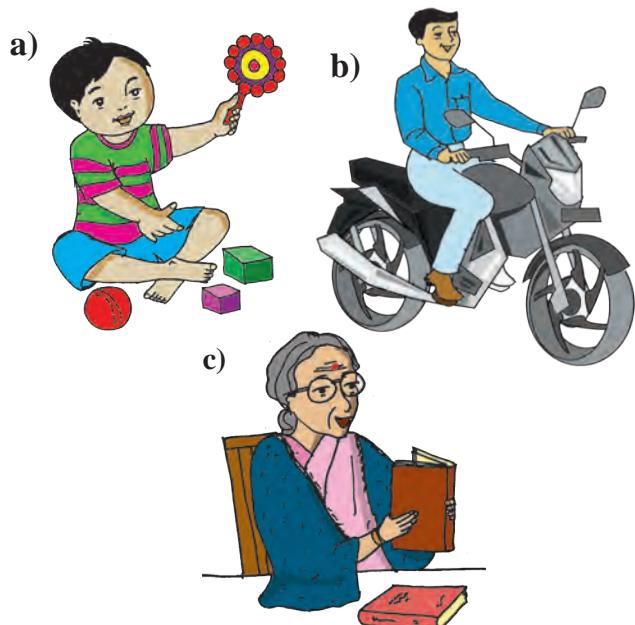
**1) Want :** It is difficult to define 'want' in few words. In common language, want can be referred to as a need. In economics, want denotes a feeling of 'lack of satisfaction'. This feeling enables the individual to satisfy his want.

Human wants have grown in number for two basic reasons :

- Desire for better living due to inventions and innovations.
- Rise in population.

## Characteristics of wants :

- Wants are unlimited :** Wants not only arise again and again but they are also unending. If one want gets satisfied, another arises. Wants go on multiplying in number.
- Wants are recurring in nature :** Several human wants occur again and again, while some might be only occasional.



**Fig. 1.5 : Age and Wants - a, b, c**

- Wants differ with age :** Wants and their satisfaction differ as per the chronological age. (Fig. 1.5 a, b, c).
- Wants differ with gender :** Men and women want different goods according to their needs.
- Wants differ due to preferences :** Individual habits, tastes and preferences matter a lot while deciding wants of the people.



**Fig. 1.6 : Seasons and Wants**

**vi) Wants differ with seasons :** Wants keep on changing with seasons (Fig .1.6).

**vii) Wants differ due to culture :** Differences in culture influence wants that are related to food, dressing styles etc.

### Classification of Wants :

Wants can be classified in the following ways.

#### i) Economic and Non-economic wants :

- Economic wants are those where monetary transaction is involved. An individual has to pay the price for them, e.g. food, medicines etc.
- Non-economic wants are those which can be satisfied without making monetary payment for them, e.g. air, sun shine etc.

#### ii) Individual Wants and Collective wants :

- Personal or individual wants refer to those wants which are satisfied at the individual level, e.g. a doctor using a stethoscope, a judge wearing his coat.
- Collective wants are social wants where there is collective satisfaction of wants, e.g. travelling by train.

#### iii) Necessities, Comforts and Luxuries :

- Necessities are the very basic needs of life, e.g. food, clothing, shelter, health and education.
- Comforts are those wants which make our life comfortable, e.g. washing machine, mixer, pressure cooker etc.
- Luxuries are those wants which are meant for pleasure and enjoyment, e.g. AC-car, well-furnished house etc.

**2) Goods and Services :** These are popular terms of economics.

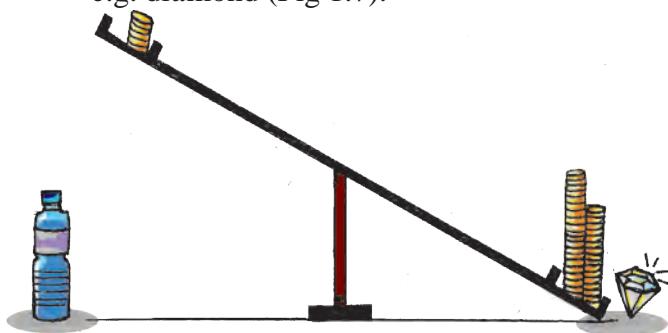
- Anything that satisfies human wants is termed as a 'good'. It has material existence, e.g. chalk used by a teacher.
- Services also satisfy human wants but do not have any material existence, e.g. 'Teaching' offered by the teacher.

**3) Utility :** Capacity of a commodity to satisfy

human wants or want satisfying power of a commodity is called utility.

**4) Value :** Value has two approaches in economics, i.e. 'value-in-use' and 'value in exchange'.

- **Value-in-use :** It refers to the worth of a commodity. In simple words, it is usefulness of a commodity, e.g. no one has to pay price for sunshine but its immense worth for life can never be doubted. In economic language, sunshine has a high value-in-use. It is an example of 'free good'.
- **Value-in-exchange :** It refers to the worth of a commodity or a service expressed in terms of another commodity. When this value is expressed in terms of money, it is called price of a commodity. A good which commands a price is termed as an 'economic good', e.g. TV, car etc.
- **Water-Diamond Paradox of values :** Some commodities have a high value-in-use but low exchange value, e.g. water, whereas, some commodities have low value-in-use but high exchange value due to its scarcity, e.g. diamond (Fig 1.7).



**Fig. 1.7 : Water-Diamond Paradox**

### Find out :

Which of the following is 'free good' or 'economic good'?

- Water in river
- Oxygen cylinder
- Sunshine
- Water processed for drinking
- Air

**5) Wealth :** Wealth refers to “anything which has market value and can be exchanged for money.”

To be regarded as 'wealth', a commodity must possess the following characteristics :

- i) Utility
- ii) Scarcity
- iii) Transferability
- iv) Externality

i) **Utility :** A commodity must have the capacity to satisfy human wants, e.g. furniture, refrigerator etc.

ii) **Scarcity :** A commodity must be scarce in supply in relation to its demand if it is to be included in the term 'Wealth', e.g. all economic goods for which price is paid.

iii) **Transferability :** A commodity should be transferable from person to person as well as place to place. If the good is material or tangible then only it is possible to transfer it from place to place, e.g. vehicle, jewellery etc.

iv) **Externality :** A good can be transferred only if it is external to human body, e.g. bag, chair etc.

#### **Do you know?**

Physical transferability - This is actual transfer of goods from one person to another and from one place to another, e.g. vehicle.

Notional Transferability - It is not possible to transfer the good physically but there can be only transfer of ownership rights, e.g. land

#### **Try this :**

Prepare a list of commodities which satisfy the condition of physical transferability and notional transferability.

#### **Do you know?**

Inborn qualities like beauty, melodious voice, efficiency etc. are not 'wealth' in the strict sense of economics. They are neither external nor transferable.

**6) Personal Income :** Earnings received by a person from all sources is called his personal income.

**7) Personal Disposable Income (PDI) :** It is that part of personal income which is left over after payment of direct taxes such as income tax, wealth tax etc.

#### **You should know :**

Following are the various types of income.

**A) Fixed income :** Income which remains stable over a period of time, e.g. rent, wages.

**B) Fluctuating income :** Income which is not fixed but keeps on changing, e.g. profit. It can be positive, negative or zero.

**C) Money income :** It is the income received in actual currency of the country. In other words, it is the income in cash, e.g. ₹ 5,000

**D) Real income :** It is the purchasing power of money income, e.g. commodities purchased out of money income.

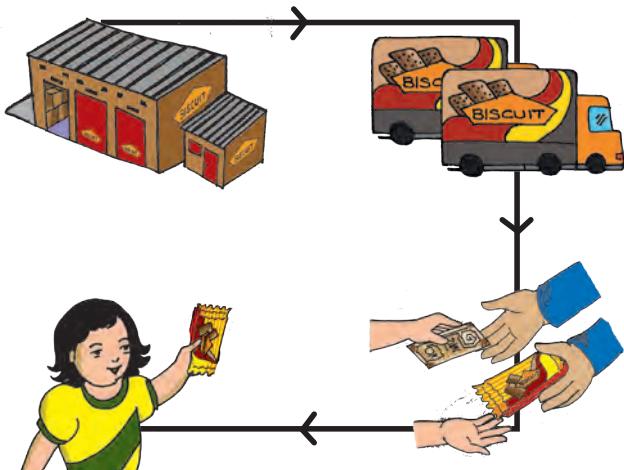
**E) Contractual income :** This income is paid as per the terms and conditions of contract, e.g. rent, wages.

**F) Residual income :** Income which is left over after making payments to all factors of production is called residual income, e.g. profit

**G) Earned income :** Income obtained after participating in the productive activity, e.g. rent, wages, interest, profit.

**H) Unearned income :** Income received from all sources without indulging in any productive activity, e.g. windfall gains, lottery prizes.

**8) Economic activity :** Economic activities can be classified into four types which include production, distribution, exchange and consumption.



**Fig. 1.8 : Economic Activities**

**a) Production :** Production is creation of utility.

There are four factors of production such as land, labour, capital and entrepreneur.

**Always remember :**

The activities which are carried out just for the sake of charity, hobby or in general, where there is no monetary exchange are considered ‘unproductive’ in the sense of Economics, though they may be adding immense value to life.

**Factors of production :**

i) **Land :** ‘Land’ in Economics is a wide term. It is a natural factor of production. Any natural resource that is available on, above and below the surface of the earth is called ‘land’ in Economics, e.g. minerals which are found below the surface of the earth; soil, water on the surface of the earth; air, sunshine, wind are above the surface of the earth. Land earns ‘rent’ in productive activity.

ii) **Labour :** Labour is a human factor of production. Any physical or mental effort undergone during the process of production to earn the reward of 'wages' is called 'labour', e.g. carpenter, accountant, engineer etc.

iii) **Capital :** Capital is a produced means for further production. It is a man-made factor

of production which earns the reward in the form of ‘interest’, e.g. machinery, technology, factory building etc.

iv) **Entrepreneur :** Entrepreneur is the organizer who is a real captain of the industry. He is a special kind of labour who gets the work done to earn the reward of ‘profit’ in the process of production.

b) **Distribution :** It is division of factor rewards among different segments of the society. Factors of production claim their rewards of rent, wages, interest and profit through the process of distribution.

c) **Exchange :** It is give and take between various units in the economy. ‘Exchange’ refers to sale and purchase of goods and services. In economics, exchange is necessarily a monetary transaction.

d) **Consumption :** It is making use of goods and services to satisfy human wants.

**B) Macro-Economics :**

Macro means large or aggregate or total. Macro-Economics is therefore the study of aggregates covering the entire economy such as total employment, national income, national output, total investment, total savings, total consumption, aggregate supply, aggregate demand, general price level etc.

**Kenneth Boulding's definition of Macro Economics :**

"Macro Economics deals not with individual quantities as such, but with the aggregates of these quantities, not with the individual incomes but with the national income, not with individual prices but with the general price level, not with individual output but with the national output".

**Basic Concepts of Macro Economics :**

1) **National Income :** This reveals the total economic performance of a nation. It is referred to as the total income of a country.

In the economic sense, national income is the aggregate monetary value of all final goods and services produced in an economy during a year.

#### **Definition by National Income Committee :**

“A national estimate measures the volume of commodities and services turned out during a given period counted without duplication”.

**2) Saving :** It is that part of the income which is set aside to satisfy the future needs by foregoing current consumption. In other words, saving is that part of income which is not spent currently on consumption.

**3) Investment :** It refers to creation of capital assets through mobilisation of savings, e.g. machinery, equipment etc.

**4) Trade Cycles :** Trade cycles are fluctuations in business. They are ups and downs in the overall economic activities. Ups and downs means fluctuations caused by inflation and depression respectively.

- **Inflation** is a continuous rise in general price level.
- **Depression** is a continuous fall in overall prices and lowering down of economic activity in general.

#### **Do you know ?**

Unemployment created due to impact of cyclical fluctuations is called ‘Cyclical Unemployment’.

**5) Economic Growth :** The term economic growth has a 'quantitative' dimension. In simple words, economic growth means an increase in the real national income of the country, over a long period of time.

**6) Economic Development :** This is a wider concept which has a 'qualitative' dimension. Economic development implies economic growth plus progressive changes in certain important variables which determine well-being of the people, e.g. education, health etc.

#### **Find out :**

Which of the following terms is a part of micro economics or macro economics?

- Global poverty
- Price of a commodity
- Balance of payments
- Profits of a firm
- National income

| <b>Always Remember</b>  |   |
|---|---|
| <b>Economic Growth</b>  | <b>Economic Development</b>   |
| 1) Economic growth means an increase in the real national income of the country.  | 1) Economic development indicates economic growth plus progressive changes in certain important variables which determine well-being of the people. |
| 2) This concept is narrow and quantitative.                                       | 2) This concept is broader and qualitative.   |
| 3) Economic growth is possible without economic development.                      | 3) Economic development is not possible without economic growth.  |
| 4) Economic growth is a unidimensional concept.                                   | 4) Economic development is a multi-dimensional concept.   |
| 5) Economic growth is spontaneous and reversible.                                 | 5) Economic development is deliberate and irreversible.   |
| 6) Economic growth is measured in terms of national income and per capita income. | 6) Economic development is measured in terms of agricultural productivity, industrial productivity quality of human life etc.                       |

**Table : 1.1**

## EXERCISE

### Q. 1. Choose the correct option :

#### 1) Statements related to Economics :

- a) Economics is a social science.
- b) Concept of economics is derived from Greek word ‘Oikonomia’.
- c) Economics is related to the study of human economic behavior.
- d) Economics is related to management of the household.

Options : 1) a, b and c

2) a and b

3) b and c

4) a, b, c and d

#### 2) Statements incorrect with reference to Adam Smith's definition :

- a) Adam Smith is a classical economist.
- b) Wealth of Nations is authored by Adam Smith.
- c) Economics is the science of wealth.
- d) Economics studies common man.

Options : 1) d

2) a, b and c

3) a and d

4) c and d

#### 3) Key points in Lionel Robbins' definition :

- a) Wants are unlimited
- b) Means are limited
- c) Wants are not gradable
- d) Means have alternative uses.

Options : 1) a and b

2) b and c

3) a, b and d

4) a, b, c and d

#### 4) Statements related to wealth :

- a) Wealth means anything which has market value and can be exchanged for money.
- b) It is external to human being.
- c) Wealth has no utility.
- d) Wealth is scarce and exchangeable.

Options : 1) a, b and d

2) a, c and d

3) b, c and d

4) None of the above

#### 5) Aspects considered in National Income :

- a) Final goods and services are included in national income.
- b) Produced goods and services in a financial year are included in national income.
- c) Double counting is avoided.
- d) Value is considered as per market price.

Options : 1) a and c

2) b and c

3) a, b and d

4) a, b, c and d

### Q. 2. Complete the correlation :

- 1) Natural sciences : Exact sciences :: Social sciences :
- 2) Physics :  :: Psychology : Social science
- 3) Arthashastra : Kautilya :: Wealth of Nations :
- 4) Necessity :  :: Comforts : Washing machine
- 5) Free goods : Value-in-use :: Economic goods :

### Q. 3. Identify and explain the concepts from the given illustrations :

- 1) My father purchased a two wheeler vehicle. This helps to fulfil my travel needs.
- 2) A study of the annual income of the family of Ramesh
- 3) As per the data for financial year 2018-19, the country's production of goods and services increased by 20%.
- 4) Karuna's mother saves ₹ 1000/- every month out of her given salary.
- 5) Ram's father utilized his provident fund amount to set up grocery store.

### Q. 4. Answer the following :

- 1) Explain the features of wealth.
- 2) Explain the characteristics of human wants.

### Q. 5. State with reasons whether you agree or disagree with the following statements :

- 1) All wants can be satisfied at a time.
- 2) Human wants change as per the seasons and preferences.
- 3) Value-in-use and Value-in-exchange are the same.

### Q. 6. Answer in detail :

- 1) Explain the basic concepts of macro economics.



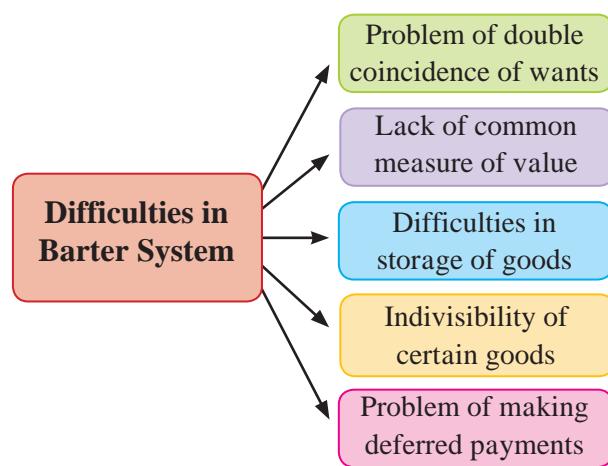
## CHAPTER - 2 : MONEY

### Introduction :

Man is an intellectual animal. The invention of money is one of the important and fundamental inventions out of various inventions in the world. According to Crowther, there is a basic invention in each branch of knowledge, e.g. invention of fire in science, invention of wheels in mechanical science. The concept of money is an important concept which has brought about a revolutionary change in the economic life of human beings. Various goods and services are bought and sold with the help of money, to satisfy human wants. Modern economy is dependent on money. Money which is in circulation today was created to reduce the difficulties in Barter System.



Fig. 2.1 : Barter system



**Barter system :** It refers to exchange of goods for goods.

### Difficulties in Barter System :

#### 1) Problem of double coincidence of wants :

Lack of double co-incidence of wants was one of the major limitations of barter system. For instance, person 'A' has cloth and he wants rice in exchange and person 'B' has rice but he does not want cloth in exchange. In this case exchange between 'A' and 'B' would not take place as their wants do not coincide with each other.

#### 2) Lack of common measure of value :

While exchanging goods for goods, there was no standard unit of account to determine the value of a commodity. e.g., it was difficult to compare two litres of milk with two kilograms of rice.

#### 3) Difficulties in storage of goods :

It is necessary to store goods for future consumption. Sometimes due to perishable nature of certain goods it was difficult to store them for future. Perishable commodities like milk, eggs, fish, vegetable etc. were difficult to store. Difficulties were also experienced due to lack of space required to store heavy and bulky goods.

#### 4) Indivisibility of certain goods :

In barter system it was inconvenient to divide animals, house etc. into small parts, so it was difficult to fix proportion of one commodity in exchange for another commodity, e.g. Individual 'A' has a sack of wheat and he wants a goat in exchange. Individual 'B' has a goat and he wants only half a sack of wheat. In this situation exchange between the two commodities is impossible due to indivisible nature of goat, for it being a live stock.

#### 5) Problem of making deferred payments :

Deferred payment means payments to be made in future. Repayment of loan was difficult due to exchange of commodities,

e.g. it was difficult to repay the perishable goods in the same condition in future.

### Definitions of Money :

**1) Prof Crowther :** "Money is anything that is generally acceptable as a means of exchange and at the same time acts as a measure and a store of value".

**2) Prof Walker :** "Money is what money does".

**Evolution of money :** Money has come into existence by evolution and



not by revolution. With passage of time, the commodities which were used as money have changed depending upon the need of time and development of civilization.

Money used in modern times is a result of many evolutionary changes that took place over a long period of time.

Following are the types of money which very well explain the evolution of money (Fig. 2.2).

### Types of Money :

**1) Animal money :** In protohistoric period, 'animal money' was used as a means of exchange, e.g. cow, sheep, goat etc. However, due to their indivisible nature, commodity money came into existence.

**2) Commodity money :** In olden days, the commodities to be used as money were dependent upon climatic conditions and culture, e.g. animal skin, grains, shells, feathers, tusk, salt, rare articles and stones were used as a medium of exchange. Due to the problem of storage of such commodities, metallic money came into existence.

**3) Metallic money :** Metallic money used durable metals such as gold, silver, copper, aluminum, nickel etc. However, scarcity of precious metals and lack of uniformity in metallic pieces gave rise to the use of metallic coins.

**4) Metallic coins :** In ancient times, rulers of various kingdoms used small pieces of metals and affixed their seals on them. With the passage of time, the monetary system was taken over by the government authorities with a view to give uniformity and legal status to metallic coins. Coins can be classified as under :

**a) Standard or full bodied coins :** Full bodied coins are those whose face value is equal to their **intrinsic value**. Face value indicates the exchange value fixed by issuing authority. These coins are made out of precious metals like gold, silver etc. Standard coins were used for some days during the British period.

**b) Token coins :** Token coins are those whose face value is higher



**Fig. 2.2 : Evolution of Money**

than their intrinsic value. These coins are made of cheaper metals like aluminum, nickel etc. These coins are of lower denominations and are generally used for settling smaller transactions. In India, all coins in circulation today are token coins. Difficulties in transportation of token coins gave rise to paper money.

**5) Paper Money:** Paper Money was a substitute for metallic money. In course of time, issue of currency notes was monopolized by the Central Bank. Paper money consists of paper currency issued by Government and Central Bank of the country.

In India, one rupee note and all coins are issued by the Government of India. Currency notes of higher denominations are issued by the Central Bank (Reserve Bank of India). Inconvenience in handling and risk of storing paper money gave rise to bank money.

**6) Bank Money or Credit Money :** Bank money refers to deposits which are in the form of cash saved by the people. It is used to create credit money. This can be withdrawable and transferable on demand, by means of cheque, demand draft etc. Cheque, demand draft are not actual money but **credit instruments** through which deposits are transferable. Credit money plays an important role in economic development. On the background of global economy, cashless transaction gained importance thereby giving rise to plastic money.

**7) Plastic Money :** Plastic Money is easy to use in transaction due to advanced technology. Debit cards and credit cards are used as plastic money. Further innovation in smart transactions led to the introduction of electronic money.

**Find out :** Recent changes introduced by banks for safe use of plastic money.

**8) Electronic Money :** E-money or Electronic money is a monetary value that is stored and transferred electronically through a variety of means i.e. a mobile phone, tablet,

smart cards, computer etc. It is backed by the Central Bank. Electronic money is used for purchases and transactions globally. **Digital wallets** are also a form of stored electronic money.

### Find out :

List of various modes of digital transactions.

### You should know :

**a) Legal Tender Money :** It is the money which is backed by law and cannot be refused in transaction by anybody on any ground. In India, all coins and currency notes are legal tender money.

**b) Non-Legal tender Money :** It is the money which is generally used by people in final payments but there is no legal compulsion of acceptance. It can be refused. Cheques, bills of exchange are examples of this money. It is also known as optional money.

### Qualities of Money :

The qualities of money are as follows :

**1) General Acceptability :** Anything which is used as money must be easily accepted by all for exchange purpose.

**2) Divisibility :** Money should be easily divisible into smaller denominations to facilitate small transactions.

**3) Durability :** Money should also possess the characteristic of durability. Currency notes and coins are being used repeatedly and shall continue to do so for years together on account of durability.

**4) Cognizability :** Money must be easily recognised. It should have certain distinct marks so as to avoid confusion by the receiving person.

**5) Portability :** It should be easy to carry from one place to another without any difficulty, expense and inconvenience, e.g. currency notes are easily portable.

- 6) Homogeneity :** Money of a particular denomination must be homogeneous or identical in its features.
- 7) Stability :** Money should have a stable monetary value. It serves as a measure of value to exchange goods and services. These goods can be sold and purchased in future as per requirements.

## Functions of Money

### A) Primary Functions :

- 1) Medium of Exchange :** The most important function of money is to serve as a medium of exchange. Any commodity can be purchased or sold for money.
- 2) Measure of Value or Unit of account :** Price is the value of a commodity or a service expressed in terms of money. Money enables to compare the prices of commodities. Different currencies are used to express the value of commodity in different countries, e.g. Rupee in India, Dollar in U.S.A., Pound in U.K., Yen in Japan etc. Income and expenditures of all kinds, assets and liabilities are stated in terms of money as a unit of account.

### B) Secondary Functions :

- 1) Standard of deferred payments :** Under barter system taking loans was easy, but its repayment was difficult because loan was in the form of grains, cattle etc. Money has overcome this difficulty. Payments to be made at a future date is called **deferred payments**. By serving as a standard measure of payment over a time, money makes borrowing and lending easy.
- 2) Store of value :** Money acts as a store of value. Money not only satisfies wants in the present but also makes provision for satisfaction of wants in future. This is possible due to savings. According to Lord J. M. Keynes, 'money is a link between the present and future'.
- 3) Transfer of Value :** Money enables transfer of value from one person to another and from one place to another. Real assets like

building, plot, shop, agricultural land etc. can be sold at one place and can be purchased at another place with the help of money.

### C) Contingent Functions :

According to Prof. Kinley, in the modern period money plays an important role almost in all economic transactions.

#### 1) Measurement of National Income :

National Income is expressed in money terms. Distribution of national income among the four factors of production is in terms of monetary rewards. e.g. rent, wages, interest, profits etc.

#### 2) Basis of Credit :

Commercial Banks create credit money on the basis of primary deposits. Money provides a liquid base for creation of credit money.

#### 3) Imparts liquidity to wealth :

Money is called the most **liquid asset**. Money can be easily converted into any asset and any asset can be converted into money. e.g. a person can purchase gold and if he wants he can sell it and purchase government bonds, securities etc.

#### 4) Estimation of macro economic variables :

Macro Economic variables like Gross National Product (GNP), total savings, total investment etc. can be easily estimated in monetary terms. It also facilitates government tax collection, preparation of budget etc.

## Concept of Black Money :

Black Money is any money which is received in cash but not accounted for and on which tax is not paid to the government. Black Money is **tax evaded income**. It can be earned through both legal and illegal means. Black money encourages illegal activities such as corruption, bribery, black marketing, hoarding etc. This creates obstacles in economic development. Economic, political and social instability are created in the economy due to black money. To control black money, **demonetization** is one of the tools, which many countries have adopted.

## EXERCISE

### **Q. 1. Complete the correlation :**

- 1) Primary function of money : Medium of exchange  
::  : Transfer of value
- 2)  : Basis of credit : Secondary functions of money : standard of deferred payments.
- 3) Commodity money : Shells ::  : Credit card
- 4) Divisibility : Smaller denomination;  ::  
Easy to carry from one place to another.
- 5) Barter system : Goods :: Modern economy

### **Q. 2. Give economic terms:**

- 1) The act of exchanging goods for goods - .....  
.....
- 2) Provision for making payments in future - .....  
.....
- 3) System that makes use of currency for facilitating payments - .....
- 4) Credit instrument through which bank deposits are transferable - .....
- 5) Monetary value stored and transferred electronically by means of computer hard drive or servers - .....
- 6) Money not accounted for in the bank and not disclosed to the government - .....

### **Q. 3. Choose the correct option :**

#### **1) Arrange in the order of evolution of money.**

- a) Metallic money
- b) Animal money
- c) Metallic coins
- d) Commodity money

**Option :** 1) a, b, c, d

2) b, d, a, c

3) d, c, a, b

4) c, a, b, d

#### **2) Arrange in the order of evolution of money.**

- a) Plastic money
- b) Paper money
- c) Electronic money
- d) Credit money

**Option :** 1) b, d, a, c

2) a, b, c, d

3) d, c, b, a

4) c, b, a, d

### **Q. 4. Identify and explain the concepts from the given illustrations :**

- 1) Vasantsheth provides coal from his shop to farmers in exchange for foodgrains.
- 2) Babanrao deposits his money in a nationalized bank.
- 3) Charu used her debit card to purchase a shirt for her younger brother.
- 4) Malathi purchased a house through an agent. The agent accepted the commission amount in cash but did not issue a receipt to her.
- 5) To prevent misuse/fraudulent use of the national currency, a note ban is imposed on its use at certain times.

### **Q. 5. State with reasons whether you agree or disagree with the following statements :**

- 1) There are no difficulties in barter system.
- 2) There are many good qualities found in modern currency.
- 3) Many tasks are accomplished by money.
- 4) Money can be sent anywhere through electronic means.

### **Q. 6. Answer the following questions on the basis of the following information :**

Ganesh travelled to the mall by bus. He gave the conductor ₹ 10 coin for the ticket. He purchased many commodities from the mall.

At the billing counter, he gave his credit card for payment but the billing clerk informed him that only debit cards were accepted. Since Ganesh had forgotten his debit card at home, he offered to make payment by cash.

- 1) Identify the types of money used in the information
- 2) Explain any two of them.



## CHAPTER - 3 : PARTITION VALUES

### LET'S RECALL

- Are you familiar with the word 'averages'?
- Can you tell the meaning of individual series, discrete data and continuous data.
- Name the positional averages that you have previously studied.

| Types of Average   | Individual Data  | Discrete Data  | Continuous Data  |
|--------------------|--|--|--|
| 1) Arithmetic Mean | $\bar{x} = \frac{\Sigma x}{n}$   | $\bar{x} = \frac{\sum f_i x_i}{n}$   | Direct method $\bar{x} = \frac{\sum f_i x_i}{n}$                               |
| 2) Mode            | Value repeated maximum number of times                                     | The value which has maximum frequency                                      | $\text{Mode} = l + \left[ \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \right] \times h$ |
| 3) Median          | $M = \text{size of } \left( \frac{n+1}{2} \right)^{\text{th observation}}$ | $M = \text{size of } \left( \frac{n+1}{2} \right)^{\text{th observation}}$ | $M = l + \left( \frac{\frac{n}{2} - cf}{f} \right) \times h$                   |

### Introduction :

The procedure of dividing the data into equal parts is called 'partitioning'. Values dividing the data into a required number of equal parts are called 'Partition Values'.

In Class X, you have already studied about the measures of central tendency i.e. averages such as Arithmetic Mean, Median and Mode. Median is the value of the middlemost observation in the data when the observations are arranged in increasing or decreasing order of values. 'Median', is a special type of partition value because there are equal number of observations above as well as below it. Like Median, Quartiles, Deciles and Percentiles are also partition values, since they divide the given set of observations into equal number of parts. In general, they are referred to as 'fractiles'. Partition values form a part of descriptive statistics.

In the forthcoming chapters such as Population, Unemployment and Poverty, students will get acquainted with the use of partition values in economic data analysis.

### Do you know?

**Statistics Day :** Prof. Prasanta Chandra Mahalanobis, an Indian Statistician was instrumental in formulating India's strategy for industrialization in the Second Five Year Plan (1956-61) which later came to be known as Mahalanobis Model.

Mahalanobis devised a measure of comparison between two data sets that is known as the Mahalanobis distance. He also devised a statistical method called 'fractile graphical analysis' which could be used to compare the socio-economic conditions of different groups of people. In recognition of the notable contributions made by P. C. Mahalanobis in the field of economic planning and statistical development, the Government of India has designated 29th of June every year, coinciding with his birth anniversary as 'Statistics Day', in the category of Special day to be celebrated at the national level.

## Need for Partition Values :

The data consists of extreme values on the lower side and also on the higher side in magnitude. Such values are known as 'outliers'. The average used for such data often misinterprets its representative value. To overcome this misinterpretation, generally partition values like median, quartiles, deciles and percentiles are used.

### Always remember :

$$Q_2 = D_5 = P_{50} = \text{Median}$$

### You should know :

#### Application of Quartiles, Deciles and Percentiles in Economics :

- Quartiles are used in the study of all types of financial information concerning economic data, income data, stock data, sales and survey data etc.
- Income quartiles is the most objective method of comparing changes among individual income groups caused by economic changes such as wage fluctuations and inflation.
- Deciles too have wide application in finance and economics. Government uses deciles to study the level of economic inequality, measurement of poverty line, drought conditions etc.
- Deciles are used in investments, particularly to assess the performance of a portfolio investment such as a group of mutual funds.
- Percentiles are used in the measurement of test scores, health indicators, household income, household wealth, percentile wages.
- Percentiles can be used for benchmarking and baseline purposes.

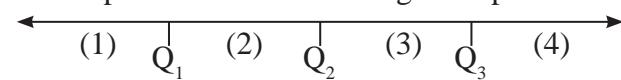
## LET'S LEARN :

### Quartiles :

**Meaning :** 'Quartiles' are values of data which divide the whole set of observations into four equal parts. There are three Quartiles which divide the data into 4 equal parts. They are

known as  $Q_1$ ,  $Q_2$  and  $Q_3$  respectively. Second quartile is nothing but the median. To find out quartiles, generally the data is arranged in ascending order.

It is explained in the following example :



- a) In general, for individual and ungrouped data we get the formula for  $Q_1$ ,  $Q_2$  and  $Q_3$  as given below :

$$Q_i = \text{size of } i \left( \frac{n+1}{4} \right)^{\text{th Observation.}} \quad i = 1, 2, 3$$

- b) For grouped data or continuous data,

$$Q_i = l + \left( \frac{\frac{in}{4} - cf}{f} \right) \times h \quad i = 1, 2, 3$$

Where

$l$  = Lower limit of quartile class.

$f$  = Frequency of the quartile class

$cf$  = Cumulative frequency of the class preceding the quartile class.

$n$  = Total of frequency.

$h$  = Upper limit - lower limit of the quartile class.

### Calculation of Quartiles

#### Solved Examples

##### A) Individual Data :

- 1) Calculate  $Q_1$  and  $Q_3$  of the first semester examination marks scored by the students as given : 40, 85, 84, 83, 82, 69, 68, 65, 64, 55, 45

**Solution :** Arrange the series in ascending order i.e. 40, 45, 55, 64, 65, 68, 69, 82, 83, 84, 85

$n$  = Total number of observations

$n = 11$

$$Q_1 = \text{size of } \left( \frac{n+1}{4} \right)^{\text{th Observation.}}$$

$$Q_1 = \text{size of } \left( \frac{11+1}{4} \right)^{\text{th Observation}}$$

$$Q_1 = \text{size of } \left( \frac{12}{4} \right)^{\text{th Observation}}$$

$Q_1 = \text{size of } 3^{\text{rd}} \text{ Observation.}$

$Q_1 = \text{size of } 3^{\text{rd}} \text{ Observation. is } 55$

$$\therefore Q_1 = 55$$

### Third Quartile

$$Q_3 = \text{size of } 3\left(\frac{n+1}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 3\left(\frac{11+1}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 3\left(\frac{12}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } (3 \times 3)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 9^{\text{th Observation}} \text{ is } 83$$

$$\therefore Q_3 = 83$$

**Ans :  $Q_1 = 55, Q_3 = 83$**

### 2) Calculate $Q_3$ for the given distribution.

20, 28, 31, 18, 19, 17, 32, 33, 22, 21

**Solution :** Arrange the data in ascending order.

17, 18, 19, 20, 21, 22, 28, 31, 32, 33

$$n = 10$$

$$Q_3 = \text{size of } 3\left(\frac{n+1}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 3\left(\frac{10+1}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } \left(3 \times \frac{11}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } \left(\frac{33}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 8.25^{\text{th Observation}}$$

$$Q_3 = \text{size of } 8^{\text{th observation}} + 0.25(9^{\text{th observation}} - 8^{\text{th observation}})$$

$$Q_3 = 31 + 0.25(32 - 31)$$

$$Q_3 = 31 + 0.25 \times 1$$

$$\therefore Q_3 = 31.25$$

**Ans :  $Q_3 = 31.25$**

**B) Discrete Data :** By arranging the observations in the data in ascending or descending order, we derive :

$$Q_i = \text{size of } i\left(\frac{n+1}{4}\right)^{\text{th Observation}} \quad \text{where } i = 1, 2, 3$$

1) Find out  $Q_1$  and  $Q_3$  from the following data.

|                 |   |   |    |    |    |   |    |
|-----------------|---|---|----|----|----|---|----|
| Income (lakh ₹) | 5 | 4 | 9  | 12 | 15 | 6 | 10 |
| No. of Person   | 8 | 6 | 12 | 8  | 6  | 9 | 10 |

**Solution :** Arrange the data in ascending order and find out the cumulative frequency.

| Income (lakh ₹)<br>( $x$ ) | No. of Person<br>( $f$ ) | Cumulative frequency ( $cf$ ) |
|----------------------------|--------------------------|-------------------------------|
| 4                          | 6                        | 6                             |
| 5                          | 8                        | 14                            |
| 6                          | 9                        | 23                            |
| 9                          | 12                       | 35                            |
| 10                         | 10                       | 45                            |
| 12                         | 8                        | 53                            |
| 15                         | 6                        | 59                            |
|                            | $n = 59$                 |                               |

$$Q_1 = \text{size of } \left(\frac{n+1}{4}\right)^{\text{th Observation}}$$

$$Q_1 = \text{size of } \left(\frac{59+1}{4}\right)^{\text{th Observation}}$$

$$Q_1 = \text{size of } \left(\frac{60}{4}\right)^{\text{th Observation}}$$

$$Q_1 = \text{size of } 15^{\text{th Observation}}$$

Size of 15th observation lies in  $cf$  23, hence quartile value = ₹ 6 lakhs

$$\therefore Q_1 = ₹ 6 \text{ lakhs}$$

$$Q_3 = \text{size of } 3\left(\frac{n+1}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 3\left(\frac{59+1}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } \left(\frac{60}{4}\right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } (3 \times 15)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 45^{\text{th Observation}}$$

Size of 45th observation lies in  $cf$  45, hence quartile value = ₹ 10 lakhs

$$\therefore Q_3 = ₹ 10 \text{ lakhs}$$

**Ans :  $Q_1 = ₹ 6 \text{ lakhs}, Q_3 = ₹ 10 \text{ lakhs}$**

**C) Continuous data :**  $Q_1$  and  $Q_3$  for continuous frequency distribution are calculated by applying the following steps.

- 1) Arrange the data in ascending or descending order.

- 2) Write respective frequencies of the class.
- 3) Find out cumulative frequency ( $cf$ )
- 4) Determine the quartile class.

**Formula :**

**Step - I :** First find the value of quartile

$$Q_1 = \text{size of } \left( \frac{n}{4} \right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } \left( \frac{3n}{4} \right)^{\text{th Observation}}$$

**Step - II :**

$$Q_i = l + \left( \frac{\frac{in}{4} - cf}{f} \right) \times h \quad i = 1, 2, 3$$

Where

$l$  = Lower limit of quartile class.

$f$  = Frequency of the quartile class

$cf$  = Cumulative frequency of the class preceding the quartile class.

$n$  = Total of frequency.

$h$  = Upper limit - lower limit of the quartile class.

- 1) Find out  $Q_1$  and  $Q_3$  quartile for the following data.

| Rainfall (in cms) | 20-30 | 30-40 | 40-50 | 50-60 |
|-------------------|-------|-------|-------|-------|
| No. of years      | 7     | 20    | 17    | 6     |

| Rainfall (in cms) | No. of years ( $f$ ) | Cumulative frequency ( $cf$ ) |
|-------------------|----------------------|-------------------------------|
| 20-30             | 7                    | 7                             |
| 30-40             | 20                   | 27                            |
| 40-50             | 17                   | 44                            |
| 50-60             | 6                    | 50                            |
|                   | $n = 50$             |                               |

**Step I**

$$Q_1 = \text{size of } \left( \frac{n}{4} \right)^{\text{th Observation}}$$

$$Q_1 = \text{size of } \left( \frac{50}{4} \right)^{\text{th Observation}}$$

$$Q_1 = \text{size of } (12.5)^{\text{th Observation}}$$

12.5 lies in  $cf$  27, therefore first quartile class is 30 - 40

$$\therefore l = 30 \quad f = 20 \quad cf = 7 \quad n = 50 \quad h = 10$$

**Step II**

$$Q_1 = l + \left( \frac{\frac{n}{4} - cf}{f} \right) \times h$$

$$Q_1 = 30 + \left( \frac{\frac{50}{4} - 7}{20} \right) \times 10$$

$$Q_1 = 30 + \left( \frac{12.5 - 7}{20} \right) \times 10$$

$$Q_1 = 30 + \left( \frac{5.5}{20} \right) \times 10$$

$$Q_1 = 30 + \left( \frac{55}{20} \right)$$

$$Q_1 = 30 + 2.75$$

$$Q_1 = 32.75$$

$$\therefore Q_1 = 32.75$$

**Step I**

$$Q_3 = \text{size of } \left( \frac{3n}{4} \right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } \left( \frac{3 \times 50}{4} \right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } \left( \frac{150}{4} \right)^{\text{th Observation}}$$

$$Q_3 = \text{size of } 37.5^{\text{th Observation}}$$

37.5 lies in  $cf$  44 hence third quartile class is 40 - 50

$$\therefore l = 40 \quad f = 17 \quad cf = 27 \quad n = 50 \quad h = 10$$

**Step II**

$$Q_3 = l + \left( \frac{\frac{3n}{4} - cf}{f} \right) \times h$$

$$Q_3 = 40 + \left( \frac{\frac{3 \times 50}{4} - 27}{17} \right) \times 10$$

$$Q_3 = 40 + \left( \frac{37.5 - 27}{17} \right) \times 10$$

$$Q_3 = 40 + \left( \frac{10.5}{17} \right) \times 10$$

$$Q_3 = 40 + \left( \frac{105}{17} \right)$$

$$Q_3 = 40 + 6.18$$

$$\therefore Q_3 = 46.18$$

**Ans :  $Q_1 = 32.75, Q_3 = 46.18$**

### Deciles :

**Meaning :** 'Deciles' are values of data which divide the whole set of observations into ten equal parts. There are nine points i.e.  $D_1$ ,  $D_2$  to  $D_9$  which divide the data into 10 equal parts. To find out deciles, generally the data is arranged in ascending order.

- a) For calculating  $D_1$  to  $D_9$  for individual and discrete data, use the following formula.

$$D_j = j \left( \frac{n+1}{10} \right)^{\text{th Observation}} \quad \text{where } j = 1, 2 \dots 9$$

- b) For grouped data or continuous data,

$$D_j = l + \left( \frac{\frac{jn}{10} - cf}{f} \right) \times h, \quad j = 1, 2 \dots 9$$

Where

**D** = Decile

**l** = Lower limit of decile class

**f** = Frequency of decile class

**cf** = Cumulative frequency of class preceding decile class

**h** = Upper limit of the class - lower limit of the decile class.

### Calculation of Deciles

#### Solved Examples

##### A) Individual Data :

- 1) Calculate  $D_4$  and  $D_8$  for the following data.

10, 15, 7, 8, 12, 13, 14, 11, 9

**Solution :** Arrange the data in ascending order.

7, 8, 9, 10, 11, 12, 13, 14, 15

$$D_4 = \text{size of } 4 \left( \frac{n+1}{10} \right)^{\text{th Observation}}$$

$$D_4 = \text{size of } 4 \left( \frac{9+1}{10} \right)^{\text{th Observation}}$$

$$D_4 = \text{size of } 4 \left( \frac{10}{10} \right)^{\text{th Observation}}$$

$$D_4 = \text{size of } (4 \times 1)^{\text{th Observation}}$$

$$D_4 = \text{size of } 4^{\text{th Observation}}$$

$$\therefore D_4 = 10$$

### Calculation of $D_8$

$$D_8 = \text{size of } 8 \left( \frac{n+1}{10} \right)^{\text{th Observation}}$$

$$D_8 = \text{size of } 8 \left( \frac{9+1}{10} \right)^{\text{th Observation}}$$

$$D_8 = \text{size of } 8 \left( \frac{10}{10} \right)^{\text{th Observation}}$$

$$D_8 = \text{size of } (8 \times 1)^{\text{th Observation}}$$

$$D_8 = \text{size of } 8^{\text{th Observation}}$$

$$\therefore D_8 = 14$$

$$\boxed{\text{Ans : } D_4 = 10, D_8 = 14}$$

- 2) Calculate  $D_8$  from the given data

14, 13, 12, 11, 15, 16, 18, 17, 19, 20

**Solution :** First arrange the data in ascending order.

11, 12, 13, 14, 15, 16, 17, 18, 19, 20

$$n = 10$$

$$D_8 = \text{size of } 8 \left( \frac{n+1}{10} \right)^{\text{th Observation}}$$

$$D_8 = \text{size of } 8 \left( \frac{10+1}{10} \right)^{\text{th Observation}}$$

$$D_8 = \text{size of } 8 \left( \frac{11}{10} \right)^{\text{th Observation}}$$

$$D_8 = \text{size of } (8 \times 1.1)^{\text{th Observation}}$$

$$D_8 = \text{size of } (8.8)^{\text{th Observation}}$$

$$D_8 = \text{size of } 8^{\text{th observation}} + 0.8 (9^{\text{th observation}} - 8^{\text{th observation}})$$

$$D_8 = 18 + 0.8 (19 - 18)$$

$$D_8 = 18 + (0.8 \times 1)$$

$$D_8 = 18 + 0.8$$

$$\therefore D_8 = 18.8$$

$$\boxed{\text{Ans : } D_8 = 18.8}$$

##### B) Discrete data :

- 1) Find out  $D_2$  and  $D_4$  for the following data.

|                 |    |    |    |    |    |    |
|-----------------|----|----|----|----|----|----|
| Marks           | 10 | 20 | 30 | 40 | 50 | 60 |
| No. of Students | 5  | 6  | 4  | 5  | 10 | 9  |

**Solution :**

| Marks | No. of students ( $f$ ) | $cf$ |
|-------|-------------------------|------|
| 10    | 5                       | 5    |
| 20    | 6                       | 11   |
| 30    | 4                       | 15   |
| 40    | 5                       | 20   |
| 50    | 10                      | 30   |
| 60    | 9                       | 39   |
|       | $n = 39$                |      |

$$D_2 = \text{size of } 2\left(\frac{n+1}{10}\right)^{\text{th Observation}}$$

$$D_2 = \text{size of } 2\left(\frac{39+1}{10}\right)^{\text{th Observation}}$$

$$D_2 = \text{size of } 2\left(\frac{40}{10}\right)^{\text{th Observation}}$$

$$D_2 = \text{size of } (2 \times 4)^{\text{th Observation}}$$

$$D_2 = \text{size of } (8)^{\text{th Observation}}$$

Size of 8<sup>th</sup> Observation lies in cf 11

Hence  $D_2 = 20$  marks

$$\therefore D_2 = 20$$

### Calculation of $D_4$

$$D_4 = \text{size of } 4\left(\frac{n+1}{10}\right)^{\text{th Observation}}$$

$$D_4 = \text{size of } 4\left(\frac{39+1}{10}\right)^{\text{th Observation}}$$

$$D_4 = \text{size of } 4\left(\frac{40}{10}\right)^{\text{th Observation}}$$

$$D_4 = \text{size of } (4 \times 4)^{\text{th Observation}}$$

$$D_4 = \text{size of } 16^{\text{th Observation}}$$

Size of 16<sup>th</sup> Observation lies in cf 20

Hence  $D_4 = 40$  marks

$$\therefore D_4 = 40$$

|  |
|--|
| <b>Ans : <math>D_2 = 20, D_4 = 40</math></b> |
|--|

### C) Continuous Data :

Apply the steps as mentioned in Qualities of continuous data.

- Find out  $D_5$  and  $D_7$  for the following data of marks of 100 students in a class test.

| Marks           | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 |
|-----------------|------|-------|-------|-------|-------|
| No. of Students | 10   | 10    | 40    | 20    | 20    |

| Marks | No. of students ( $f$ ) | $cf$ |
|-------|-------------------------|------|
| 0-10  | 10                      | 10   |
| 10-20 | 10                      | 20   |
| 20-30 | 40                      | 60   |
| 30-40 | 20                      | 80   |
| 40-50 | 20                      | 100  |
|       | $n = 100$               |      |

### Calculation of $D_5$

#### Step I

$$D_5 = \text{size of } \left(\frac{5n}{10}\right)^{\text{th Observation}}$$

$$D_5 = \text{size of } \left(\frac{5 \times 100}{10}\right)^{\text{th Observation}}$$

$$D_5 = \text{size of } \left(\frac{500}{10}\right)^{\text{th Observation}}$$

$$D_5 = \text{size of } 50^{\text{th Observation}}$$

Size of 50<sup>th</sup> Observation lies in cf 60

Hence Decile class = 20-30

$$\therefore l = 20 \quad f = 40 \quad cf = 20 \quad n = 100 \quad h = 10$$

#### Step II

$$D_5 = l + \left( \frac{\frac{5n}{10} - cf}{f} \right) \times h$$

$$D_5 = 20 + \left( \frac{\frac{5 \times 100}{10} - 20}{40} \right) \times 10$$

$$D_5 = 20 + \left( \frac{\frac{500}{10} - 20}{40} \right) \times 10$$

$$D_5 = 20 + \left( \frac{50 - 20}{40} \right) \times 10$$

$$D_5 = 20 + \left( \frac{30}{40} \right) \times 10$$

$$D_5 = 20 + \frac{300}{40}$$

$$D_5 = 20 + 7.5$$

$$D_5 = 27.5 \text{ marks}$$

$$\therefore D_5 = 27.5$$

### Calculation of $D_7$

#### Step I

$$D_7 = \text{size of } \left(\frac{7n}{10}\right)^{\text{th Observation}}$$

$$D_7 = \text{size of } \left( \frac{7 \times 100}{10} \right)^{\text{th Observation}}$$

$$D_7 = \text{size of } \left( \frac{700}{10} \right)^{\text{th Observation}}$$

$$D_7 = \text{size of } 70^{\text{th}} \text{ Observation}$$

$$D_7 = \text{size of } 70^{\text{th}} \text{ Observation lies in } cf \ 80$$

Hence Decile class = 30-40

$$\therefore l = 30 \quad f = 20 \quad cf = 60 \quad n = 100 \quad h = 10$$

### Step II

$$D_7 = l + \left( \frac{\frac{7n}{10} - cf}{f} \right) \times h$$

$$D_7 = 30 + \left( \frac{\frac{7 \times 100}{10} - 60}{20} \right) \times 10$$

$$D_7 = 30 + \left( \frac{\frac{700}{10} - 60}{20} \right) \times 10$$

$$D_7 = 30 + \left( \frac{70 - 60}{20} \right) \times 10$$

$$D_7 = 30 + \left( \frac{10}{20} \right) \times 10$$

$$D_7 = 30 + \left( \frac{100}{20} \right)$$

$$D_7 = 30 + 5$$

$$D_7 = 35 \text{ marks}$$

$$\therefore D_7 = 35$$

**Ans :  $D_5 = 27.5, D_7 = 35$**

### Percentiles :

**Meaning :** 'Percentiles' are values of data which divide the whole set of observations into 100 equal parts. There are 99 percentiles giving ninety nine dividing points. Symbolically, value of percentiles are denoted by  $P_1, P_2, \dots, P_{99}$ . To find out percentiles, generally the data is arranged in ascending order.

- a) For calculating  $P_1$  to  $P_{99}$  for individual and discrete data we use following formula.

$$P_k = \text{size of } k \left( \frac{n+1}{100} \right)^{\text{th Observation}} \quad k = 1, 2, \dots, 99$$

- b) For grouped data or continuous data,

$$P_k = l + \left( \frac{\frac{kn}{100} - cf}{f} \right) \times h \quad k = 1, 2, \dots, 99$$

Where

**P** = Percentile

**l** = Lower limit of percentile class

**f** = Frequency of percentile class

**cf** = Cumulative frequency of class preceding percentile class

**h** = Upper limit of the class - lower limit of the percentile class.

### Calculation of Percentiles

#### Solved Examples

##### A) Individual Data :

- 1) Find  $P_{40}$  for the following data.

10, 15, 8, 16, 19, 11, 12, 14, 9

**Solution :** Arrange the data in ascending order

i.e. 8, 9, 10, 11, 12, 14, 15, 16, 19

$$n = 9$$

$$P_{40} = \text{size of } 40 \left( \frac{n+1}{100} \right)^{\text{th Observation}}$$

$$P_{40} = \text{size of } 40 \left( \frac{9+1}{100} \right)^{\text{th Observation}}$$

$$P_{40} = \text{size of } 40 \times \left( \frac{10}{100} \right)^{\text{th Observation}}$$

$$P_{40} = \text{size of } \left( \frac{40 \times 10}{100} \right)^{\text{th Observation}}$$

$$P_{40} = \text{size of } \left( \frac{400}{100} \right)^{\text{th Observation}}$$

$$P_{40} = \text{size of } 4^{\text{th Observation}}$$

$$P_{40} = \text{size of } 4^{\text{th Observation}} \text{ is } 11$$

$$\therefore P_{40} = 11$$

**Ans :  $P_{40} = 11$**

- 2) Calculate  $P_{85}$  from the following data.

79, 82, 36, 38, 51, 72, 68, 70, 64, 63

**Solution :** Arrange the data in ascending order

i.e. 36, 38, 51, 63, 64, 68, 70, 72, 79, 82

$$n = 10$$

$$P_{85} = \text{size of } 85 \left( \frac{n+1}{100} \right)^{\text{th Observation}}$$

$$P_{85} = \text{size of } 85 \left( \frac{10+1}{100} \right)^{\text{th Observation}}$$

$$P_{85} = \text{size of } 85 \left( \frac{11}{100} \right)^{\text{th Observation}}$$

$$P_{85} = \text{size of } (85 \times 0.11)^{\text{th Observation}}$$

$$P_{85} = \text{size of } (9.35)^{\text{th Observation}}$$

$$P_{85} = \text{size of } 9^{\text{th observation}} + 0.35(10^{\text{th observation}} - 9^{\text{th observation}})$$

$$P_{85} = 79 + 0.35(82 - 79)$$

$$P_{85} = 79 + 0.35 \times 3$$

$$P_{85} = 79 + 1.05$$

$$\therefore P_{85} = 80.05$$

**Ans :  $P_{85} = 80.05$**

### B) Discrete Data :

1) Find out  $P_{20}$  and  $P_{60}$  for the following data :

|                    |    |    |    |    |    |    |    |
|--------------------|----|----|----|----|----|----|----|
| Height (in inches) | 58 | 59 | 60 | 61 | 62 | 63 | 64 |
| No. of persons     | 4  | 5  | 6  | 10 | 12 | 2  | 1  |

**Solution :** Arrange the data in ascending order.

| Height (in inches) | No. of persons ( $f$ ) | $cf$ |
|--------------------|------------------------|------|
| 58                 | 4                      | 4    |
| 59                 | 5                      | 9    |
| 60                 | 6                      | 15   |
| 61                 | 10                     | 25   |
| 62                 | 12                     | 37   |
| 63                 | 2                      | 39   |
| 64                 | 1                      | 40   |
|                    | $n = 40$               |      |

$$P_{20} = \text{size of } 20 \left( \frac{n+1}{100} \right)^{\text{th Observation}}$$

$$P_{20} = \text{size of } 20 \left( \frac{40+1}{100} \right)^{\text{th Observation}}$$

$$P_{20} = \text{size of } 20 \left( \frac{41}{100} \right)^{\text{th Observation}}$$

$$P_{20} = \text{size of } \left( \frac{20 \times 41}{100} \right)^{\text{th Observation}}$$

$$P_{20} = \text{size of } \left( \frac{820}{100} \right)^{\text{th Observation}}$$

$$P_{20} = \text{size of } 8.2^{\text{th Observation}}$$

$$P_{60} = \text{size of } 8.2^{\text{th Observation}} \text{ lies in cf 9}$$

$$\text{Hence } P_{20} = 59$$

$$\therefore P_{20} = 59$$

### Calculation of $P_{60}$

$$P_{60} = \text{size of } 60 \left( \frac{n+1}{100} \right)^{\text{th Observation}}$$

$$P_{60} = \text{size of } 60 \left( \frac{40+1}{100} \right)^{\text{th Observation}}$$

$$P_{60} = \text{size of } 60 \left( \frac{41}{100} \right)^{\text{th Observation}}$$

$$P_{60} = \text{size of } \left( \frac{60 \times 41}{100} \right)^{\text{th Observation}}$$

$$P_{60} = \text{size of } (24.6)^{\text{th Observation}}$$

$$P_{60} = \text{size of } 24.6^{\text{th Observation}} \text{ lies in cf 25}$$

$$\text{Hence } P_{60} = 61$$

$$\therefore P_{60} = 61$$

**Ans :  $P_{20} = 59, P_{60} = 61$**

### C) Continuous data :

Apply the steps as mentioned in Quartiles of continuous data.

1) Find  $P_{65}$  from the following data

|                 |     |      |       |       |       |
|-----------------|-----|------|-------|-------|-------|
| Marks           | 0-5 | 5-10 | 10-15 | 15-20 | 20-25 |
| No. of Students | 3   | 7    | 20    | 12    | 8     |

**Solution :**

| Marks | No. of students ( $f$ ) | $cf$ |
|-------|-------------------------|------|
| 0-5   | 3                       | 3    |
| 5-10  | 7                       | 10   |
| 10-15 | 20                      | 30   |
| 15-20 | 12                      | 42   |
| 20-25 | 8                       | 50   |
|       | $n = 50$                |      |

**Step I**

$$P_{65} = \text{size of } \left( \frac{65n}{100} \right)^{\text{th Observation}}$$

$$P_{65} = \text{size of } \left( \frac{65 \times 50}{100} \right)^{\text{th Observation}}$$

$$P_{65} = \text{size of } \left( \frac{3250}{100} \right)^{\text{th Observation}}$$

$P_{65}$  = size of 32.5<sup>th</sup> Observation

$P_{65}$  = size of 32.5<sup>th</sup> Observation lies in cf 42

Hence percentile class = 15-20

$$l=15 \quad f=12 \quad cf=30 \quad n=50 \quad h=5$$

**Step II**

$$P_{65} = l + \left( \frac{\frac{65n}{100} - cf}{f} \right) \times h$$

$$P_{65} = 15 + \left( \frac{\frac{65 \times 50}{100} - 30}{12} \right) \times 5$$

$$P_{65} = 15 + \left( \frac{\frac{3250}{100} - 30}{12} \right) \times 5$$

$$P_{65} = 15 + \left( \frac{32.5 - 30}{12} \right) \times 5$$

$$P_{65} = 15 + \left( \frac{2.5}{12} \right) \times 5$$

$$P_{65} = 15 + \left( \frac{2.5 \times 5}{12} \right)$$

$$P_{65} = 15 + \left( \frac{12.5}{12} \right)$$

$$P_{65} = 15 + 1.04$$

$$\therefore P_{65} = 16.04$$

$$\boxed{\text{Ans : } P_{65} = 16.04}$$


**EXERCISE**

**Q. 1. Choose the correct option :****1) Statements that do not apply to Quartiles.**

- a) First arrange the values in ascending or descending order.
- b) Observation can be divided into 4 parts.
- c) They are represented as  $Q_1$ ,  $Q_2$  and  $Q_3$ .
- d)  $Q_2$  is also known as median.

**Options :** 1) a

2) b and c

3) a, b and c

4) None of these

**2) D<sub>j</sub> from the given data.**

Data – 4, 5, 6, 7, 8, 9, 10, 11, 12

**Options :** 1) 7    2) 9    3) 10    4) 12

**3) Statements related to partition values that are correct.**

- a) Exact divisions of percentiles into 100 parts gives 99 points
- b) Deciles have total 9 parts
- c) Quartiles are shown by  $Q_1$ ,  $Q_2$  and  $Q_3$
- d) Symbolically, Percentiles and Deciles are shown by P and D

**Options :** 1) a and c

2) a and b

3) a, b and c

4) a, c and d

**Q. 2. Identify the correct pairs from the given options :****Group A**

1) Quartiles

**Group B**

$$a) D_j = \text{size of } j \left( \frac{n+1}{10} \right)^{\text{th Observation}}$$

2) Deciles

$$b) P_k = l + \left( \frac{\frac{kn}{100} - cf}{f} \right) \times h$$

3) Percentiles

$$c) Q_i = l + \left( \frac{\frac{in}{4} - cf}{f} \right) \times h$$

**Options :** 1) 1-b, 2-c, 3-a

2) 1- c, 2-a, 3-b

3) 1- c, 2-b, 3-a

4) 1- a, 2-b, 3-c

**Q. 3. Give economic terms :**

- 1) Procedure for dividing the data into equal parts.
- 2) Value that divides the series into ten equal parts.
- 3) Value that divides the whole set of observations into four equal parts.

**Q. 4. Solve the following :**

- 1) Calculate  $Q_1$ ,  $D_4$  and  $P_{26}$  for the following data.

$\boxed{18, 24, 45, 29, 4, 7, 28, 49, 16, 26, 25, 12, 10, 9, 8}$

2) Calculate of  $Q_3$ ,  $D_5$ , and  $P_{35}$  for the given data.

| Income (in lakhs ₹) | 1 | 2 | 3  | 4  | 5  | 6  |
|---------------------|---|---|----|----|----|----|
| No. of family       | 2 | 5 | 20 | 25 | 15 | 12 |

3) Find out  $P_{50}$  for the following data.

| Wages (in ₹) (x) | Number of workers |
|------------------|-------------------|
| 0-20             | 4                 |
| 20-40            | 6                 |
| 40-60            | 10                |
| 60-80            | 25                |
| 80-100           | 15                |

4) Calculate  $Q_3$  for the following data.

| Sales (in lakhs ₹) | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
|--------------------|-------|-------|-------|-------|-------|-------|
| No. of firms       | 20    | 30    | 70    | 48    | 32    | 50    |

5) Calculate  $D_7$  for the following data.

| Profit (in crores ₹) | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 |
|----------------------|-------|-------|-------|-------|-------|-------|
| No. of firms         | 20    | 30    | 70    | 48    | 32    | 50    |

6) Calculate  $P_{15}$  for the following data.

| Investment (₹ in lakhs) | 0-10 | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 |
|-------------------------|------|-------|-------|-------|-------|-------|
| No. of firms            | 5    | 10    | 25    | 30    | 20    | 10    |

**Q. 5. State with reasons whether you agree or disagree with the following statements :**

- 1) Partition values have application only in theory but not in practice.
- 2) Average can misinterpret the representative value.
- 3) Median is also known as second quartile.

**Q. 6. Answer the following questions on the basis of the given table :**

| Marks           | 30 | 10 | 20 | 40 | 50 |
|-----------------|----|----|----|----|----|
| No. of Students | 13 | 4  | 7  | 8  | 6  |

- 1) Write the formula of  $Q_1$  and  $Q_3$ .
- 2) Find out the cumulative frequency of the last value in the above data.
- 3) Find out the value of 'n' in the above data.



## CHAPTER - 4 : THE ECONOMY OF MAHARASHTRA

### Introduction :

The state of Maharashtra came into existence on 1<sup>st</sup> May 1960. The state economy has achieved a distinguished status as a result of the collective efforts of its people.



### Administrative Divisions of Maharashtra :

As per Economic Survey of Maharashtra 2017-18, the state has been divided into 36 districts under 6 revenue divisions viz, Mumbai, Pune, Nasik, Aurangabad, Amaravati and Nagpur, for administrative reasons.

### Important features of the economy of Maharashtra :

- 1) Maharashtra is the second largest populated state in the country, the population of the state was 11.24 crores during 2011.
- 2) Maharashtra is the third largest state in the country in terms of geographical area measuring about 3.08 lac sq. kms.

- 3) It is the most urbanized state with 45.20% of its population living in towns and cities.
- 4) According to 2011 census, the sex ratio of Maharashtra was 929 females per 1000 males.
- 5) The state literacy rate was 82.3% as per 2011 census.
- 6) According to the Economic Survey of Maharashtra for 2016-17, the State had the highest growth of GSDP (Gross State Domestic Product) and **State Per Capita Income (SPCI)** in comparison with other states.
- 7) The state economy is characterised by

- i) abundant natural resources
  - ii) availability of skilled manpower
  - iii) technological advancement
  - iv) developed infrastructure.
- 8) Maharashtra is the most favoured destination for creativity, skill development, investment and tourism.

### Economic development of Maharashtra :



**Fig. 4.1 : Economy of Maharashtra**

**A) Agricultural sector :** Agriculture and allied activities play an important role in the economic development of the state. As per Economic Survey of Maharashtra 2017-18, the share of agriculture and allied activities in the total Gross State Value Added (GSVA) was 12.2% during 2016-17 as against 15.3% during 2001-02 which shows a declining trend over the period.



**Fig. 4.2 : Agriculture**

### General problems in the agricultural sector :

- i) Decrease in the average size of land holdings leads to low farm productivity.
- ii) Increase in the number of small and marginal farmers.
- iii) Excessive use of chemical fertilizers and pesticides, leading to soil degradation.
- iv) Agricultural indebtedness.
- v) Poor implementation of land reforms and adverse crop pattern.
- vi) Dry land and inadequate irrigation facilities.
- vii) Lack of capital
- viii) Improper implementation of rural development plans.
- ix) Lack of marketing facilities
- x) Impact of climatic changes

### Think about it :

What will happen if the farmers sell their farm produce without the middlemen?

### Measures undertaken by the Government for agricultural development (Economic Survey of Maharashtra 2017-18) :

- 1) Distribution of quality seeds at reasonable rates.
- 2) Increased number of outlets for fertilizer and pesticide distribution.
- 3) Development of irrigation facilities.
- 4) Electrification of agricultural pumps and efforts to provide 'electricity on demand'.
- 5) Financial assistance as per requirements.
- 6) Setting up of Agriculture Produce Marketing Committees (APMC), establishment of agro export zones, horticultural training centres, grading and packing facilities for effective distribution.
- 7) Creating awareness about agricultural information through the use of mass media for making agriculture a profit making business.

**B) Industry :** Maharashtra is an industrially advanced state. Industrial sector plays a

major role in the economic development of Maharashtra. It has the potential to absorb excess labour from the farming sector,. It leads to diversification of markets, generates higher incomes and higher productivity. As per Annual Survey of Industries (ASI) 2016-17, the industrial sector of Maharashtra is at the top position. The share of industry in the Net Value Added (NVA) is about 18%. Maharashtra has also been the first choice of domestic and foreign investors.



**Fig. 4.3 : Industry**

#### **Find out :**

Names of any five enterprises from each category producing the following goods in Maharashtra : chemicals, food processing, textiles, automobile, I.T. and pharmaceuticals.

#### **Foreign Direct Investment (FDI) :**

In the early 1990s, the Government of India started amending the norms capping foreign direct investment in certain sectors. The liberalisation act of 1991 cleared the path of FDI. Maharashtra has been consistently ranked as the number one investment destination in India. The State has remained in the forefront in terms of FDI inflow in the country. The FDI inflows in Maharashtra since April, 2000 till September 2017 was ₹ 6,11,760 Crore which is 31% of the total FDI inflow at all India Level.

#### **General problems in the industrial sector :**

- 1) Delays in government procedure
- 2) Lack of opportunities for skill development.
- 3) Lack of updated technology.

- 4) Lack of infrastructural facilities.
- 5) Lack of motivation to new entrepreneurs.
- 6) Lack of development programmes.
- 7) Regional imbalance

#### **Measures undertaken by the Government for industrial development (Economic Survey of Maharashtra 2017-18) :**

- 1) Single window cell was initiated to provide all clearances to the existing and prospective investors.
- 2) Maharashtra Industry, Trade and Investment Facilitation Cell (MAITRI) was introduced to provide online consolidated information about the investment process.
- 3) Awards for export performance, space rent subsidies are provided to small scale industries to encourage participation in international exhibitions.
- 4) Creation of Special Economic Zones (SEZ) to boost industrial growth.
- 5) Maharashtra State Industrial Cluster Development Programme (MSICDP) is being implemented all over the state to develop small, medium and micro enterprises.

**C) Service Sector :** Service sector consists of insurance, tourism, retail banking, education and social services. Service sector includes provision of services to business as well as final consumers.

Service sector is the largest employment generating and fastest growing sector of the economy. The contribution of service sector to the Gross State Domestic Product (GSDP) has been the highest compared to the other sectors in the economy. It was 54.5% during 2017-18.

The core areas for development of service sector include Fintech, IT/ITES, start ups, cloud computing, electric vehicles, defence, tourism and private universities. Government has also tried to expand the service sector by various activities in Tier II cities.

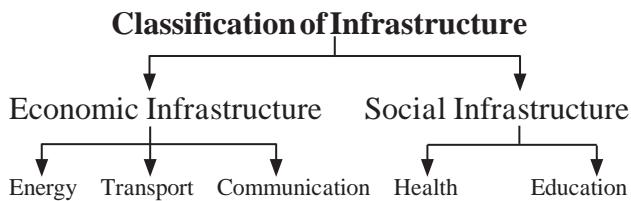
### Try this :

Classify the services mentioned in the previous paragraph into services for business and services for final consumers.

### Core Areas of Service Sector :

#### • Infrastructure :

Infrastructure is the basic requirement for economic development. A sound infrastructural foundation is the key to overall socio-economic development of the state. This acts as a magnet for attracting additional investment into the state and thus provides a competitive edge to it over other states. Adequate infrastructural facilities are an absolute necessity for rapid achievement of sustainable economic growth.



a) **Economic Infrastructure :** It facilitates production and distribution of goods and services for economic development.

### Measures for development of economic infrastructure :

- 1) Increasing installed capacity of electricity generation.
- 2) Rural electrification, network improvement and programmes for energy conservation.
- 3) Modified direct benefit transfer scheme to LPG consumers in the state.
- 4) Road development plan (2001-2021) is being implemented in the state with a target to develop 3.37 lakh kms of road.
- 5) Metro Railway has started at Mumbai and Nagpur.
- 6) Maharashtra Port Development Policy was constituted for integrated development of ports. State government is promoting Sagarmala programme launched by the central government for port led development.

7) Internet subscriber base was 5.45 crore in Maharashtra as on 30<sup>th</sup> September 2017, which is the highest among all the states.

**b) Social infrastructure :** Social infrastructure is also one of the important components of the economy because it improves the quality of human life as well as stimulates the economic development. It not only improves the quality but also gives the power to produce knowledge. Social infrastructure includes literacy programme, education, public health, housing, drinking water and sanitation.

### Measures undertaken to develop Social Infrastructure :



#### i) Education :

Education is considered as one of the basic human needs. It forms the backbone of socio-economic development of any country. Education is significant aspect of human resource development (HRD). In the present scenario, India is getting the advantage of highest demographic dividend due to maximum percentage of young population in the country. Education, therefore becomes 'a priority' at the national as well as state level. The state of Maharashtra has implemented various educational schemes to achieve the goal of education. There are four levels of education in our country.

- 1) Primary
- 2) Secondary
- 3) Higher Secondary
- 4) Higher education

**a) Primary education :** The state of Maharashtra has implemented the Right to Education (RTE) of children in the age group 6-14 years to provide free and compulsory education under the Sarva Shiksha Abhiyan (SSA). The expenditure of the State government on primary education was ₹19,486 crores during 2016-17.

### Primary (Std. I to VIII) Educational Institutions and Enrolment

| Year    | Number of Schools | Total Enrolment (in lakhs) | No. of Teachers (in lakhs) | Pupil-Teacher Ratio |
|---------|-------------------|----------------------------|----------------------------|---------------------|
| 2016-17 | 1,04,971          | 159.86                     | 5.30                       | 30.1                |

Source : Economic Survey of Maharashtra 2017-18

**b) Secondary and Higher Secondary Education :**

Rashtriya Madhyamik Shiksha Abhiyan (RMSA) was launched in 2009 with the objective to improve the access as well as the quality of secondary education. During 2016-17, the State government's expenditure on secondary and higher secondary education was ₹16,089 crores.

**Secondary and Higher Secondary (Std. IX to XII) Educational Institutions and their Enrolment**

| Year    | Number of Schools | Total Enrolment (in lakhs) | No. of Teachers (in lakhs) | Pupil-Teacher Ratio |
|---------|-------------------|----------------------------|----------------------------|---------------------|
| 2016-17 | 25,737            | 66.15                      | 2.13                       | 31.1                |

**Source :** Economic Survey of Maharashtra 2017-18

**c) Higher education :** Apart from

universalization of primary education, the Government of Maharashtra is taking efforts to expand opportunities in higher education also. Higher education helps in creating technical and skilled human resources which is an important input necessary for overall economic development. There are 22 state universities, out of which 4 universities are for agriculture, one university for health science courses, one university for veterinary science, one for technology and 15 other universities for general courses. In addition to these, there are 21 autonomous universities, one central university, 4 private universities and 5 institutes of national importance in the state.

To meet the challenges of liberalization, privatization and globalization, the state enacted the new Maharashtra Public Universities Act, 2016. Key focus of this Act is to promote academic autonomy and excellence, skill based education through democratic process in higher education.

Maharashtra is also the first state in the country to receive RUSA grant of ₹ 20 crore under Research and Innovation and Quality Improvement for setting up innovation and technology transfer hubs. Rashtriya Uchchatar Shiksha Abhiyaan (RUSA) is a centrally sponsored scheme launched by the Government of India in 2013.

**d) Others :**

**1) Inclusive education :** This is for differently abled children with special needs.

**2) Girls' Education :** Various schemes to promote girls' education such as free education till the higher secondary level, free of cost S.T. bus service for school going girls in rural areas, bicycles to needy girls living within 5 kms from schools have been introduced by the Government of Maharashtra.

**3) Adult Literacy :** To increase adult literacy in the state, innovative schemes like 'Each one Teach one', 'Sakshar Bharat Abhiyan' are implemented with community participation.

**4) Tribal Education :** Government of Maharashtra has introduced residential Ashram Schools in the tribal areas of the state. Tribal students are provided accommodation, food, uniforms, educational materials and other concessions free of cost. There are 556 aided Ashram Schools in the state. Government hostel facility is provided at division, district and taluka levels to encourage tribal students to pursue higher studies.

**Find out :**

Symbols of the following :

- Sarva Shiksha Abhiyan (SSA)
- Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
- Adult Literacy Mission (ALM)



**ii) Health Services :**

There were 1814 primary health centres and 360 community health centres in the state as on 31st March 2017. Government of Maharashtra also emphasizes on programmes to strengthen health system in rural and urban areas through National Rural Health Mission (NRHM) and National Urban Health Mission (NUHM). These programmes include health determinants like sanitation and hygiene, nutrition and safe drinking water. The Government of Maharashtra

has created a three tier health infrastructure to provide comprehensive health services.

Primary tier includes Primary Health Centres and Community Health Centres. The Secondary tier includes sub district hospitals and district hospitals.

The tertiary tier includes well equipped medical colleges and super speciality hospitals located in major cities.



#### • Tourism :

Maharashtra attracts many tourists from different states and abroad too. To promote the state as a leading tourist destination, the government has formulated Maharashtra Tourism Policy, 2016.

#### Objectives of tourism policy include :

- To make Maharashtra a leading tourist destination by 2025.
- To attract investments to the tune of ₹ 30,000 crore.
- To create one million additional jobs in the industry.

Maharashtra Tourism Development Corporation (MTDC) is the nodal agency for implementation of this policy in the state. MTDC organises different events such as Ellora festival, Elephanta festival etc.

MTDC has also launched the scheme of 'Mahabhraman' to bring different experimental projects such as agro tourism, village tourism, food tourism, safaris, tribal lifestyles etc. under one roof.



#### • Hospitality :

Hospitality is a much broader industry than other industries. It has grown manifold in Maharashtra due to flourishing tourism. One of the most defining aspects of this industry is that it focusses on customers' satisfaction. Hotel industry is one of the sectors of the hospitality industry. Many forms of transportation that cater to the tourists are also part of this business, e.g. Airlines, Mumbai-Goa cruiseship, fancier trains (Deccan Odyssey), restaurants, general

tourism and event management are also a part of this sector.



#### • Entertainment Industry :

India produces the largest number of films in the world. Maharashtra has played a remarkable role in this. Entertainment sector of Maharashtra generates employment opportunities to large number of people. Kolhapur has been a worth mentioning city for regional films. Mumbai, popularly known as 'Bollywood' has a great impact on the global film industry.

#### D) Co-operative Movement in Maharashtra :

Co-operative movement is the greatest contribution given by the state of Maharashtra to the country.



**Fig. 4.4 : Co-operative Movement**

Co-operative Movement is an effective instrument in the economic development of rural areas and improving socio-economic conditions of the under-privileged in Maharashtra. The basic nature of co-operative societies is to encourage the values of self help, democracy, equality and solidarity.

Co-operative movement in Maharashtra was confined mainly to the field of agricultural credit but subsequently extended to other sectors such as :

- agro processing
- agro marketing
- sugar co-operatives
- fisheries co-operative societies
- co-operative dairy societies

- textiles
- housing societies
- consumer stores

As on 31st March 2017, there were about 1.95 lakh co-operative societies in the state with about 5.25 lakh members.

## EXERCISE

### **Q. 1. Give economic terms :**

- 1) Investments done by foreign companies in our country
- 2) Programme for development of small, medium and micro industries.
- 3) Basic requirement for facilitating production and distribution of goods and services for economic development.
- 4) Movement that promotes values of self-help democracy and equality.

### **Q. 2. Find the odd word out :**

- 1) Agricultural Indebtedness, dry farming, lack of capital, engineering
- 2) Tourism, Banking, Automobile Production, Insurance
- 3) Pune, Hyderabad, Nasik, Nagpur
- 4) MTDC, MAITRI, SEZ, MIDC
- 5) Primary education, Hospitality, Higher education, Skill based education.

### **Q. 3. Identify and explain the concepts from the given illustrations :**

- 1) To facilitate research in robotic technology, Japan has invested ₹ 1000 crores in India
- 2) Prajakta and her family visited the beaches during her eight-day Diwali vacation.
- 3) Pravin from Latur works as a technician in the films division at Mumbai city.
- 4) Rani Gond from Chandrapur works as a hostess with the Mumbai-Goa cruise ship.

### **Q. 4. Distinguish between :**

- 1) Economic Infrastructure and Social infrastructure

- 2) Agriculture sector and Service sector
- 3) Tourism and Hospitality
- 4) Education and Health services

### **Q. 5. Answer the following :**

- 1) Explain the role of Co-operative movement in Maharashtra.
- 2) Explain in detail measures taken by the government for agricultural development of Maharashtra.
- 3) Explain the major problems in the industrial sector of Maharashtra.
- 4) Explain the measures taken to develop social infrastructure in Maharashtra.

### **Q. 6. Read the following passage and answer the questions given below :**

Government of India has launched an ambitious programme of 'Bharatnet' for rural India by keeping in mind today's modern era. More than one lakh rural (Grampanchayat) areas have been connected under Bharatnet high speed broadband scheme. Maharashtra has become the best performing state. East Uttar Pradesh, Chattisgarh, Rajasthan and Jharkhand have also been placed among the best performing states in the first phase of Bharatnet broad band connection scheme.

- 1) Why did the Government of India launch the Bharatnet project?
- 2) How many Grampanchayats have received the Internet service?
- 3) Which states have been placed as the best performing states in the first phase of Bharatnet?
- 4) 'Internet has brought the world closer' - Express your views on it.



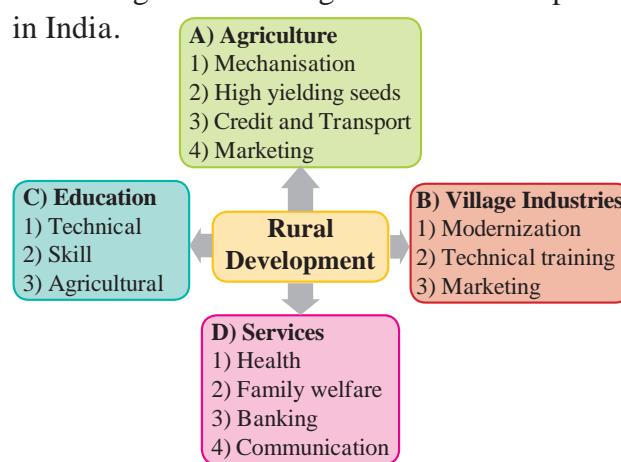
## CHAPTER - 5 : RURAL DEVELOPMENT IN INDIA

### Introduction :

Indian economy is predominantly a rural economy. Economic growth of the country is driven by its rural development. It is true that India lives in villages. The term 'rural development' is a **subset** of the broader term development. The term 'rural development' connotes overall development of rural areas with a view to improve the quality of life. According to 2011 census, the country's rural population is 83.25 crores (68.8% of total population). There has been a wide consensus that rural development should be inclusive and sustainable in order to alleviate the poverty.

### Rural Development :

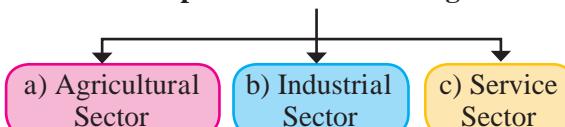
The concept of 'Rural development' was born in the context of agriculture, and it remained for a long time with agricultural development in India.



### Definition by World Bank :

"Rural development is a strategy designed to improve the economic and social life of a specific group of people - the rural poor. Rural development involves extending the benefits of development to the poorest among those who seek livelihood in the rural areas. The group includes small-scale farmers, tenants and the landless."

### Rural occupational structure in general



**a) Agricultural sector :** The rural population in India is classified into agricultural sector which has been subdivided as agriculture and allied activities. Agriculture consists of small, marginal and large farmers. Allied sector consists of plantation, forestry, fisheries, dairy and horticulture.

**b) Industrial Sector :** Industrial sector is defined as an economic activity concerned with the processing of raw materials and manufacture of goods in factories. This sector has been classified into the small scale, cottage and rural industries.

**c) Service Sector :** The service sector termed as 'tertiary sector' involves provision of services to businesses as well as final consumers such as accounting services, tradesman-ship (like mechanic or plumber services), computer services, restaurants, tourism etc. The service sector has been further classified into traders (wholesaler and retailer), transport operators, professional and technical.

### Rural Development in India :

Rural development in India has witnessed various plans and policies initiated by the government as well as at the non-government levels. Appropriate strategies for rural development will lead to economic growth and development of the country.

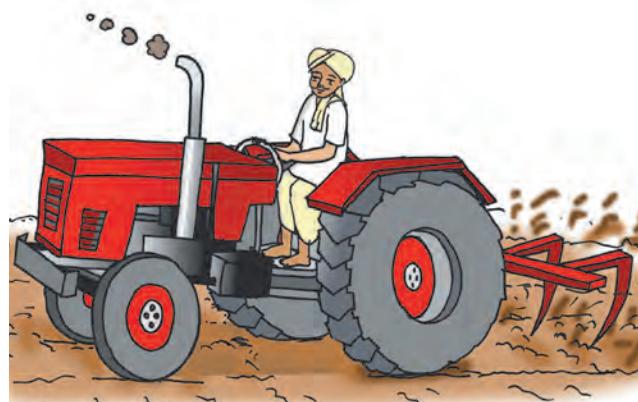
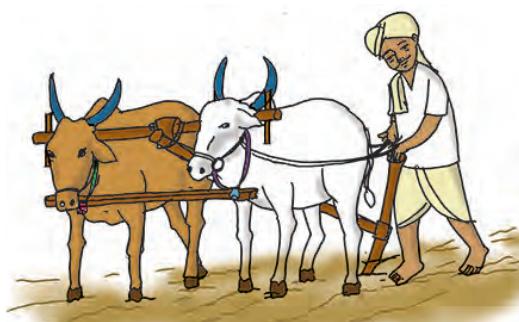
### Significance of Rural Development in India :

**1) Public health and sanitation :** Rural development helps to improve sanitation and hygiene, providing safe drinking water and affordable health facilities. This would lead to an improvement in the quality of life of the rural people.

**2) Literacy rate in rural area :** Literacy is a powerful instrument of socio-economic change. However there is a considerable

gap between the rural and urban literacy rates. Rural development helps to bridge this gap by making provisions for educational facilities at all levels.

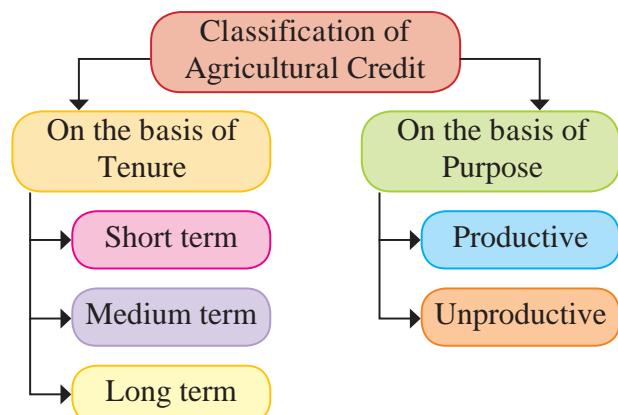
- 3) Empowerment of women :** Rural development helps to reduce gender disparity, meet the diverse needs of rural women as well as encourage their participation in community development programmes.
- 4) Enforcement of law and order :** Rural development helps to safeguard the rights of the socially disadvantaged groups through proper enforcement of law and order.
- 5) Land reforms :** Rural development ensures effective implementation of land reforms such as ceiling on land holdings, regulation of rent, protection of tenancy rights etc. This leads to reduction in rural inequality.
- 6) Infrastructure development :** Rural development leads to further progress in basic facilities such as generation of electricity, road connectivity, irrigation etc.
- 7) Availability of credit :** Rural development also facilitates the growth of financial institutions such as primary agricultural co-operative credit societies, regional rural banks, co-operative banks. This is vital for providing subsidised credit facilities to the farmers.
- 8) Eradication of poverty :** Rural development leads to an increase in rural incomes and standard of living. This helps in the eradication of poverty.



**Fig. 5.1 : Transformation of Agriculture**

#### **Agricultural Credit in India :**

Agricultural credit is an important prerequisite for agricultural growth. Agricultural policies have been reviewed from time to time to provide adequate and timely finance to this sector. Rural credit system assumes importance because for most of the Indian rural families, savings are inadequate to finance farming and other economic activities.



#### **Types of Agricultural Credit :**

Agricultural credit can be classified on the basis of :

- 1) Tenure :** It is credit requirement based on the time-period of loans. It is of three types:
  - a) Short-Term Credit :** It refers to loans not exceeding two years. It is required for meeting the short-term requirements of the cultivators, e.g. loans required for the purchase of fertilizers, High Yielding Variety (HYV) seeds, for meeting expenses on religious or social ceremonies etc.

**b) Medium-Term Credit :** These loans are for a period upto 5 years. These are the financial requirements to make improvements on land, buying cattle or agricultural equipments, digging up of canals etc.

**c) Long-Term Credit :** These loans are for a period of more than 5 years and are generally required to buy tractor, making permanent improvements on land etc.

**2) Purpose :** The agricultural credit on the basis of purpose for which the credit is used can be of two types:

- a) Productive :** Productive loans are the loans that are related to agricultural production and economically justified, e.g. purchase of tractor, land, seeds etc.
- b) Unproductive :** Unproductive credit is used for personal consumption and unrelated to productive activity, e.g. loans for expenditure on marriages, religious ceremonies etc.

### Source of Agricultural Credit in India :

- 1) Non-Institutional Sources
- 2) Institutional Sources

**1) Non-Institutional Sources :** The non-institutional finance forms an important source of rural credit in India, constituting around 40 percent of total credit in India. The interest charged by the non-institutional lenders is usually very high. The land or other assets are kept as **collateral security**. The important sources of non-institutional credit are as follows :

**i) Money-Lenders :** Money-lending has been a widely prevalent profession in the rural areas. The money-lenders charge huge rate of interest and mortgage the property of the cultivators.

#### ii) Other Private Sources :

- a) Traders, landlords, Commission agents, etc.
- b) Credit from relatives, friends, etc.

**2) Institutional Sources :** The general policy on agricultural credit has been one of progressive institutionalization aimed at providing timely and adequate credit to farmers for increasing agricultural production and productivity. Providing better access to institutional credit for the small and marginal farmers and other weaker sections to enable them to adopt modern technology and improved agricultural practices has been a major part of the policy.

Following are some of the institutional sources of agricultural credit in India.

**i) National Bank for Agriculture and Rural Development (NABARD) :** It is the apex banking institution to provide finance for agriculture and rural development. National Bank for Agriculture and Rural Development (NABARD) was established on **July 12, 1982** with a paid up capital of ₹ 100 crores by 50:50 contribution of Government of India and Reserve bank of India. NABARD is an apex institution in rural credit structure for providing credit for promotion of agriculture, small scale industries, cottage and village industries, handicrafts etc.

The paid up capital stood at ₹ 10,580 crores as on 31<sup>st</sup> March 2018. Consequent to the revision in the composition of share capital between Government of India and RBI, NABARD today is fully owned by Government of India.

**ii) Rural Co-operative Credit Institutions :** The rural credit co-operatives may be further divided into short-term credit co-operatives and long-term credit co-operatives.

**A) Short-term credit co-operatives :** It provides short-term rural credit and are based on a three-tier structure as follows

- Primary Agricultural Credit Societies (PACS)
- District Central Co-operative Banks (DCCB)
- State Co-Operative Banks (SCB)

**B) Long-term credit Co-operatives :** These co-operatives meet long-term credit requirements of the farmers and are organized at two levels:

- **Primary Co-operative Agriculture and Rural Development Banks :** These banks operate at the village level as an independent unit.
- **State Co-operative Agriculture and Rural Development Banks :** These banks operate at state level through their branches in different villages.

**iii) Commercial Banks :** Commercial Banks (CBs) provide rural credit by establishing their branches in the rural areas.

**iv) Regional Rural Banks (RRBs) :** Regional Rural Banks (RRBs) are the specialised banks established under RRB Act, 1976, to

cater to the needs of the rural poor. RRBs are set-up as rural-oriented commercial banks with the low cost profile of co-operatives but with the professional discipline and modern outlook of commercial banks.

**v) Micro Finance Institutions (MFIs) :**

Banks offer concessional interest rates for the rural credit. However, small farmers are unable to access them because of borrower-unfriendly products and procedures, inflexibility and delay, and high transaction costs, both legitimate and illegal. Thus, Non-Government Organisations (NGOs) are providing alternative means to enhance access to credit by the poor since mid-70's.

#### Find out :

Information about the latest achievements of NABARD.

### EXERCISE

#### Q. 1. Complete the following statements :

- 1) **Rural credit system assumes importance because .....**
  - a) It leads to an increase in the rural income.
  - b) Savings are inadequate to finance farming and other economic activities.
  - c) It leads to overall development of the rural areas.
  - d) It leads to reduction in rural inequality.
- 2) **Productive loans are economically justified because .....**
  - a) They are related to agricultural production.
  - b) They are used for personal consumption.
  - c) They help in eradication of poverty
  - d) They improve the quality of life of the people
- 3) **Small farmers are unable to access rural credit provided by banks due to .....**
  - a) Presence of money lenders.
  - b) No branches in rural areas
  - c) High transaction costs
  - d) Preference given to large farmers.
- 4) **The rights of socially disadvantaged groups can be safe guarded through .....**
  - a) empowerment of women

- b) proper enforcement of law and order.
- c) infrastructural development
- d) improvement in quality of life.

5) **The quality of life of the rural people can be improved by .....**

- a) Providing safe drinking water, health and hygiene facilities.
- b) Effective implementation of land reforms
- c) Providing subsidized credit facilities
- d) Reducing rural inequality.

#### Q. 2. Choose the wrong pair :

- | i) | 'A'                        | 'B'                              |
|----|----------------------------|----------------------------------|
|    | <b>Agricultural Credit</b> | <b>Requirement</b>               |
| 1) | Short-term                 | Purchase of fertilizers          |
| 2) | Medium-term                | to meet expenditure on marriages |
| 3) | Long-term                  | to buy tractor                   |
- 
- | ii) | 'A'                                 | 'B'                         |
|-----|-------------------------------------|-----------------------------|
|     | <b>Rural occupational structure</b> | <b>Activity</b>             |
| 1)  | Agricultural sector                 | Banking and Insurance       |
| 2)  | Industrial sector                   | Processing of raw materials |
| 3)  | Service sector                      | Computer related service    |

### **Q. 3. Assertion and Reasoning questions :**

- 1) **Assertion (A)** : Indian economy is pre-dominantly rural economy

**Reasoning (R)** : As per 2011 census, the country's rural population is almost 83.25 crore (68.8% of total population)

**Options :** 1) (A) is True but (R) is False

- 2) (A) is False but (R) is True
- 3) Both (A) and (R) are True and (R) is the correct explanation of A.
- 4) Both (A) and (R) are True but (R) is not the correct explanation of (A)

- 2) **Assertion (A)** : Literacy is a powerful instrument of socio-economic change.

**Reasoning (R)** : Empowerment of women helps to reduce gender disparity.

**Options :** 1) (A) is True, but (R) is False

- 2) (A) is False, but (R) is True
- 3) Both (A) and (R) are True and (R) is the correct explanation of (A)
- 4) Both (A) and (R) are True but (R) is not the correct explanation of (A)

- 3) **Assertion (A)** : Agricultural credit is mostly for unproductive purposes.

**Reasoning (R)** : Agricultural credit is an important pre-requisite for agricultural growth.

**Options :** 1) (A) is true, but (R) is false

- 2) (A) is False, but (R) is True
- 3) Both (A) and (R) are True but (R) is the correct explanation of (A)
- 4) Both (A) and (R) are True but (R) is not the correct explanation of (A)

- 4) **Assertion (A)** : Non-institutional finance forms an important part of rural credit.

**Reasoning (R)** : Small farmers are unable to access bank credit because of borrower unfriendly products.

**Options :** 1) (A) is True, but (R) is False

- 2) (A) is False, but (R) is True
- 3) Both (A) and (R) are True and (R) is the correct explanation of A
- 4) Both (A) and (R) are True, but (R) is not the correct explanation of A

### **Q. 4. Identify and explain the concepts from the given illustrations :**

- 1) Kusumtai knowingly set up her business enterprise in the rural area so that people living there could be gainfully employed.
- 2) Raoji purchased a new tractor for his farm by taking a loan.
- 3) Subsidized credit is provided by banks to small farmers for purchase of high yielding variety (HYV) seeds.
- 4) Damaji borrows loan from a credit society established in the village this season rather than taking it from a moneylender.
- 5) Ramraozi takes a loan from the bank for a period of ten years subject to terms and conditions for the purpose of irrigated farming.

### **Q. 5. Read the following passage carefully and answer the questions given below :**

Rural development is one of the thrust areas of administration. As Mahatma Gandhi rightly said, "India lives in villages and the development of the nation cannot be achieved without the development of the villages". The need of the hour is the convergence of all development interventions, at the grassroot level which can be possible through effective governance at the village level. The movement towards decentralization of the National and State governments through the Panchayati Raj system needs to be strengthened through lessons learned from the successful stories of 'Model villages' around India. Though India is progressing in the right direction in reducing education inequalities and increasing literacy levels, there is still a lot that needs to be done. An understanding of social issues is important for effective planning and policy development. Self-governance ensures that Indian citizens, even the previously marginalized, can participate in decision-making.

- 1) Explain in short Mahatma Gandhi's views on rural development.
- 2) Highlight the role of the government in achieving rural development.
- 3) What measures have been suggested to achieve rural development.
- 4) Express your idea of a 'Model Village'.



## CHAPTER - 6 : POPULATION IN INDIA



**Fig. 6.1 : Population in India**

### Introduction :

India is a developing country. The rate of economic development of a country depends on its quantitative and qualitative growth which can be measured in terms of population, national income, per capita income etc.

Population refers to the number of people living in an area at a given point of time. Population of India is measured once in every ten years through a census survey. According to 2011 census, India's population was 121.02 crores. India ranks second in the world next to China.

India has 17.5% of the world population but it occupies only 2.4% of the world's land area. Population statistics are compiled and published by the Office of the Registrar General and Census Commissioner of India.

### You should know :

#### Population Facts

- Kautilya wrote 'Arthashastra' in the third century B. C. It prescribed the collection of population statistics as a measure of state policy for taxation.
- A systematic and modern population census in its present form was conducted

between 1865 and 1872 in different parts of the country. However 1872 has been popularly labelled as the first population census of India.

- On 11<sup>th</sup> July 1987, world population crossed 500 crores. Hence, 11<sup>th</sup> July is observed as 'World Population Day'.

Source : [Censusindia.gov.in](http://Censusindia.gov.in)

### Stimulate your memory :

Find out the basic features of India's population that you have studied in Std. VIII and Std. X in the subject of Geography. (e.g. Sex Ratio, Density of Population, Age Composition, Urbanisation etc.)

### Trends in Population Growth :

India's population is very large in size. It is growing rapidly. Information regarding the size, structure and other characteristics of India's population is obtained through Census Survey.

Table 6.1 reviews the trends in population growth:

#### Growth of Population in India

| Year | Population<br>(In Crores) | Average Annual Growth<br>Rate (Percent) |
|------|---------------------------|---|
| 1911 | 25.2                      | -                                       |
| 1921 | 25.1                      | -0.03                                   |
| 1931 | 27.9                      | 1.0                                     |
| 1941 | 31.9                      | 1.3                                     |
| 1951 | 36.1                      | 1.3                                     |
| 1961 | 43.9                      | 2.0                                     |
| 1971 | 54.8                      | 2.2                                     |
| 1981 | 68.3                      | 2.2                                     |
| 1991 | 84.6                      | 2.1                                     |
| 2001 | 102.7                     | 1.9                                     |
| 2011 | 121.02                    | 1.4                                     |

**Table 6.1**

Source : [Census of India Reports](http://CensusofIndiaReports)

## **1) Marginal Decline in population (1911-1921) :**

**There was a marginal decline in population from 25.2 crores in 1911 to 25.1 crores in 1921.** Thus, there was negative growth rate due to spread of epidemics such as influenza, cholera, plague, malaria etc.

## **2) Year of Great Divide :**

The decadal growth of population was negative during the period 1911 to 1921. After 1921, there was a continuous increase in population. Hence, then Census Commissioner of India had designated the year 1921 as the 'Year of Great Divide'.

## **3) Positive growth rate (1931-1941) :**

India recorded an annual growth rate around 1 to 1.3% during this period.

## **4) Increase in population (1951 onwards) :**

Between 1951 to 1971 population increased from 36.1 crores to 54.8 crores. This shows that after Independence, there was tremendous rise in population.

## **5) Population Explosion (1971-2001) :**

During this period, India experienced 'population explosion' because during these three decades, annual population growth rate was more than 2%.

## **6) Slow down in population growth rate (2001-2011) :**

There is an indication of slow down in growth rate of population from 1.9% in 2001 to 1.4% in 2011. This shows that the average annual growth rate is declining.

## **Theories of Population Growth :**

### **1) Malthusian theory of population growth :**

Thomas Robert Malthus propounded this theory in his book, "An Essay on the Principle of Population" in 1798 and modified some of its conclusions in the next edition in 1803.

According to Malthus, population increases in geometric progression (2, 4, 8, 16, 32, 64 etc.) and food supply increases in Arithmetic progression (1, 2, 3, 4, 5, 6, 7, 8, 9 etc.). This creates imbalance between population and food supply.

Malthus states that correction of the imbalance can be done by introducing 'preventive checks' such as late marriage, moral restraint etc. He also mentions about 'positive or natural checks' such as natural calamities. Natural checks operate and wash out the excess population and thus balance is maintained. However, preventive checks are more dependable out of the two.

## **Concepts related to population growth :**

**1) Birth rate :** Birth rate means the number of births occurring per thousand of the living population during a year. It is also known as fertility rate .

**2) Death rate :** The number of deaths per thousand of the living population during a year is called death rate. It is also called mortality rate.

**3) Survival rate :** The difference between the birth rate and death rate is known as the survival rate. This shows the actual rate of population growth.

$$\text{Survival rate} = \text{Birth rate} - \text{Death rate}.$$

**2) Theory of Demographic Transition :** The theory of demographic transition was given by A. J. Coale and E. M. Hoover, in the book, "Population growth and Economic Development in low-income countries" (1958).

According to this theory, every country passes through three stages of demographic transition. This theory explains the transition from high to low birth rates and death rates.

## **Stages of Demographic Transition :**

The theory shows a three stage relationship between economic development and population growth. According to this theory, as a country advances economically, its population passes through three stages as follows :

### **A) First stage (Low growth of population) :**

It is pre-industrialised and primitive stage. The birth rate and death rate both are very high. All underdeveloped countries

have passed through this stage. Social and economic conditions such as mass illiteracy, superstitions, mass poverty, orthodoxy, lack of medical facilities, spread of epidemics etc. led to low growth of population. Before 1921, India was in the first stage of demographic transition.

### B) Second stage (High growth of population) :

Introduction of industrialisation and beginning of the process of economic development is the indicator of the second stage. Due to economic development death rate started falling rapidly, but the birth rate continued to remain high. This led to population explosion. All developing countries, including India are in the second stage of demographic transition. India is on the verge of entering into the third stage.

### C) Third stage (Low or Stable population) :

Rapid industrialisation and urbanisation, result in the spread of education and consciousness about standard of living. With economic development, both birth rate as well as death rate tend to decline. All developed countries are in this stage.

Fig. 6.2 helps to understand the theory of demographic transition.

#### Birth rate and Death rate in India

| Year | Birth rate | Death rate |
|------|------------|------------|
| 1901 | 49.2       | 42.6       |
| 1911 | 48.1       | 47.2       |
| 1921 | 46.3       | 36.3       |
| 1931 | 45.2       | 31.2       |
| 1941 | 39.9       | 27.4       |
| 1951 | 41.7       | 22.8       |
| 1961 | 41.2       | 19.0       |
| 1971 | 37.2       | 15.0       |
| 1981 | 32.5       | 15.0       |
| 1991 | 29.5       | 9.8        |
| 2001 | 28.3       | 9.0        |
| 2011 | 20.97      | 7.48       |

Table 6.2

Source : Census of India Reports

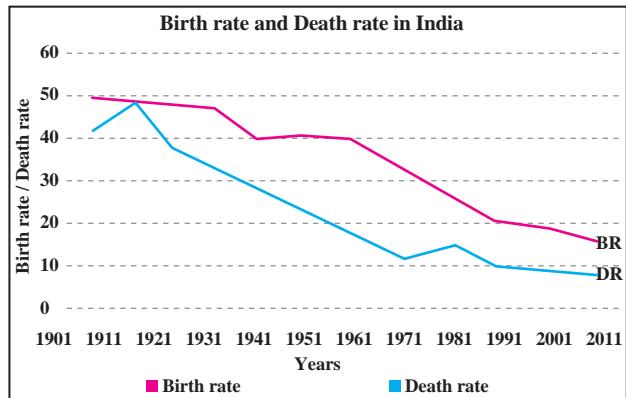


Fig. 6.2 : Demographic transition

#### Try this :

Based on the table 6.2, explain how demographic transition theory is applicable to India.

#### Population Explosion in India :



Fig. 6.3 : Population Explosion

### Can you tell :

Observe Fig. 6.3 and draw inferences from it.

Population explosion is a situation where the growth of population is faster than the growth and development of the economy. Population explosion in India is due to a high birth rate followed by a low death rate.

### Causes of high birth rate :

- 1) **Illiteracy** : The percentage of illiterates in the country is reasonably high. The attitude of illiterate people towards marriage and child birth has remained rigid. Low level of literacy among females is also responsible for a high birth rate.
- 2) **Universalization of marriage** : In India, marriage is considered as both religious and social obligation. Even with the spread of education, the attitude of people towards marriage remains unchanged at large.
- 3) **Age of marriage** : In India, the legal age of marriage is relatively lower compared to other countries. It is 18 years for females and 21 years for males. Low age of marriage has also resulted in a high birth rate.
- 4) **Preference for male child** : Many Indian parents are opting to continue having children until they have a son or desired numbers of sons. This is known as son meta-preference.
- 5) **Joint family system** : There is no individual financial responsibility in a joint family. Hence, existence of joint family is also responsible for high birth rate in India.
- 6) **Dependence on Agriculture** : Indian agriculture is driven by manpower. In India, there is overdependence on agriculture. More number of children in the family implies more labour force available for field work.
- 7) **Widespread Poverty** : Poor people prefer large families because they feel that more children means greater economic support.

- 8) **Lack of awareness about family welfare services** : Most of the people are ignorant about the availability of various means and techniques of family planning.

### Find out :

Legal age of marriage for males and females in different countries.

### You should know :

- **Underpopulation** : Natural resources exceed the population growth.
- **Overpopulation** : Population growth exceeds availability of natural resources
- **Optimum Population** : There is a balance between population growth and availability of natural resources.

### Causes of low death rate :

- 1) **Improvement in medical and health facilities** : Due to widespread increase in medical and health facilities, epidemics like plague, cholera, malaria, small pox, tuberculosis etc. have almost been eradicated.
- 2) **Decline in Maternal Mortality Rate** : Over a period of time, death rate of women dying during maternity has declined due to improvement in medical facilities.
- 3) **Fall in infant mortality rate** : Due to better medical facilities there has been a decline in **infant mortality rate** from 146 per 1000 in 1951 to 64 per 1000 in 2002 and 47 per 1000 in 2011. Improvement in literacy among women has also resulted in better care for infants and as such there is a decline in infant mortality rate.
- 4) **Increase in literacy** : Better education will help the people to take care of their life and the needs of their children in a better way. Education has helped the people to come out of their blind faith, beliefs and ignorance.

- 5) Use of nutritious food :** Education has created awareness about health and nutrition. Percentage of children and women dying due to malnutrition and ill health was quite high. These deaths are now brought under control by providing nutritious diet. e.g. Mid-day meal programme in schools.
- 6) Disaster management :** The National Disaster Management Authority (NDMA) was constituted in 2005. This helps to mitigate all types of disasters thereby reducing the loss of lives.
- 7) Other factors :** Education, social reforms, rapid urbanization, improvement in standard of living, publicity campaigns are also responsible for creating awareness among the people.

#### You should know :

##### Effects of population explosion

- Increased pressure on land
- Increased pressure on agriculture
- Pressure on infrastructure and basic amenities
- Imbalance between demand for and supply of food
- Inflation
- Environmental problems
- Social problems
- Low national income

#### Measures to check population explosion :

To control the problem of population explosion in India, the following measures need to be undertaken :

- A) Economic measures :** Economic measures can raise the standard of living of the people and help to reduce population growth. Some of the important economic measures are as follows :
- Expansion of industrial sector.
  - Creation of employment opportunities.
  - Removal of poverty
  - Equitable distribution of income and wealth.

**B) Social Measures :** Population explosion is a socio-economic problem. It is related to illiteracy, superstition, orthodoxy, low status of women. The following are the social measures :

- Spread of education
- Improving the status of women
- Raising the minimum age of marriage

**C) Population Policy of India :** Population policy was implemented through the following programmes.



**Fig. 6.4 : Small family**

**1) Family Planning Programme :** It was launched in 1952 with the objective of reducing the birth rate. Family planning refers to planned parenthood. It is a measure in which birth of a child is determined by choice and not by chance. Family planning programme was not successful due to lack of awareness among the people, false religious beliefs and inconsistent policies of the government.

**2) Family Welfare Programme :** Family Planning Programme was renamed as Family Welfare Programme in 1979. It attempted to integrate family planning services with those of maternal, child health and nutrition.

**3) National Population Policy, 2000 :** In the year 2000, the Government introduced National Population Policy (NPP) to control population and to improve its quality. Some of the important features of NPP, 2000 are :

- 1) Free and compulsory school education upto the age of 14 years.
- 2) Reduce infant mortality rate to below 30/1000 live births.
- 3) Reduce Maternal Mortality Rate (MMR) to below 100 per 1,00,000 live births.
- 4) Universal immunization of children against all vaccine preventable diseases.
- 5) Delayed marriage for girls, not earlier than 18 and preferably after 20 years of age.
- 6) Prevention and control of communicable diseases.
- 7) Achieve a stable population by 2045.

## Population as a Human Resource

### Introduction :

Population constitutes a nation's valuable resource. Nature's bounty becomes significant only when people find it useful. It is people with their demands and abilities that turn them into resources. Hence, human resource is the ultimate resource. Healthy, educated and motivated people develop resources as per their requirements.

Human resources like other resources are not equally distributed all over the world. They differ in their educational levels, age and sex. Their numbers and characteristics also keep changing.

The United Nations Development Programme (UNDP) has introduced the concept of 'Human Development' in 1990.

Human Development embraces enlargement of all human choices – economic, social, cultural or political. It is the enrichment of human lives which is the real wealth of the society.

### Role of human resources in economic development :

- 1) Human development is an end while economic growth is a means to achieve this end. So, human conditions should be improved.
- 2) Human development can contribute to reduction in civil disturbances in a society and increased political stability.
- 3) Human development is concerned with widening not merely income choices but covering all aspects of human development

- economic, social, cultural or political.
- 4) Human resource development occurs through provision of educational facilities. Increase in literacy rate, especially among women, tends to reduce birth rate and infant mortality rate. This contributes to population control.
- 5) Human resource development contributes to improvement in life expectancy and literacy rate. This further improves the quality of life.
- 6) Human resource development helps to bring about research and development. It motivates research in various educational institutions.
- 7) Human development leads to increase in human productivity, i.e. investment in nutrition, health and education which results in higher productivity.
- 8) Concept of human development is universal by nature. It applies to less developed as well as highly developed countries. In short, human development embraces the entire society.

### Do you know?

**Population Education :** It is essentially related to human resource development. It aims not only at creating awareness about the population but also with developing values and attitudes which take care of quality and quantity of population. According to UNESCO “Population Education is an educational programme which provides for a study of population situation of the family, the community, nation and world with the purpose of developing in the students rational and responsible attitude and behaviour towards the situation”.

### You should know :

**Demographic Dividend :** One of India's competitive advantages is its demographic dividend. Demographic dividend occurs when the proportion of working people to the total population is high. This indicates a high potential of human resources which can contribute to economic growth.

## EXERCISE

**Q. 1. Choose the correct option :**

**1) Stages of the theory of demographic transition.**

- a) High birth rate and high death rate
- b) High birth rate and low death rate
- c) Low birth rate and low death rate
- d) Economic development

**Options :** 1) a and b

2) a and c

3) a, b and c

4) a, b, c and d

**2) Incorrect reasons for population explosion in India.**

- |                        |                                 |
|------------------------|---------------------------------|
| a) Illiteracy          | b) Universalization of Marriage |
| c) Joint family system | d) Upliftment in lifestyle      |

**Options :** 1) a and b

2) c and d

3) a, b and c

4) d

**3) Remedies undertaken to check population explosion.**

- a) To provide employment
- b) To improve women's quality of life
- c) National Population Policy
- d) Disaster management

**Options :** 1) d

2) a and c

3) c and d

4) a, b and c

**4) Choose the correct option.**

| <b>Group A</b>                      | <b>Group B</b>                 |
|-------------------------------------|--------------------------------|
| 1) Year of Great Divide             | a) Stable population till 2045 |
| 2) A. J. Coale and E. M. Hoover     | b) 1921                        |
| 3) Social Reforms                   | c) Demographic Transition      |
| 4) National Population Policy, 2000 | d) Spread of education         |

**Options :** 1) 1-d, 2-c, 3-a, 4-b

2) 1-b, 2-c, 3-d, 4-a

3) 1-b, 2-a, 3-c, 4-d

4) 1-c, 2-d, 3-a, 4-b

**Q. 2. Give economic terms :**

- 1) Increase in population is faster than economic growth and development.
- 2) Difference between birth rate and death rate.
- 3) Balance between natural resources and population growth.
- 4) Programme introduced to reduce the birth rate in 1952.

**Q. 3. Identify and explain the concepts from the given illustrations :**

- 1) There were 40 births per 1000 in country 'A' during a year.
- 2) In Mumbai city, public transport service is largely affected due to the growing population.
- 3) In country 'B', there are 15 deaths taking place per 1000 during a year.
- 4) For a certain period of time China had adopted the policy of 'One child per family'.

**Q. 4. Answer the following :**

- 1) Explain the causes of high birth rate.
- 2) Explain the causes of low death rate.
- 3) Explain the role of Human Resource in Economic development.

**Q. 5. State with reasons whether you agree or disagree with the following statements :**

- 1) India is experiencing population explosion.
- 2) Death rate is falling rapidly in India.
- 3) Optimum population contributes economic development of a country.
- 4) Human resources play an important role in economic development.
- 5) Birth rate is declining due to changes in the standard of living.

**Q. 6. Solve the following :**

- 1) Find out Q<sub>5</sub> from the given data.

(Use the population figures as numerical data)

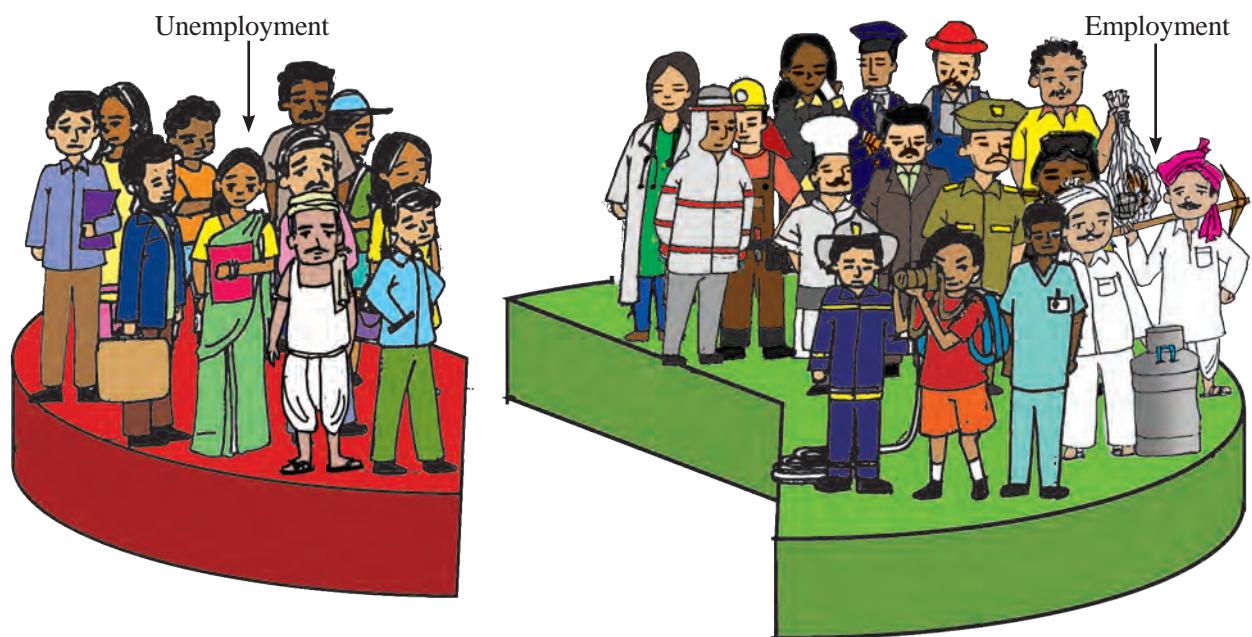
- 2) Draw a population growth curve from the given data.

| <b>Year</b> | <b>Population<br/>(in Crores)</b> |
|-------------|-----------------------------------|
| 1951        | 36.1                              |
| 1961        | 43.9                              |
| 1971        | 54.8                              |
| 1981        | 68.3                              |
| 1991        | 84.6                              |
| 2001        | 102.7                             |
| 2011        | 121.02                            |

(Source - Census reports)



## CHAPTER - 7 : UNEMPLOYMENT IN INDIA



**Fig. 7.1 : Unemployment in India**

### Introduction :

India is a developing economy and one of the fastest growing economies of the world. The problem of unemployment is considered to be the biggest challenge to the development of India. Fig. 7.1 gives an idea about the problem of unemployment in India. Unemployment leads to a waste of human resources. Long term unemployment results in mass poverty and slow economic development. Mostly, young people face the problem of unemployment. Young people are a major human resource, key agents for social change and driving force for economic development and technological innovation. India has considerable young population hence unemployment among youth is the most critical challenge of the 21<sup>st</sup> century. There is an imbalance between employment opportunities and increase in population. This has resulted in large scale unemployment. So generally unemployed people are involved in unproductive work like gambling and indulge in anti-social and anti-national activities.

### Meaning of Unemployment :

Normally anyone who is not gainfully employed in any productive activity is said to be unemployed. In economics, unemployment is to be studied with respect to

- a) nature
- b) working age group
- c) demand for and supply of labour
- d) prevailing wage rate.

The rate of economic growth is not fast enough to generate adequate jobs to absorb the expanding labour force.

'Unemployment is a situation in which people in the age group of 15 to 59 years are able and willing to work at the prevailing wage but unable to get a job'.

For a person to be considered employed, it is essential that the person should be engaged in work for a minimum number of hours per week. According to National Sample Survey Organization (N.S.S.O.)

- i) In India, a person is considered unemployed if he works for less than fourteen hours per week.
- ii) Those who work for 15 - 28 hours a week are considered as underemployed.

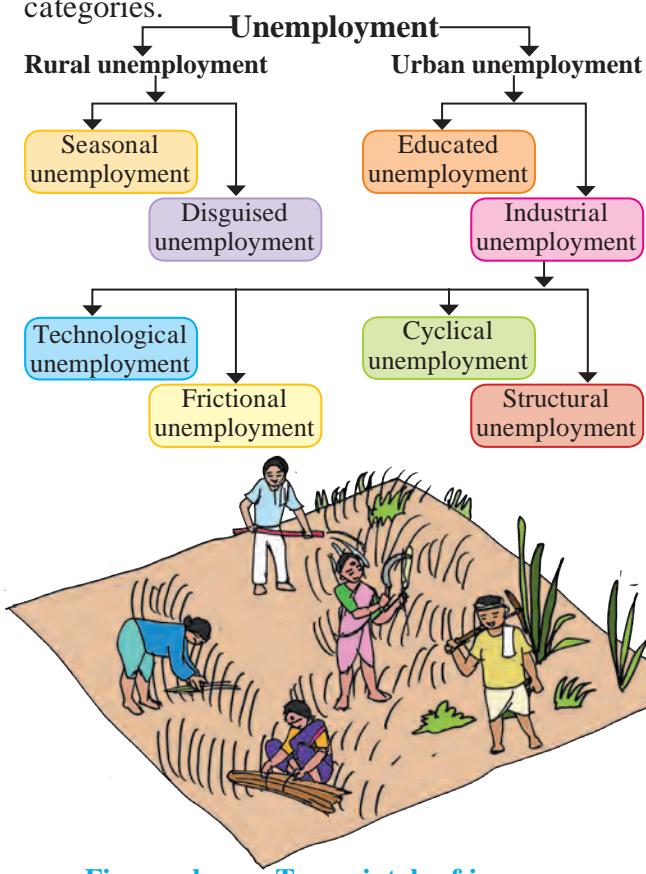
- iii) Person working for eight hours per day i.e. 273 days of the year is considered 'employed' on a standard basis.

### You should know :

- 1) **Involuntary unemployment** : It refers to a situation in which people are willing to work, but there is no work for them due to excess of labour force in relation to demand for labour.
- 2) **Voluntary unemployment** : It is a type of self unemployment where a person is fit to work but not willing to work.
- 3) **Underemployment** : It is a situation where a person's capacity to work is under utilised.
- 4) **Full employment** : It is a hypothetical situation in which all available resources are being used in the most efficient manner.

### Types of Unemployment :

There are various types of unemployment. We can classify unemployment into various categories.



Five workers = Ten quintals of jowar

### A) Rural Unemployment :

The unemployment found in villages is called rural unemployment. Following are the types of rural unemployment :

- 1) **Seasonal Unemployment** : A large number of people remain unemployed during the slack season or in the off season. Agriculture being a seasonal occupation, farmers have to depend upon monsoon for cultivation. Majority of the labour force in the agricultural sector remain unemployed for nearly 5-7 months in a year. Seasonal unemployment is also found in tourism, marriage bands, sugar factories, ice factory, fisheries etc.
- 2) **Disguised Unemployment** : It is also known as invisible unemployment. Disguised unemployment is generally found in villages in India. It is a situation in which more people are doing work than actually required. Even if some are withdrawn, production does not suffer. In other words it refers to a situation of employment with surplus manpower in which some workers have zero marginal productivity.

The excessive pressure on land leads to disguised unemployment in rural areas. It is estimated that nearly 20% of the labour force is disguisedly unemployed in rural areas. Joint family system, lack of alternative job opportunities result in overcrowding in agriculture. These are the main reasons for disguised unemployment.

Sixteen workers = Ten quintals of jowar

Fig. 7.2 : Disguised Unemployment

## B) Urban Unemployment :

Urban unemployment refers to unemployment found in the urban areas i.e. towns and cities of the country. Following are the types of urban unemployment.

- 1) **Educated Unemployment** : When people are educated and willing to work but do not get jobs is known as educated unemployment. This type of unemployment is found among matriculates, undergraduates, graduates and post graduates. Casual approach to education, imbalance between job opportunities and number of educated youth, preference for white collar jobs, lack of employable skills, lack of awareness about available educational opportunities are the main reasons for unemployment among educated youth in India.
- 2) **Industrial Unemployment** : It refers to unemployment in the industrial sector. The unemployed workers may be skilled or unskilled. This is generally a form of **open unemployment**. Slow industrial growth, rapid growth of population, lack of training facilities, low adaptability to modern technology, inconvenient location of industries, low mobility of labour etc. are the main reasons for industrial unemployment.

## Following are the types of Industrial unemployment :

### i) Technological Unemployment :

Technological unemployment arises because of changes in technology. Modern technology is capital-intensive and requires less labourers. When new techniques are introduced in the industrial sector, existing workers are displaced from their jobs due to

lack of proper training, e.g. computerisation, introduction of robotic technology etc.

- ii) **Frictional Unemployment** : Frictional unemployment is caused due to breakdown of machinery, power failure, shortage of raw materials, strikes by workers etc. Frictional unemployment is temporary by nature.
- iii) **Cyclical Unemployment** : Cyclical unemployment is the result of cyclical fluctuations in the level of business activity. The economy passes through phases of prosperity and depression. During the period of depression, effective demand falls which leads to a fall in the prices and profits earned by the producers. As a result, there is a corresponding decline in investment and production of commodities. A fall in production leads to a fall in employment. As a result, workers are thrown out of jobs during the period of depression.
- iv) **Structural Unemployment** : This type of unemployment arises due to drastic changes in the economic structure of a country. These changes may affect either the supply of or demand for a factor of production. Structural changes in the economy are caused by changes in government policies, shortage of capital, shifting of industry from one region to another etc. Structural unemployment is a long term phenomenon. Structural unemployment takes place because of a mismatch between the skills of workers and the jobs that are actually available, e.g. i) horse carts had been replaced by auto rickshaws. ii) introduction of computerised typing has caused unemployment among manual typists.

## Extent of Unemployment in India : Employment and Unemployment (in million)

| Year        | Labour Force | Employed | Unemployed | Unemployment rate in (%) |
|-------------|--------------|----------|------------|--------------------------|
| 1993 - 94   | 381.94       | 374.45   | 7.49       | 2.0                      |
| 1999 - 2000 | 406.85       | 397.88   | 8.97       | 2.2                      |
| 2004 - 05   | 468.73       | 457.56   | 11.17      | 2.4                      |
| 2009 - 10   | 472.32       | 462.49   | 9.84       | 2.1                      |
| 2011 - 12   | 483.75       | 472.91   | 10.84      | 2.2                      |

Table : 7.1

Source : Economic and Political Weekly (June 7, 2014)

**Do you know?****State-wise unemployment rates in India (2015-16)**

| Ranks | State             | Unemployment (Per 1000) | Ranks | State          | Unemployment (Per 1000) |
|-------|-------------------|-------------------------|-------|----------------|-------------------------|
| 1     | Tripura           | 197                     | 16    | Manipur        | 57                      |
| 2     | Sikkim            | 181                     | 17    | Odisha         | 50                      |
| 3     | Kerala            | 125                     | 18    | West Bengal    | 49                      |
| 4     | Himachal Pradesh  | 106                     | 19    | Meghalaya      | 48                      |
| 5     | Assam             | 96                      | 20    | Haryana        | 47                      |
| 6     | Arunachal Pradesh | 89                      | 21    | Madhya Pradesh | 43                      |
| 7     | Nagaland          | 85                      | 22    | Tamilnadu      | 42                      |
| 8     | Jharkhand         | 77                      | 23    | Andhra Pradesh | 39                      |
| 9     | Uttar Pradesh     | 74                      | 24    | Mizoram        | 30                      |
| 10    | Jammu and Kashmir | 72                      | 25    | Telangana      | 28                      |
| 11    | Rajasthan         | 71                      | 26    | Maharashtra    | 21                      |
| 12    | Uttarakhand       | 70                      | 27    | Chhattisgarh   | 19                      |
| 13    | Goa               | 61                      | 28    | Karnataka      | 15                      |
| 14    | Punjab            | 60                      | 29    | Gujarat        | 09                      |
| 15    | Bihar             | 60                      |       |                |                         |

Source : Report on Fifth Annual Employment-Unemployment Survey (2015-16), GoI.

**Find out :** Calculate  $Q_2$  from the above data. Use the ranks of the States given as numerical data. Identify the state on the basis of the obtained partition value.

### Causes of Unemployment :

Following are the major causes of unemployment :

**1) Jobless growth :** Since independence, the rate of growth of employment in India has been considerably less than the rate of economic growth. Moreover, the rate of economic growth has not been adequate enough to absorb the increasing labour force. As a result, there is widespread unemployment.

**2) Increase in labour force :** Death rate has rapidly declined without a corresponding fall in birth rate, therefore the country has registered an unprecedented population growth. This was naturally followed by an equally large expansion in labour force

leading to unemployment.

**3) Excessive use of machinery :** In India, manpower is available in large quantities. Under these circumstances, the country would have labour-intensive technique of production. However, not only in industries, but also in agriculture, producers are increasingly substituting capital for labour. Where capital is in abundant supply, use of automatic machines and other sophisticated equipment is both rational and justified. But in India, this policy results in large scale unemployment.

**4) Lack of skill development programmes :** Vocational skill development courses which are compatible to Indian industry are comparatively less in number. So, there is a dearth of skilled man power needed by the industry.

**5) Expectations towards employment :** Educated youth in India aspire for white collar job. There is a lack of innovative and

entrepreneurial spirit to organize economic activities where they can be self-employed. Graduates prefer to remain unemployed till they get a job which is upto their expectations in terms of salary and nature of work.

#### 6) Seasonal nature of agriculture :

Agriculture in India is seasonal by nature. It depends on monsoon. Lack of irrigation facilities, poor soil fertility, outdated production techniques, non-availability of certified seeds and fertilizers are the factors that reduce the capacity of agriculture for other gainful employment throughout the year. The labourers are employed only for a few months in a year. For the rest of the year, the labour force remains jobless.

#### 7) Slow rate of economic development :

The overall economic development of India is very slow. Inadequate irrigation facilities, fertilizers, unsatisfactory growth of infrastructure are all due to inadequate industrial expansion. As a result, employment opportunities have not increased enough in the rural sector to absorb the growing labour force.

#### 8) Migration of rural population :

There has been a continuous migration of people from rural to urban areas in search of jobs. This has increased the problem of unemployment in urban areas.

#### You should know :

##### Effects of Unemployment

- 
- ```
graph TD; A[Effects of Unemployment] --> B[Economic effects]; A --> C[Social effects]; B --> D[1) Waste of human resources]; B --> E[2) Difficult to implement welfare schemes]; B --> F[3) Poverty and income inequality]; B --> G[4) Growth of informal sector]; B --> H[5) High dependency ratio]; C --> I[1) Social tension and unrest]; C --> J[2) Loss of human dignity]; C --> K[3) Helplessness]
```
- Economic effects
    - 1) Waste of human resources
    - 2) Difficult to implement welfare schemes
    - 3) Poverty and income inequality
    - 4) Growth of informal sector
    - 5) High dependency ratio
  - Social effects
    - 1) Social tension and unrest
    - 2) Loss of human dignity
    - 3) Helplessness

#### You should know :

##### General Measures to reduce Unemployment :

- 1) Development of agricultural sector
- 2) Provision for alternative occupation
- 3) Development of infrastructure
- 4) Reforms in the educational system
- 5) Development of Tourism
- 6) Use of labour-intensive techniques
- 7) Development of Information technology and communication
- 8) Provision for vocational training and skill development facilities
- 9) Rural industrialization
- 10) Motivation for self employment

##### Specific Measures undertaken by the Government to generate employment opportunities :

###### 1) Employment Guarantee Scheme (EGS) :

Employment Guarantee Scheme was first introduced by the Government of Maharashtra on 28<sup>th</sup> March 1972. This scheme was intended to provide productive employment to the rural population and thereby solve the problem of rural unemployment and poverty. Under this scheme, government assures to provide minimum employment opportunities. Due to its success in Maharashtra, EGS was implemented in other states as well.

###### 2) Swarnjayanti Gram Swarozgar Yojana (SGSY) :

This scheme was launched in April, 1999 after restructuring the Integrated Rural Development Programme (IRDP) and allied schemes. It is the only self-employment scheme for the rural poor in India.

###### 3) Swarna Jayanti Shahari Rozgar Yojana (SJSRY) :

This scheme was launched

in December, 1997. It provides gainful employment to the urban unemployed and underemployed. It included self-employment, women self-employment programme, skill training for employment promotion and urban wage employment programme. For this scheme, Central Government shares 75% of the cost and State Government shares 25% of the cost.

**4) Pradhan Mantri Rozgar Yojana (PMRY) :**

This scheme is being implemented since 1993 to create and provide sustainable self-employment opportunities to more than one million educated unemployed youth.

**5) Training Rural Youth for Self-employment (TRYSEM) :**

It was initiated in 1979 with the objective of tackling unemployment problem among the rural youth. It aimed at training about 2 lakh rural youth every year to enable them to become self-employed. TRYSEM was merged into Swarnajayanti Gram Swarozgar Yojana in April 1999.

**6) Jawahar Rozgar Yojana (JRY) :**

On 1<sup>st</sup> April 1989, the Government announced a new wage employment scheme, the Jawahar Rozgar Yojana for intensive employment creation in 120 backward districts. It was restricted to rural area. With effect from April 1999, it was renamed as Jawahar Gram Samrudhi Yojana (JGSY).

**7) Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) :**

Since 2nd October 2009, National Rural Employment Guarantee Scheme has been renamed as Mahatma Gandhi National Rural Employment Guarantee Scheme. This scheme provides at least 100 days of guaranteed wage employment in a financial year to at least one member of every rural household whose adult member volunteers to do unskilled manual work.

**8) Deen Dayal Upadhyaya Grameen**

**Kaushalya Yojana 2014 :** It is the most important placement linked skill training programme under the Ministry of Rural Development announced on September 23, 2014. The mission of this scheme is to reduce poverty as well as provide gainful and sustainable employment through regular wages. The focus of this programme is on the rural youth from poor families, in the age group of 15-35 years.

**9) National Policy for Skill Development and Entrepreneurship - 2015 :**

The first National policy on skill development was notified in 2009 to promote private sector participation via innovative funding models.

The objective of this scheme is to co-ordinate and strengthen factors essential for growth of entrepreneurship across the country. This would include :

- i) Promote entrepreneurship culture
- ii) Encourage entrepreneurship as a viable career option through advocacy
- iii) Promote entrepreneurship among women

**10) Start up India Initiative :**

It was introduced in January 2016 with an aspiration to impart more "strength and inspiration to the talented young generation of India to do something new for India and humanity."

**11) Pradhan Mantri Kaushal Vikas Yojana-(2016-20)**

The objective of this scheme is to encourage skill development among youth by providing monetary rewards for successful completion of approved training programmes. The government has allocated a budget of ₹ 12,000 crores till 2020 for implementation of the scheme.

## EXERCISE

**Q. 1. Find the odd word out :**

- 1) Urban unemployment -  
Educated unemployment, Industrial unemployment, Disguised unemployment, Technological unemployment
- 2) States with high rates of unemployment -  
Goa, Punjab, Maharashtra, Tripura
- 3) Employment Guarantee Scheme 1972,  
Jawahar Rozgar Yojana 1989,  
Swarnajayanti Gram Swarozgar Yojana 1999  
Development of Tourism

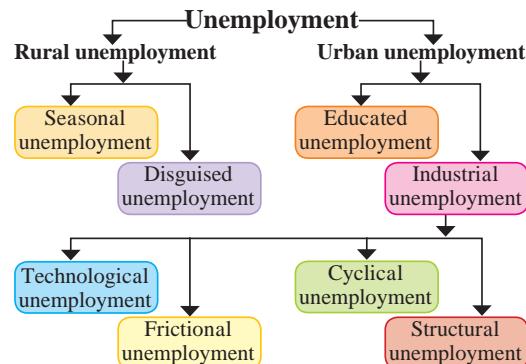
**Q. 2. Identify and explain the concepts from the given illustrations :**

- 1) Hussain Shaikh employed seven workers less than the usual number of workers on his farm, in spite of this, output remained the same.
- 2) Use of new technology in the printing industry has led to unempolyment among several workers.
- 3) Satish has completed his post graduation and is desperately expecting a job.
- 4) In certain agricultural areas of Maharashtra only kharif crops are grown, therefore employment is available till the month of October.

**Q. 3. Complete the correlation :**

- 1) Seasonal unemployment : Tourist guides;  
 : Graduates
- 2)  : Disguised unemployment; Urban unemployment : Industrial unemployment
- 3) Frictional unemployment : Shortage of raw materials ;  : Fluctuations in business activity
- 4) MGNREGS : guaranteed wage employment;  
TRYSEM :
- 5)  : Waste of resources. Social effect : loss of human dignity

**Q. 4. Observe the following chart and answer the following questions.**



- 1) Production does not increase if additional worker is employed and production does not decrease if worker is reduced from the work. Mention the type of unemployment.
- 2) A worker is thrown out of job because of computerisation. Name this type of unemployment?
- 3) Sharad was forced to return back to India from USA due to depression in IT sector.
- 4) In spite of being a graduate, Vasant is sitting idle at home.

**Q. 5. Find out Q<sub>1</sub> and Q<sub>3</sub> using unemployment rates as numerical data :**

| Year | Unemployment Rate % |
|------|---------------------|
| 2009 | 3.75                |
| 2010 | 3.54                |
| 2011 | 3.53                |
| 2012 | 3.62                |
| 2013 | 3.46                |
| 2014 | 3.41                |
| 2015 | 3.49                |
| 2016 | 3.51                |
| 2017 | 3.52                |

**Q. 6. Answer the following in detail :**

- 1) Explain the types of Industrial unemployment in India.
- 2) Explain the causes of unemployment in India.
- 3) Explain the measures taken by the government to reduce unemployment.



## CHAPTER - 8 : POVERTY IN INDIA



**Fig. 8.1 : Poverty**

### Introduction :

Poverty is one of the major challenges faced by Indian economy. It is a socio-economic phenomenon. Poverty is perceived as 'social exclusion' of a certain section of people in the society. Deprivation of basic needs and denial of opportunities has led to **social exclusion**.

Fig. 8.1 gives an idea about the concept of poverty.

Poverty in India has a long history. Economic drain of resources, decline of handicraft and cottage industries, oppressive economic policies, recurrence of famines etc. were responsible for mass poverty among the people during the British period.

Elimination of poverty has been the top agenda of the Indian Government since Independence. Policy measures such as economic planning, economic reforms and anti-poverty programmes such as 'garibi hatao' have helped in greater reduction of poverty .

### Meaning of Poverty :

In the conventional sense, poverty refers to a situation in which a major section of the people in the society are unable to fulfil even the basic needs of life such as food, clothing and shelter due to lack of sufficient income.

### Multi-dimensional Poverty :

Concept of poverty in the conventional sense was limited only to basic needs of life. However, in modern times, the scope of the concept of poverty has been enlarged. Of late, the concept of multi-dimensional poverty has emerged.

Multi-dimensional poverty refers to deprivation in terms of both material and non material dimensions. Material dimensions relate to deprivation in terms of food, clothing, shelter, health, education, road connectivity, electricity, access to safe drinking water and sanitation facilities etc. The non material dimensions are associated with social discrimination.

### You should know :

According to **Prof. Amartya Sen**, "Poverty is not just a lack of money, it is not having the capability to realize one's full potential as a human being". Capabilities refer to economic, social and political freedom. Lack of substantive freedom such as freedom to satisfy hunger, lack of nutrition, healthcare and educational facilities, denial of political and civil liberties lead to poverty.

### Do you know?



Noted Indian Economist and recipient of Bharat Ratna, Prof. Amartya Sen was awarded the Nobel Memorial Prize in Economic Science(1998) for his contribution to welfare economics and social choice theory as well as for his interest in the problems of the society's poorest members. In his book, 'Poverty and Famines: An Essay on Entitlement and Deprivation(1981)', Prof. Sen revealed that declining wage, unemployment,

rising food prices and poor food distribution systems led to starvation among certain groups in the society. His views encouraged policy makers to pay attention not only to alleviating immediate suffering but also finding ways to replace the lost income of the poor. For economic growth to be achieved, he argued that social reforms such as improvements in education and public health must precede economic reforms.

### Can you tell :

#### Express your opinion on the following :

- There is a thick line of rural-urban economic divide in India .
- There is an equitable distribution of income and wealth in the country.
- All the citizens have equal access to education, health, energy and drinking water.
- There is no hunger, starvation or malnutrition in the country.
- There is lack of sanitation facilities in the country.
- Poverty ratio is uniform across all the states.

### Concepts of Poverty :

Poverty is multifaceted. The major concepts of poverty in India include absolute poverty and relative poverty.

**a) Absolute Poverty :** Absolute poverty is measured in terms of minimum calorie intake. Earlier, Planning Commission determined per capita daily calorie requirement of 2400 calories for a person living in the rural area and 2100 calories for a person living in the urban area. On an average, the per capita daily calorie requirement amounts to 2250 calories. Absence of minimum income to satisfy the desired level of calorie intake of food leads to absolute poverty. It is mostly found in the developing countries like India. Absolute poverty can be eradicated through effective poverty alleviation measures.

### Find out :

Prepare a list of 5 Countries in the World having Absolute Poverty with reference to the latest World Bank Report.

**b) Relative Poverty :** It is difficult to define the concept of relative poverty.

It is judged on the basis of comparison of relative standards of living of different sections of the people. Relative poverty is measured with respect to differences in the levels of income, wealth, consumption, economic inactivity (unemployment, old age) etc. Such poverty is found in all the countries of the world. It is an universal phenomenon. Relative poverty cannot be completely eradicated. However, it can be reduced to some extent through appropriate policy measures.

### Poverty Line :

Poverty line is an imaginary line that divides the poor and non-poor. It is determined in terms of per capita household expenditure. Various Committees and Study Groups have defined poverty line in different ways.

As per the Task Force on Eliminating Poverty constituted by the NITI Aayog, Poverty line is defined as "the threshold expenditure or the amount necessary to purchase a basket of goods and services that are considered necessary to satisfy basic human needs at socially acceptable levels".

Poverty line helps to fulfil the following objectives :

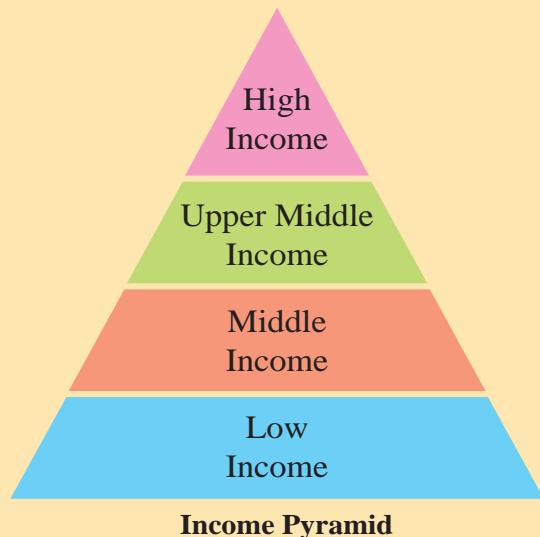
- 1) To determine the population living above poverty line (APL) and below poverty line (BPL).
- 2) To identify the poor on the basis of the household consumption expenditure.
- 3) To track poverty in a region over a period of time and compare it across regions.
- 4) To provide an estimate of the required expenditure on poverty alleviation programmes.

Poverty line differs from country to country. According to World Bank, "Poverty line was defined at \$1.90 per capita per day at 2011 prices on purchasing power parity basis (PPP)". On this basis, 21.2% of India's population lived below poverty line.

### Can you tell :

Place the following individuals as per their income in the pyramid as given below:

- 1) Contract labourer
- 2) Salesman in a shop
- 3) CEO of a Multinational Company
- 4) Executive in a Company



### Types of Poverty :

**1) Rural poverty :** Deprivation of basic needs among certain section of the people living in the villages is termed as rural poverty.

It is found among small and marginal farmers, agricultural labourers, contractual workers and landless labourers. Low agricultural productivity, drought, poor rural infrastructure, illiteracy, lack of alternative jobs, rural indebtedness have aggravated the problem of rural poverty.

**2) Urban Poverty :** Absence of basic needs among certain section of the population living in towns and cities is termed as urban poverty. Urban poverty is largely attributed to the spillover effects of migration among the rural poor, lack of affordable housing, illiteracy, slow industrial growth, lack of infrastructure etc. Urban poverty has led to the growth of slums

and informal sector as well as it creates law and order problems in the society.

### Find out :

Information about the informal sector and list a few activities related to it as per your observation.

### Do you know?

Following are some of the food and non-food items required to be on the poverty line.

#### Food Items

Cereals, pulses, milk and milk products, salt and sugar, edible oil, egg, fish and meat, vegetables, fruits, spices, beverages, processed food

#### Non Food Items

Fuel and light, medical, entertainment, durable goods, rent, clothing, bedding, footwear, education, toilet articles, conveyance

### Try this :

- 1) Given the number of members in your family prepare a list of food items and non-food items purchased monthly.
- 2) Calculate the total monthly consumption expenditure of your family's consumption basket as per the current prevailing prices.
- 3) What is the per capita monthly expenditure?

### Extent of Poverty in India :

Extent of poverty is measured by the poverty ratio. It is the ratio of the number of poor to the total population. Studies were conducted by individual economists as well as research institutions to ascertain the extent of poverty in India. Since 1962, the Planning Commission had appointed several working groups, task force and expert committees for estimation of poverty.

### Estimates of Poverty :

Earlier, poverty lines were based on calorie intake. It did not include the non food components such as education, health etc. Government of India had appointed various Committees to

review poverty line from time to time. In 2012, an Expert Group, under the Chairmanship of Dr. C. Rangarajan, was constituted. This Committee submitted its report in 2014. As per the report approved by this Committee, a new poverty line has been decided for rural and urban areas.

Table 8.1 provides estimates of poverty by the Rangarajan Committee.

### Poverty Estimates (2011-12)

| Poverty Line (in Rs.)<br>(Consumption Expenditure)            |                                                                 | Poverty Ratio (%) |       |       |
|---------------------------------------------------------------|-----------------------------------------------------------------|-------------------|-------|-------|
| Rural                                                         | Urban                                                           | Rural             | Urban | Total |
| Rs. 972/-<br>Per month<br>(Rs. 32/-<br>per day per<br>person) | Rs. 1407/-<br>Per month<br>(Rs. 47/-<br>per day per<br>person ) | 30.9%             | 26.4% | 29.5% |

**Table 8.1**

Source : Government of India, Planning Commission Report, (June, 2014)

### State-wise Poverty Ratios (2011-12)

| State Ratio       | Poverty Ratio (2011-12) in Percent | State Ratio    | Poverty Ratio (2011-12) in Percent |
|-------------------|------------------------------------|----------------|------------------------------------|
| Andhra Pradesh    | 9.20                               | Kerala         | 7.1                                |
| Assam             | 31.9                               | Madhya Pradesh | 31.7                               |
| Bihar             | 33.7                               | Maharashtra    | 17.4                               |
| Chhattisgarh      | 39.9                               | Odisha         | 32.6                               |
| Gujarat           | 16.6                               | Punjab         | 8.3                                |
| Haryana           | 11.2                               | Rajasthan      | 14.7                               |
| Himachal Pradesh  | 8.1                                | Tamil Nadu     | 11.3                               |
| Jammu and Kashmir | 10.4                               | Uttar Pradesh  | 29.4                               |
| Jharkhand         | 36.9                               | Uttarakhand    | 11.3                               |
| Karnataka         | 20.9                               | West Bengal    | 19.9                               |

**Table 8.2**

Source : Economic Survey 2017-18

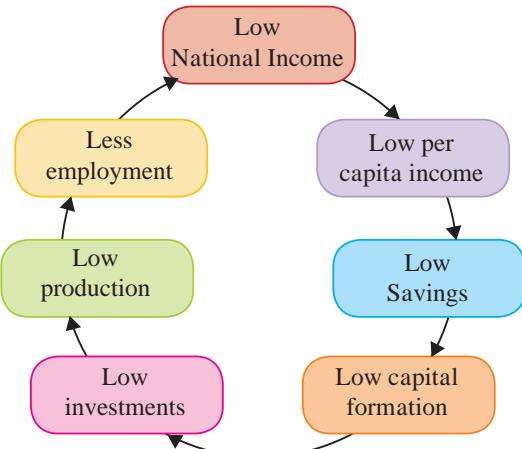
#### Find out :

From the above data on poverty ratios, find out Q<sub>3</sub> and P<sub>10</sub> and name the states as per the derived partition values.

**Causes of poverty :** Following are the major causes of poverty in India :

- 1) Population explosion :** Unequal distribution of resources among the rapidly growing population has led to deprivation of basic facilities causing widespread poverty.
- 2) Slow Economic Growth :** Due to slow agricultural and industrial growth, the growth rate of national income and per capita income has been slow over the years. This has resulted in poverty and low standard of living among the people.
- 3) Unemployment and Underemployment :** Poverty in the rural and urban areas has also increased due to unemployment and underemployment.
- 4) Economic inequalities :** Wide inequalities have been observed in the distribution of income, assets, consumption expenditure, credit facilities, agricultural landholdings etc. This has also led to a high incidence of poverty.
- 5) Inaccessibility to infrastructural facilities :** Due to lack of purchasing power infrastructural facilities such as energy, transport, communication, health and education are inaccessible to the poor. This perpetuates poverty.
- 6) Inflation :** Inflation refers to a continuous rise in the price level of essential commodities especially the food items. Growing demand for food and its insufficient supply causes the prices to rise tremendously. This results in low purchasing power making the poor still poorer. Food crisis has led to malnutrition, hunger and starvation among the people.
- 7) Regional imbalance :** Regional imbalance is also one of the causes of poverty. States such as Orissa, Bihar, Madhya Pradesh, Chhattisgarh, Jharkhand, Sikkim, Arunachal Pradesh, Assam etc. lag behind in terms of economic development and therefore have a high poverty ratio.
- 8) Vicious Circle of Poverty :** This concept is given by Prof. Ragnar Nurkse. The

operation of vicious circle of poverty has trapped Indians into miseries which in turn leads to low national income, low per capita income, low capital formation, low-savings, low production, less employment. Fig 8.2 explains the vicious circle of poverty.



**Fig. 8.2 : Vicious Circle of Poverty**

## 9) Other Factors :

- Recurrence of natural disasters
- Caste, religious, racial and gender discrimination
- Administrative inefficiency and corruption
- Leaks in the public distribution system

### You should know :

#### Effects of Poverty :

- Poverty retards the economic progress of a country.
- It leads to low national income and low per capita income.
- It leads to low standard of living.
- It results in low savings, investment and capital formation.
- It leads to concentration of economic power and unequal opportunities.
- It results in class conflicts between the rich and poor.
- Anti-social and anti-national activities are on a rise due to poverty.
- Increase in subsidies have increased government expenditure on welfare programmes resulting in misallocation of resources.

- Poor people become vulnerable to diseases, misery and economic hardships.
- Poverty also leads to environmental deterioration.

### You should know :



The UN Sustainable Development Goals (SDGs) was adopted by the international community in September 2015 to comprehensively cover social, economic and environmental dimensions. The SDGs constitute a universal agreement to end poverty in all its forms and dimensions. There are 17 SDGs which have 169 targets to be achieved by 2030. India played an important role in shaping SDGs.

India being one of the signatories of United Nations Sustainable Development Goals, it is committed towards eradication of poverty by 2030 (SDG1).

### General measures to eradicate poverty :

Policy measures undertaken for eradication of poverty are as follows :

- 1) **Control of population :** Family Welfare Programme and population policies have been introduced to keep a check over the population growth.
- 2) **Agriculture :** Farmers are provided with cheap credit facilities to purchase agricultural inputs. The Government also announces Minimum Support Prices for selected crops to ensure stable agricultural income.

**3) Rural Works :** Employment opportunities are provided to the poor through construction of rural roads, irrigation projects, rural electrification etc.

**4) Rural industrialization :** To promote employment in the rural areas, emphasis has been laid on setting up of small scale and cottage industries.

**5) Minimum Wages :** Minimum Wages Act was passed in 1948 to provide fair wages to agricultural and industrial workers. It has been revised from time to time.

**6) Public Distribution System :** To ensure food security, food-grains are made available to the poor people at highly subsidized rates through ration shops under the public distribution system.

**7) Nationalization of Banks :** To ensure financial inclusion, credit facilities are made available to the poor people at low rates of interest. For this purpose nationalization of banks was undertaken in 1969 and 1980.

**8) Progressive Tax Measures :** To reduce inequalities in the distribution of income, progressive income tax system has been introduced.

**9) Education :** To increase the enrolment ratio, primary education has been made free and compulsory for all. Free education for girls, mid-day meal programmes, sanitation and safe drinking water etc. have also been provided.

**10) Affordable Housing :** Slum rehabilitation programmes and affordable housing facilities are provided to the rural and urban poor.

**11) Health facilities :** Primary health centres, government hospitals have been established to provide medical treatment at subsidized rates to the poor people.

**12) Skill development and self employment :** Skill development is considered one of the important aspects for job creation in India. For this purpose opportunities need to be provided for skill based training. This will

inspire people towards entrepreneurship or self employment.

### Try this :

To ensure food security, the Government of Maharashtra has introduced Tri Colour Family Ration Card. Find out the income criteria of each ration card on the basis of information provided by the Food, Civil Supplies and Consumer Protection Dept., GoM.

WHITE



SAFFRON



YELLOW



### Try this :

Correlate the following Poverty Alleviation Programmes with the given points : food security, wage employment, self employment, education, health, sanitation, financial inclusion, housing.

- Employment Guarantee Scheme (EGS)
- Swarnajayanti Gram Swarozgaar Yojana (SGSY)
- Jan Dhan Yojana (JDY)
- Swachch Bharat Mission (SBM)
- Sarva Shiksha Abhiyaan (SSA)
- Antyodaya Anna Yojana (AAY)
- Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
- Pradhan Mantri Awaas Yojana (PMAY)
- National Health Mission (NHM)

### Do you know?

17th October is observed as International Day for Eradication of Poverty.

Poverty retards the economic progress of the country. Therefore, anti-poverty programmes introduced by the government needs to be monitored from time to time. Leaks and bottlenecks need to be identified for its effective implementation.

## EXERCISE

### Q. 1. Assertion and reasoning questions :

1) **Assertion (A)** : Poverty level declines with a rise in agricultural output.

**Reasoning (R)** : Agricultural incomes have declined due to wide fluctuations in climatic conditions.

**Options :** 1) (A) is True, but (R) is False.

2) (A) is False, but (R) is True.

3) Both (A) and (R) are True and (R) is the correct explanation of (A).

4) Both (A) and (R) are True, but (R) is not the correct explanation of (A).

2) **Assertion (A)** : Urban poverty is attributed mainly to spillover effects of migration among the rural poor.

**Reasoning (R)** : Poor rural infrastructure, lack of alternative jobs results in forced migration.

**Options :** 1) (A) is True, but (R) is False.

2) (A) is False, but (R) is True.

3) Both (A) and (R) are True and (R) is the correct explanation of (A).

4) Both (A) and (R) are True, but (R) is not the correct explanation of (A).

3) **Assertion (A)** : Relative poverty is found in all the countries of the world.

**Reasoning (R)** : Differences in the levels of income is the only criteria for judging relative poverty.

**Options :** 1) (A) is True, but (R) is False.

2) (A) is False, but (R) is True.

3) Both (A) and (R) are True and (R) is the correct explanation of (A).

4) Both (A) and (R) are True, but (R) is not the correct explanation of (A).

4) **Assertion (A)** : Poverty is not just lack of money but also lack of capabilities.

**Reasoning (R)** : Lack of freedom to satisfy hunger, lack of health care facilities, denial of political freedom leads to poverty.

**Options :** 1) (A) is True, but (R) is False.

2) (A) is False, but (R) is True.

3) Both (A) and (R) are True and (R) is the correct explanation of (A).

4) Both (A) and (R) are True, but (R) is not the correct explanation of (A).

5) **Assertion (A)** : Food security, credit facilities guarantee social protection to the poor.

**Reasoning (R)** : Leakages in the administrative system perpetuates poverty.

**Options :** 1) (A) is True, but (R) is False

2) (A) is False, but (R) is True

3) Both (A) and (R) are True and (R) is the correct explanation of (A)

4) Both (A) and (R) are True, but (R) is not the correct explanation of (A)

### Q. 2. Find the odd word out :

1) Colours of Ration card - White, Green, Saffron, Yellow

2) High Poverty ratio - Chhattisgarh, Jharkhand, Bihar, Kerala

3) Calories - 2400, 1800, 2100, 2250

### Q. 3. Give economic terms :

1) Denial of opportunities to certain section of the people in the society.

2) Concept of poverty that covers material and non-material dimensions.

3) Poverty judged on the basis of relative standards of living of the people.

4) Poverty that can be completely eradicated.

5) Threshold expenditure needed to satisfy basic human needs at socially acceptable levels.

### Q. 4. Identify and explain the concepts from the given illustrations :

1) Baban's daughter had to be hospitalized due to weakness caused by undernourishment or lack of minimum calorie requirement in the intake of food.

2) Dhanajirao is a wealthy landlord, but his annual income is relatively less in comparison to entrepreneur Raobahadur.

3) Urmi's family live in a situation whereby they are not able to fulfil even the basic needs of life such as food, clothing and shelter.

4) Sanjay's family receives food grains on the basis of yellow ration card through public distribution system.

5) In certain parts of the State, starvation-related deaths have been observed whereas in certain areas gross wastage of food has been reported.

### Q. 5. State with reasons whether you agree or disagree with the following statements :

1) Population control is the only measure to eradicate poverty.

2) Relative poverty is universal by nature.

3) Regional imbalance is the only cause of poverty.

### Q. 6. Answer in detail :

1) Assess various measures undertaken to eradicate poverty.



## CHAPTER - 9 : ECONOMIC POLICY OF INDIA SINCE 1991

### Introduction :

In the beginning of the last decade of the 20<sup>th</sup> century, Indian economy experienced an economic crisis. At the end of June 1991, foreign currency assets declined to such an extent that it was barely enough to finance two weeks of imports. The annual rate of inflation reached to 16.7% in August 1991.

The government expenditure was greater than its revenue due to defence expenditure, subsidies, interest on loans etc. The positive effects of socialistic pattern of society was on the verge of decline. On this ground, it was necessary to bring new changes in the economy. Hence, Government of India adopted a New Economic Policy (NEP) in 1991.

The process of new economic policy which started in 1985 got a momentum in 1991. The new industrial policy introduced radical changes to unshackle India's industrial economy from the cobweb of unnecessary bureaucratic controls and rigidity in the government procedures. According to the new industrial policy, the state will no longer play the role of a controller and regulator, but it will act as a facilitator, co-ordinator, inspirer and supervisor.

### Main Objectives of the Economic Policy of 1991 :

- 1) To plunge the Indian economy into the arena of Globalisation.
- 2) To bring down the rate of inflation
- 3) To correct the disequilibrium in the balance of payments.
- 4) To acquire higher economic growth rate.
- 5) To build sufficient foreign exchange reserves.
- 6) To achieve economic stabilisation and to reduce fiscal deficit.
- 7) To establish international trade relations for free flow of goods without any restrictions.

- 8) To increase the participation of private sector.

### Features of the Economic Policy of 1991 :

- 1) **Delicensing :** It means abolition of government licence required to carry on any business or industrial activity. All industries except 18 specified industries of strategic importance required licence. As per the Dept. of Industrial Policy and Promotion, Government of India, only the following four industries require compulsory licensing :
  - 1) Electronic Aerospace and defence equipment
  - 2) Industrial Explosives
  - 3) Hazardous chemicals, drugs and pharmaceuticals.
  - 4) Cigarettes
- 2) **Abolition of Monopolies and Restrictive Trade Practices (MRTP) Act :** According to MRTP Act, it was compulsory for large industrial houses to take the approval of Central government for establishment, expansion, merger etc. This resulted in slow industrial growth. Abolition of MRTP Act has encouraged industrial growth.
- 3) **Encouragement to small sector :** The government encouraged small sector units to attain a higher growth rate in output, employment and export sector. Its investment limit was increased from 1 crore to 5 crores.
- 4) **Encouraging foreign investment :** Industrial policy of 1991 approved Foreign Direct Investment (FDI) to encourage investment in high priority industries requiring high investment and technology. Initially FDI was permitted upto 51% of total investment in selected industries. Later this limit was raised to 74% and then 100% for specific industries.

- 5) Reducing role of Public Sector :** Many changes were made in the public sector policy to include following objectives :
- Ending state monopoly
  - Improving efficiency of public sector
  - Releasing capital blocked in sick public sector enterprises

To encourage private sector, NEP reduced the number of industries in public sector from 17 to 8. From 2014, there are only two industries reserved for public sector which include railways and atomic energy.

- 6) Trade Liberalisation :** Import licensing controls have been abolished. Almost all capital goods, raw materials, intermediate goods and other components were made freely importable. Established exporters are allowed to raise external credit to finance their trade. **Special Economic Zones (SEZ)** are set up to promote exports. The Government has also introduced the concept of Agro Export Zones (AEZ) to encourage agricultural exports.

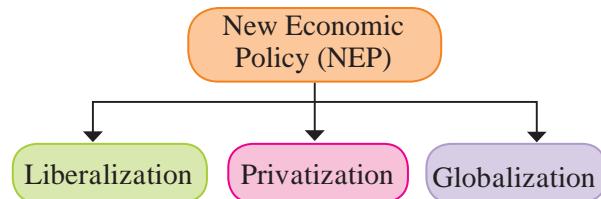
- 7) Reforms in Insurance Sector :** Insurance sector was a monopoly of the government. The new policy passed Insurance Regulatory and Development Authority Act (IRDA) in 1999 to introduce reforms in this sector. The IRDA has given licence to many private companies to enter insurance business. This has ended the monopoly of Government in this sector.

- 8) Reforms in financial sector :** Earlier only co-operative banks and public sector banks were permitted to do banking business in the financial sector. The new economic policy has also permitted the entry of new private banks and foreign banks.

#### Find out :

Names of five Private Banks and Foreign Banks.

#### Components of new economic policy :



#### A) Liberalisation :



**Fig. 9.1 : Liberalisation**

**Meaning :** Liberalisation refers to 'economic freedom' or 'freedom for economic decision'. It means producers, consumers and owners of factors of production, are free to take decision to promote their self interest. Adam Smith in his book, 'Wealth of Nations' suggested that economic liberalisation is the best economic policy to promote economic growth and well being of the people.

The economic policy which leads to reduction if not removal, of barriers in the working of market mechanism and free competition is called economic liberalisation.

#### Measures taken for Liberalisation :

- Flexibility of Interest rate :** Under the policy of liberalisation, commercial banks have the freedom to determine the rate of interest depending upon the market forces of demand and supply.

**2) Freedom for expansion of industries :** In this new liberalised era, the industries are free to diversify their production capacity and reduce the cost of production. Earlier, Government used to fix the maximum limit of production capacity. No industry could produce beyond that limit. Now the industries are free to decide their own production limit on the basis of market requirements.

**3) Abolition of Monopolies and Restrictive**

**Trade Practices :** According to MRTP Act of 1969, all those companies having assets worth Rs. 100 crores and more were classified as MRTP firms, and were subject to several restrictions. Now these firms have the freedom to take investment decisions.

**4) Reforms in FERA :** To bring about flexibility in the laws relating to foreign exchange. Foreign Exchange Regulation Act (FERA) was replaced by Foreign Exchange Management Act (FEMA). This would encourage international trade.

**5) Investments in infrastructure :** Infrastructure was opened to domestic as well as foreign investors. They could invest in rail, roads and power projects.

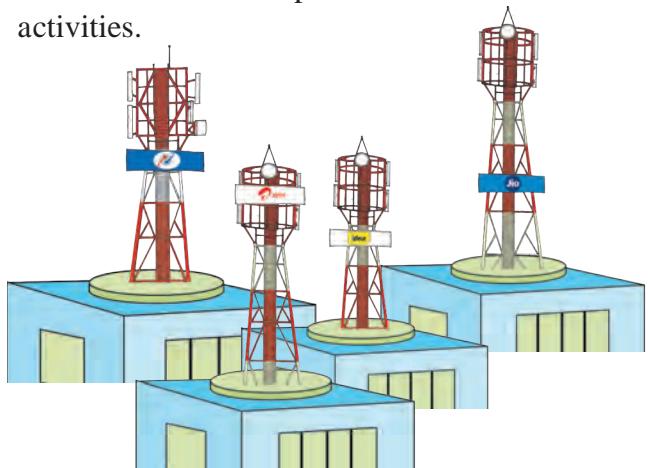
**6) Encouragement to foreign technology :** Liberalisation has allowed the use of foreign technology in high priority industries. This helps to reduce the cost and make the industries competitive.

**7) SEBI (Securities and Exchange Board of India) :** SEBI was established on 12<sup>th</sup> April 1992. This step was introduced to protect the interest of investors in securities, promote development and regulate the securities market.

**B) Privatisation :**

**Meaning :** Privatisation means transfer of ownership from public to private sector. In the broader sense, it means introduction of private management and control with or without change

in ownership of public enterprise. In simple words, Privatisation refers to a process that reduces the involvement of the public sector and increases that of private sector in economic activities.



**Fig. 9.2 : Privatisation**

**Measures taken for Privatisation :**

**1) Disinvestment :** It is the act of selling shares of sick public sector units to the private sector. e.g. Disinvestment of Maruti, ITDC hotels, IPCL, VSNL etc.

**2) Dereservation policy :** The Industrial Policy of 1956 reserved 17 industries for the public sector. NEP reduced this number to eight, gradually to three and then two. At present only railway transport and atomic energy are reserved for the public sector.

**3) Establishment of BIFR (Board of Industrial and Financial Reconstruction) :** NEP has set up Board of Industrial and Financial Reconstruction to take decision regarding sick public sector units. By the end of 1996, 188 cases of sick public sector units were referred to BIFR.

**4) Creation of National Renewal Board (NRB) :** When the loss making public sector units are closed, the workers have to face the problem of unemployment and poverty. To solve this problem, government has created National Renewal Board (NRB). NRB takes the responsibility of providing compensation to the retrenched workers as well as those seeking voluntary retirement.

**5) Navratna Status :** During 1997-98, nine public sector units were selected and given the status of 'Navratnas' on the basis of their performance. These Navratnas were given full financial and managerial autonomy.

These Navratnas are as follows :

- 1) IOC : Indian Oil Corporation.
- 2) ONGC : Oil and Natural Gas Corporation.
- 3) HPCL : Hindustan Petroleum Corporation Ltd.
- 4) BPCL : Bharat Petroleum Corporation Ltd.
- 5) IPCL : Indian Petrochemicals Corporation Ltd.
- 6) VSNL : Videsh Sanchar Nigam Limited
- 7) BHEL : Bharat Heavy Electricals Ltd.
- 8) SAIL : Steel Authority of India Ltd.
- 9) NTPC : National Thermal Power Corporation

At present, public sector units (PSUs) have been further categorised into Miniratnas and Maharatnas.

• **Miniratna Companies :** The concept of 'Miniratna' was introduced by the Government of India in 2002. Miniratnas are further divided in two categories.

Miniratna Category - I : A public sector company should have made profit in the last three years continuously, the pre-tax profit should have been ₹ 30 crores or more in at least one of the three years.

Miniratna Category - II : A public sector company can be called as miniratna category II, if it has continuously made profit for last three years as well as it has a positive net worth.

• **Maharatna Companies :** The Maharatna category for Central Public Sector Enterprises (CPSEs) was introduced in 2009 with the objective to empower mega CPSEs to expand their operations and emerge as global giants or become Indian multinational companies (MNCs).

### Find out :

Names of companies coming under Maharatna and Miniratna status.

### C) Globalisation :



**Fig. 9.3 : Globalisation**

### Meaning :

Globalisation has been the ultimate aim of the new economic policy. To be more specific, liberalisation and privatisation finally lead to globalisation of the economy.

Globalisation means the creation of global economy. A Global economy is a borderless economy having a free flow of goods and services, capital, labour and technology across the national borders. In other words 'Globalisation' means integrating the economy of a country with the world economy. It removes all barriers in free trade and investments.

### Measures taken for Globalisation :

#### 1) Removal of quantitative restrictions :

All the quantitative restrictions have been removed on imports and exports. Further tariff rates have been brought down considerably. The import duty on industrial goods have been reduced.

#### 2) Encouragement to Foreign Capital :

Government has opened the economy to foreign investments. As a result, foreign capital is attracted towards various sectors.

Indian economy has become a part of global economy.

- 3) **Convertibility of Rupee :** Exchange rate of rupee has been made flexible. Rupee is made fully convertible to all **current account transactions**.
- 4) **Foreign collaboration :** Indian companies are allowed to enter into important foreign collaboration, e.g. Maruti-Suzuki, Hero-Honda, Tata-Corus deal of iron and steel in South Africa.
- 5) **Long term trade Policy :** To ensure longer duration in foreign trade, changes were made in the foreign trade policy.  
Main features of this policy included :
  - a) Liberalised policy
  - b) Removal of restrictions on foreign trade.
  - c) Encouragement to Foreign Collaboration.
- 6) **Encouragement to Exports :** Through **EXIM policy**, various incentives are given to exporters. Special Economic Zones are created to encourage exports.

#### Stimulate your memory :

- 1) What is Corporate Social Responsibility (CSR)?
- 2) How does it help the society?

#### Evaluation of the Economic Policy of 1991:

##### Major Achievements :

- 1) **Revolution in IT Sector :** Globalisation has created a revolution in the IT Sector. It has contributed to India's Gross Domestic product (GDP). Indian software engineers are in high demand in developed countries like U.S.A, U.K., France etc.
- 2) **Improvement in Financial Facilities :** Due to entry of private and foreign banks, financial sector has become highly professional and competitive. They are providing quick services through credit cards, e-banking etc. to their customers.

##### 3) **Improvement in educational standards :**

Globalisation has motivated Indian students to go abroad and seek higher education as an effect of flexibility in getting educational loans, scholarships and other required facilities.

- 4) **Increase in Exports :** Our exports have increased considerably. India is not only exporting traditional products but also machinery, chemicals, computers etc. Consequently, our adverse balance of payments position is improving.

##### 5) **Diversification of cropping pattern :**

Earlier, Indian farmers were growing only staple food and cash crops. But now, as per the requirement of globalisation they have diversified their cropping pattern from traditional products to non-traditional products. They are developing horticulture, floriculture, medicinal plants etc.

- 6) **Solves the problem of scarcity :** Due to liberal imports, we can overcome scarcity of goods and raw materials. This helps to solve the problem of inflation.

##### Major Failures :

- 1) **Lack of Self Sufficiency :** A country under Globalisation cannot achieve self-sufficiency in food production because it is forced to produce only those goods which are demanded at global level and which are profitable.
- 2) **Adverse effect on domestic market :** Due to globalisation and liberalisation our domestic markets are adversely affected. They are flooded with imported goods. Due to liberal import policy, imported goods are cheaper than the domestic products. They are highly demanded.
- 3) **Affects poor farmers :** The benefits of globalisation are being enjoyed by the rich farmers. They are growing exportable

crops. But poor farmers are left unnoticed. They cannot face the competition. Hence, they are forced to sell their land or take extreme steps. They are facing the problem of indebtedness and poverty.

- 4) Unhealthy competition :** The Indian entrepreneurs cannot face competition with multi-national companies (MNCs). As a result, they are forced to declare their units as a sick unit or close it down or to sell it out.

**5) Neglects welfare aspect :** Privatisation of services like health, communication, education has led to exorbitant charges and fees for maximisation of profit. Hence, welfare aspect has taken a backseat.

**6) Unemployment :** Many Indian industries are compelled to close down as they cannot face the competition with multinational companies. Hence, large number of workers are thrown out of jobs leading to unemployment, poverty and inequality.

## EXERCISE

**Q. 1. Complete the following statements by choosing the correct alternative :**

- 1) After Independence, India had adopted .....  
a) Socialism                                    b) Capitalism  
c) Mixed Economy                            d) Communism
- 2) The new economic policy approved foreign technology in .....  
a) Cottage industries  
b) Small scale industries  
c) Micro enterprises  
d) High priority industries
- 3) At present, the number of industries reserved for public sector has been reduced to .....  
a) 3      b) 5      c) 7      d) 2

**Q.2. Assertion and Reasoning questions :**

- 1) **Assertion (A)** Delicensing of industries was an important step taken under liberalization.

**Reasoning (R)** Unwanted controls and restrictions led to economic stagnation prior to 1991.

- a) (A) is TRUE but (R) is FALSE  
b) (A) is FALSE but (R) is TRUE  
c) (A) and (R) both are TRUE and (R) is the correct explanation of (A)  
d) (A) and (R) both are TRUE but (R) is not the correct explanation of (A)

- 2) **Assertion (A)** In 1990-91, India faced an acute shortage of foreign exchange reserves.

**Reasoning (R)** Import quotas and tariffs led to an increase in the imports.

- a) (A) is TRUE but (R) is FALSE  
b) (A) is FALSE but (R) is TRUE  
c) (A) and (R) both are TRUE and (R) is the correct explanation of (A)  
d) (A) and (R) both are TRUE but (R) is not the correct explanation of (A)

- 3) **Assertion (A)** Post liberalization, the sale of domestic goods has increased.

**Reasoning (R)** The demand for imported goods had increased due to liberal policy.

- a) (A) is TRUE but (R) is FALSE  
b) (A) is FALSE but (R) is TRUE  
c) (A) and (R) both are TRUE and (R) is the correct explanation of (A)  
d) (A) and (R) both are TRUE but (R) is not the correct explanation of (A)

- 4) **Assertion (A)** Due to Globalisation, a country cannot achieve self-sufficiency in food production.

**Reasoning (R)** Globalisation has created a revolution in IT sector.

- a) (A) is TRUE but (R) is FALSE  
b) (A) is FALSE but (R) is TRUE  
c) (A) and (R) both are TRUE and (R) is the correct explanation of (A)  
d) (A) and (R) both are TRUE but (R) is not the correct explanation of (A)

**Q. 3. Find the odd word out :**

- 1) New Economic Policy -  
Liberalization, Privatization, Demonetization,  
Globalisation
- 2) Industries requiring compulsory licensing -  
defence equipment, agro-based industries,  
cigarettes, industrial explosives
- 3) Navratna status companies -  
SPCL, IOC, ONGC, HPCL
- 4) Liberalization dealt with the following -  
MRTP, FERA, SEBI, NTPC

**Q. 4. Identify and explain the concepts from the given illustrations :**

- 1) Vehicles manufactured by various automobile companies are now available in India.
- 2) Government equity in some public sector enterprises is sold to the private sector.
- 3) Foreign investments are encouraged on a large scale in the industrial sector of India.

**Q. 5. State with reasons whether you agree or disagree with the following statements :**

- 1) Liberalisation has permitted the use of foreign technology.
- 2) Government has given private enterprises free access to public sector.
- 3) Government has monopoly in insurance sector.
- 4) The creation of National Renewal Board was done to remove poverty.
- 5) Indian Oil Corporation is one of the public sector units among 'Navratnas'.

**Q. 6. Answer in detail :**

- 1) Explain the features of economic policy of 1991.
- 2) Explain the measures undertaken for Globalisation.

**Q. 7. Read the following passage carefully and answer the questions.**

Indian ice-cream industry is one of the fastest growing segments of the dairy and food processing sector. India has a low per capita consumption of ice-cream of 400 ml whereas in USA it is 22,000 ml and in China it is 3000 ml.

The per capita consumption of ice-cream is low in India because it is a country filled with traditional sweets of more than 100 varieties. In developed countries, people have either pastries or ice-creams for dessert. In the era of Globalisation, the mindset of the people is fast changing. This is because multi-national companies have set up a number of ice-cream parlours, with a lot more varieties and flavours that attract the younger lot. Besides this, there are better delivery systems.

The ice-cream sector has great potential for growth in the country due to improvement in the cold chain infrastructure, increasing disposable income and changing lifestyle of the people. However, it is taxed higher with 18 percent GST while other dairy products in the same basket such as butter and cheese are taxed at 12 percent.

The ice-cream industry has generated revenue of more than \$1.5 billion in 2016-17. With an employment of 15 lakh people directly or indirectly, it is also considered one of the largest employers of the dairy and food processing industry.

- 1) Identify the reason for low per capita consumption of ice-cream in India.
- 2) Explain the impact of Globalisation on the Indian ice-cream industry.
- 3) Find out the factors that could lead to the growth of ice-cream industry in India.
- 4) Express your views about the implications of higher GST on ice-cream industry in India.



# CHAPTER - 10 : ECONOMIC PLANNING IN INDIA

## Introduction :

In the year 1950, the Government of India established the Planning Commission. The Prime Minister has been designated as Ex-Officio Chairman of the Planning Commission. Planning Commission consisted of experts from various fields such as banking, finance, industry etc. It was responsible for the formulation of economic plans.

### Collect information on :

- 1) Bombay Plan    2) People's Plan
- 3) Gandhian Plan

## Meaning and Definitions of Economic Planning :

Economic planning is a time bound programme to achieve certain objectives with the help of available resources by the planning authority.

### According to Dr. H. D. Dickinson :

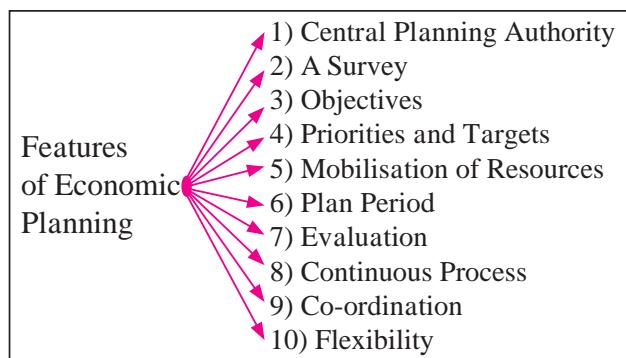
"Economic planning is the making of major economic decisions such as what and how much to be produced how, when and where it is to be produced, to whom it is to be allocated by the conscious decision of the determinate authority, on the basis of a comprehensive survey of the economy as a whole".

### According to Mrs. Barbara Wooten :

"Planning is a conscious and deliberate choice of economic priorities by some public authority."

### Features of Economic Planning :

Economic planning has the following features:



- 1) **Central Planning Authority** : Central Planning Authority in a country undertakes economic planning. In India, it was known as Planning Commission. It has been replaced by National Institution for Transforming India i.e. NITI Aayog since 2015.
- 2) **A Survey** : A comprehensive survey of the economy is undertaken regarding the availability and utilisation of human and natural resources.
- 3) **Objectives** : Economic planning is based on certain pre-determined objectives which are realistic and flexible.
- 4) **Priorities and targets** : Priorities are fixed according to the importance of each sector for accelerating economic development. Target is the concrete step towards the attainment of objectives.
- 5) **Mobilisation of Resources** : The resources needed for planning are mobilised through various sources like taxation, domestic savings, deficit financing, public debt, external assistance etc.
- 6) **Plan Period** : Plan period varies as per needs. In countries like India, planning is generally for a period of five years.
- 7) **Evaluation** : Periodic assessment such as mid term appraisal is done to incorporate necessary changes in priorities and targets of the plan.
- 8) **Continuous Process** : Economic planning is a continuous process. It aims at economic development of the country.
- 9) **Co-ordination** : States of the country also undertake economic planning along with the centre. Thus, co-ordination between the centre and states is ensured.
- 10) **Flexibility** : Central Planning Authority maintains flexibility in its approach. This makes it possible to incorporate necessary changes in the plan as per requirements during its implementation.

## You should know :

### Five Year Plans (FYP) at a Glance

| Plan          | Period    | Main Objective/Strategy                      | Target in % | Achievements % |
|---------------|-----------|----------------------------------------------|-------------|----------------|
| 1st           | 1951-1956 | Development of Agriculture                   | 2.1         | 3.6            |
| 2nd           | 1956-1961 | Development of heavy industries              | 4.5         | 4.1            |
| 3rd           | 1961-1966 | Development of both agriculture and Industry | 5.6         | 2.7            |
| Annual Plans  | 1966-1969 | ---                                          | ---         | ---            |
| 4th           | 1969-1974 | Growth with Stability                        | 5.7         | 3.3            |
| 5th           | 1974-1979 | Removal of Poverty                           | 4.4         | 4.8            |
| Rolling Plans | 1978-1980 | ---                                          | ---         | ---            |
| 6th           | 1980-1985 | Improvement in Quality of Life.              | 5.2         | 5.7            |
| 7th           | 1985-1990 | Social Welfare and poverty eradication       | 5.0         | 6.0            |
| Plan Holiday  | 1990-1992 | ---                                          | ---         | ---            |
| 8th           | 1992-1997 | To give dynamism to economy                  | 5.6         | 6.8            |
| 9th           | 1997-2002 | Social justice and Equality                  | 7.0         | 5.6            |
| 10th          | 2002-2007 | Reduction of Poverty                         | 8.2         | 7.8            |
| 11th          | 2007-2012 | Faster and more inclusive growth             | 8.1         | 7.9            |
| 12th          | 2012-2017 | Faster sustainable and more inclusive growth | 8.0         | N.A.           |

**Table 10.1**

Source : Various five year plan reports, Planning Commission, GoI.

**Find out :** Calculate  $D_6$  and  $D_9$  from the above table using 'achievements' as the numerical data.

### 12<sup>th</sup> Five Year Plan (2012-2017)

Twelfth five year plan which covered the period 2012-2017, focussed on the objective of "Sustainable Growth". The plan aimed at encouraging the development of India's agriculture, education, health and social welfare through government spending. It also aimed at creating employment through developing India's manufacturing sector.

**Following were the targets of 12<sup>th</sup> five year plan :**

#### 1) Economic Growth :

- Real GDP growth rate at 8% to be achieved.
- Agriculture growth rate at 4.0% to be gained.

- Manufacturing or Industrial growth rate at 10% to be achieved.
- Every State must have a higher average growth rate in the 12<sup>th</sup> plan than what was achieved in the 11<sup>th</sup> plan.

#### 2) Poverty and Employment :

- To reduce head-count ratio of poverty by 10%.
- To create 50 million new work opportunities in the non-farm sector.

#### 3) Education :

- Mean years of schooling to increase to seven years by the end of the twelfth plan.
- Access to higher education with reference to skill development.
- Eliminate gender and social gap in school enrolment by the end of this plan.

#### **4) Health :**

- Reduce total fertility rate to 2.1%
- Reduce undernutrition among children in the age group of 0 to 3 years to half of the NFHS-3 levels.

#### **Find out :**

Information of various levels of **NFHS** (National Family Health Survey).

#### **5) Infrastructure :**

- Investment in infrastructure to be increased to 9% of GDP.
- Connect all villages with all weather roads.
- Increase in rural television and telephone density to 70%

#### **6) Environment and sustainability :**

- Increase green cover by 1 million hectare every year during the 12<sup>th</sup> plan period.

#### **7) Service Delivery :**

- Provide access to banking services to 90% Indian households by the end of the plan.
- Major subsidies and welfare related beneficiaries to be shifted to a direct cash transfer by using the Aadhar platform linked with bank accounts.

### **NITI Aayog (National Institution for Transforming India)**

#### **Introduction :**

Twelfth Five Year Plan ended on 31<sup>st</sup> March, 2017, which was extended by 6 months (4<sup>th</sup> Oct, 2017) for enabling ministries to complete their appraisals. NITI Aayog, introduced in 2015 aimed at expanding the role of the states, making the state's role more positive in collaboration with the Centre. Formation of NITI Aayog was an innovative and remarkable step to reinforce the principles of federalism and decentralisation of power. It also aims to accelerate economic

growth and development. Resolution of NITI Aayog was sanctioned on 1<sup>st</sup> January 2015, but its actual execution started after the completion of 12<sup>th</sup> five year plan.

#### **Think-Tank Functions :**

As a premier policy 'Think-tank' of the Government of India, NITI Aayog aims to evolve a shared vision of national development with the active involvement of states. It fosters **co-operative federalism** through structural support and policy guidance to the states on a continuous basis.

#### **Do you know?**

**Think-tank** : Think-tank is a group of experts who are gathered together by an organisation, especially by a Government in order to consider various problems, try and work out ways to solve them.

#### **Following are the Pillars of NITI Aayog**

- 1) Vision Document of India
- 2) **Appraisal Document** of 12<sup>th</sup> five year Plan.
- 3) Transforming India :Lecture series organised by NITI Aayog.
- 4) Doubling of Farmers' Income
- 5) **Outcome Budget** and **Output-Outcome Framework**.
- 6) Global Entrepreneurship Summit 2017
- 7) Launching of Programme to transform identified **aspirational districts**.

#### **Structure of NITI Aayog :**

The Resolution dated 1<sup>st</sup> January 2015 and its subsequent amendment dated 16 th February 2015, provides for the structure of NITI Aayog as follows :

- 1) **Governing Council** : Comprising of the Chief Ministers of all States and Governors of Union Territories.

**2) Regional Councils :** These would be formed to address specific issues and contingencies impacting more than one state or region.

**3) Special Invitees :** These would include experts, specialists and practitioners with relevant knowledge who will be nominated by the Prime Minister.

**4) Organisational Framework :**

- **Chairperson :** Prime Minister of India
- **Vice Chairperson :** To be appointed by the Prime Minister.  
Full time members - 5  
Part time members - 2
- **Ex-Officio Members :** Maximum of 4 members of the Union Council of Ministers to be nominated by the Prime Minister.
- **Chief Executive Officer (CEO) :** To be appointed by the Prime Minister for a fixed tenure, in the rank of Secretary to the Government of India.
- Secretariat- As deemed necessary.

**Find out :**

Present structure of NITI Aayog and list out the names of members in the respective columns.

**NITI Aayog**

| Chairperson | Vice -Chairperson | Members |
|-------------|-------------------|---------|
|             |                   |         |

**Functions of NITI Aayog :**

**1) Shared National Agenda :** Evolves a shared vision of national development priorities and strategies with the active involvement of states. This will provide a framework of 'National Agenda' for the Prime Minister and Chief Ministers to implement.

**2) States' Best Friend at the Centre :** Supports states in addressing their own challenges, building on strengths and comparative advantages. This will be through various means such as co-ordinating with Ministries, championing their ideas at the centre, providing consultancy support and building capacity.

**3) Decentralized Planning :** Restructuring the planning process into bottom-up model, from village-level i.e. local government to national level or central government.

**4) Knowledge and Innovation Hub :** Be an accumulator as well as booster of research and best practices on good governance, through a State-of-the-art Resource centre which identifies, analyses, shares and facilitates replication of the same.

**5) Monitoring and Evaluation :** Monitor the implementation of policies and programmes and evaluate their impact through rigorous tracking of performance metrics and comprehensive programme evaluations. This will identify weaknesses and bottlenecks for necessary course correction, enable date-driven policy making, encouraging greater efficiency and effectiveness.

**6) Co-operative and Competitive Federalism :** Be the primary platform for operationalizing co-operative federalism, enabling states to have active participation in the formulation of national policy and achieving time-bound implementation of quantitative and qualitative targets through the combined authority of the Prime Minister and Chief Ministers of the states.

**7) Others Functions :**

- Inter consultancy
- Conflict Resolution
- Technological upgradation

## **Comparison between Planning Commission and NITI Aayog**

| Planning Commission                                                                                                     | NITI Aayog                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1) Planning Commission was established on 15th March 1950.                                                              | 1) NITI Aayog was established on 1 <sup>st</sup> January 2015.                                                                                |
| 2) Planning Commission enjoyed the powers to allocate funds to Ministry and State governments.                          | 2) NITI Aayog is an advisory body or a think tank which performs the function of allocation of funds.                                         |
| 3) Role of states was restricted to the National Development Council (NDC) and annual interaction during Plan meetings. | 3) State governments are expected to play a more significant role.                                                                            |
| 4) Secretaries or member secretaries were appointed through the usual process.                                          | 4) Secretary known as CEO, to be appointed by the Prime Minister.                                                                             |
| 5) Planning Commission had no provision for part-time members.                                                          | 5) NITI Aayog has a number of part time members, depending on the need from time to time.                                                     |
| 6) Planning Commission had a Chairperson, a Member Secretary and full time members.                                     | 6) NITI Aayog comprises of Chairperson, Vice-Chairperson, Full time members, Part-time members, Ex-officio members and CEO of Secretary Rank. |
| 7) Planning Commission framed policies for States and tied allocation of funds with approval of the project.            | 7) NITI Aayog is only a think tank and does not have the powers to frame policies.                                                            |

## EXERCISE

**Q. 1. Choose the correct option :**

**1) Statements that are true about the Planning Commission :**

- a) Planning Commission was established in 1950.
  - b) The Prime Minister is the Ex-Officio Chairman of Planning Commission.
  - c) Economic planning is a time bound programme.
  - d) Economic planning is based on predetermined objectives.

**Options :** 1) a and b

2) a, b, c and d

3) a and c

4) None of these

**2) Statements that are incorrect regarding India's five year plans :**

- a) The main objective of first five year plan was development of agriculture.
  - b) Social welfare and poverty eradication were the prime objectives of the seventh five year plan.

- c) By the second five year plan, focus increased on faster, inclusive growth

- d) Development of both agriculture and industry were the main objectives of the third five year plan.

**Options :** 1) a

2) a, b and d

3) c

4) b and d

**3) Identify the correct pairs from the given options :**

'A'

'B'

- |                                   |                                             |
|-----------------------------------|---------------------------------------------|
| 1) Economic<br>Planning           | a) Selection by<br>Prime Minister           |
| 2) Twelfth Five<br>Year Plan      | b) Think Tank group<br>of Indian Government |
| 3) NITI Aayog                     | c) Fast and sustainable growth              |
| 4) NITI Aayog<br>Vice-Chairperson | d) Time bound programme                     |

- Options :** 1) 1-c, 2-a, 3-d, 4-b      2) 1-d, 2-b, 3-a, 4-c  
3) 1-d, 2-c, 3-b, 4-a      4) 1-b, 2-d, 3-c, 4-a

**4) Choose the correct statement :**

**Statement 1** - NITI Aayog takes note of dynamic change in the Indian economy.

**Statement 2** - Considering the economic, social and technological differences in underdeveloped districts, the body plans to implement various programmes and bring about economic changes.

- Options :** a) statement 1 is correct  
b) statement 2 is correct  
c) statement 2 is the result of statement 1  
d) there is no relation between statement 1 and statement 2.

**Q. 2. Give economic terms :**

- 1) Conscious and deliberate choice of economic priorities by some public authority.
- 2) A group of people called forth by the government to discuss various problems and also try to find solutions to them.

**Q. 3. Identify and explain the concepts from the given illustrations :**

- 1) Sayali's mother maintains a book of accounts for household purpose and plans the expenditure accordingly.
- 2) Ramabai gets a subsidy on domestic LPG directly transferred to her bank a/c.
- 3) To solve classroom related issues, the teacher forms a group of students. This group discusses the problems and finds solutions to it.

**Q. 4. Answer the Following :**

- 1) Explain the features of Economic Planning.
- 2) Explain the targets of 12<sup>th</sup> Five Year plan.
- 3) Explain the structure of NITI Aayog.

- 4) Explain the functions of NITI Ayog.
- 5) Distinguish between Planning Commission and NITI Aayog.

**Q. 5. State with reasons whether you agree or disagree with the following statements :**

- 1) State governments have more significant role to play under NITI Aayog.
- 2) Functions of Planning Commission has been transferred to NITI Ayog.
- 3) The objective of the 12<sup>th</sup> five year plan was to achieve a faster, sustainable and inclusive growth.

**Q. 6. Read the following passage carefully and answer the questions :**

The Finance Minister of the Central Government presents the Union Budget before the Parliament during the month of February every year. The budget, also referred to as the annual financial statement reflects the estimated receipts and expenditure of the government for a particular financial year that begins on the 1<sup>st</sup> of April and ends on 31<sup>st</sup> March. Changes in the tax structure are suggested in the budget. Besides this, provisions are also made for allocating expenditure on defence, education, research and development etc. The date for presenting the budget has been shifted to the 1<sup>st</sup> of February every year. This enables generation of funds well in advance prior to the commencement of the financial year.

- 1) Where is the Union Budget usually presented?
- 2) What all aspects are considered while preparing the budget?
- 3) Why is the date for presenting the budget shifted to the 1<sup>st</sup> of February?
- 4) Explain the term 'budget'.



## GLOSSARY OF ECONOMIC TERMS

- **Academic autonomy :** Academic autonomy refers to the ability to decide on various academic issues, such as student admissions, academic content, quality assurance, introduction of degree programmes and the language of instruction of the institution.
- **Agricultural indebtedness :** Inability on the part of the farmers to pay off loans borrowed for various agricultural operations due to their lower incomes or wasteful expenditures. This leads to accumulation of debt as well as interest pending on the amount borrowed.
- **Agro-tourism :** The business of providing holidays for people on farms or in the countryside. The concept of agro-tourism is a direct expansion of ecotourism, which encourages visitors to experience agricultural life at first hand.
- **Appraisal document :** An official record in written or printed form that provides for an assessment or estimation of the worth, value or quality of a person or thing.
- **Aspirational districts programme :** It is a programme introduced by NITI Aayog to transform the districts that have shown relatively lesser progress in key social areas.
- **Balance of Payments :** It is a financial statement of a country showing the flow of goods, services and funds between its residents and those of the rest of the world during a given period of time. It is based on double entry book-keeping system.
- **Baseline :** It is a minimum or starting point used for comparisons.
- **Benchmarking :** A measurement of the quality of an organization's policies, products, programs, strategies, etc., and their comparison with standard measurements
- **Collateral security :** Bank loans other than personal loans that are normally made against the security of stocks and shares, property or insurance policies.
- **Competitive federalism :** It is a concept where the Government at the Centre competes with that of the States and vice-versa as well as the States compete with one another, all of them contributing to the nation's development.
- **Convertibility of rupee :** Rupee is said to be convertible when it may be freely exchanged for another currency or gold. It is a part of floating or flexible exchange rate system where exchange rate is market determined through the

free interplay of demand and supply forces.

- **Co-operative federalism :** It is a concept in which national, state and local governments share responsibility in the governance of the people. They work collectively towards solving problems of the nation and for its betterment.
- **Credit instruments :** Credit Instruments may be an order for payment of money to a specified person or it may be a promise to pay the loan. Credit instruments generally in use are cheques, bills of exchanges, bank overdraft etc.
- **Current account transactions :** The current account in balance of payments of a country includes transactions in goods, services, investment income and current transfers.
- **Deferred payments :** A loan arrangement in which the borrower is allowed to make payments at some specified time in the future.
- **Demonetization :** It refers to withdrawal of a coin, note or precious metal from use as legal tender.
- **Dereservation :** It is one of the important policies that were followed under the policy of privatization as a part of new economic reforms. Dereservation implies opening up of those industries for the private sector

that were exclusively reserved for the government sector.

- **Digital wallets :** A digital wallet or an electronic wallet is a software-based system for making e-commerce transactions. By using a digital wallet, online purchases can be done easily through computers, tablets or smart phones. Bank accounts of individual users are linked with their digital wallet.
- **Direct benefit transfer scheme :** It is a kind of social protection measure aimed to transfer government subsidies directly in to the bank account of the beneficiaries with the purpose of removing leakages in the delivery system and enhancing financial inclusion.
- **Disinvestment :** Disinvestment is an act of selling or diluting the government's stake (share) in public sector undertakings to the private sector in which it has a majority holding with the aim of giving more freedom to the management, mobilizing resources and inducting private corporate oriented business practices in their administration.
- **Diversification of cropping :** It refers to production of a variety of crops in a given area so as to expand production related activities on various crops and also to lessen risk. In India, crop diversification is viewed as a shift from traditionally grown less remunerative

- crops to more remunerative crops.
- **Empirical approach :** It is an evidence-based approach that relies on real world data to study and interpret information.
  - **Empowerment of women :** It is a process by which women gain power and control over their own lives and acquire the ability to make strategic choices.
  - **Enrolment ratio :** It is the number of students enrolled in school at several different grade levels.
  - **Environmental Economics:** It is a sub-discipline of economics that applies the values and tools of mainstream macroeconomics and microeconomics to allocate environmental resources more efficiently.
  - **EXIM Policy :** It is a set of guidelines and instructions established by the Directorate General of Foreign Trade (DGFT) in matters related to import and export of goods in India.
  - **FERA :** Foreign Exchange Regulation Act (FERA) of 1973 is an act to regulate certain payments dealing in foreign exchange, securities, the import and export of currency and acquisition of immovable property by foreigners.
  - **FEMA :** Foreign Exchange Management Act (1999) was introduced as a replacement for the earlier FERA to promote the orderly development and maintenance of foreign exchange market in India.
  - **Flexibility of interest rate :** Flexibility of interest rate is a self-adjusting mechanism that keeps the money market or the market for loanable funds in equilibrium all the time and thus prevents the real GDP (Gross Domestic Product) from falling below its natural level.
  - **Financial Inclusion :** Financial inclusion may be defined as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost.
  - **Fintech :** Fintech or financial technology describes a business that aims at providing financial services by making use of software and modern technology.
  - **Food tourism :** It refers to visit to primary and secondary food producers, food festivals, restaurants and specific locations for food tasting and experiencing the attributes of specialist food production regions.
  - **Foreign collaboration :** It is an important driver of growth in the country. Foreign collaboration is an agreement or contract between two or more companies from different

countries for mutual benefit.

- **Foreign Direct Investment :** Investment from one country into another (normally by companies rather than governments) that involves establishing operations or acquiring tangible assets, including stakes in other businesses. FDI is not just a transfer of ownership as it usually involves the transfer of factors complementary to capital, including management, technology and organizational skills.
- **Global Entrepreneurship :** It is a trait or characteristic in which professionals as global entrepreneurs use their global understanding and connections to identify transnational and cross-cultural opportunities and turn them into new value-creating initiative.
- **Global poverty :** Global poverty refers to a situation of extreme poverty (hunger, starvation and homelessness) among certain sections of the people across countries in the world. The World Bank is the main source of global information and it sets the International poverty line which has been updated to \$1.90 per person per day since October 2015.
- **Gross State Domestic Product (GSDP) :** It refers to the aggregate monetary value of all goods and services produced within the geographical boundaries of a particular State in the country during a given period of time accounted without duplication.

- **Hospitality :** It is related to the business of entertaining clients, conference delegates, tourists or other official visitors.
- **Inclusive education :** Inclusive education is a new approach towards educating the children with disability and learning difficulties with that of normal ones under the same roof.
- **Inclusive growth :** Inclusive growth is economic growth that is distributed fairly across society and creates opportunities for all.
- **Infant mortality rate :** Infant mortality rate is the number of deaths under one year of age occurring per 1,000 live births among the population in a given geographical area during a given year.
- **Informal Sector :** It is a diversified set of economic activities, enterprises, jobs and workers that are not regulated or protected by the State.
- **Institutional Sources :** It is a multi-agency approach to provide credit to the agricultural sector comprising of co-operative banks, commercial banks, regional rural banks (RRBs), micro-finance institutions etc.
- **Intrinsic value :** It is the inherent worth of a company, investment or asset based on its fundamental characteristics and earning power.

- **Liquid asset :** An asset is said to be liquid if it is easy to sell or convert into cash without any loss in its value.
- **LPG Consumer :** They are ultimate users of liquefied petroleum gas cylinders for cooking purposes.
- **Mahabhraman :** It is a scheme introduced by Maharashtra Tourism Development Corporation (MTDC) for marketing and promoting agri-tourism.
- **Marginal farmers :** Marginal farmer means a farmer cultivating (as owner or tenant or share cropper) agricultural land up to 1 hectare (2.5 acres)
- **Maternal Mortality Rate (MMR) :** Maternal Mortality Rate (MMR) is the ratio of the number of maternal deaths during a given time-period per 100,000 live births during the same time-period.
- **Material welfare :** It refers to the fact or state of having enough housing, clothing, food and possessions etc. to live comfortably.
- **Microfinance institutions :** Institutions providing financial services such as small loans, to poor people or new businesses that cannot use traditional banking services, usually in developing countries.
- **Mutual funds :** A mutual fund is formed when capital collected from different investors is invested in company shares, stocks or bonds.
- **National Disaster Management :** It refers to the organization and management of resources and responsibilities at the national level for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.
- **National Family Health Survey :** It is a large scale multi-round health survey conducted in a representative sample of household throughout India.
- **Nationalization of Banks :** It is a process whereby a national government or State takes over the ownership and control of private banks by an Act or ordinance or some other kind of orders.
- **Open unemployment :** It is a situation wherein a large section of the labour force does not get a job that may yield them regular income. This unemployment is clearly visible and can be counted.
- **Outcome Budget :** Outcome based budgeting is a practice of suggesting and listing of estimated outcomes (end products) of various Government initiatives and interventions, including those involving partnership with the State Governments, Public Sector Undertakings, autonomous bodies and the community.

- **Output-outcome framework :** Output-outcome framework is an explicit summary of the different levels, or chains, of results expected from a particular intervention- project, programme or development strategy.
- **Portfolio investment :** Portfolio investments are investments undertaken in a group of assets, including transactions in equity, securities, debentures etc.
- **Poverty ratio :** It is the proportion of population that exists or lives below the poverty line.
- **Progressive income tax system :** A progressive tax structure is one in which an individual or family's tax liability as a fraction of income rises with income.
- **Public Distribution System (PDS) :** It is a key element of the Government's food security system in India. It ensures availability of certain essential commodities at easily affordable prices especially for the poor through a network of fair price shops.
- **Purchasing Power Parity (PPP) :** Purchasing power parity is defined as the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the US.
- **Quantitative Restrictions (QRs) :** It refers to a trade restriction imposed on the amount of an item or service that can be imported into a country so as to protect the price of domestically produced good or to reduce the trade deficit.
- **Regional imbalance :** It refers to wide differences in per-capita income, literacy rates, health and education services, levels of industrialization , infrastructural facilities etc. between different regions.
- **Rural indebtedness :** Inability on the part of rural people to repay loans borrowed for meeting their requirements needed for production, consumption and other social commitments, thus leading to passing of debt from one generation to another.
- **Sagarmala Programme :** It is an initiative undertaken by the Government of India to promote port-led development in the country. The vision of the Sagarmala Programme is to reduce logistics cost for EXIM and domestic trade with minimal infrastructure investment.
- **Service delivery :** It is a component of business which involves the act of providing services to the client by the provider.
- **Son-meta preference :** Son-meta preference refers to a strong preference among parents for a male child.

- **Socio-Economic change :** It is a change related to or concerned with the interaction of social and economic factors, based on income, education, occupation etc.
- **Social exclusion :** It is an act of making certain groups of people within the society feel isolated and unimportant.
- **Special Economic Zones (SEZ) :** It refers to an area with particular economic advantages such as lower taxes than the rest of the country so as to encourage investment and development there.
- **State Per Capita Income (SPCI) :** It measures the average income earned per person in any particular State of the country.
- **Sub-set :** A set of numbers, objects or people that is part of another, larger set.
- **Sustainable economic growth :** It refers to a rate of growth which can be maintained without creating other significant economic problems, especially for future generations.
- **Tariff rates :** Tariff rate in terms of international trade is a tax imposed by a government on goods and services imported from other countries. It is undertaken to reduce the imports of specific goods and services.
- **Tax evaded income :** Non-payment of taxes by means of not reporting all taxable income especially through fraud or concealment of income.
- **Three-tier :** It refers to a system that has three distinct levels.
- **Threshold expenditure :** It is also referred to as poverty threshold. It is a limit fixed by economists to get a head count of the poor people in the country. It is a monthly budget that a household needs in order not to consider itself poor in general.
- **Tier II Cities :** Cities that are comparatively smaller than metropolitan cities in terms of population (50,000 – 99,999 as per 2001 census)
- **Treatise :** It is defined as a written work dealing formally and systematically with a subject.
- **Universal Immunization :** It is a vaccination programme undertaken to provide recommended vaccines against tuberculosis, polio and other diseases for infants, children and pregnant women.
- **Village tourism :** It is synonymous with rural tourism that showcases rural life, art, culture and heritage at rural locations and in villages.



## LIST OF ABBREVIATIONS

|        |                                                       |
|--------|-------------------------------------------------------|
| • ALM  | ADULT LITERACY MISSION                                |
| • AAY  | ANTYODAYA ANNA YOJANA                                 |
| • AEZ  | AGRO EXPORT ZONES                                     |
| • APMC | AGRICULTURE PRODUCE & MARKETING COMMITTEE             |
| • APL  | ABOVE POVERTY LINE                                    |
| • ASI  | ANNUAL SURVEY OF INDUSTRIES                           |
| • BPL  | BELOW POVERTY LINE                                    |
| • BPCL | BHARAT PETROLEUM CORPORATION LIMITED                  |
| • BIFR | BOARD OF INDUSTRIAL & FINANCIAL RECONSTRUCTION        |
| • BHEL | BHARAT HEAVY ELECTRICALS LIMITED                      |
| • CEO  | CHIEF EXECUTIVE OFFICER                               |
| • CSR  | CORPORATE SOCIAL RESPONSIBILITY                       |
| • DCCB | DISTRICT CENTRAL CO-OPERATIVE BANK                    |
| • EGS  | EMPLOYMENT GUARANTEE SCHEME                           |
| • FDI  | FOREIGN DIRECT INVESTMENT                             |
| • FERA | FOREIGN EXCHANGE REGULATION ACT                       |
| • FEMA | FOREIGN EXCHANGE MANAGEMENT ACT                       |
| • GDP  | GROSS DOMESTIC PRODUCT                                |
| • GNP  | GROSS NATIONAL PRODUCT                                |
| • GSDP | GROSS STATE DOMESTIC PRODUCT                          |
| • GSVA | GROSS STATE VALUE ADDED                               |
| • HPCL | HINDUSTAN PETROLEUM CORPORATION LIMITED               |
| • HRD  | HUMAN RESOURCE DEVELOPMENT                            |
| • HYV  | HIGH YIELDING VARIETY                                 |
| • IRDP | INTEGRATED RURAL DEVELOPMENT PROGRAMME                |
| • IRDA | INSURANCE REGULATORY & DEVELOPMENT AUTHORITY OF INDIA |
| • IPCL | INDIAN PETROCHEMICALS CORPORATION LIMITED             |

|           |                                                            |
|-----------|------------------------------------------------------------|
| • IOC     | INDIAN OIL CORPORATION                                     |
| • IT      | INFORMATION TECHNOLOGY                                     |
| • ITDC    | INDIA TOURISM DEVELOPMENT CORPORATION                      |
| • ITES    | INFORMATION TECHNOLOGY ENABLED SERVICES                    |
| • JDY     | JAN DHAN YOJANA                                            |
| • JGSY    | JAWAHAR GRAM SAMRUDDHI YOJANA                              |
| • JRY     | JAWAHAR ROZGAR YOJANA                                      |
| • MAITRI  | MAHARASHTRA INDUSTRY, TRADE & INVESTMENT FACILITATION CELL |
| • MGNREGS | MAHATMA GANDHI NATIONAL RURAL EMPLOYMENT GUARANTEE SCHEME  |
| • MSICDP  | MAHARASHTRA STATE INDUSTRIAL CLUSTER DEVELOPMENT PROGRAMME |
| • MRTP    | MONOPOLIES & RESTRICTIVE TRADE PRACTICES                   |
| • MTDC    | MAHARASHTRA TOURISM DEVELOPMENT CORPORATION                |
| • NABARD  | NATIONAL BANK FOR AGRICULTURE & RURAL DEVELOPMENT          |
| • NDMA    | NATIONAL DISASTER MANAGEMENT AUTHORITY                     |
| • NEP     | NEW ECONOMIC POLICY                                        |
| • NFHS    | NATIONAL FAMILY HEALTH SURVEY                              |
| • NGO     | NON GOVERNMENTAL ORGANIZATION                              |
| • NITI    | NATIONAL INSTITUTION FOR TRANSFORMING INDIA                |
| • NRB     | NATIONAL RENEWAL BOARD                                     |
| • NRHM    | NATIONAL RURAL HEALTH MISSION                              |
| • NUHM    | NATIONAL URBAN HEALTH MISSION                              |
| • NSSO    | NATIONAL SAMPLE SURVEY ORGANIZATION                        |
| • NTPC    | NATIONAL THERMAL POWER CORPORATION                         |
| • NVA     | NET VALUE ADDED                                            |
| • ONGC    | OIL & NATURAL GAS CORPORATION                              |
| • PACS    | PRIMARY AGRICULTURAL CREDIT SOCIETIES                      |
| • PMAY    | PRADHAN MANTRI AWAAS YOJANA                                |

|          |                                          |
|----------|------------------------------------------|
| • PMRY   | PRADHAN MANTRI ROZGAR YOJANA             |
| • RBI    | RESERVE BANK OF INDIA                    |
| • RMSA   | RASHTRIYA MADHYAMIK SHIKSHA ABHIYAAN     |
| • RRB    | REGIONAL RURAL BANKS                     |
| • RUSA   | RASHTRIYA UCHCHATAR SHIKSHA ABHIYAAN     |
| • RTE    | RIGHT TO EDUCATION                       |
| • SAIL   | STEEL AUTHORITY OF INDIA LIMITED         |
| • SBM    | SWACHCH BHARAT MISSION                   |
| • SCB    | STATE CO-OPERATIVE BANKS                 |
| • SEBI   | SECURITIES & EXCHANGE BOARD OF INDIA     |
| • SEZ    | SPECIAL ECONOMIC ZONES                   |
| • SGSY   | SWARNAJAYANTI GRAM SWAROZGAR YOJANA      |
| • SJSRY  | SWARNAJAYANTI SHAHARI ROZGAR YOJANA      |
| • SPCI   | STATE PER CAPITA INCOME                  |
| • SSA    | SARVA SHIKSHA ABHIYAAN                   |
| • TRYSEM | TRAINING RURAL YOUTH FOR SELF EMPLOYMENT |
| • UNDP   | UNITED NATIONS DEVELOPMENT PROGRAMME     |
| • VSNL   | VIDESH SANCHAR NIGAM LIMITED             |



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- pmkvyofficial.org – (Pradhan Mantri Kaushal Vikas Yojana)
- www.csoisw.gov.in – (Annual Survey of Industries)
- www.makeinindia.com
- www.mospi.gov.in/national-sample-survey-office-nss – (Ministry of Statistics and Programme Implementation, GoI).
- www.niti.gov.in – (NITI Aayog)



## IMPORTANT WEBSITES/LINKS

- [censusindia.gov.in](http://censusindia.gov.in)
- <https://data.gov.in>
- <https://dfpd.gov.in> – (Dept. of Food and Public Distribution, India).
- <https://mahades.maharashtra.gov.in>
- <https://mohfw.gov.in> – (Ministry of Health and Family Welfare, GoI)
- <https://www.rbi.org.in> - (Reserve Bank of India)
- <https://rural.nic.in> – (Ministry of Rural Development, GoI)
- <https://www.un.org/sustainabledevelopment>
- <https://www.worldbank.org> - (World Bank)
- [mahafood.gov.in](http://mahafood.gov.in) - (Food, Civil Supplies and Consumer Protection Dept. GoM)
- [mofapp.nic.in:8080/economic](http://mofapp.nic.in:8080/economic) survey  
(Ministry of Finance, GoI)



NITI Aayog



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