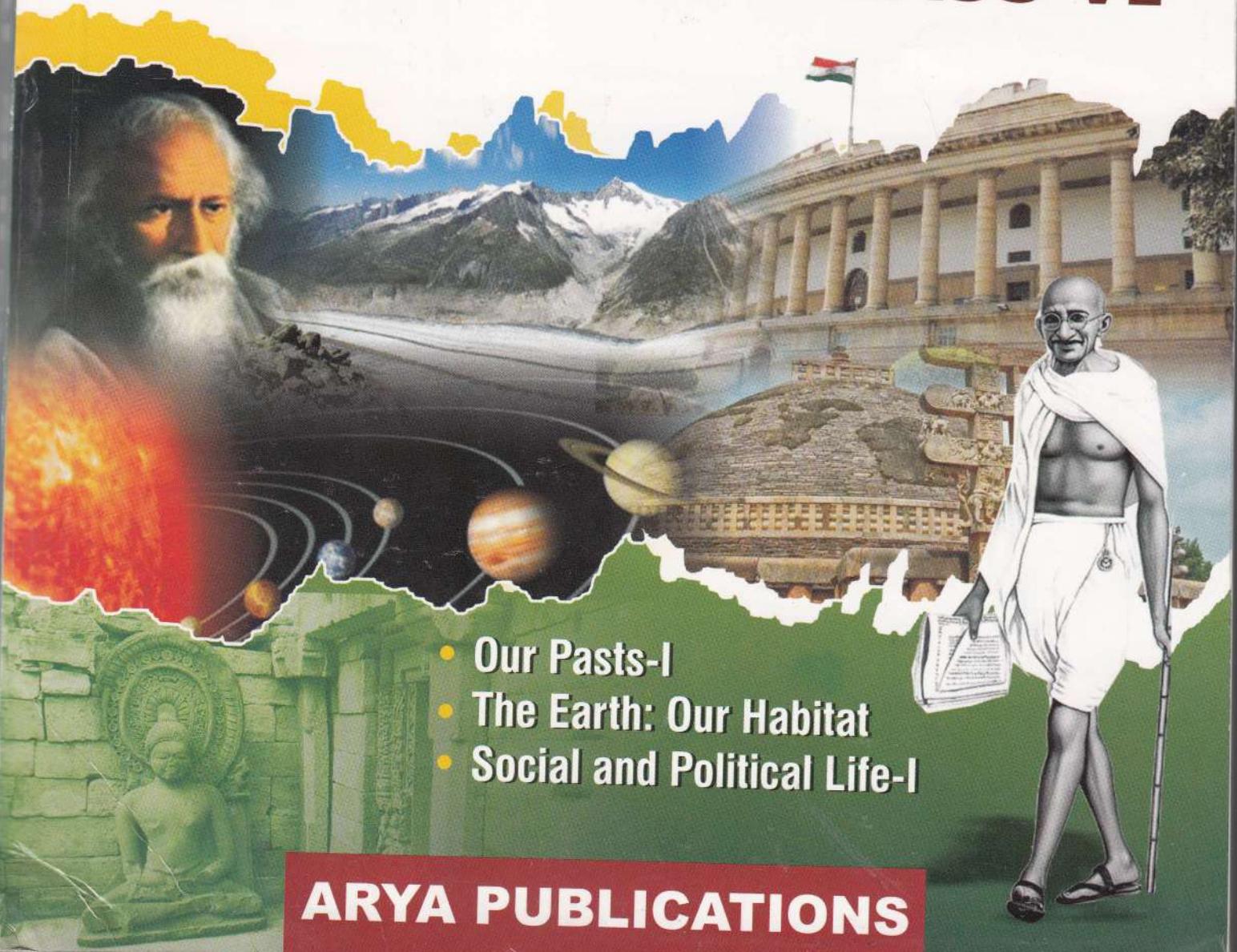


APC

PERFECT SOCIAL SCIENCE

CLASS VI



- Our Pasts-I
- The Earth: Our Habitat
- Social and Political Life-I

ARYA PUBLICATIONS

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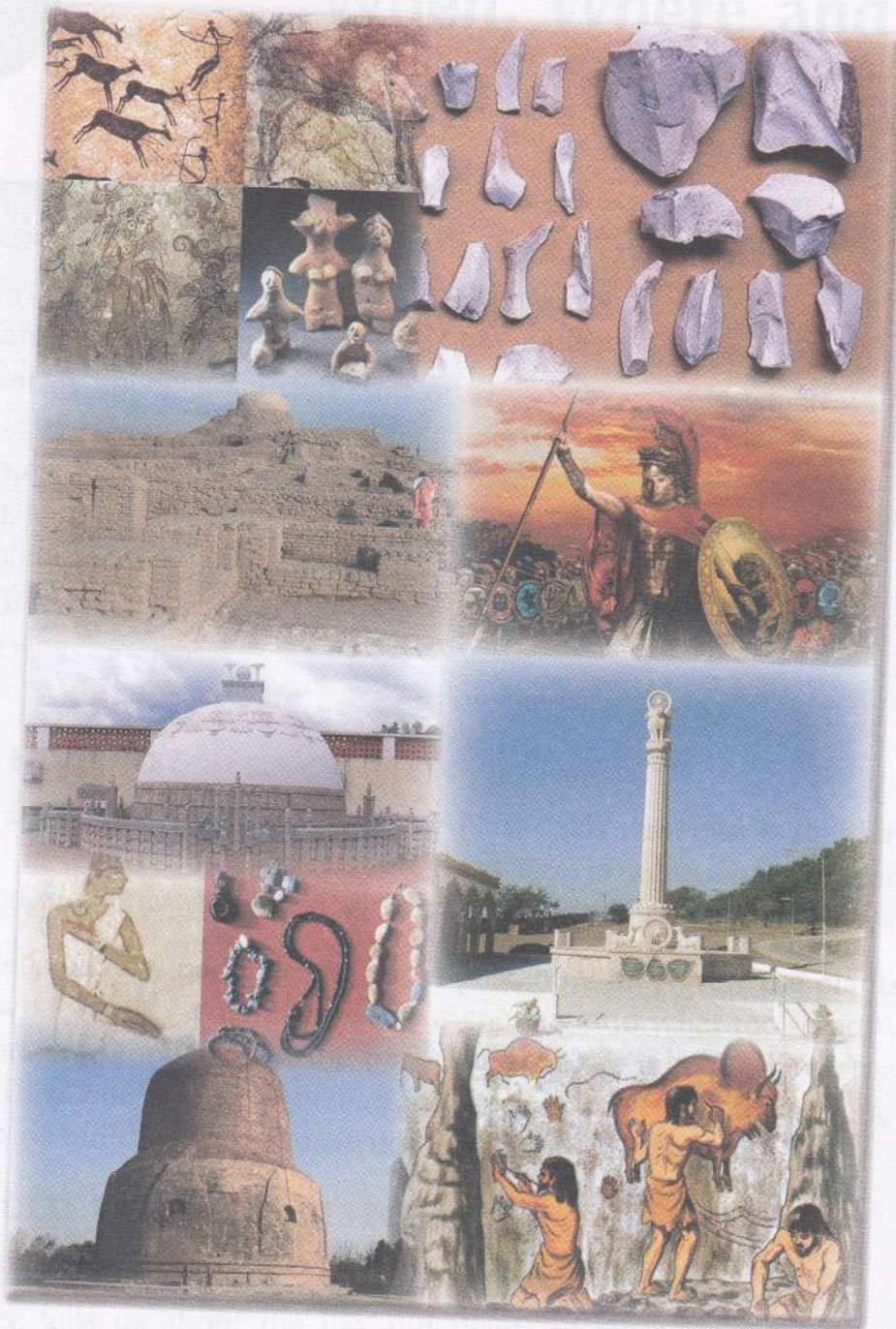
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Our Pasts-I



1

When, Where and How?

New Words to Remember

Biography: It is the record of the life of a person.

Inscriptions: The words inscribed on stone or metal.

Monument: A building, structure, fort or a place of worship which was built long time ago.

Manuscripts: Records of the past written by hand.

Secular Literature: Literature which deals with all worldly subjects except religion and philosophy.

Sacred Literature: Literature which deals with God and religion.

Scripts: Letters or signs.

WHAT IS HISTORY?

History is 'HIS STORY'; the STORY OF MAN. It deals with events that have happened in the past. It tells us how men lived from age to age, what problems men and women faced and how they tried to solve those problems.

History tells us how people lived in the past, how they grew the plants which gave them food, what kind of pots they used for cooking and what tools and weapons they used. In short, it is the study of the past. The scholars who study the past are called **historians**. They take the help of various sources such as manuscripts, inscriptions and remains of buildings to reconstruct the history of the past.

WHY SHOULD WE STUDY HISTORY?

We should study history because of the following reasons.

1. History tells us about the life and deeds of great men. Some of them were great teachers and saints like Gautam Buddha, Mahavira, Guru Nanak and Kabir. Others were great emperors like Ashoka and Akbar. Still others were great poets or artists or those who made scientific discoveries.
2. History tells us how languages have developed. It provides a clue to the food, dress and ornaments of the people in the past.

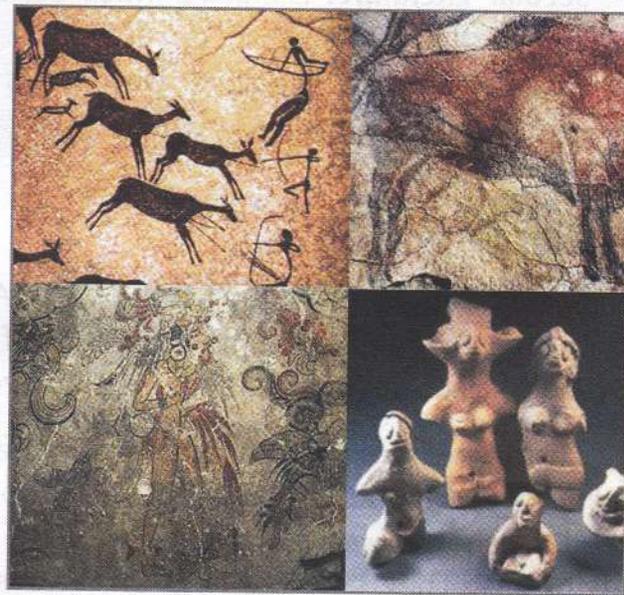
3. We cannot understand our present life without the knowledge of the past. All the great ideas, inventions and the wonderful things that we see around had a beginning in the past. Scientific discovery goes on all the time. History connects the past with the present and helps us to understand the present in a better way.
4. History is an account of all that happened in the world in the past. We learn about the customs, traditions and beliefs of people of all countries of the world. It broadens our outlook.
5. History is a great teacher. There are many lessons to be learnt by us from the past. For example, thousands of people get killed in a war. Therefore, war must be avoided at all cost.

PREHISTORY AND HISTORY

Our past goes back to thousands of years. The whole of the past may be put under two headings—prehistory and history.

PREHISTORY

Prehistory is that period about which we do not get any information in writing. Prehistoric people did not know how to read and write. They could not record their observations in writing. Our knowledge about them is based on unwritten sources. The prehistoric people lived mainly in caves. Their bones, tools and pottery have been found buried in the ground. All these objects have much to say about the life of prehistoric people.



Cave Paintings and Sculptures

HISTORY

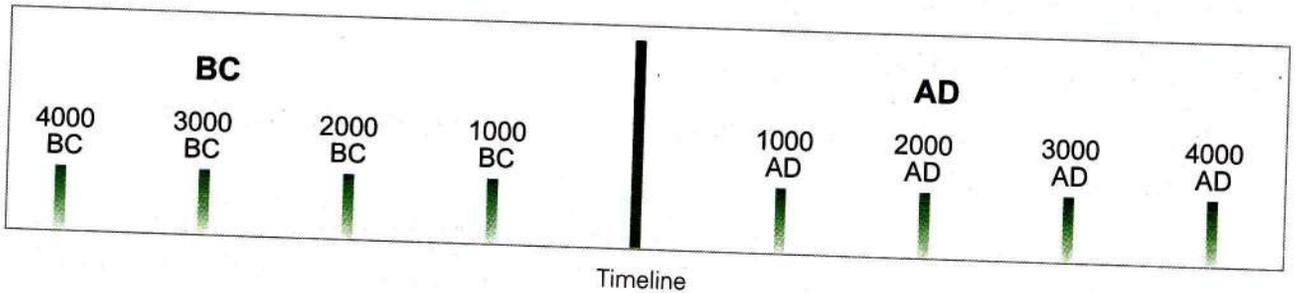
History refers to the period about which written documents are available. For hundreds of years there was no paper to write on. But even in those ancient times people knew the art of writing. They wrote on palm leaves or on the bark of trees. They also wrote on stone or on skins of sheep or goats. Later, they used paper to write on. These written records or manuscripts help us to know about the past. These are called **manuscripts** because these were written by hand. In fact, the Latin word *manu* means 'by hand'. Manuscripts are found in different scripts and languages.



A Palm-leaf Manuscript

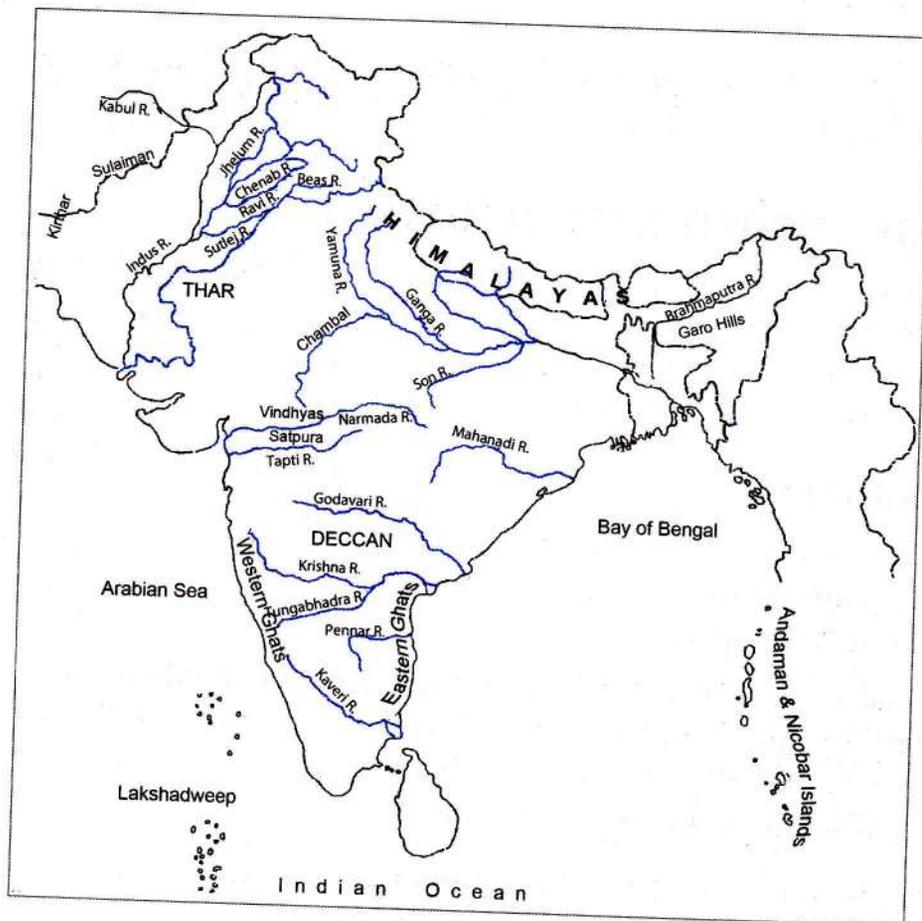
TIMELINE

Historians express time in history by two terms BC and AD. The letters BC stand for 'Before Christ' and AD stand for 'Anno Domini' which means 'in the year of our Lord'. The birth of Jesus Christ is taken as the dividing point of world history. The term BC is used when we refer to a year before the year in which Jesus Christ was born. The term AD refers to the number of years which have passed since the time when Jesus Christ was born.



THE GEOGRAPHICAL FRAMEWORK

Geographical features greatly influence the history of a country. The Himalayan mountains in the north have protected India against Central Asian invasions and harsh weather.



Physical Map of India

However, it was through the passes in the north-west that the invaders entered India in ancient times. Geography provides the setting where the drama of history was enacted.

The plains of the Ganga and the Indus became the cradle of several kingdoms in the past. The following conditions helped the civilizations to flourish in the river valleys.

- Abundance of water to support life.
- Fertile soil which helped crops to grow.
- Rivers also facilitated the movement of goods and people and helped in the expansion of trade.

The western and eastern coastal plains helped the kingdoms of South India like the Cholas and the Pallavas to establish commercial and cultural links with the countries of Europe, Africa and South-East Asia.

HOW DID INDIA GET ITS NAME?

Our country is often referred to as either India or *Bharat*. The word India comes from River Indus which was called *Sindhu* in Sanskrit. But the Iranians and the Greeks, who entered our country through the north-western passes, called it Hindos or the Indos. Hence, the land east of the river Indus was called India. According to the *Vishnu Purana*, "the country lying to the north of the ocean and to the south of the Himalaya is called *Bharatvarsha*."

SOURCES OF ANCIENT INDIAN HISTORY

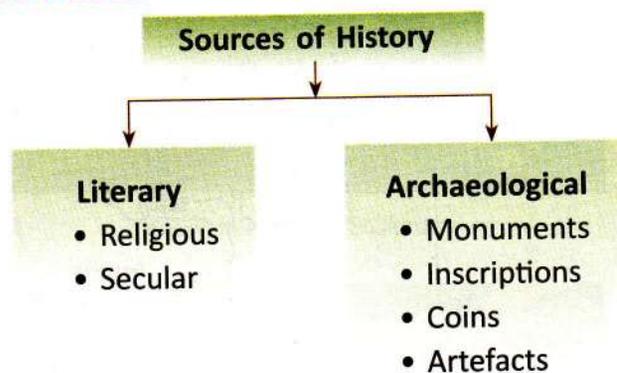
Sources mean the places and objects which provide information about events that happened in the past. The sources are of two kinds—literary and archaeological.

LITERARY SOURCES

All written works are known as literature. Literary sources can be classified into two groups—religious and secular.

Religious Literature: Literature dealing with religion is believed to be holy or religious. The four Vedas (*Rigveda*, *Samaveda*, *Yajurveda* and *Atharvaveda*) are the sacred literature of the Indo-Aryans. They are written in Sanskrit. They give valuable information about social and religious life of the Aryans.

The famous works of the later Vedic period are the two epics—the *Ramayana* and the *Mahabharata*. The *Ramayana* is believed to be the work of Rishi Valmiki. The



Mahabharata was written by Rishi Ved Vyas. They provide information about the political institutions and social conditions of the epic age.

The Buddhist sacred literature was written in Pali and Sanskrit. The *Jataka* tales were written in Pali. They deal with the previous births of the Lord Buddha. The religious literature of the Jains was written in *Ardha-Magadhi*, a form of *Prakrit*. The twelve *Angas* contain the rules of conduct for Jain monks and teachings of *Tirthankars* or spiritual *gurus*. The Buddhist and the Jain texts throw light on the social and political conditions of the people up to about third century BC.

Secular Literature: The secular literature includes biographies, dramas, historical works and the accounts of foreign travellers. *Arthashastra*, written by Kautilya, provides useful information about the social and political conditions of the Mauryan age. Banabhatta wrote *Harshacharita*. It deals with the life and times of king Harshavardhana.

The *Sangam* texts in Tamil are a valuable source of information about the life and culture of the Tamil people during the reign of the Pandya and the Chola kings.

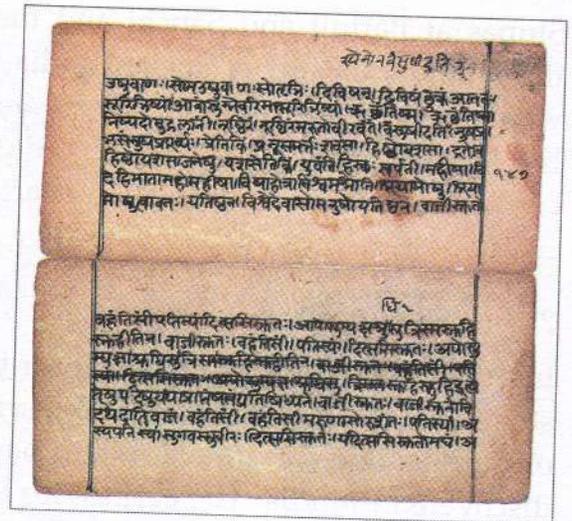
Many pilgrims came to India to visit the sacred Buddhist places. Fa Hien visited India in the fifth century AD. Hiuen Tsang, the famous Chinese pilgrim, arrived in India in seventh century AD. They throw light on the political, economic and religious conditions of those times.

ARCHAEOLOGICAL DISCOVERIES

We can know the history and civilization of ancient people by examining the remains of their buildings, their tools and some other objects. The study of these objects is called archaeology. Excavations have brought to light many interesting objects.

1. Monuments

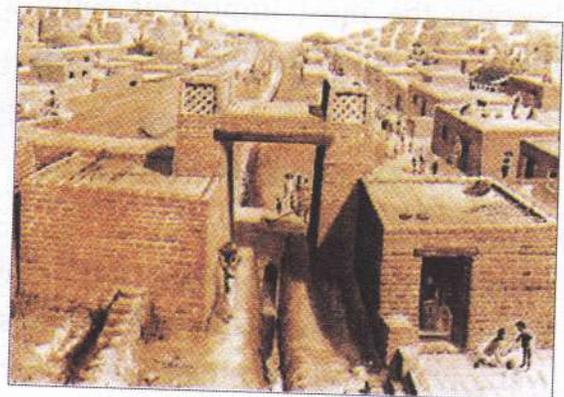
Ruins of the buildings, caves, stupas and temples are of great historical importance.



The Rig Veda



Hiuen Tsang

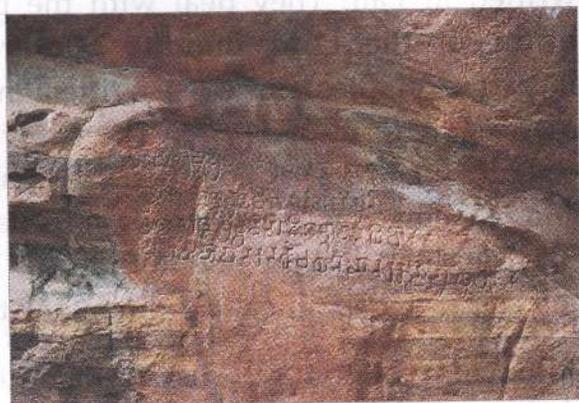


Excavation at Harappa

Stupas at Barhut and Sanchi and the caves at Ellora and Ajanta tell us a lot about the religion and art of ancient India. The temples at Mahabalipuram and Thanjavur were not only places of worship, but they were also centres of social and cultural life. The excavations at Mohenjo-daro and Harappa show the existence of a great civilization in the Indus Valley nearly 5000 years ago.

2. Inscriptions

Inscriptions are the words inscribed on stone, metal, etc. Thousands of inscriptions on rocks, pillars and metal-plates have been discovered in India. The earliest inscriptions are found on the seals of Harappa. Ashoka's rock inscriptions throw light on Ashoka's religious beliefs and his administration. The Allahabad Pillar inscription presents a description of the character and conquests of Samudragupta. The inscriptions at Udaygiri provide information about the conquests of king Kharvela of Kalinga (Odisha).



Ashoka's rock inscriptions

3. Coins

Thousands of coins have been found. They are made of gold, silver, copper and nickel. The coins bear many figures and marks. They also bear names and portraits of the rulers who issued them. Samudragupta's coins show the emperor playing the *Veena*, a musical instrument. His warrior character is also shown by the coins which picture the battle axe and the tiger. The coins have become the most important sources of the history of ancient India.



Coins

4. Other Archaeological Sources

Other archaeological sources include cave paintings, bones of persons and animals and the stone and metal tools. Paintings on the walls of the caves tell us about the artistic skills of the early man.



Cave painting

Summary of the Lesson

- **What is History?** History is the STORY OF MAN. It is not concerned with the life and actions of kings alone. It also tells how ordinary people lived in the past.
- **Why should we study History?** (1) History tells us about the life and deeds of great men. (2) Study of the past adds to our knowledge. (3) We cannot study the present without the knowledge of the past. (4) History is an account of the events of other countries. (5) History is a great teacher.
- **Prehistory:** Prehistory is that period about which we do not get any information in writing.
- **History:** History refers to the period about which written documents are available.
- **Timeline:** BC – Before Christ, AD – After Christ
- **Source Material of Ancient Indian History:** (1) Literary Sources: There are sacred literature and secular literature. The sacred literature is believed to be holy. (2) The secular literature includes biographies, dramas, historical works and the accounts of the foreign travellers.
- **Archaeology:** Archaeology includes monuments, inscriptions and coins.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Hiuen Tsang, the Chinese pilgrim, arrived in India in the
(a) fourth century AD. (b) fifth century AD.
(c) sixth century AD. (d) seventh century AD.
2. The Sangam literature is the source of information about the life and culture of the people of:
(a) Tamil Nadu. (b) Karnataka.
(c) Kerala. (d) Andhra Pradesh.
3. Samudragupta's coins show the Emperor playing the
(a) sitar. (b) flute. (c) veena. (d) harmonium.
4. The Allahabad Pillar inscription presents a description of the conquests of
(a) Chandragupta. (b) Samudragupta.
(c) Chandragupta II. (d) Kumaragupta.
5. Monuments, coins, artefacts and inscriptions are the examples of sources.
(a) literary (b) oral (c) archaeological (d) geographical

II. Fill in the blanks choosing the correct options.

1. Prehistory is that period about which
(a) no information is available in writing
(b) information is available in writing

2. The mountains protected India against Central Asian invasions.
(a) Himalayas (b) Vindhya
3. When there was no paper to write on, people wrote on
(a) bark of trees. (b) plastic sheets.
4. Literature dealing with religion is believed to be
(a) secular. (b) holy.
5. The Buddhist sacred literature is written in
(a) Ardha Magadhi (b) Pali and Sanskrit
6. The term BC is used to refer to the period
(a) before the year in which Jesus Christ was born
(b) since the time when Jesus was born

III. Write true or false.

1. The *Mahabharata* was written by Rishi Valmiki.
2. The Sangam texts were written in Tamil.
3. Fa Hien visited India in the fifth century AD.
4. Archaeology is the study of the remains of the past buildings, paintings, etc.
5. The religious literature of the Jains is in Sanskrit.

IV. Distinguish between

1. Manuscripts and inscriptions
2. Religious and secular literature
3. History and prehistory

V. Give short answers for the following questions.

1. What are the two sources of history?
2. What was the name given by the Greeks to the River Sindhu?
3. Name the four Vedas.
4. Name the two great epics.
5. Who wrote *Harshacharita*?

VI. Match the columns.

Column A

1. Inscriptions
2. Monuments
3. Kautilya
4. Jataka tales
5. History
6. Plains of the Ganga and the Indus

Column B

- (a) Arthashastra
- (b) Study of past events
- (c) Fertile land
- (d) Buildings of historical importance
- (e) Words on stone, metal, etc.
- (f) Previous births of Lord Budha

VII. Answer the following questions.

1. The geographical features of a place play a very important role in influencing its history. How?
2. Why are accounts of foreign travellers treated as a valuable source in studying the history of any period?
3. Why should we study history?
4. Why are coins considered a valuable source of information about ancient India?
5. Write a short note on secular literature.

VIII. Who am I?

1. I am a part of history for which there is no written record.
2. Words are inscribed on me. I could be a stone or a metal piece.
3. I am the collection of famous Buddhist tales of the previous lives of Lord Buddha.
4. I am the past records of history written by hand.

IX. Projects and Activities

1. Visit a museum and make a list of a few ancient coins.
2. Visit a historical monument. Gather information about it to make a report. Mention in it the following points.
 - (a) When and by whom was it built?
 - (b) Materials used to build it.
 - (c) Three important features of the monument.
3. Make a timeline of your family history. Mark in red the important years in the lives of your father and grandfather.
4. Choose any period from the Indian history. Collect pictures of coins, kings, and monuments of that period and make a collage.

VALUE-BASED QUESTION

When you visit a historical monument, what are the things that you should do and should not do? Mark them with a cross (X) or a tick (✓)

1. Scribble on the walls of the monument.
2. Spit here and there.
3. Litter the place around it with packets of eatables.
4. Note down important information you gather about the monument.
5. Take photographs of the monument.



HOTS: THINK BEYOND

History is not merely a story of kings and queens; it is more than that. How?

2

The Earliest Societies: From Gathering to Growing Food

New Words to Remember

Palaeolithic Age: Old Stone Age

Neolithic Age: New Stone Age

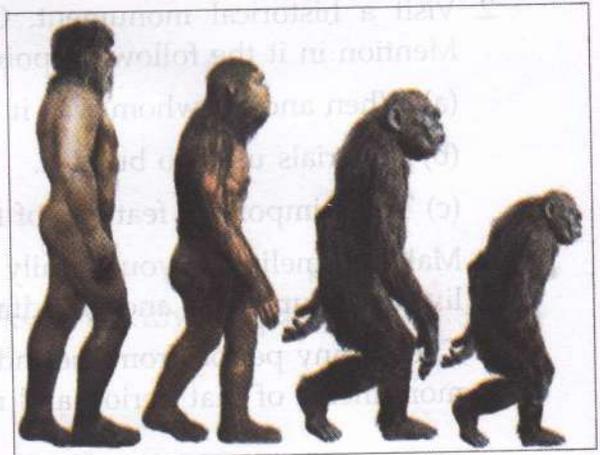
Mesolithic Age: Middle Stone Age

Chalcolithic Age: Bronze Age or Copper-Stone Age

Man's presence in India has been found from the very ancient times. Millions of years ago man was only a hunter and a food-gatherer. It took lakhs of years for him to become the producer of food and other goods.

The early history of man is marked by different stages. We may divide the prehistoric times into four stages.

1. Palaeolithic Age or Old Stone Age
2. Mesolithic Age or Middle Stone Age
3. Neolithic Age or New Stone Age
4. Chalcolithic Age or Bronze Age



Evolution of man

PALAEOLITHIC AGE: OLD STONE AGE (5,00,000 BC-10,000 BC)

The word 'palaeolithic' is derived from two Greek words *Palaeo* meaning old and *lithos* meaning stone. The word thereby means 'Old Stone'. This was the age when man used stone tools which were rough and unfinished. The Old Stone Age began in India about 5,00,000 years ago. It lasted up to around 10,000 BC.

During the Palaeolithic Age, man was a nomad who moved from place to place in search of food and shelter. He was called a food-gatherer or a hunter-gatherer.

Why did the food-gatherers or hunter-gatherers move from place to place? This is because:

- once the food supply of plant and animal resources were exhausted, the food gatherer would move to different areas.
- man who hunted animals would follow movements of animals as big animals would go in search of smaller animals and plant eating animals would look for greener pastures.
- people would move in search of different types of seasonal fruits and plants.
- all living beings, be it humans, animals or plants, need water to survive. People living on the banks of seasonal rivers would have to go in search of water once it was exhausted.



Old Stone Age

TOOLS

The tools made of stones of the Old Stone Age have been found in the valleys of the Son and the Jhelum rivers. They have also been found at various places in southern India. All the tools are made from quartzite, a hard rock. The tools have the forms of knives, choppers, axe heads and digging instruments. The tools of stone used by early man in old stone age were crude, rough and unpolished.

The tools were of three kinds—core tools, flake tools, blade tools.

Core Tools: Core tools were made by the core method. In other words, they were made by chipping away portions of a piece of rock till they got the desired shape. They were pear-shaped, that is they had no handles. They were used as hand-axe for purposes of cutting trees and digging the earth.

Flake Tools: Flake tools were made by the flake method. A large flake was first cut off from a rock and then shaped into a tool. Such tools were used



Stone tools of Old Stone Age



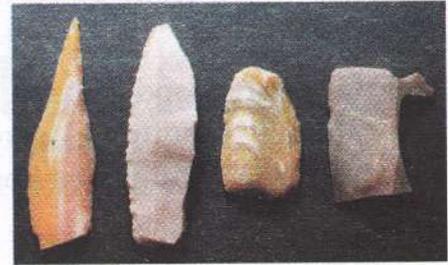
Core tool



Flake tool

as choppers for removing skins from dead animals and cutting meat into small pieces.

Blade Tools: Blade tools were longer and gradually evolved into knives, spears and arrow heads.



Blade tool

LIFE OF MAN IN THE OLD STONE AGE

Cave Dwellings

Man in the old stone age lived in natural caves. The caves provided protection from cold weather and wild animals.

Food

Man did not know how to grow fruits or grains. He lived on animals, fishes and fruits. The meat or other food that man ate was raw.

Men lived in small groups. They kept on moving from place to place in search of birds or animals. It was a wandering life, spent mostly in fear and hunger.



Early man living in a cave

Discovery of Fire

It was pure chance that led to the discovery of fire. Man noticed that a hard stone when struck with another stone produced sparks which lighted a fire. When it touched dried leaves, it burst into flames. Now man was able to ignite fire whenever he needed it. Ash has been found in one of the caves at Kurnool, Andhra Pradesh.



Discovery of fire

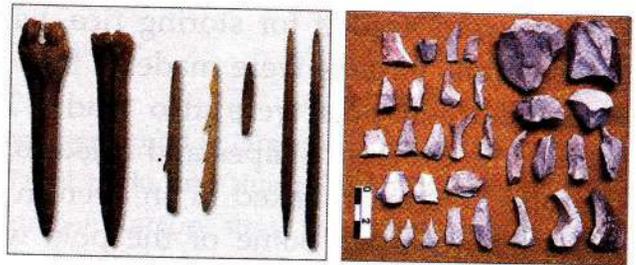
Fire had many uses. Man used fire in order to keep himself warm or to cook meat or nuts. He also used fire to scare off wild animals. Fire brought light into the dark caves. Man could now spend his time peacefully.

MESOLITHIC AGE: MIDDLE STONE AGE (10,000 BC–8,000 BC)

The Mesolithic Age was the period of change from Old Stone Age to the Middle Stone Age. Man made a number of inventions and discoveries during this period.

BETTER TOOLS

Man was still a hunter and a food-gatherer, but his tools now became smaller and more refined. Due to their small size, the tools are called **microliths**. Bone tools were now used. Their tools included borers, scrapers and arrow-heads. Axes were still made out of stone, but they now had wooden handles. This made it



Mesolithic

Microliths

Tools of Middle Stone Age

easier to use the axes. These tools have been discovered in many parts of India; especially in Punjab, Gujarat, Madhya Pradesh, Karnataka and Andhra Pradesh.

DOMESTICATION OF ANIMALS

Towards the end of the Mesolithic Age man began to domesticate animals. The domestication of the dog was an important feature of this age. Dog could be useful in many ways, especially in chasing and hunting animals. Around the same time man learnt to grow plants.

NEOLITHIC AGE: NEW STONE AGE (8,000 BC–3,500 BC)

The Neolithic Age means 'New Stone Age'. The remains of this age are found all over India.

AGRICULTURE

Like fire, agriculture was also a chance discovery. Man found that some seeds which had fallen on moist land developed into plants. He started growing plants from seeds. This was a great discovery for man. Instead of wandering in search of food, man settled down in areas which were suitable for agriculture.



A cave painting showing Neolithic ploughing

FOOD

The earliest crops must have been barley and wheat. Man also cultivated rice. This brought a change in his food habits. Man's diet now consisted of meat, fishes, fruits, milk, barley, wheat and other grains.

TAMING ANIMALS

The taming of the dog had started in the Mesolithic Age. Man realised that instead of killing goats, sheep or oxen, he should domesticate these animals. He could use these animals as food also, whenever necessary. Goats and cows gave him milk. He used them for carrying goods from one place to another. Oxen also helped men in pulling their ploughs.

BASKET WEAVING AND POTTERY

Baskets were needed for storing rice, barley and other grains. Baskets were made of thin strips of wood. Earthen pots were also made. The pots were given different shapes and dried in the sun. The pots were then baked in an oven in order to make them harder. Some of the pots were also decorated by various designs of animal figures on them. Red, yellow, brown and orange were the colours used over the surface of the pottery.



Basket Weaving

POLISHED TOOLS

The tools were still made of stone, but now they were harder and highly polished. The tools included axes, hammers, chisels, saws, mace-heads, arrow-heads, etc. Polished tools have been found in large numbers in south India. In the north, neolithic implements have been found in Kashmir valley, Assam, Bihar, West Bengal and Uttar Pradesh.



Arrow head



Hammer

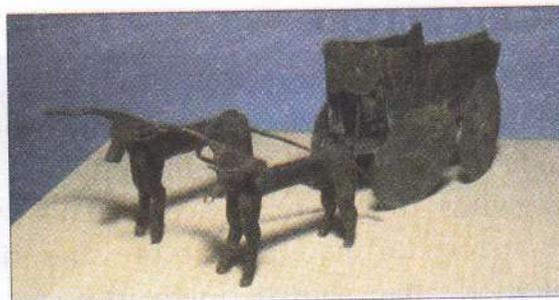


Axe

Tools of Neolithic Age

INVENTION OF THE WHEEL

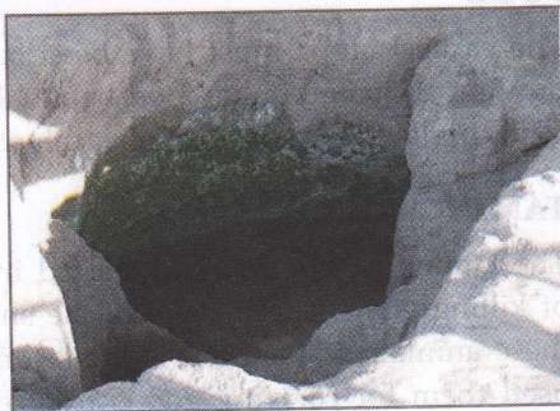
The most important invention of the age was that of the wheel. Man must have seen round pieces of the wood rolling on the ground. A thick piece of wood, shaped like a circle, was man's first wheel. The invention of the wheel made life easier for man. Now, he could make a cart with two wheels to be pulled by animals. The cart could be used to transport both goods and men. The wheel was also used for making pottery of various types. Wheel was also used in spinning.



A Wheeled Cart

THE EARLY VILLAGES

Men built their huts along river banks. The huts were made of wood, mud or grass. Such huts were found on high banks of a river. This is how the earliest villages were born. In some places people found shelter in dwelling pits. They built pit houses, which were dug into the ground, as found in Burzahom in



A dwelling pit in Burzahom

Case Study

The Deccan

Remains of the Palaeolithic or Old Stone Age have been found in large numbers in the Deccan in peninsular India especially at Pallavaram in Tamil Nadu and Hunsgi in Karnataka, on the banks of the River Krishna. These were habitation-cum factory sites, i.e. where people lived and made tools as stone was found here in abundance. Tools like hand-axes, cleavers, choppers and swapers have been found. These tools were not only heavy but very sharp and probably used for chopping meat or cutting down trees.

Some habitation sites have been found in Bhimbetka in Madhya Pradesh. These include natural caves and rock shelters which protected early man from all types of bad weather. They were largely found near the Narmada valley.

At Patne in Maharashtra, plenty of ostrich shells have been found, some of which are well decorated with designs. Beads were also made out of them.

(Ref. Encyclopedia—Britannica)

Kashmir. With food grains stored in pots and sheep and goats at hand life began to be comfortable.

DRESS AND ORNAMENTS

Animal skin or bark of trees was not the only covering of the body. Spinning and weaving was known by now. The dress was made of wool and cotton. Bangles and beads made of shells and bones were worn by women.



Ornaments

COMMUNITY AFFAIRS

Since many families were living in a village, there must have been quarrels between them. They needed rules to tell them what they were not allowed to do. Those who broke the community rules must have been punished.

Who controlled the affairs of the village? Who punished someone because he did some thing wrong? Probably each village was led by a grand old man. Sometimes the leader was a brave young man. The leader was there to see that men lived in peace with each other.

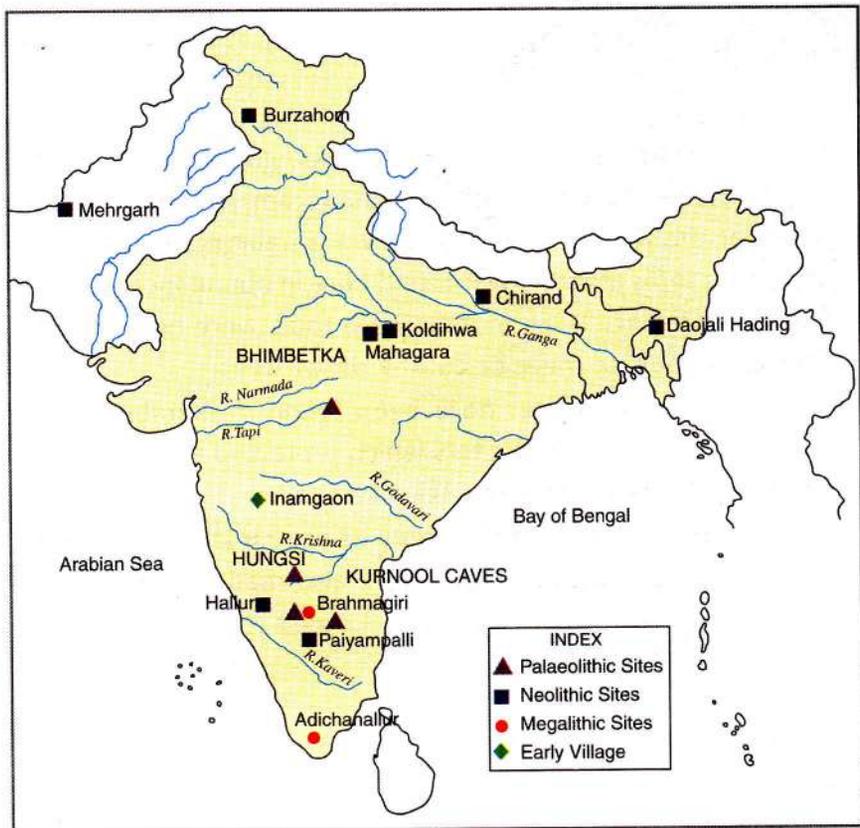
DIVISION OF LABOUR

There were now plenty of jobs to be done. So some kind of division of labour must have existed. While some men made tools or implements, others made pottery. Basket-making and weaving of clothes developed as separate occupations. People did not use money when they bought something. They exchanged goods for other goods.

The potter or weaver gave their produce to the farmer, who in turn gave them grains and vegetables. We call it the **barter system**.

RELIGIOUS BELIEFS

The earth provided food for man. Therefore, the Neolithic man worshipped the God Earth. The forces of nature frightened him. They also remained a mystery to the early man. Therefore, he worshipped the Sun, water (rivers), fire and also cow, man's main source of milk.



Archaeological sites of India

The dead were now buried. The dead man's tools, weapons, rice, barley and other grains were also placed in the grave. The graves were then closed with large stone slabs called *megaliths*. Many such megaliths have been found in South India.

Case Study

North West — Mehrgarh

Mehrgarh (now in Pakistan) is located near the Bolan Pass in present-day Baluchistan and is one of the most important link routes to Iran. It is said to be one of the earliest farming and pastoral settlements.

- Archaeologists have found here the remains of burnt grains and bones of different animals such as goats and sheep. This indicates that crops like wheat, barley, legumes were grown here. People domesticated animals. This shows a transition from the hunting stage to the practice of domestication of animals.

Remains of square or rectangular houses have been found at Mehrgarh. Each house was divided into four or more parts; some may have been used for the purpose of storage. A number of burial sites have been found with articles used by the dead ranging from food, stone axe, ornaments and animals like goat.

- Archaeologists have also found at burial site the hand-made terracotta pottery, and figures of females and animals. This shows that people had belief in life after death.

North East — Daojali Hading

A Neolithic site of Daojali Hading was found on the hills near the Brahmaputra valley, very close to the routes leading to China and Myanmar. A variety of stone tools and articles that were commonly used in a house have been found. Some tools made of fossil wood, pottery and a stone, jadeite probably brought from China have been found here.

Remains of the Stone Age have also been found in several North-East states of India like Assam, Arunachal Pradesh, Manipur, Mizoram, Nagaland and Tripura. Flakes, hand-axes, scrapers, cleavers. etc., have been found at these sites.

A Summary of the Lesson

- **Palaeolithic Age (Old Stone Age):** This was the age when man used stone tools which were rough and unfinished. Their tools were of three kinds: (1) Core Tools (2) Flake Tools (3) Blade Tools.
- **Life in the Old Stone Age:** (1) Cave Dwellings (2) Man lived on animals, fishes and fruits (3) Discovery of Fire
- **Mesolithic Age (Middle Stone Age):** The period of change from the Old Stone Age to the New Stone Age. Man's tools now became smaller and more refined. Man began to domesticate animals.
- **Neolithic Age (New Stone Age):** (1) Agriculture (2) Man cultivated barley, wheat and other grains (3) The taming of animals (4) Basket weaving and pottery (5) Polished tools (6) Invention of wheel (7) The early villages (8) Dress and ornaments (9) Community affairs (10) Division of labour (11) Religious beliefs

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Which was a major discovery in the life of the Palaeolithic man?
(a) Stone (b) Iron (c) Wheel (d) Fire
2. The Neolithic site at Mehargarh is in
(a) India. (b) Pakistan. (c) Afghanistan. (d) China.
3. In which age did man begin to grow crops?
(a) Mesolithic (b) Neolithic (c) Palaeolithic (d) Chalcolithic
4. Where is Burzahom located?
(a) Kerala (b) Kashmir (c) Goa (d) Bihar

II. Fill in the blanks choosing the correct option.

1. The earliest tools which men used were made of
(a) Iron (b) Copper (c) Stone

2. The most important invention of the Neolithic Age was that of
 (a) Wheel (b) Bronze (c) Stone
3. The first animal to be domesticated was
 (a) Cat (b) Horse (c) Dog
4. Man became the food producer in
 (a) Palaeolithic Age (b) Neolithic Age (c) Chalcolithic Age

III. Write true or false.

1. The Old Stone Age was the age when man used polished tools.
2. Man in the Old Stone Age was able to ignite fire whenever he needed it.
3. The Old Stone Age was followed by the Neolithic Age.
4. Tools in the Mesolithic Age became smaller and more refined.

IV. Match the columns.

Column A	Column B
1. Old Stone Age	(a) Domestication of animals
2. Mesolithic Age	(b) Dress made of wool and cotton
3. Neolithic Age	(c) Cave dwellings
4. Bhimbetka	(d) Brahmaputra valley
5. Mehrgarh	(e) Now located in Pakistan
6. Daojali Hading	(f) Cave paintings

V. Give short answers for the following questions.

1. Name any two places in north India from where the Neolithic implements have been found.
2. Mention two uses of fire to early man.
3. Where do we come across rock shelters and natural caves in India?
4. What is barter system?

VI. Answer the following questions.

1. What tools and implements were used by man in the Old Stone Age?
2. Mention any two changes that took place in man's life in the Mesolithic Age.
3. How was the invention of wheel useful in the Neolithic Age?
4. What was the importance of agriculture in human life?
5. What new occupations developed in the Neolithic Age?
6. Compare the tools of the Palaeolithic and the Neolithic periods.

VII. Who am I?

1. I am a food gatherer. I am
2. I was the most important invention of the Neolithic man

VIII. Projects and Activities

1. Draw some tools used by the people during the Old Stone Age.
2. Complete the columns.

Food eaten by hunter-gatherers	Food you eat
1.	1.
2.	2.
3.	3.

IX. Map Work

On a map of India, mark the places where prehistoric tools have been found.

X. Solve the crossword puzzle with the help of clues given below.

			^A P						^B F
¹ N	O		A	D	S				L
			⁶ A				Y		^C C
² F		R	E						E
³ T			L	S					P
⁴ E			T	H		⁷ R	V		R
⁵ A	G		I	C			T	R	E
			C						

CLUES
Across
1. Wandering people
2. It was used to scare away wild animals.
3. Early man used, made of stone
4. It is a unique planet, 4.5 billion years old.
5. The biggest discovery of New Stone Age.
6. New metal made by mixing two metals.
7. valleys were very fertile.
Down
A. During period man lived like a nomad.
B. A type of stone tool.
C. was the first metal to be discovered.

ANSWERS

Across

- | | | | |
|----------------|----------|----------|----------|
| 1. Nomads | 2. Fire | 3. Tools | 4. Earth |
| 5. Agriculture | 6. Alloy | 7. River | |

Down

- | | | |
|-----------------|----------|-----------|
| A. Palaeolithic | B. Flake | C. Copper |
|-----------------|----------|-----------|

A FEW INTERESTING FACTS

Bhimbetka in Madhya Pradesh is famous for prehistoric rock paintings. Out of 750 rock shelters, 500 have rock paintings depicting scenes from everyday life—men were seen hunting, riding, dancing, performing rituals, etc. Many animals were also seen. The colours used in these paintings were red, green, white and ochre. Colours were made by grinding various rocks and minerals. The powder, thus, made must have been mixed with water or resin, a sticky substance obtained from plants.

VALUE-BASED QUESTION

Early men made many inventions despite various hardships. What lessons can you learn from their lives?

HOTS: THINK BEYOND

The invention of wheel was a gradual process. How did sledge convert into a cart?



3

The First Cities: Harappan Civilization

New Words to Remember

Civilization: A society which has its own highly developed culture and way of life.

Pictorial script: Picture-like signs used for writing.

Granary: Storehouse for grains.

THE RISE OF CITIES

Agriculture and the use of metals brought about a complete change in man's life. He gave up his wandering habits and settled down in a particular place. Thus, so many villages came up along river banks. There began the process of division of labour, that is the rise of many occupations. Besides farmers, there were potters, weavers, carpenters and shoe makers.

Small Market Towns and Cities: The farmers and the craftsmen produced much more than what they needed. They, therefore, bartered goods. They exchanged their goods for other goods which they needed. The farmers and the craftsmen began to assemble at a particular place to barter their goods. Such a place was called the market. Over a period of time this place developed into a market town. Some of the towns grew into big cities.

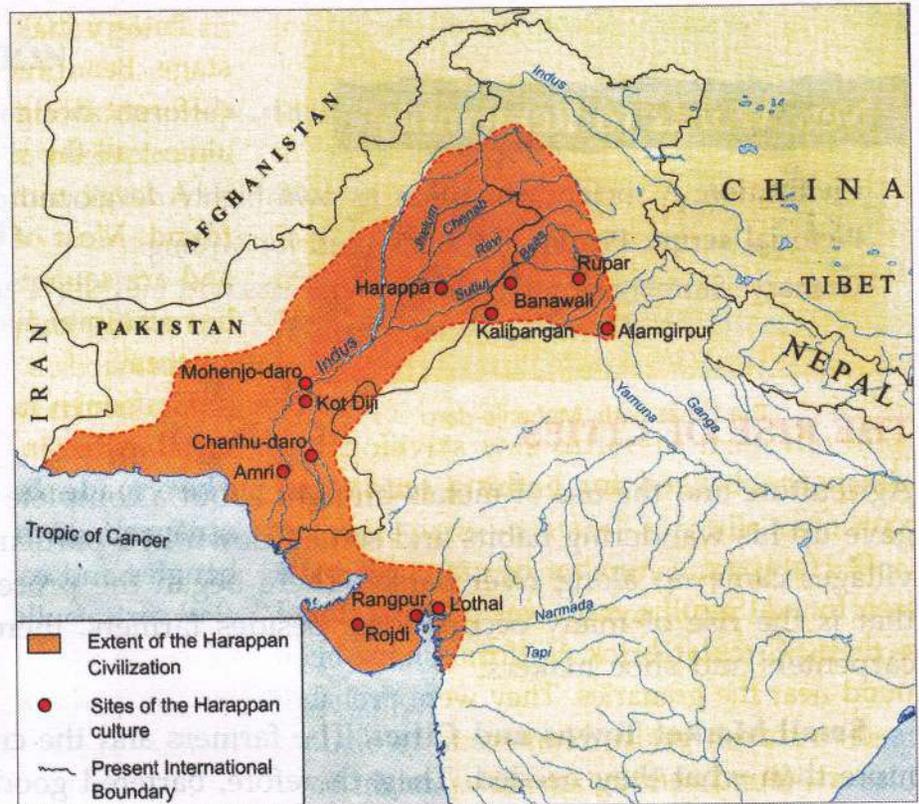
WHAT IS CIVILIZATION?

Civilization made its start only when man had sufficient quantity of food. He now had enough time to think about other things. He thought about better homes and better clothes. He was also learning to read and write. Writing was the most significant human invention. Man began to use his scientific knowledge to improve farming and trade. He also thought about life and death. Different societies had different ideas about life and death. This led to different religions. Thus, civilization is a wide term which includes many things—the comforts of the city life, the development of trade and commerce, the art of writing, and a good system of government.

BRONZE AGE

The period when people used bronze for tools and weapons is called the Bronze Age. It followed the Stone Age. The discovery of metals was helpful to man in many ways. With the help of better tools man could cut down crops and trees in much better way. The weapons of war also came to be made of bronze.

It is difficult to say when the use of bronze began and ended. People in some areas started using bronze earlier and in some areas later. In some places it lasted for long but in some it lasted for a short period. The Sumerians in Mesopotamia (present day Iraq and parts of Iran) are known to be the earliest ones to use bronze about 3500 BC. The Chinese made use of bronze until some time between 1500 BC and 1000 BC. We may place the Bronze Age roughly between 3500 BC and 1500 BC.



Map of the Harappan civilization

THE EARLIEST CIVILIZATIONS

All over the world different civilizations flourished in the river valleys. Four great civilizations developed some 5,000 years ago.

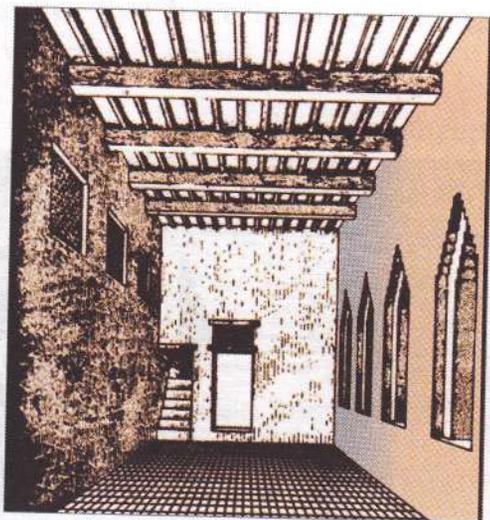
1. The Indus Valley or the Harappan civilization (India)
2. The Egyptian civilization on the banks of River Nile (North-East Africa)
3. The Mesopotamian civilization on the banks of the Euphrates and the Tigris rivers (West Asia).
4. The Chinese civilization in the valleys of the Hwang Ho and the Yangtze rivers (East Asia).

Reasons why Civilizations flourished in River Valleys: There are many reasons why the earliest civilizations developed along river banks.

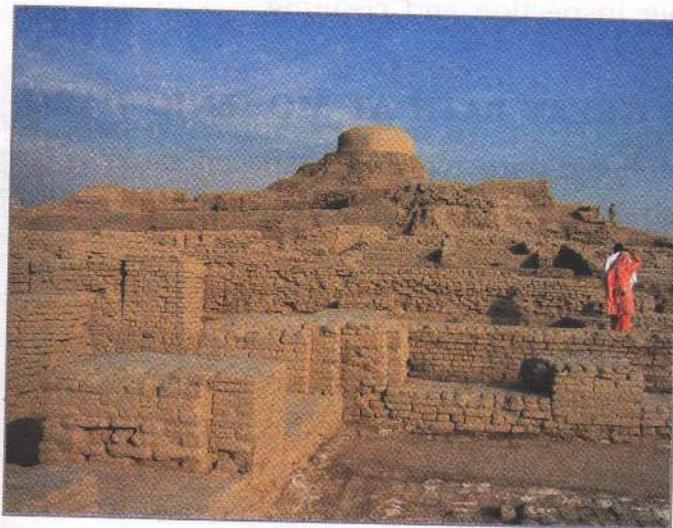
1. The river water could be used to grow fruits, vegetables and cereal crops. Man also ate fishes and many kinds of water birds.
2. A good pasture land nearby was used for animals to graze on.
3. The valleys had a warm and a pleasant climate. The cold was never very severe in the valleys.
4. The rivers provided ready means of communication and transport. There were no long or good roads to connect the ancient towns.

INDUS VALLEY CIVILIZATION (HARAPPAN CULTURE)

We shall now have a glimpse of the civilization which existed in India some five thousand years ago. In 1921 an Indian archaeologist, Daya Ram Sahni, discovered the ruins of the city of Harappa. It was situated on the bank of River Ravi in West Punjab. In 1922 the ruins of Mohenjo-daro were discovered in the Larkana district of Sind by R D Banerjee. As Harappa and Mohenjo-daro both belonged to the Indus Valley, this civilization came to be called the Indus Valley civilization. The city of Harappa was discovered first. So Indus Valley Civilization is also called the Harappan Civilization. The city of Harappa and other cities flourished some 4,700 years ago.



Interior of a house of the Harappan culture

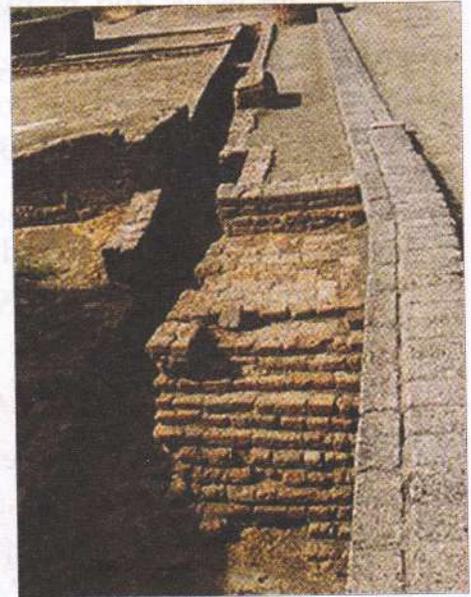


The Citadel at Mohenjo-daro

The Spread of Civilization: Since 1921, more than 250 sites have been discovered. Their civilization resembles that of Harappa and Mohenjo-daro. Such remains were discovered at (1) Lothal in Gujarat, (2) Chanhu-daro in Sind, (3) Kalibangan in Rajasthan, (4) Ropar in Punjab, (5) Alamgirpur in Uttar Pradesh, and (6) Banwali in Haryana. The Harappan Culture thus spread over large areas of Sind, Baluchistan, Punjab, Haryana, Rajasthan, Gujarat and western Uttar Pradesh. The civilization lasted for about 1,000 years.

TOWN PLANNING AND DRAINAGE SYSTEM

The people were urban and their cities were planned skillfully and divided into two parts. The raised part was called the **citadel** and the lower part was called the **lower town**. Each part was surrounded by a wall of baked bricks. The main streets were wide and straight and they cut each other at right angles. Fire-burnt bricks were used for paving the streets. The houses were of different sizes and had either one or two storeys. They were built on raised platforms as a protection against floods. The houses had wells and bathrooms. There were few windows but enough doors. There were also very large buildings which were used as palaces or Assembly Halls. At Harappa, a number of granaries were found. Surplus grain was perhaps stored in these granaries.

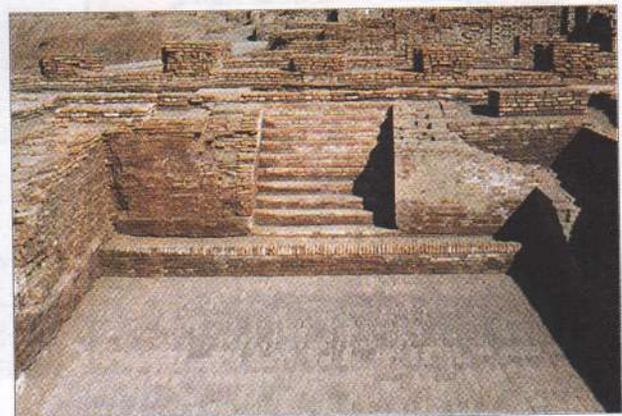


Drainage of Mohenjo-daro

Every street had its brick-lined drainage channel. It was connected to the house drains. These drains were properly covered. The drains had inspection holes for proper inspection and cleaning.

THE GREAT BATH AT MOHENJO-DARO

In Mohenjo-daro we find a special tank which was named the Great Bath. It had an open quadrangle with *verandahs* (galleries) on its four sides. It was made water tight with burnt bricks and coated with plaster. It was 12 metres long, 7 metres wide and 2.5 metres deep. It was filled with water taken from a well situated nearby drained out after use. It was probably used by important people on important religious occasions.



Remains of the Great Bath at Mohenjo-daro

SOCIAL LIFE OF THE PEOPLE

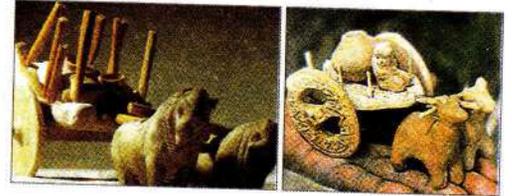
The principal diet of the people consisted of wheat, barley, rice and vegetables. Mutton and fish were commonly used. Men used two pieces of cloth. The upper garment was a *shawl* which was drawn over the left shoulder and under the right arm. The lower garment was like a modern *dhoti*. Women used a cloth bound at the waist by a girdle. Cotton fabrics were commonly used and perhaps wool was also used.

Ornaments like necklaces, finger rings and armlets were worn both by men and women. Silver was more common than gold. The Harappans probably got gold from Karnataka and precious stones from Gujarat and Iran. Glazed ceramic ware was also used to make bangles, ear-rings, beads and small vessels.



Jewellery of Mohenjo-daro

Children played with different types of toys like wheeled carts, whistles, figures of birds and animals made of clay. Many terracotta toys have been found in the Harappan city. Children must have played with them.



Toys children played with

ECONOMIC LIFE

The main occupation of the people was agriculture and rearing of animals. The Harappans grew wheat, barley, pulses, rice, sesame, mustard, linseed and peas. The plough, a new tool, was used for the first time to turn the soil. Probably, stored water was used for irrigation as rainfall was scanty in these areas.

The Harappan weavers were good in making fabrics. This we understand from the spindles that have been found. Also the bust statue of the bearded priest is shown as wearing a shawl.

Animals like ox, buffalo, sheep and goat were domesticated by the Harappans. The cow was known as a useful animal. They even caught fish and wild animals like the antelope.

Other important occupations of the Harappans were pottery, metallurgy, seal making and trading.

The Harappans had commercial relations with southern and eastern India, and also with other countries of Asia. Trade was carried on both by land and sea routes. The Indus seals have been found in Mesopotamia.

ARTS AND CRAFT

A bronze figure of a dancing girl has been found at Mohenjo-daro. Her feet below the ankles are missing. One of the stone statues shows a bearded noble man or a priest wearing a shawl. His eyes are half-closed. The figures of men, animals and birds painted on pottery show the artistic skill of the people. The pots meant for daily use were



Bust Portrait of a Bearded man



A bronze figure of a dancing girl

plain. Pots which were used for preserving valuable things were glazed and had beautiful designs in black. Beads, weights and blades were the striking finds of Harappan cities.

THE SEALS

More than 2,000 seals have been discovered from the various sites. The seals, rectangular in shape were made of terracotta and soapstone. The most interesting seal is that of *Pashupati*. A person appearing like Lord *Shiva* is seated in a yogic posture. The deity is surrounded by animals. Some seals bear the figures of animals like the buffalo, bull, tiger and elephant.



The Pashupati seal of stone

- (i) The seals throw light on religious beliefs of the people.
- (ii) From the figures on the seals we come to know the features, dress and ornaments of the people.

The seals were probably used to stamp the bags which contained goods being sent from one place to another.

RELIGION

No temples or shrines have been discovered. But many clay figures of the Mother Goddess have been found. The *Pashupati* (the figure appearing like Lord Shiva) was one of the principal deities of the Harappan people.

The Harappans worshipped trees and animals.



Mother Goddess

SCRIPT (THE ART OF WRITING)

The Harappans had developed the art of writing. Their script was pictorial. Nearly four hundred signs have been found. The historians have not been able to read the script.

THE FALL OF THE CIVILIZATION

The civilization came to an end in 1500 BC. There are many theories about the fall of this civilization.

- (a) Some writers believe that these cities were destroyed by the invaders who could have been the Aryans.
- (b) Others are of the opinion that the civilization could have been destroyed by natural disasters like earthquake or floods.
- (c) It is also possible that the rivers might have changed their courses. The result was that this region turned into a desert.

Case Study

Harappan towns in Gujarat

A number of Harappan towns have been found in the presentday Gujarat.

Dholavira, unlike other Harappan towns, was a city found in the Rann of Kachchh. The city was divided into three parts. Huge stone walls separated the three parts. Public ceremonies were probably held in a large open area within the township. One important discovery was the Harappan script which was different from the ones found earlier on objects like the seals. These letters were made of white stone.

Lothal is an important Harappan port city situated near the Gulf of Khambat (Gujarat). A dockyard has been found here. Probably raw materials were loaded and unloaded from ships and boats that entered Lothal through the sea. A storehouse was also found with plenty of seals.

In a building that was excavated, different types of beads, stones and tools for making beads have been found. This suggests that it was probably a workshop.

Ghola Doro has recently been found in the Kachchh area of Gujarat. Archaeologists have found products made of shell and copper and a very old Indus seal.

Rangpur is another Indus settlement found in the Kachchh area of Gujarat. Probably, this settlement belongs to the later period of the Harappan culture as the articles found here have a close resemblance to the Harappan style.

Surkotada, also in Gujarat, was a flourishing settlement. A number of advanced terracotta toys, seals, bangles, beads have been found. A unique feature was the discovery of small oval pits covered with stone slabs suggesting that they buried their dead. No such sites have been found in any other Indus settlements.

Besides Mohenjo-daro, Kot Dijji, smaller sites have been found in Baluchistan in Punjab (Pakistan).

A Summary of the Lesson

- **The Rise of Cities:** The farmers and craftsmen assembled at a place called market. This place developed into a market town. Some of the towns grew into big cities.
- **The Earliest Civilizations:** The civilizations flourished in the river valleys. Four great civilizations developed some 5,000 years ago—the Indus Valley civilization, the Egyptian civilization, the Mesopotamian civilization and the Chinese civilization. There were good reasons why the earliest civilizations developed along river banks.
- **Indus Valley Civilization or the Harappan Culture:** Since 1921 more than 250 sites have been discovered in Sind, Gujarat, Punjab, Uttar Pradesh and Haryana. The features of the civilization are: (1) the people were urban and their cities were planned skillfully with proper drainage system; (2) the Great Bath at Mohenjo-daro; (3) social life of the people, their food, dress and ornaments; (4) economic life of the people, their occupations and trade; (5) arts and craft, (6) their religion, the worship of Pashupati, Mother Goddess, trees and animals; (7) their script was pictorial but not deciphered.
- **The Fall of the Civilization:** Invasion, earthquakes or floods
- **Case Study:** Harappan towns in Gujarat

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. All over the world the civilizations flourished in the:
(a) river valleys. (b) hill ranges.
(c) desert regions. (d) peninsular plateau.
2. The city of Harappa and other cities flourished about
(a) one thousand years ago. (b) two thousand years ago.
(c) three thousand years ago. (d) four thousand years ago.
3. The Harappan seals were made of
(a) baked bricks. (b) ceramic.
(c) terracotta and soapstone. (d) gypsum.

II. Fill in the blanks choosing the correct options.

1. An archaeologist studies human history through
(a) Excavation of sites
(b) Analysis of natural or physical sciences
2. The city of Harappa was situated on the bank of River
(a) Ganga (b) Ravi

3. The most remarkable building of Harappa is the
 (a) Great Bath (b) Great Granary
4. The main occupation of the Harappan people was
 (a) Agriculture (b) Mining
5. The Harappan civilization was
 (a) Rural (b) Urban

III. Match the columns.

Column A

1. Great Granary
2. Noble man
3. Mohenjo-daro
4. A famous seal
5. The Harappan script
6. Lothal

Column B

- (a) Larkana district of Sindh
- (b) Storehouse for grain
- (c) Harappan port city
- (d) Wearing a shawl
- (e) Pashupati
- (f) Pictorial

IV. Give short answers for the following questions.

1. Name the toys that the Harappan children played with.
2. Mention any two reasons which might have caused the fall of the Harappan civilization.
3. How was the script of Dholavira different from the other Harappan scripts?
4. Name any four centres of Harappan culture.
5. Name three Harappan cities that were found in present day Gujarat.

V. Answer the following questions.

1. Give two reasons why early civilizations developed along the river banks?
2. Name the four great civilizations which flourished about 5,000 years ago.
3. What do you know about the drainage system of the Indus cities?
4. How can you say that Harappan people were good in making fabrics (cloth)?

VI. Who am I?

1. I discovered the ruins of the city of Harappa in 1921.
2. I am the famous bronze figure of Mohenjo-daro.
3. I am the upper part of the Harappan city.
4. I was mixed with copper to make bronze.

VII. Map Work:

On a map of India, mark Harappa, Mohenjo-daro, Lothal, Dholavira and Kalibangan.

VII. Solve the crossword puzzle with the help of clues given below.

		¹ → S		^A ↓ A	L		^B ↓ G		^C ↓ N		
				² ↖ C	I		A		L		
							N				
	³ ↖ A	U		E	T						
							Y				
	⁴ ↖ G	R			E						
									^D ↓ B		
		⁵ ↖ C	I	V	I		Z				N
				T							
									S		

CLUES	
Across	
1.	An object used for stamping goods.
2.	A fort-like structure
3.	An object to protect oneself from evil.
4.	Cord fastened around the waist
5.	Advanced stage of human development
Down	
A.	A person who studies ancient sites.
B.	Building where grain is stored.
C.	A river in Egypt
D.	Houses were made of baked

ANSWERS

Across

1. Seal 2. Citadel 3. Amulet 4. Girdle 5. Civilization

Down

- A. Archaeologist B. Granary C. Nile D. Bricks

IX. Projects and Activities

- Prepare a PowerPoint presentation on the Harappan civilization mentioning in it
 - the drainage system.
 - ornaments of the people.
 - religious beliefs of the people.
- Many terracotta toys were found in the city of Harappa. Collect pictures of the terracotta toys and paste them on a chart paper. Which toys the Harappan children would have enjoyed to play with? Write a report on it.

VALUE-BASED QUESTIONS

Taking clue from the Harappan town planning, suggest three ways for better city planning.

HOTS: THINK BEYOND

Why is it important to know the history of civilization that existed nearly 5,000 years ago?



PROJECT WORK

(Based on Chapters 1–3)

I. Assignment

Collect coins used by your grandparents, parents and you. Make a comparative study of the coins, mentioning the shape of currency, script, metal and the year in which those coins were minted.

II. Project Work

Make a project report mentioning the differences between the lives of people in prehistoric times and present times. Prepare your data in a tabular form and paste it in a chart.

III. Creative Writing

Imagine how early men must have thought and faced the difficulties before inventing a wheel. Write a story depicting those difficulties.

4

The Vedic Culture and Chalcolithic Settlements

New Words to Remember

Deity: An idol of a God or Goddess.

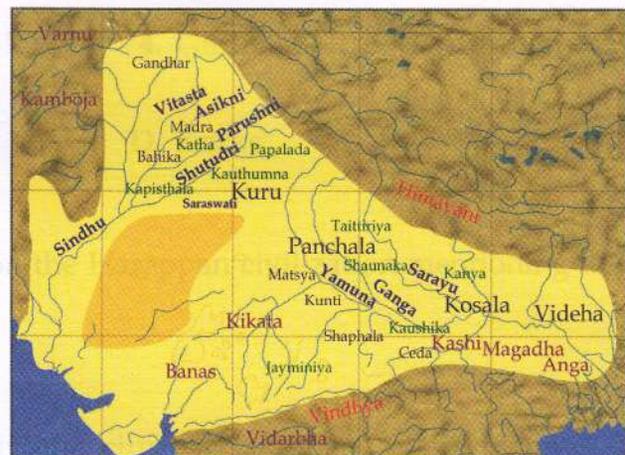
Epic: A long poem which tells a story of heroic deeds.

Chalcolithic Age: Bronze Age.

Megalith: A large stone kept standing on the ground which indicates a burial site.

VEDIC CULTURE

The people who developed the Vedic culture were the Aryans. There are different views about the original home of the Aryans. Perhaps they came from Iran or Central Asia in about 1500 BC. The Aryans connected with India are called 'Indo-Aryans'. They are distinguished from those who went to European countries such as Greece, Rome, Germany, France or Russia.



Map of Vedic India

EARLY ARYAN SETTLEMENTS

The early Aryans lived in the *Sapta-Sindhu* region for a long time. They gave the name *Brahmavarta* to this region, which means the 'Land of Gods'. It was during this period that the Rig Veda was written. Later, the Aryans moved eastwards and settled in different parts of the country. Gradually, they occupied the whole of northern India. Their settlements extended from the Himalayas to the Vindhya mountains. They named this region *Aryavarta* or the 'Land of Aryans'.

LITERATURE OF THE ARYANS

The knowledge about the Aryans comes mainly from the Vedas. That is why this period of Indian history is called the Vedic Age. The word 'Veda' means knowledge. The four Vedas are (1) the *Rig Veda*, (2) the *Sama Veda*, (3) the *Yajur Veda* and (4) the *Atharva Veda*. The Vedas are of great importance. The Vedas give us an idea of the religious beliefs and social customs of the Aryans. They also bring to light the economic conditions



A manuscript from the Rig Veda

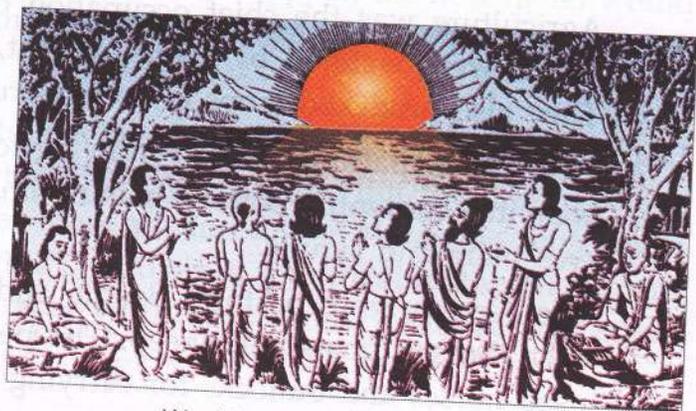
of the people. The Rig Veda was composed about 3,500 years ago and is said to be the oldest Veda. It is in the form of dialogues. It includes more than a thousand hymns called *sukta* or 'well-said'. These hymns were composed by sages or *rishis* in old Vedic Sanskrit. The most famous works of the later Vedic period were the *Upanishads* and the two epics — the *Ramayana* and the *Mahabharata*. The epics provide information about the various Aryan kingdoms, their armies and the weapons they used during the war.

Apart from literary evidences, we also get information about the Aryans from archaeological excavations carried out in the Ganga valley, such as Atranjikhera and other places.

Sanskrit owes its origin to a family of languages known as Indo-European. Most of the Indian languages like Sanskrit, Assamese, Hindi, Kashmiri and Sindhi and many European languages like French, German, Spanish, Italian, and English have many words in common. The languages of South India, such as Tamil, Telugu, Kannada and Malayalam belong to the Dravidian family.

RELIGION OF THE ARYANS

The religion of the Rig Vedic Aryans was very simple. The people worshipped the various forces of nature. Thus, they had many gods and goddesses. *Surya* was the Sun God. *Indra* was the God of Thunder, rain and water. He was one of the most popular gods as he caused rain, giving them prosperity. *Vayu* was the God of wind. *Prithvi* was the Goddess of the Earth. *Agni* represented sacrificial fire.



Worship of Nature by the Aryans

The Aryans pleased their Gods by performing *Yajnas* and sacrifices. Their offering to the Gods included *ghee*, milk, grains and *soma* juice. The priests in course of time became very powerful.

In the later Vedic age some new gods gained greater importance. They were *Brahma*, *Vishnu* and *Shiva*. The most popular deities during the epic period were *Rama* and *Krishna*. The *Upanishads* stress on the principles of *karma* (action) and *moksha* (salvation).

POLITICAL ORGANISATION (THE KING AND HIS OFFICERS)

The successful among the Aryan chiefs emerged as kings or rajans. The king exercised vast powers. The kingship became hereditary in the later Vedic Age, that is, the title passed on from father to his eldest son. The king ruled with the help of a number of officials, such as the *senani* (commander of the army) and the *purohita* (chief priest). The *gramini* (the village headman) also assisted him. The *gramini* administered the village. He also kept a fighting band ready to help the king.

There were two important assemblies known as the *samiti* and the *sabha*. The *samiti* was formed by the chiefs of the villages and the towns. The *samiti* was a smaller body. It consisted of a few prominent persons, men of wealth and learning.

In the later Vedic period the small tribal kingdoms were replaced by large kingdoms and the number of officers also increased.

SOCIAL LIFE OF THE ARYANS

1. **The Family:** There were joint families. The eldest male member was the head of the family. Women were treated with much respect. They took part in all the religious ceremonies. Women were given good education. Child marriage and *pardah* system (covering one's face) did not exist among the Aryans.

2. **The Village:** The early Aryans were basically tribal people. They lived in villages. The village or the *grama* was headed by the *gramini*.

Agriculture was the chief occupation of the villagers. They cultivated fields which were watered by rivers. Wheat, rice and barley were mainly grown. They also produced crops of cotton, fruits and vegetables.

3. **Other Occupations:** Apart from agriculture, some other occupations were weaving, carpentry, pottery, making implements and ornaments. Their pottery was plain and simple.

The Aryans were pastoral people and domesticated animals, such as cows, oxen, horses, goats and sheep. The people were also engaged in trade. They used horses and bullocks for carrying goods from place to place.

4. **Food and Dress:** The early Aryans ate rice, wheat, barley, fruits, vegetables. They also took milk, *ghee* and other milk products in plenty. Their dress consisted of two or three pieces of clothing made of cotton or wool. The women wore a *sari*. The men wore the *dhoti* and the turban. Both men and women were fond of ornaments made of gold, silver and other metals. The ornaments included ear rings, necklaces and bracelets.
5. **Amusements:** The amusements of the people included chariot-racing, horse-racing, gambling, dancing and music. They used the drum, lute (*veena*) and the flute.
6. **Social Classes:** The Aryans followed various professions according to the needs of society. The people who performed religious ceremonies were called the *brahmins*. The king and his warriors were called the *kshatriyas*. The common people engaged in agriculture, trade or crafts were the *vaishyas*. The *shudras* were the menial workers and had a low status in society.

The Aryans did make a distinction between themselves and the non-Aryans whom they called *dasas* or *dasyus*. The *dasas* had an inferior position in the society.

To begin with, the occupations were not hereditary. A person could choose whatever profession he liked. But in the later Vedic period these professions developed into the rigid caste system.

CHALCOLITHIC AGE (3500 BC – 2000 BC)

The word 'Chalco' (Khalkos in Greek) means copper. Towards the end of the Neolithic Age, people started using both copper and stone for making tools. Copper was the first metal to be found by man. For hundreds of years man used polished stone and copper both for making tools. Gradually, stone was replaced by copper. In India copper implements have been found in plenty in Rajasthan, Ganga-Yamuna doab and Bihar. In course of time other metals like tin and zinc were also discovered. Then somebody found out that if a little tin was mixed with copper, the new metal would be much harder than either copper or tin. This metal is bronze. The Chalcolithic Age is also called the Bronze Age.

It is believed by a few archaeologists that the Chalcolithic settlements flourished more or less around the same time as the Harappan culture. But the findings have shown that the Harappan culture was far more advanced. The Harappan settlements were urban while those of the Chalcolithic period were rural. Unlike the Harappans they had not learnt the art of mixing copper with tin to produce bronze which was widely used by the Harappans.

INAMGAON: A CHALCOLITHIC SETTLEMENT

Chalcolithic sites have been found in almost all parts of India except in the north-eastern parts of India. Inamgaon, on the bank of River Ghod, a tributary of River Bhima is an important Chalcolithic settlement in India. It existed between 3600 and 2700 BC.

Houses at Inamgaon

About 140 rectangular mud houses have been found at Inamgaon. Most of the houses have one or two rooms. A granary has also been found where the chief may have collected grains received as tax from the cultivators.

Some oval-shaped pits have been found. Probably, food was cooked here. Several impressive structures with walls surrounding them have also been found.

Tools and Ornaments

A variety of stone tools and quite a few red pottery have been found at Inamgaon. A few tools and ornaments made of copper have also been found. Beads made of ivory, terracotta, seashells and even semi-precious stones have been found. A number of terracotta figures of female and bull have been found. Probably, the people of Inamgaon worshipped them.

Occupations and Food

People were engaged in agriculture and grew wheat, barley, rice, pulses, sesame, millets and peas. They also grew a variety of fruits. Bones of animals have been found which indicates that animals were hunted for food. These included goat, sheep, black buck and hare.

System of Burial

The adults were often buried along with vessels containing food and water outside the houses but sometimes the dead were buried within the houses too.

Decline

There is a possibility that due to shortage of rainfall, people migrated to other areas in search of food.



Terracotta figures and ornaments found in Inamgaon.

Case Study

The North-west and the Deccan — IRON AGE

The Iron age is the period in history between 1500 and 1000 BC. During this period, there was widespread use of iron for making tools and weapons. This age has continued to the present.

About 3000 BC some people in the Middle East started smelting iron ore for making tools. The Egyptian sickle blades are the oldest pieces in existence. True iron working began somewhere in Asia Minor, which is now a part of Turkey, between 1500 and 1000 BC. The use of iron spread over Asia, Africa and Europe. People found that iron was present in large quantities and was cheap. The knowledge of iron helped in the spread of civilization. Carpenters, masons and others gave up the crude tools of the Bronze Age and started working with more shapely iron tools. Farmers used iron ploughs.

During the Iron Age many inventions came into general use. Improved trade and transportation helped the Aryan civilization to expand and progress in the north-west.

Megalithic Culture of the Deccan and South India

The word megalith means large (mega) stone (lith). The prehistoric people did not know how to erect towers or make buildings. Things of big or tall sizes are quite impressive. So they made use of big stones for burial or religious purposes.

In north Deccan and south India graves have been found where large stones have been used in various arrangements. The large stones served the purpose of marking the sites of the burials and providing an impressive look in honour of the departed. We know very little about the people who lived in that period but historians have collected some information about the life and culture of these people from the objects discovered in the graves. People have found iron tools, sickles, arrow and spear heads, hoes, pottery fragments, fragments of rice and other grains, besides the parts of skeletons of persons buried in those graves. It is clear that these people lived in the Iron Age.



Grave of Megalithic Culture

Agriculture was their most important occupation.

Besides agriculture, they also had to depend on hunting for their food. Rice was their favourite staple food. From some graves, bones and trappings of horses have been found. These indicate that the rich people used horses which might have helped in expanding their contacts with other people and have encouraged trade. A large number of pots filled with ashes and charred bones found in some graves might be associated with some religious customs or burial rituals. The Megalithic Culture was found in parts of Andhra Pradesh, Tamil Nadu and Karnataka.

A Summary of the Lesson

- The people who developed the Vedic culture were the Aryans. Perhaps they came from Iran or Central Asia in about 1500 BC.
- **Early Aryan Settlements:** The Aryans lived in the Sapta-Sindhu region. Later, they occupied the whole of northern India from the Himalayas to the Vindhya mountains.
- **The Literature of the Aryans:** The four Vedas, the Upanishads and the two epics.
- **The Religion of the Aryans:** The early Aryans worshipped the forces of nature, such as *Surya*, *Indra*, *Agni* and *Vayu*. They performed *Yajnas*. In the later Vedic age *Brahma*, *Vishnu* and *Shiva* gained greater importance.
- **The King and his Officers:** The king was known as *rajan*. He exercised vast powers. He ruled with the help of officials such as the *senani* and the *purohita*. The *samiti* and *sabha* were the two popular assemblies.
- **Social Life of the Aryans:** There were joint families. The Aryans lived in villages. Apart from agriculture, other occupations were carpentry, pottery and making implements. The *brahmins*, the *kshatriyas*, the *vaishyas* and *shudras* were the various social classes.
- **Contemporary Chalcolithic Settlement:** Inamgaon — tools, pottery, terracotta figures have been found here.
- **Iron Age** is the period between 1500 and 1000 BC.
- **Megalithic Culture** in India is related to those people in the Deccan who used big stones around their graves.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. What were the main occupations of the Aryans?
(a) Fishing (b) Importing and exporting goods
(c) Agriculture and cattle rearing (d) Embroidery
2. How many houses have been excavated at Inamgaon?
(a) About 124 (b) About 140
(c) About 440 (d) About 1,400
3. Megalithic culture was found in:
(a) eastern India. (b) western India.
(c) Deccan and south India. (d) North-West Frontier.

II. Fill in the blanks choosing the correct options.

1. The early Indo-Aryans lived in region.
(a) Sapta-Sindhu (b) Eastern (c) Vindhya mountains

2. The word *Aryavarta* means
 - (a) Land of Orissans
 - (b) Land of Aryans
 - (c) Land of saints
3. The Rig Veda, oldest of the Vedas, was composed about years ago.
 - (a) one thousand
 - (b) two thousand
 - (c) three thousand five hundred
4. The word 'Veda' means
 - (a) story
 - (b) knowledge
 - (c) poetry
5. The Aryans made a distinction between themselves and the non-Aryans whom they called
 - (a) Shudras
 - (b) Dasas or Dasyus
 - (c) Brahmins
6. The Harappan settlements were, while those of the early Aryans were rural.
 - (a) urban
 - (b) metropolitan
 - (c) pastoral

III. Match the columns.

Column A

1. Indra
2. Agni
3. Sabha
4. Samiti
5. Graminis
6. Rama and Krishna

Column B

- (a) Sacrificial fire
- (b) God of thunder and rain
- (c) Formed by men of wealth and learning
- (d) Formed by chiefs of villages
- (e) Deities during epic period
- (f) Village headmen

IV. Give short answers for the following questions.

1. Name the four Vedas.
2. Name any two gods or goddesses worshipped by the early Aryans.
3. Name the two famous epics. Why are they important?
4. Name the four social classes in which the Aryan society was divided.
5. What was the position of the women in the Vedic period?
6. What were the main amusements of the early Aryans?

V. Who am I?

1. I am the Hindu God of rain.
2. I am the sacred Hindu epic of the later Vedic Age.
3. I am a Chalcolithic site where 140 rectangular houses have been found.
4. I am the language of the Aryans.

VI. Map Work

On a political map of India, show the geographical areas occupied by the Aryans in early and later Vedic period using different colours.

VII. Projects and Activities

1. Prepare a project report or make a presentation or website on early Aryan lifestyle depicting their (a) food, (b) dress, (c) ornaments, and (d) worship of Surya (the Sun God).
2. Collect pictures representing some events of the Ramayana or the Mahabharata and paste them on your scrapbook.

HOTS: THINK BEYOND

The Gayatri Mantra

“ॐ भूर्भुवः स्वः तत्सवितुर्वरेण्यं,
भर्गो देवस्य धीमहि, धियो यो नः प्रचोदयात्”।

(Om Bhurbhuvah swah, tatsaviturvarenyam,
Bhargo devasya dhimahi dhiyo yo nah prachodayat.)

What is the meaning of this famous Gayatri Mantra?

5

Early States: Kingdoms and Republics

New Words to Remember

Hereditary occupation: An occupation that is passed on from father to son.

Monarchy: A system in which a king or a queen reigns over a country.

Republic: A state which is governed by the elected representatives.

Jana: A group which has several members.

Sangha: An association or organisation

Shreni: Guilds formed by artisans and traders in ancient India.

The period from 600 BC to 400 BC saw a big transformation in the history of ancient India. We now see the rise of *Janapadas* and *Mahajanapadas* (large kingdoms) ruled by kings whose powers were extremely large.

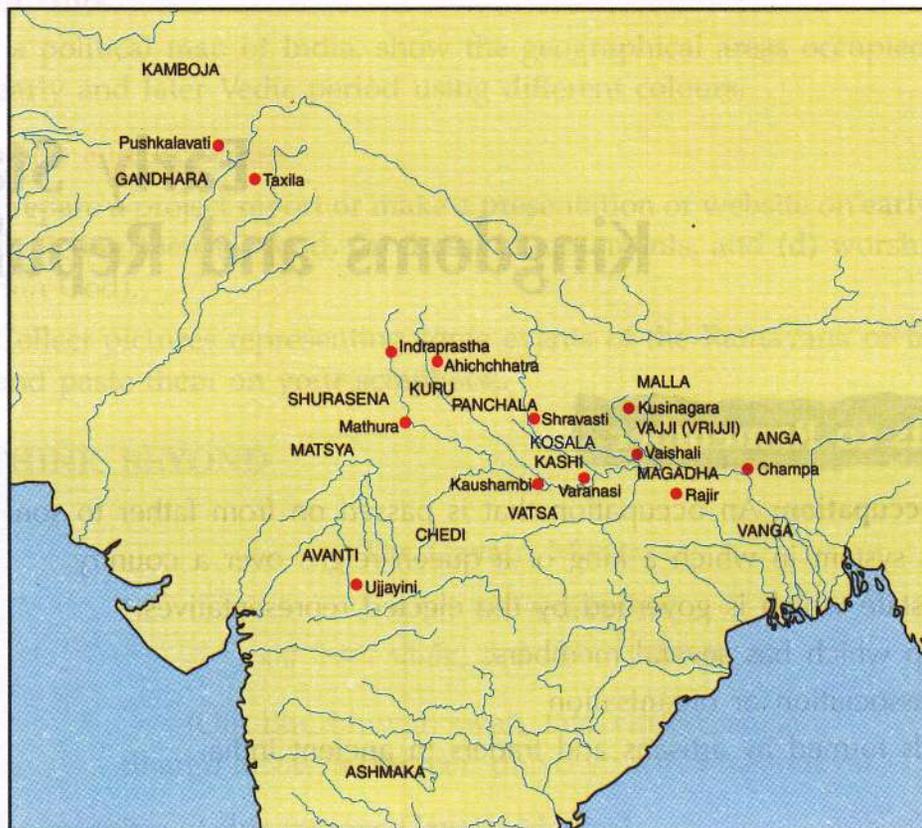
SOURCES

The history of India from about 600 BC is clear and easy to understand due to many literary sources. The Jain and the Buddhist texts like the *Jataka* tales throw light on the life of the people. Besides, the Vedic texts like the *Brahmanas* and the *Upanishads* give a lot of information about the *Janapadas* and the *Mahajanapadas*. The *Puranas* also give some useful information about the history of the period.

JANAPADAS AND MAHAJANAPADAS

By 600 BC the iron tools had come into popular use. The plains of the River Ganga could be cleared of thick forests. Tilling of land also became much easier. The small Aryan settlements had now turned into large kingdoms called *Janapadas*. Each Aryan tribe had its own *Janapada*, which was guarded and protected by the tribesmen (*jana*).

The bigger and more powerful among them were called the *Mahajanapadas*. From the Buddhist texts we learn that there were 16 *Mahajanapadas* in the sixth century BC. Some of the states were republics or *sanghas*.



The Mahajanapadas

Most of the *Mahajanapadas* were fortified and had a capital city. Forts were built in order to protect the people from invasions.

A *monarchy* or a kingdom was ruled by a hereditary monarch or king.

The Republics were of two kinds. Some of the republics were governed by an elected assembly, whereas others had elected kings.

THE REPUBLICS

A few of these republics deserve special mention, such as the *Shakyas* of Kapilavastu, the *Videhas* of Mithila and the *Lichchhavis* of Vaisali (*Vajji sangha*). More details are found of the *Shakyas* than of the others. The *Shakya* republic lay on the border of Nepal and Indian territory. The administrative and judicial business of the republic was carried on in the public assembly. The assembly also met to make laws for the republic. The people had an elected chief called *raja*. He presided over the assembly sessions.

THE MONARCHIES

The four important kingdoms were—Avanti, Vatsa, Kosala and Magadha. Avanti had its capital at Ujjain. The Vatsa lay north-west of Magadha with Kaushambi as its capital. Kosala included modern Varanasi, Ayodhya and some adjoining regions. Magadha comprised the territories which are now included in Bihar.

Case Study



BIHAR

(a) **Magadha:** In the sixth century BC Magadha rose to great prominence. It included the present day districts of Patna and Gaya.

Why Magadha became a Powerful Kingdom?

The following are the reasons why Magadha grew into a powerful kingdom.

1. It had fertile plains which gave a boost to agriculture. The rulers received land revenue and other taxes. The income from taxes was used to maintain vast armies.
2. Iron, discovered in the hilly regions of Magadha, was used in making agricultural implements and weapons. The Magadhan army was well-equipped with arms.
3. The rivers Ganga, Son, Gandaka and Sarayu helped in the movement of traders and soldiers. The trade and crafts made Magadha a prosperous kingdom.
4. The Magadh army was the first to employ the elephants in warfare as they were able to cross rivers and jungles with ease. This gave Magadha an added military advantage.
5. Magdha had forests that provided timber which could be used for making carts, chariots and houses.

(b) **King Bimbisara:** From about 542 BC upto 492 BC Bimbisara ruled over Magadha. He was a capable ruler. His capital was Rajagriha, the modern Rajgir in the Patna district. Bimbisara was a great devotee of the Buddha. The Jain *tirthankara*, Mahavira, also received much support from him.

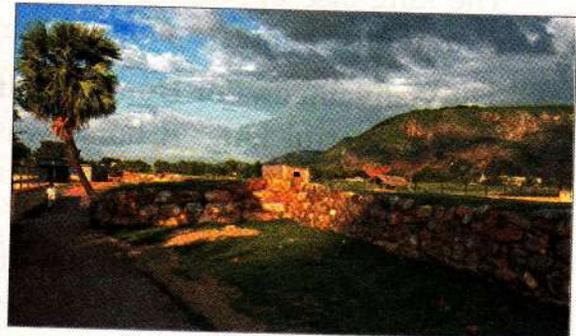
Bimbisara increased the power and prestige of the kingdom through conquests and marriage relations. He conquered Anga, the region to the east of Magadha. He married Kosaladevi of Kosala and received the town of Kasi as dowry. He married Chellana, the youngest daughter of the ruler of Vaisali. He maintained friendly relations with Avanti and Gandhara. Bimbisara was an efficient administrator. He built many roads and bridges. He travelled from place to place to find whether his people were happy or not. But his end was very tragic. He lost his life at the hands of his son, Ajatashatru.



King Bimbisara

(c) **King Ajatashatru and his Successors:**

Ajatashatru was the ruler of Magadha from about 492 BC to 460 BC. After Kosaladevi's death, her brother confiscated the town of Kasi. This led to a war between Kosala and Magadha. Ajatashatru emerged victorious. He also fought and destroyed the Licchavis of Vaishali. Magadha became a powerful kingdom of north India. Ajatashatru called the First Buddhist Council at Rajagriha in 487 BC.



Rajgir-Ajatashatru fort

Ajatashatru was succeeded by his son, Udayana (460 BC—364 BC). The city of Pataliputra (Patna) which became the capital of the empire was founded by him. The history of Magadha after Udayana is not bright. Very little is known about Magadha when it was ruled by Shishunaga and his successors for the next 50 years. However, it was Mahapadma Nanda of the Nanda dynasty who once again brought Magadha in the limelight. The last of the Nanda king was Dhana Nanda who was not at all popular and was overthrown by Chandragupta Maurya.

(d) **Vajji Confederacy:** We get more information about Vajji from some Buddhist literary work like *Digha Nikaya*.

It is said the Republic of Vajjis consisted of eight tribes and the Lichhavis were the most famous of them. Mahavira belonged to this tribe. Buddha also belonged to the Ganas or the Sanghas. The Lichhavis had their capital at Vaishali, a prosperous town. It was the birthplace of Lord Mahavira. The Buddha preached his last sermon here, making it an important pilgrimage centre for both the Jains and the Buddhists.

Vajji, unlike the Magadha kingdom was under a government known as Gana or Sangha. The Vajji had no king. It had an Assembly to carry on the business of the state. They met as and when required and took decision on all matters by a majority of votes. The women, the *dasas* (the slaves) and *kammakaras* (the landless labourers) could not attend such meetings. There was a smaller Council of Elders to implement the decisions and administer the state. King Ajatashatru wanted to annex this state. Buddha advised his ministers not to do so, but the king ignored his advice.

POLITICAL, ECONOMIC AND SOCIAL LIFE OF THE PEOPLE

POLITICAL ORGANISATION

1. **The King:** In each of the kingdoms, king was the executive and judicial head of the state. Normally, the king was a *Kshatriya*. He was very powerful. The king was regarded as god.
2. **His Ministers and Officers:** There was a Council of Ministers to advise the king. The *rajapurohita* and *senapati* held a place of eminence amongst the ministers. The king also appointed a large number of officers called *amatyas* for the task of administration.
3. **The Ashvamedha or Horse-Sacrifice:** The *Ashvamedha* ceremony was performed by a powerful king. A horse was set free to wander around the kingdoms of other *rajyas* under the protection of an army. If the other *rajyas* allowed the horse to pass through their kingdoms, it meant that they accepted the overlordship of the king who wanted to perform *ashvamedha* ceremony. They recognised him as the 'King of Kings'. They gave him many gifts at the time of *ashvamedha* (horse-sacrifice) ceremony.

4. **The Army:** The king maintained a large army. It consisted of elephants, chariots and soldiers who fought on horses and on foot. Ajatashatru had a type of chariot to which a thick long piece of a tree was attached. As the chariot went round and round, the log caused great damage and injured people.
5. **Sources of Revenue and Government Expenditure:** Much money came from the gifts which people gave to their king. Vassal states were forced to give goods or money to the king in return for peace and protection. But the most important source of income was the land revenue. The peasants paid one-sixth of their produce as the share of the king. Traders paid octroi duties. Herdsmen paid in the form of animals and animal products. Even hunters were required to give forest products to the king.

The taxes were used mainly for maintaining the army and paying salaries to officers. Another main expenditure was the maintenance of the royal family. Roads, bridges and canals were made for the public use.

ECONOMIC LIFE OF THE PEOPLE

1. **Village Economy:** Most of the people lived in villages. Agriculture and cattle-rearing were their main occupations. Two important changes came about in agriculture. First, the use of ploughshare and secondly, the art of transplanting paddy. It was a tedious task which was generally performed by slaves (men and women) and landless labourers or *kammakaras*.

The village headman, besides collecting taxes, protected the *grama*. He was helped by a village council consisting of elders of the village. Villagers were largely self-sufficient. They were able to produce or make everything that they needed.



Punch-marked coins and silver bars

2. **Trade and Industry:** The important trading centres were connected by road. The barter system was found inconvenient. It caused problems while buying or selling goods. For example, if one wished to buy a jar of oil, he would carry a bag of grain or cloth that he had to exchange them for oil. Money was introduced to improve the business activity. The coins of this period were made in a simple way. They were pieces of copper and silver with punch-marks on them. The trade by sea was also popular. The important ports were Bhrigukachha (modern Broach) and Surparka (modern Sopara).

3. **Cities were busy commercial centres:** The Buddhist literature refers to many cities. The most important cities were Champa, Vaishali, Rajagriha and Pataliputra in Bihar, Varanasi, Ayodhya, Mathura and Kaushambi in Uttar Pradesh and Ujjain or Ujjayini in Madhya Pradesh. These cities had grown into busy commercial centres. Kaushambi and Tamralipti (in the Ganga delta near Kolkata) were important river ports. The houses were made of burnt bricks and wood. At Pataliputra extensive use of wood had been made. The royal palaces were usually made of stone.

SOCIAL LIFE

Varna System

The Indian society had not changed much. The *varna* system continued to be the basis of society. The four *varnas* were—*Brahmins*, *Kshatriyas*, *Vaishyas* and *Shudras*. Besides, there was a class of persons who belonged to the lowest caste. They were the untouchables who had to do dirty jobs. This made their life miserable. The *Brahmins*, on the other hand, enjoyed many privileges. They were exempted from paying taxes. The artisans and merchants formed their own guilds called *shrenis*. The chief of the *shreni* had a place of honour in the public eye.

Customs made the son to join the occupation of his father. Thus, a man's occupation was hereditary. Two persons from different castes could not marry each other. The caste system became rigid.

Ashramas

The system of *ashramas* or the four stages of life was confined to the members of the upper caste. Each stage was divided into a period of 25 years.

1. The *brahmacharya* stage was a period devoted to education.
2. The *grihastha* stage was when man got married and had a family.
3. The *vanaprastha ashram* stage was spent in meditation and prayer.
4. The last stage or *sanyas* meant giving up worldly pleasures and leading a life of a hermit or a *sanyasi*.

STATUS OF WOMEN

Women did not have the position that they had in the early Vedic period. They could not own property nor they could remarry. Child marriage and polygamy was practised.

RELIGION

The *Brahmins* or the priestly class became very powerful. Religion became complicated and greater stress was laid on rituals and sacrifices. Sanskrit was the language used

by the *Brahmins* to preach. However, this language was not understood by common man. In the sixth century BC people in large number followed *Mahavira* and *Buddha* as they preached in simple language.

A Summary of the Lesson

- **Monarchies:** From the Buddhist texts we learn that there were 16 *Mahajanapadas* at that time. A monarchy was ruled by a hereditary king.
- **The Republics:** A few important republics were the *Shakyas* of Kapilavastu, the *Videhas* of Mithila and the *Lichchhavis* of Vaishali. The administrative and judicial business of the republic was carried on in the public assembly. The people had an elected chief called *raja*.
- **The Rise of Magadha:** Magadha comprised the territories which are now included in Bihar. King Bimbisara (542 BC–492 BC) increased the power and prestige of the kingdom through conquests and marriage relations. Ajatashatru (492 BC–460 BC) fought and destroyed the *Licchavis* of Vaishali.

There were many reasons why Magadha became a powerful kingdom. It had fertile plains. The trade and crafts made Magadha a prosperous kingdom.

- **Economic Life of the People:**
 1. Village economy
 2. Trade and industry
 3. The cities had grown into busy commercial centres.
- **Social Life:** The four *varnas*; the guilds or *shrenis*; man's occupation was hereditary; women could not regain the position that they had in the early Vedic period.
- The four *ashrams* were the *brahmacharya*, the *grihastha*, the *vanaprastha* and *sanyas*.
- Religion became complicated and dominated by the priestly class.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Bimbisara was the king of
(a) Avanti. (b) Magadha. (c) Gandhara. (d) Kalinga.
2. Pataliputra, which became the capital of the kingdom of Magadha, was founded by
(a) Bimbisara. (b) Shishunaga. (c) Ajatashatru. (d) Udayan.

3. The most important source of income of the kings during the period 600 BC to 400 BC was
 - (a) gifts which people gave.
 - (b) octroi duties.
 - (c) land revenue.
 - (d) forest products.
4. The king's Council of Ministers, during the period 600 BC to 400 BC, included mainly
 - (a) the Vaishyas.
 - (b) the Shudras.
 - (c) *rajapurohita* and *senapati*.
 - (d) artisans and merchants.

II. Fill in the blanks choosing the correct option.

1. The main sources of information about the rise of large kingdoms and republics which flourished from 600 BC to 400 BC are
 - (a) Rig Veda
 - (b) Yajur Veda
 - (c) Puranas and Upanishads
2. The Jataka tales are
 - (a) Jain texts.
 - (b) Buddhist texts.
 - (c) Vedic texts.
3. A monarchy was ruled by
 - (a) a hereditary king.
 - (b) an elected Assembly.
 - (c) a small group of people.
4. According to the Buddhist texts, there were *Mahajanapadas* in the plains of the River Ganga in the sixth century BC.
 - (a) fourteen
 - (b) fifteen
 - (c) sixteen
 - (d) nineteen
5. The kingdom of Magadha in the sixth century BC comprised the territories which are now included in
 - (a) Bengal
 - (b) Bihar
 - (c) Odisha

III. Give short answers for the following questions.

1. Name any two republics which flourished during Buddha's time.
2. Name any two kingdoms which grew up by 600 BC.
3. What led to a war between Kosala and Magadha soon after Ajatashatru's succession to kingship?
4. What is meant by the term *Mahajanapada*?
5. What do you know about the administration of the Republic of the Shakyas?
6. Give any two reasons why Magadha grew into a powerful kingdom in the period around 600 BC.
7. What was *ashvamedha* ceremony?

IV. Match the columns.

Column A

1. Lichchhavis
2. Videhas
3. Ajatashatru
4. *Ashvamedha*
5. Sanyas ashram
6. Varna system

Column B

- (a) Mithila
- (b) Vaishali
- (c) Leading the life of a hermit
- (d) Ruler of Magadha
- (e) Four classes of society
- (f) Horse sacrifice

V. Answer the following questions.

1. How is a republic different from a monarchy?
2. Explain the economic life of the Mahajanapadas.
3. Discuss the position of the King in Magadh. Who had a place of eminence in his Council of Ministers?
4. What steps were taken by Bimbisara to strengthen his position?

VI. Who am I?

1. I am a political system with hereditary rule of the king.
2. I am a political system with elected representatives.
3. I am the capital of Magadh empire.
4. I am the priestly class of the society.

VII. Map Work

1. On an outline map of India, mark the following.
(a) Avanti (b) Vatsa (c) Kosala (d) Magadha
(e) Vaishali
2. On an outline map of India, show the six main mahajanapadas through different colours.

VIII. Projects and Activities

1. Make a chart showing the family history of Bimbisara and his successors.
2. Discuss in your class the merits and demerits of the varna system in the Indian society.

6

New Ideas

New Words to Remember

Transmigration: The passing of a person's soul after his or her death into another body.

Nirvana: Salvation or *moksha*, a state of eternal peace after being released from the circle of birth and rebirth.

Karma: Previous acts of one's life.

Viharas: The monasteries where Buddhist monks and nuns lived.

HINDUISM

The Hinduism represents a gradual development of thought, philosophy and practices. It integrates a large variety of different elements. In principle, the Hinduism incorporates all forms of belief and worship. The Hindus worship the divine in all forms and are, therefore, very tolerant. The essence of religion does not lie in whether there is one god or many.

UPANISHADS

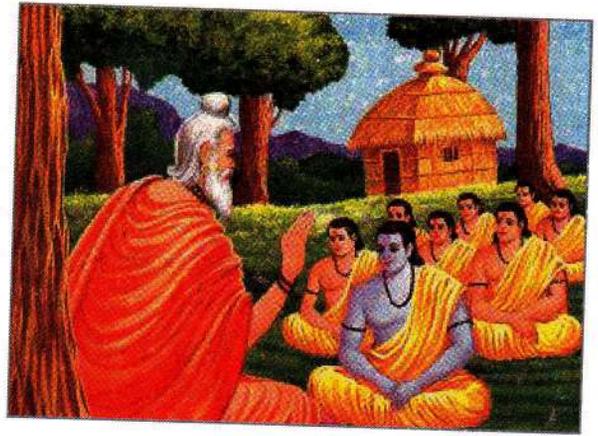
The *Upanishads* are part of the Hindu scriptures which discuss philosophy and meditation and give interpretations on the Vedas. The term '*Upanishad*' is derived from *Upa* (near), *ni* (down) and *shad* (to sit), i.e. the 'sitting down near' a spiritual teacher (*guru*) in order to receive instruction in religion and philosophy. This was known as the *guru-shishya parampara* or tradition.



Upanishad

Traditionally, there are said to be 108 *Upanishads*. Of these, eleven are considered to be the principal *Upanishads*. Most of them were written between eighth and fourth century BC. Their language is generally classical Sanskrit, although the oldest of them

is said to have been written in Vedic Sanskrit. The main among the eleven *Upanishads* are: *Brihadaranyaka Upanishad* (it is the biggest of all *Upanishads*), *Chhandogya Upanishad* (it teaches truth through the medium of many interesting stories), and *Taittiriya Upanishad* (more than any other *Upanishad*, this one is widely studied). The *Upanishads* explain the relationship between *jeeva* (individual soul) and *brahma* (supreme soul or god).



THE MAIN FEATURES OR TEACHINGS OF UPANISHADS

1. The theory of transmigration and *karma* is accepted by all the *Upanishads*. The principle of *karma* implies one's previous acts which determine the condition into which a *jeeva* is reborn. Good acts produce good results and bad acts produce bad results.
2. The soul is immortal, but it has to go through an unending cycle of births and rebirths as a result of *karma*. When a *jeeva* dies, it is the body that dies and the soul enters a new body.
3. There are three courses to achieve ultimate salvation or *moksha*. It may be obtained through *karma marg* or by means of good deeds, through *gyan marg* or by means of true knowledge or through *bhakti marg*, i.e. intense devotion to god. Salvation means freedom from the cycle of births and rebirths.
4. *Brahma* is regarded as the creator, *Vishnu* as the preserver and *Shiva* as the destroyer of the universe.

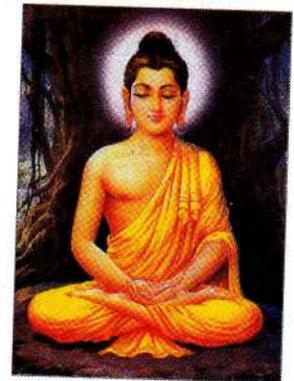
Hinduism has no founder, no central authority, no hierarchy and no organization. It is only a way of life.

SPREAD OF HINDUISM

Hinduism spread beyond India to Nepal, Sri Lanka, Myanmar, Cambodia and Indonesia. There is a temple of *Vishnu* called Angkor Vat in Cambodia. At present the Hindus are found mainly in India and Nepal though their small concentrations are found all over the world.

BUDDHISM

By the sixth century BC the simple Aryan religion became complicated because of rituals, ceremonies, *yajnas* and animal sacrifices. Moreover, the Sanskrit *shlokas* were beyond the understanding of the common man. The Hindus supported the caste system which made the life of the untouchables miserable.



Lord Buddha

Many people got dissatisfied with these aspects of the religion. Holy persons like Buddha and Mahavira felt that instead of following meaningless rituals, it was better to lead a moral life.

Buddhism was founded in India by Siddhartha or Gautama Buddha in the sixth century BC. He was born in Lumbini near Kapilavastu. He left home in search of truth. He visited many places and met many religious teachers. He attained enlightenment under a *peepal* tree at Bodh Gaya in Bihar. He gave his first religious sermon at Sarnath, near Varanasi. This event is known as 'Dharma Chakra Parivarthana' meaning 'turning of the wheel of *dharma*'.

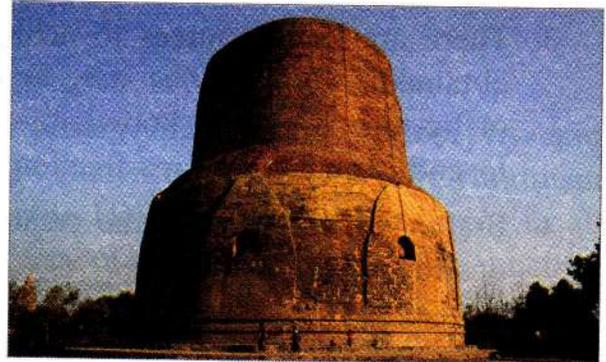
THE MAIN TEACHINGS OF BUDDHA

1. Lord Buddha's teachings are based on the *four noble truths*.

- The human life is full of sorrow and suffering.
- Desire is the cause of all sufferings.
- It is possible to get rid of sufferings.
- People can end suffering by giving up their desires and following the eightfold path.

2. The Eightfold Path

- (i) Right belief
- (ii) Right thought
- (iii) Right speech
- (iv) Right action
- (v) Right means of livelihood
- (vi) Right effort
- (vii) Right memory
- (viii) Right meditation



The Dhamek Stupa at Sarnath: Lord Buddha gave his first Sermon here

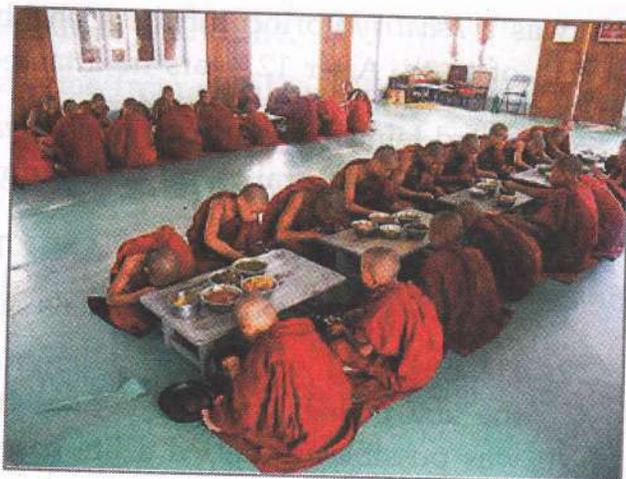
3. To obtain peace of mind, wisdom and happiness one should lead a life of moderation. This would free a person from *tanha* or a very strong desire for a lot more. One should neither practise extreme austerities nor be surrounded by many pleasures. This he called the middle way.
4. He believed in the cycle of birth and rebirth. Buddha taught that one could escape the cycle of rebirth by following the middle way.
5. Buddha rejected the caste system, the elaborate Vedic ceremonies and sacrifices. He believed in *ahimsa*. The Buddhist sacred texts containing the teachings of Lord Buddha are collectively known as *Tripitakas*.

Later, the followers of Buddhism got divided into two groups: the **Mahayana** and the **Hinayana**. The Mahayana Buddhism believed in performing rites and ceremonies

and in the worship of saints. The Hinayanas did not accept this change.

Anybody could join the *sangha* or the Buddhist order of monks. It was a very disciplined and democratic organization. The rules governing the *sanghas* are given in a book called the *Vinaya Pitaka*, a part of the *Tripitakas*.

The Buddhist monks and nuns went far and wide spreading the message of Buddha among people. They lived in *viharas* or monasteries.



The Buddhist monks in a monastery

SPREAD OF BUDDHISM

Buddhism spread to Tibet, China, Central Asia and South-East Asia. In the third century BC. Ashoka became a great patron of Buddhism. He propagated it in India and sent missions to Sri Lanka and several East Asian countries. Kanishka popularised Buddhism in Afghanistan and Central Asia in the first century AD from there it spread to China, Korea and Japan in a new form.



A monastery

Buddhism became popular widely due to the following reasons.

1. Its teachings were very simple.
2. It was preached by Buddha in the local dialects.
3. It opposed the caste system and stood for equality of all men. It thus attracted the depressed and other lower castes of the Hindus.
4. Buddhist monks led a disciplined life. They explained to the people the teachings and the good deeds of Buddha.
5. The patronage of great emperors—Ashoka and Kanishka—made it a world religion.

JAINISM

According to the Jain tradition, Jainism is as old as the Vedic religion. There were twenty four *Tirthankaras* (spiritual gurus), the last being Mahavira who was born in 599 BC near Vaishali.



Lord Mahavira

He was a *kshatriya* prince of the Lichchhavi clan. He left home at the age of 30 in search of truth. After 12 years he attained true knowledge.

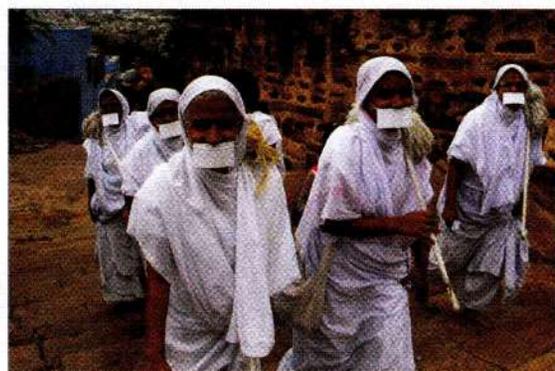
The word Jainism comes from term *Jina* meaning 'conqueror'. Mahavira's teachings were initially given orally and were known as Purvas and Angas.

TEACHINGS OF MAHAVIRA AND THE JAIN RELIGION

1. Mahavira opposed Vedic rituals and sacrifices.
2. He preached in Prakrit, a language understood by all. According to him, the aim of life was to free oneself from the cycle of births and rebirths. This was possible if one led a life based on right faith, right knowledge and right conduct. These, he called the three jewels.
3. A person should not lie, steal, injure or be greedy for luxury and possessions. Wealth should be spent on charity.
4. Mahavira spoke of *ahimsa*. It means non-injury or non-violence. Great importance was laid on the principle of non-injury. Every living being has a soul. So causing injury to any living being; be it a human being, insect or animal; was a sin.

Many Jain monks even today cover their noses and mouths with a cloth to avoid inhaling of insects that exist in the air. They do not eat after sunset to avoid even unconscious injury to a tiny living thing.

After Mahavira, two sects were formed among the Jains—the *Digambaras* and the *Swetambaras*. The *Swetambara munis* wear white garments. The *Digambara munis* discarded the clothes entirely.



Jain monks

SPREAD OF JAINISM

The Jain *munis* or monks spread Mahavira's teachings in Rajasthan, western India, Bengal, central India and southern India. Jainism did not spread as widely or as speedily as Buddhism. In later times, it remained confined mainly to Gujarat, Rajasthan, Karnataka and Andhra Pradesh. This religion became popular among traders in these regions.

For several centuries the teachings of Mahavira and his followers were passed orally. About 1,500 years ago, the teachings were written down for the first time at Valabhi in Gujarat.

SIMILARITIES BETWEEN BUDDHISM AND JAINISM.

1. Both Mahavira and Gautama Buddha came from royal families. Both left their homes in search of truth.
2. They believed in equality and rejected the caste system and the domination of the Brahmins.
3. Both believed in *ahimsa* (non-violence), the principle of *karma* (good deeds) and *moksha* (salvation).
4. They taught in Pali and Prakrit which were the languages of the common man.

A Summary of the Lesson

- **Hinduism:** The Hindus worship the divine in every form and believe in the theory of transmigration and *karma*. *Karma marg*, *gyan marg* and *bhakti marg* are the three ways to realize God. Hinduism has no founder and no central authority.
- **Upanishads:** The *Upanishads* explain the relationship between *jeeva* and *Brahma*.
- **Buddhism:** Buddha taught (1) the four noble truths; (2) the eightfold path; (3) the middle way; and (4) rejected the caste system.
- **Jainism:** Mahavira opposed the Vedic rituals and preached that one should lead a moral life based on right faith, right knowledge and right conduct. He laid great stress on *ahimsa*.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The biggest of all *Upanishads* is the
 - (a) *Chhandogya Upanishad*.
 - (b) *Taittiriya Upanishad*.
 - (c) *Brihadaranyaka Upanishad*.
 - (d) *Katha Upanishad*.
2. Which of the following Mauryan Emperors became a great patron of Buddhism?
 - (a) Chandragupta Maurya
 - (b) Ashoka
 - (c) Bindusara
 - (d) Brihadrath
3. The word *jina* in the Jain religious texts means a
 - (a) warrior.
 - (b) conqueror.
 - (c) monk.
 - (d) guru.
4. The word *Moksha* means
 - (a) *ahimsa*.
 - (b) right means of livelihood.
 - (c) salvation (freedom from cycle of birth and rebirth).
 - (d) right action.

II. Fill in the blanks choosing the correct options.

- is regarded as the creator of universe.
 (a) Vishnu (b) Brahma (c) Shiva
- Buddha was born in the sixth century BC at
 (a) Bodhgaya (b) Lumbini (c) Vaishali
- Buddha gave his first religious sermon at
 (a) Pataliputra (b) Avanti (c) Sarnath
- Upanishad* means sitting down near (or at the feet of)
 (a) mother (b) father (c) guru

III. Match the columns.

Column A

- Upanishads*
- Tripitakas*
- Digambaras*
- Jina*
- Svetambaras*
- Purvas* and *Angas*

Column B

- Buddhist sacred texts
- Jainism
- Hindu scriptures
- Sky-clad (naked)
- Mahavira's teachings
- White-clad

IV. Solve the crossword puzzle with the help of clues given below.

		↑S						4→R	↓A		U	L
		V										
	1→V	E	D			T				I	↓U	
						2→M	O		S		A	
									A		N	
		3→B		↓D		H	A					
				I								
			S		M							
							A				S	
	5→S	A			K	R	T					
					S							

CLUES	
Across	
1.	Conclusion of the inquiry which began with the Vedas
2.	Freedom from the cycle of birth and rebirth
3.	Siddhartha
4.	Budha's son
5.	A language
Down	
A.	White clad
B.	Naked / Sky clad
C.	Founder of Jainism
D.	Mahavira stressed on the principle to follow
E.	That explains the relationship between Jeeva and Brahma

ANSWERS

Across

- | | | |
|------------|-------------|-----------|
| 1. Vedanta | 2. Moksha | 3. Buddha |
| 4. Rahul | 5. Sanskrit | |

Down

- | | | |
|----------------|---------------|-------------|
| A. Svetambaras | B. Digambaras | C. Mahavira |
| D. Ahimsa | E. Upanishads | |

V. Give short answers for the following questions.

1. Describe any two teachings of the *Upanishads*.
2. What are the four noble truths?
3. Mention the two main teachings of Mahavira and the Jain religion.
4. Name the two sects in which both Buddhism and Jainism were divided.
5. Mention any two similarities between Buddhism and Jainism.

VI. Answer the following questions.

1. Why did Buddhism become so popular?
2. What is the main difference between the two sects of Buddhism?
3. Why do Jain Monks cover their noses and mouths?

VII. Who am I?

1. I founded Buddhism.
2. I am the 24th Tirthankara of the Jains.
3. I am the place where Lord Buddha attained enlightenment under a peepal tree.

VIII. Map Work

On the map of India, show the following places.

- | | |
|----------------|-------------|
| 1. Kapilavastu | 2. Bodhgaya |
| 3. Sarnath | 4. Vaishali |

IX. Projects and Activities

1. Paste pictures of the founders of Buddhism and Jainism and write the names of some of the holy scriptures of the two religions.
2. The *Jataka* tales are the stories from the previous births of Buddha. Narrate one of the stories in the classroom.

VALUE-BASED QUESTION

If you were to start a new religion today, what should be the teachings you would like people to follow? Which practices would you ask them to give up?

INTERESTING FACT

The Upanishad

*Asato ma sadgamaya
Tamaso ma jyotirgamaya
Mritoyr ma amritamgamaya*

Meaning: From the unreal, lead me to the real,
From darkness, lead me to the light,
From death, lead me to immortality.

—from Brihadaranyak Upanishad

HOTS: THINK BEYOND

Who is the current head of the Buddhists in the world? Which region of the world does he belong to? Where does he live at present?

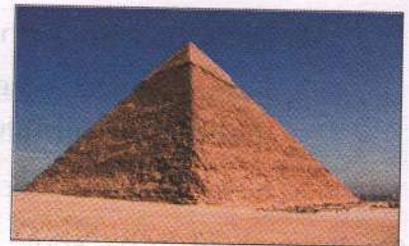


PROJECT WORK

(Based on Chapters 4–6)

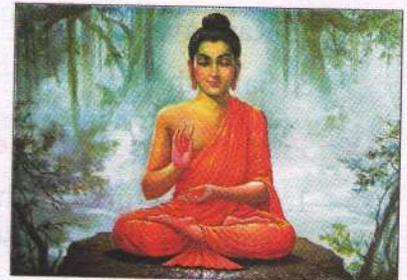
I. Presentation

Make a PowerPoint presentation on the practice of burials in the Deccan. How was it different from the Egyptian concept of burial in a pyramid?



II. Role Play

Develop a script on the life of Buddha. Mention the incidences of King Bimbisara meeting Buddha. Enact the play in your class.



III. Project Report

Make a comparative report on the lives and teachings of Buddha and Mahavira. How are both similar in their ideas and practices?





TEST PAPER

(Based on Chapters 1–6)

Total Marks: 50

Time: 2 Hours

A. Tick (✓) the correct answer.

1 × 8 = 8

1. The period before the invention of writing is known as
(a) history. (b) pre-history. (c) post-history. (d) mid-history.
2. In which age was iron discovered?
(a) Vedic Age (b) Stone Age (c) Copper Age (d) Bronze Age
3. The tools that were longer and that evolved into knives and spears were called
(a) core tools. (b) blade tools. (c) flake tools. (d) sharp tools.
4. Where were dwelling pits found?
(a) Leh (b) Ahom (c) Burzahom (d) Arikamedu
5. Which was the most important invention of the Neolithic Age?
(a) Wheel (b) Iron (c) Stone (d) Bronze
6. Which was the first domesticated animal?
(a) Dog (b) Cow (c) Horse (d) Bull
7. Ajatshatru was the ruler of
(a) Magadh. (b) Avanti. (c) Kosala. (d) Vatsa.
8. The *Jataka* tales are the stories of
(a) Mahavira. (b) Buddha. (c) Rama. (d) Krishna.

B. Fill in the blanks.

1 × 6 = 6

1. is the study of the past.
2. A bronze figure of a dancing girl has been found at.....
3. Buddha's teachings are based on the noble truths.
4. Jina means
5. There is a temple of called the Angkor Vat in Cambodia.
6. Buddha was born in

C. Define the following.

2 × 3 = 6

1. Janapadas
2. *Upanishads*
3. Varna system

D. Write short answers in about 30 words.

2 × 5 = 10

1. What is secular literature?
2. What was the eightfold path taught by Buddha?
3. Who was Ajatashatru? What do you know about him?
4. Name the four Vedas and one of the Upanishads.
5. What do you know about the Pashupati Seal of the Harappan people?

E. Give long answers in about 60 words.

4 × 5 = 20

1. What are inscriptions? How do they help us to know about ancient India?
2. What do you know about the religion and religious practices of the Vedic Aryans?
3. Write a short note on the Great Bath.
4. Why did early civilization develop along the river banks?
5. Write a short note on Inamgaon: A Chalcolithic Settlement.

The Mauryan Empire

New Words to Remember

Relics: Things which are preserved because they are associated with famous persons or important events of the past.

Edict: A command or an instruction.

Stupas: Dome-like structures built either of bricks or stones.

Dhamma Mahamatras: Emperor Ashoka appointed some special officers for propagating *dhamma* and implementing royal orders in this regard. Such officers are called Dhamma Mahamatras.

Dynasty: A line of hereditary rulers with a common descent.

ALEXANDER'S INVASION AND DEFEAT OF KING PORUS

Alexander, the king of Macedonia, after his victory over Iran turned towards India. In 326 BC he attacked the north-west part of the country. Porus made preparations to resist the invader. Alexander gathered his forces on the left bank of the Jhelum. He crossed the Jhelum and made a surprise attack on Porus. King Porus fought bravely, but was seriously wounded and taken prisoner. When produced before Alexander, Porus said he should be treated like a king who fought for his motherland. Alexander admired Porus' courage. Alexander gave Porus back his kingdom and made him a friend and ally.

ALEXANDER'S RETURN JOURNEY

Alexander planned to march forward. He crossed the Chenab and the Ravi rivers and advanced up to the Beas. But the areas conquered by him rose in revolt. His soldiers also refused to go any further because the territory beyond the Beas was ruled by the mighty Nanda emperor. With a heavy heart, he began his return journey. That was in 325 BC. A year later he died at Babylon (in modern Iraq).



Alexander

EFFECTS OF ALEXANDER'S INVASION

Alexander had appointed a few governors to look after the territories he had won. His empire broke up soon, but its indirect results were many.

1. It was India's first contact with the West. The sea and the land routes taken by Alexander encouraged the traders. This boosted trade between India and Europe.
2. Many Greeks had settled in the north-west region. Indian art and culture came to be influenced by the Greeks. The Greek technique left its mark on the Gandhara School of Art.
3. The invasion made the kingdoms of the north-west weak. This paved the way for the rise and growth of the Mauryan empire in India.

THE FOUNDATION OF THE MAURYAN EMPIRE

Vishnugupta, better known as Chanakya or Kautilya, was a learned Brahmin of Taxila. He had gone to Pataliputra where he was humiliated by the Nanda king. On his way back to Taxila he met young Chandragupta Maurya. Seeing the sign of greatness in the boy, he took Chandragupta Maurya to his native town. He gave Chandragupta Maurya a perfect education.

CONQUEST OF PUNJAB AND MAGADHA

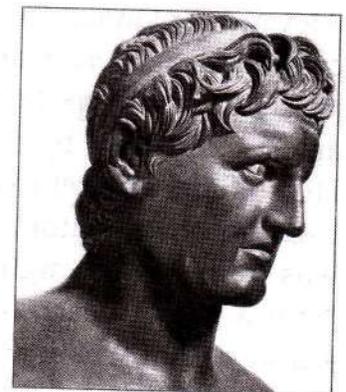
Both Chanakya and Chandragupta Maurya set out to recruit soldiers for the army. Chandragupta Maurya installed himself as a king. He first defeated the Greeks who were the rulers of north-west region of India. Soon he made himself the master of the whole of Punjab and Sindh. Then he turned towards Pataliputra. The Nandas were completely defeated. He became the first ruler of the Maurya dynasty in 324 BC.

WAR WITH SELEUCUS

The territories west of the Indus were ruled by the Greek king, Seleucus. Chandragupta Maurya crossed the Indus in 305 BC. The Mauryan armies rushed to the north-west. It was a crushing defeat for Seleucus. Seleucus was forced to give many territories (Herat, Kabul and Kandahar) to Chandragupta Maurya. These territories are the parts of modern Afghanistan. Chandragupta Maurya married princess Helen, the daughter of king Seleucus. The Greek king sent

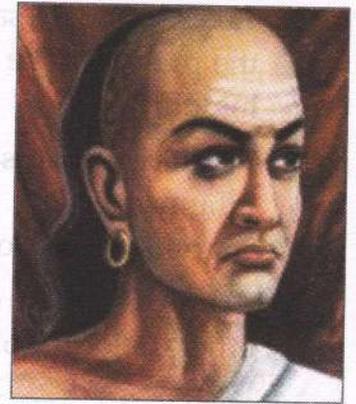


Buddha's statue reflecting Greek influence



Seleucus

Megasthenes as his ambassador to the Mauryan court. Megasthenes lived at Pataliputra for a long time and wrote a book called *Indika*.



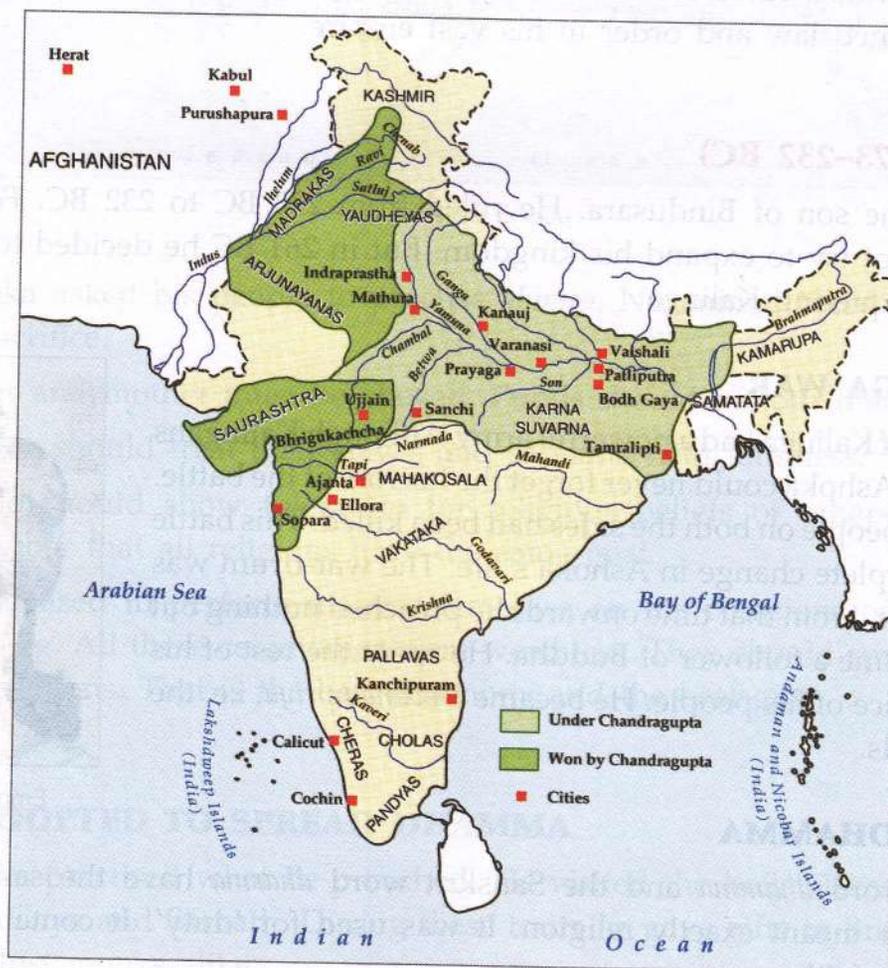
Kautilya

THE GREATNESS OF CHANDRAGUPTA MAURYA

Chandragupta Maurya has been described as the first historical emperor of India. He ruled for about 25 years. His empire included Bihar, Bengal and Assam in the north, Mysore in the south and Herat, Kabul and Kandahar in the west.

From Megasthenes' book *Indika* we gain a lot of knowledge about the Mauryan administration. Another main source of information for this period is the *Arthashastra* written by Kautilya.

1. **Kingship:** Kautilya divided the king's day into eight parts. It was the king's duty to give close attention to people's welfare, judicial administration and military action.



Mauryan's Empire

2. **Taxes:** Kautilya said the taxes must be reasonable. The land tax was one-sixth of the produce. The king collected taxes on various trades very efficiently through his officials.
3. **Military Organisation:** There was a large standing army. It consisted of 6,00,000 infantry; 30,000 cavalry and 9,000 war elephants. The king had 2,000 war chariots and also a small navy.
4. **Administration of the Capital:** Megasthenes remarked that the city had an efficient local government. The city was administered by a municipal body.

Megasthenes' description leaves no doubt that peace and prosperity prevailed throughout the kingdom.

KING BINDUSARA (298–273 BC)

Chandragupta Maurya had embraced the Jain religion. He gave his throne to his son Bindusara. He himself settled at Sravanabelagola, a place in Karnataka. Like a Jain *muni* he fasted unto death. The hills where he lived and died is still known as Chandragiri.

King Bindusara also ruled for about 25 years. Very little is known about his reign. But he maintained law and order in his vast empire.

ASHOKA (273–232 BC)

Ashoka was the son of Bindusara. He ruled from 273 BC to 232 BC. For about 12 years he did not try to expand his kingdom. But in 261 BC he decided to extend the empire by conquering Kalinga.

THE KALINGA WAR

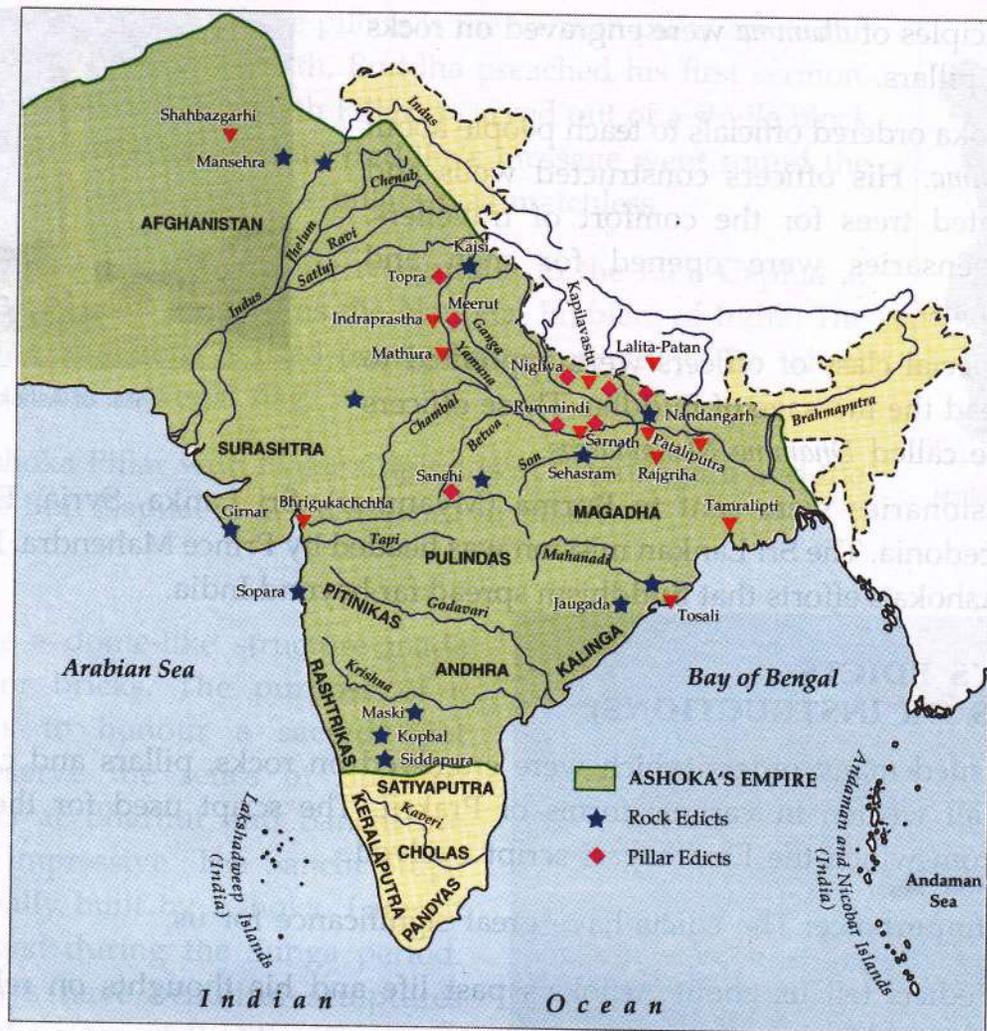
The kingdom of Kalinga had a powerful army. Although Kalingans were crushed, Ashoka could never forget the horrors of the battle. Thousands of people on both the sides had been killed. This battle brought a complete change in Ashoka's life. The war-drum was silenced forever. From that time onwards he preached nothing but peace. He became a follower of Buddha. He spent the rest of his life in the service of his people. He became *Devanampriya*, i.e. the beloved of gods.



Emperor Ashoka

ASHOKA'S DHAMMA

The Prakrit word *dhamma* and the Sanskrit word *dharma* have the same meaning. *Dhamma* never meant exactly religion. It was used for 'duty'. It contained the best of all religious faiths.



Ashoka's Empire

1. Ashoka asked his people to practise *ahimsa*. No animal could be slaughtered for sacrifice.
2. Father and mother must be obeyed. Pupils should honour their teachers.
3. Masters should treat their slaves and servants with kindness.
4. People should show toleration for religious beliefs of others. They should remember that all religions have the same goal.
5. People used to perform many ceremonies on the occasions of child birth or wedding. All these ceremonies were worthless. They should spread *dhamma* in all directions. That is the best ceremony and the best gift.

MEANS ADOPTED TO SPREAD DHAMMA

1. Ashoka practised what he preached. He visited the holy places like Lumbini, Bodh Gaya and Sarnath. During these tours he gave gifts to Brahmins and the Buddhist monks alike.

2. Principles of *dhamma* were engraved on rocks and pillars.
3. Ashoka ordered officials to teach people about *dhamma*. His officers constructed wells and planted trees for the comfort of travellers. Dispensaries were opened for men and animals.
4. A special class of officers were appointed to spread the message of Buddha. These officers were called *Dhamma Mahamatras*.
5. Missionaries were sent to Burma (Myanmar), Sri Lanka, Syria, Egypt and Macedonia. The Sri Lankan mission was headed by Prince Mahendra. It was due to Ashoka's efforts that Buddhism spread far beyond India.



Pillar of Ashoka

ASHOKA'S EDICTS (ORDERS OR INSTRUCTIONS)

Ashoka issued many orders which were engraved on rocks, pillars and cave walls. They are all written in various forms of Prakrit. The script used for the edicts is Brahmi, from which the Devanagari script evolved.

Their Importance: The edicts have great significance for us.

1. The edicts tell us about Ashoka's past life and his thoughts on religion and policies of his government.
2. The edicts tell us about the fundamental principles of *dhamma*.
3. Our whole information about the Kalinga war comes from a rock edict.
4. The edicts give us an idea about the extent of Ashoka's empire. They cover nearly the whole of India.
5. The edicts also tell us that Pali or Prakrit was the language of the people and these were written in Brahmi script.

THE MAURYAN ART AND ARCHITECTURE

THE STONE PILLARS

The stone pillars are the best specimens of the Mauryan art. These pillars are found in various parts of India like Sanchi, Sarnath, Allahabad and Nandangarh. Each pillar consists of three parts: the base, the shaft, and the capital. The capital is the top part of the pillar.

The most famous of all the pillars is the Sarnath pillar erected in the Deer Park. Here at Sarnath, Buddha preached his first sermon. The Lion Capital of the Sarnath Pillar is carved out of a single block of stone. The wheel shows that Buddha's message went round the world. The polish of Ashoka's pillars was matchless.

Modern India has given due recognition to the Lion Capital at Sarnath. It has been adopted as the National Emblem of India. The figure of the four lions is used on the Indian currency. The wheel is shown on our national flag.

The Ashoka Pillar with Horse Capital is at Nandangarh and the pillar with Bull Capital is at Rampurwa in Bihar.



National Emblem

STUPAS

A stupa is a dome-like structure made of stone or bricks. The purpose of a stupa was to honour a sacred spot or to preserve the relics of Buddha. The stupas at Bharhut and Sanchi are extremely impressive. The Sanchi Stupa was originally built by Ashoka. Later, it was enlarged during the Sunga period. Its gateways have beautiful sculptures depicting the story of Buddha.



The Sanchi Stupa

THE MAURYAN ADMINISTRATION

- 1. The Central Administration (the King and his ministers):** The king was at the head of the administration. His powers were unlimited, but he acted according to the rules of *dharma*. The king was guided by the advice of his ministers.
- 2. Provincial and Local Administration:** The empire was divided into a number of provinces, each province was under a governor. Each province was divided into a number of districts.
- 3. The City Administration:** Administration of the major towns like Pataliputra or Ujjain was organised on almost similar lines. Kautilya said the city was placed under the charge of a *Nagraka*, that is the City Magistrate. According to Megasthenes, Pataliputra was administered by a Municipal Commission of 30 members.

The Mauryan rulers had perfect control over roads and rivers as they were important for trade and commerce.

- 4. Welfare Measures:** Ashoka treated his people as his own children. He worked for their physical and moral welfare. He built hospitals for both men and

animals. Wells had been dug and rest-houses constructed for the benefit of the travellers. The emperor was a Buddhist, but he allowed people to follow their own religious beliefs. He treated the Jains, the Buddhists and followers of other sects alike.

SOCIAL CONDITIONS

The caste system prevailed. Megasthenes speaks of the caste system. The Brahmins and monks held a high position in society. The society consisted of farmers, artisans, traders, metal workers, weavers, hunters and herdsmen.

Megasthenes speaks about the high morals of the Indian society. There were no thefts and the houses were left unguarded. Ashoka prohibited games which involved violence or cruelty to animals.

THE END OF THE MAURYAN EMPIRE

Ashoka died in 232 BC. Soon after his death the empire began to decline. There were several reasons why the empire broke up.

1. The empire was very vast. It needed a strong hand to hold it together, but Ashoka's successors were weak.
2. The later kings failed to collect taxes from the people. Therefore, they could not maintain a large army.
3. The chiefs of Kalinga and the southern provinces revolted.
4. The Greek kings began to invade the north-western India.
5. The army had lost its fighting qualities because after the Kalinga War Ashoka did not fight any other war.

It was under these conditions that Brihadrath, the last Mauryan ruler, was killed by the Mauryan general Pushyamitra Sunga. That was the end of the Mauryan empire.

A Summary of the Lesson

- **Alexander's Invasion and Defeat of King Porus:** After Alexander's victory over Iran and Afghanistan, his troops crossed the River Indus. His troops made a surprise attack on Porus. Alexander admired the courage of king Porus. Alexander gave Porus back his kingdom. Alexander's soldiers refused to go any further. Alexander began his return journey in the year 325 BC.

The route taken by Alexander encouraged traders. Indian art and culture came to be influenced by the Greeks.

- **Chandragupta Maurya conquered Punjab and Magadha:** Chandragupta Maurya became the first ruler of the Mauryan dynasty. In 305 BC he defeated Seleucus. The territories of Herat, Kabul and Kandahar were added to the Mauryan empire.
- **The Greatness of Chandragupta Maurya:** Chandragupta Maurya ruled for about 25 years. (1) Mauryan ideal of kingship; (2) Taxes (3) Military organisation and (4) The administration of the city of Pataliputra.
- **King Bindusara:** Bindusara ruled from 298 to 273 BC. He maintained his vast empire in order.
- **Ashoka (273 BC–232 BC):** The Kalinga War brought about a complete change in Ashoka's life. Ashoka's *dhamma* stands for 'duty'. He asked his people to practise *ahimsa*. Parents should be obeyed and slaves should be treated with kindness. The principles of dhamma were engraved on rocks and pillars. The *Dhamma Mahamatras* saw that no animals were slaughtered.
- **Ashoka's Edicts:** Ashoka issued many orders which were engraved on rocks, pillars and cave walls. They are written mostly in the Brahmi script. The edicts tell us about Ashoka's past life and his thoughts on religion and policies of his government.
- **The Mauryan Art:** The most famous of all the pillars is the Sarnath Pillar erected in the Deer Park, where Buddha preached his first sermon. The Lion Capital of the Sarnath Pillar has been adopted as the National Emblem of India. The stupas at Bharhut and Sanchi are extremely impressive.
- **The Mauryan Administration:** (1) Ashoka's ideal of kingship; (2) Provincial and local administration; (3) City administration and (4) Welfare measures.
- **Social Conditions:** The caste system prevailed. Megasthenes spoke about the high morals of Indian society. Ashoka prohibited games which involved cruelty to animals.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The name by which Ashoka was usually known was

(a) Maharaja.	(b) Maharajadhiraja.
(c) <i>Devanampriya</i> .	(d) Shrimana.
2. The script used for Ashoka's edicts (instructions) was

(a) Devanagari.	(b) Brahmi.
(c) Arabic.	(d) Gurmukhi.
3. Kautilya had been humiliated by

(a) ruler of Kandahar.	(b) Nanda king.
(c) Greek king Seleucus.	(d) ruler of Bengal.
4. The officers appointed by Ashoka to spread message of Buddha were called

(a) Dhamma Mahamatras.	(b) Amatyas.
(c) Nagrakas.	(d) Gramikas.

II. Fill in the blanks choosing the correct option.

- Chanakya, a learned Brahmin, was also known as
(a) Kripacharya (b) Kautilya (c) Brahmadev
- The Greek king Seleucus had sent as his ambassador to the Mauryan Court.
(a) Fa-Hien (b) Helen
(c) Megasthenes
- The war with the ruler of brought complete change in Ashoka's life.
(a) Magadha (b) Kabul
(c) Kalinga
- Chandragupta Maurya became the first ruler of the Mauryan dynasty in
(a) 189 BC (b) 286 BC
(c) 324 BC (d) 305 BC
- The Ashokan pillar with Bull Capital is at
(a) Nandangarh (b) Rampurva in Bihar
(c) Sanchi

III. Match the columns.

Column A

- Script
- Kautilya
- National Emblem
- Megasthenes
- Stupa

Column B

- (a) Sarnath Pillar
- (b) Sanchi
- (c) Brahmi
- (d) *Arthashastra*
- (e) *Indika*

IV. Give short answers for the following questions.

- Who has been described as the first historical emperor of India?
- Name two important rulers of the Mauryan dynasty.
- Name any two places where the Ashoka pillars are found.
- What is the significance of the Lion Capital of the Sarnath Pillar for modern India?
- Name the book which Megasthenes wrote on India.

V. Answer the following questions.

- What were the effects of the Kalinga War?
- List out any three principles of *dhamma*.
- What information does *Arthashastra* provide about the Mauryan Administration?
- What led to the disintegration of the Mauryan empire?
- Discuss the various measures taken by Ashoka to spread Buddhism?

8

Life in Towns and Villages

New Words to Remember

Ring wells: Ceramic rings arranged one on top of the other.

Dakshinapatha: Land to the south of the Vindhya mountains and the Narmada river.

Urns: Small containers.

A major advancement in history was due to the discovery of iron around 2000 BC. It was discovered around 1000 BC in India. A profound change could be seen now in political and social-economic structure, especially in the Gangetic plains and later in the Deccan.

LIFE IN VILLAGES

USE OF IRON TOOLS

1. With the introduction of new iron tools like axes, ploughshare, agricultural production increased. People were able to produce more from the same piece of land. With the axes, land was cleared for cultivation and ploughshare helped in turning over hard soil. Irrigation facilities included canals, wells, tanks and artificial lakes.
2. Iron was used for making tools for different crafts.
3. Weapons of war came to be made of iron.
4. With the discovery of iron, there was rapid spread in civilization.

DIFFERENT CLASSES OF CULTIVATORS

Most of the villages in southern and northern India were inhabited by three different kinds of people. In the Tamil region, landowners were called *vellalar*, ordinary ploughmen as *uzhavar*, and landless labourers as *kadaiyyar* and *adimai*.

In north India, the village headman was called the *gramabhojaka*. Most often he was the largest landowner and hired labourers and slaves to cultivate the land. Apart

from being the village headman, he functioned as a judge and a policeman. He also collected taxes for the king. Then there were small land owners called *grihapatis*. The landless workers were known as *dasas* or *karmakaras*.

LIFE IN TOWNS OR CITIES

ARTS AND CRAFTS

Craftsman like blacksmiths, goldsmiths, potters, weavers and carpenters lived in villages.

Most of the cities that developed were capitals of the *Mahajanapadas*. It is believed that these cities were fortified with massive walls to guard against foreign invasions.

Archaeologists have discovered that many cities had ring wells which were probably used as toilets, drains or pits to dump garbage.

Very fine pottery has also been found. It suggests the high standard of craftsmanship.

TRADE AND COMMERCE

Travellers and sailors have left behind a good description of the early cities. One such account about the port city, *Barygaza* (Greek name of Bharuch) has been left behind by a Greek sailor. The imports in this city included gold, silver coins, copper, tin, lead, coral, topaz, wine, etc. Exports included cotton, silk, ivory, perfumes, agate, etc. Merchants would bring special gifts for the king.

Trade links developed between north and south India and also with the Roman Empire. Several punch marked coins made of copper and silver have been found. It shows that the barter system gave way to the use of money.



Punch-marked coins

SHRENIS

Sources refer to associations or trade guilds called *shrenis* which provided assistance to craftsmen. They also got raw material from adjoining areas and distributed the finished products. Sometimes *shrenis* were used as banks where the rich invested their money. In short, *shrenis* were organised to protect the interests of the craftsmen.

IMPORTANT TOWNS AND CITIES

Several port cities like Bharuch, Sopara, Arikamedu developed because of increase in trade and commerce. Crafts like silk-weaving, cloth-making and dyeing grew in cities like Kaveripattanam, Vaishali, Madurai and Varanasi. Some of the cities were religious centres like Bodhgaya, Ujjain and Mathura. Others were administrative centres like Pataliputra, Vaishali and Rajagriha.

Sometimes, a single town became important for a variety of reasons. Mathura is one such example. For more than 2,500 years Mathura has been an important town as it served both as a trade and a travel link – from north to south and north-west to east. Mathura has beautiful stone sculptures dating back to the period of the Kushanas. Several Jain shrines, Buddhist monasteries and temples of Lord Krishna are found here.

Case Study

Tamil Nadu

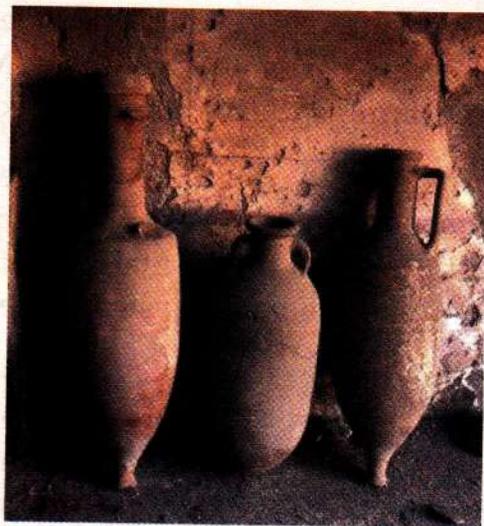
During the Iron Age the Deccan was called Dakshinapatha. Iron was first used in the south by the Megalithic people. The Megalith burials help us to reconstruct the history of south India during the period of the Satavahanas, the Cholas, the Cheras and the Pandyas.

During the early years of the Christian era, the present day Tamil Nadu was ruled by the Pandyas. Agriculture and trade formed the main source of revenue for the king. Cities and towns grew. The chief being Madurai, Mahabalipuram, Uraiyur and Tirunelveli.

Arikamedu in Puducherry was a port town. Most of the imports and exports must have taken place from here. A brick structure has been found at the site which may have been a warehouse or a granary.

Different types of pottery have been found, such as amphorae, tall double-handled jars to keep liquids. Red-glazed pottery made by wet clay known as arretine ware (named after an Italian city) was also found. Another local pottery with Roman designs have also been found. Besides Roman gems, lamps and glassware have also been found. This indicates that the Pandyas had trade links with Rome in particular.

Small urns have been found at Uraiyur. Probably they were used to dye cloth or to contain the ashes of the dead. Besides, discovery of iron tools and weapons, bronze figures of high quality suggest that most of these settlements were mining and industrial towns.



Jars unearthed from Arikamedu

A Summary of the Lesson

- Discovery of iron brought about a change in the field of agriculture.
- Iron tools like axes and ploughshare increased agricultural production.
- Three different kinds of people inhabited the villages of south and north India—the landowners, the ordinary ploughmen, and landless labourers and slaves.
- Popular occupations were metal working, pottery making, weaving and dyeing.
- There was flourishing trade between Tamil Nadu (Pandyas) and Rome.
- Growth of cities and towns, especially Mathura, was due to its strategic position.
- Pandya was a flourishing kingdom.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer:

1. Iron was first used in India
(a) 4000 BC (b) 3000 BC (c) 2000 BC (d) 1000 BC
2. Around 1000 BC India did have trade links with Empire.
(a) British (b) Roman (c) Greek (d) Persian
3. The Megalith burials help us to reconstruct the history of:
(a) south India. (b) north India. (c) western India. (d) eastern India.
4. Which among these was not a port town?
(a) Sopara (b) Arikamedu (c) Bharuch (d) Ujjain

II. Match the columns.

Column A

1. Iron gates
2. *Vellalar*
3. *Dasas (Karmakaras)*
4. Bharuch
5. Pandyas
6. *Shrenis*

Column B

- (a) Port city
- (b) South Indian rulers
- (c) Agricultural production
- (d) Trade guilds
- (e) Tamil landowners
- (f) Landless workers in north India

III. Give short answers for the following questions.

1. How did iron tools help increase production of food?
2. What were the three different kinds of people called in the Tamil region?
3. What are ring wells?

4. What are punch-marked coins?
5. What were the imports and exports from the port town of Bharuch?
6. Give any two important functions performed by the *Gramabhojaka*.

IV. Answer the following questions.

1. Discuss the contribution of the *shrenis* in the economic growth of people.
2. Explain how Mathura became an important town.
3. Write a brief note on Arikamedu town in Puducherry.
4. Describe the different types of pottery found in Arikamedu.

V. Who am I?

1. I am a trade guild. I am called
2. I am the port city of Bharuch. The Greeks called me
3. I am the headman of a village and I am called

VI. Projects and Activities

Make a project on the town of Arikamedu. Include in it the following points.

- (a) The present situation of the town.
- (b) Compare it with the ancient times.

9

India from 200 BC to 300 AD

New Words to Remember

Satrap: The provincial governors of the Saka empire.

An Era: A system of counting years or dates starting from some particular point of time.

Sangam: Assembly or gathering. Many poets, scholars and bards met at these gatherings at Madurai in Tamil Nadu.

Bodhisatvas: They were enlightened persons who remained in the world for the welfare of other living beings.

NORTH INDIA AFTER THE MAURYANS

THE SUNGA AND THE KANVA RULERS

The last Mauryan ruler Brihadratha was a weak person. He was killed by his army general Pushyamitra Sunga. Pushyamitra and his successors came to be known as the Sunga rulers. The Sunga dynasty ruled for about 112 years. The last Sunga king was Devabhuti. He was killed by his minister Vasudeva Kanva in 72 BC. The Kanva dynasty lasted for about 45 years, from 72 BC to 27 BC. It was overrun by the Andhra rulers.

The Sunga and the Kanva rulers followed Brahminical religion. Pushyamitra Sunga had to fight the foreign invaders, the Bactrian Greeks. He won a great victory in the war. To celebrate his victory he performed *Ashvamedha* (horse sacrifice).

THE NORTH-WEST

THE INDO-GREEKS

1. **Bactria:** Bactria lay between the Hindukush mountains and the River Oxus. After Alexander's conquest the Bactrians had adopted the Greek culture. Menander (Milinda) was the most important among the Indo-Bactrian kings. He ruled over a vast kingdom which included Gandhara, north-western India, Punjab, Sind and parts of Uttar Pradesh and Rajasthan. His capital was Sakala (Sialkot in Pakistan).

Menander became a disciple of the Buddhist monk Nagasena. The book *Milindapanah* is one of the most notable books in Buddhist literature. The other Bactrian rulers worshipped Lord Vishnu. Their way of life was an amazing mixture of Indian and Greek cultures. That is the reason why we call them Indo-Greeks.

2. **Parthia:** The Parthians were also of the Greek origin. They ruled over Parthia which included some parts of modern Iran. Gondophernes was the most famous among the Parthian kings. Taxila was his capital. The Parthian empire split into pieces after Gondophernes' death.
3. **The Sakas:** The Sakas were driven out of their homeland by the Yueh-Chi tribe, living outside the Chinese Wall. They overran the Parthians. They then crossed Baluchistan and settled in the regions of the lower Indus.



Coins issued by Menander

The provincial governors of the Saka kings were known as *Satrap* (*Kshatrapas*). The Satraps of Taxila, Nasik, Ujjain and Mathura occupy a prominent place in the Indian history. Rudradaman, the Satrap of Ujjain, ruled from 130 AD to 150 AD. The last Saka Satrap was defeated by Chandragupta II in 398 AD.

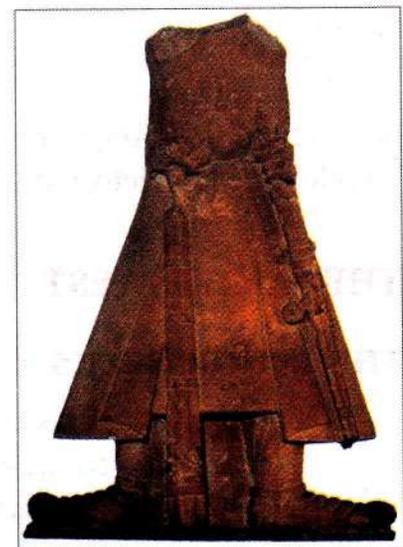
THE KUSHANAS

The Kushanas were a branch of the famous Yueh-Chi tribe. In the first century AD they defeated the Parthians and Saka Satraps of Taxila. They captured parts of Afghanistan from them. Later, their empire became very vast.

KING KANISHKA

Kanishka was the greatest of the Kushana rulers. He ruled from 78 AD to 101 AD. He started a new era, which began with the first year of his rule, that is 78 AD. It came to be known as the Saka era because of its long use by the Saka Satraps of Ujjain.

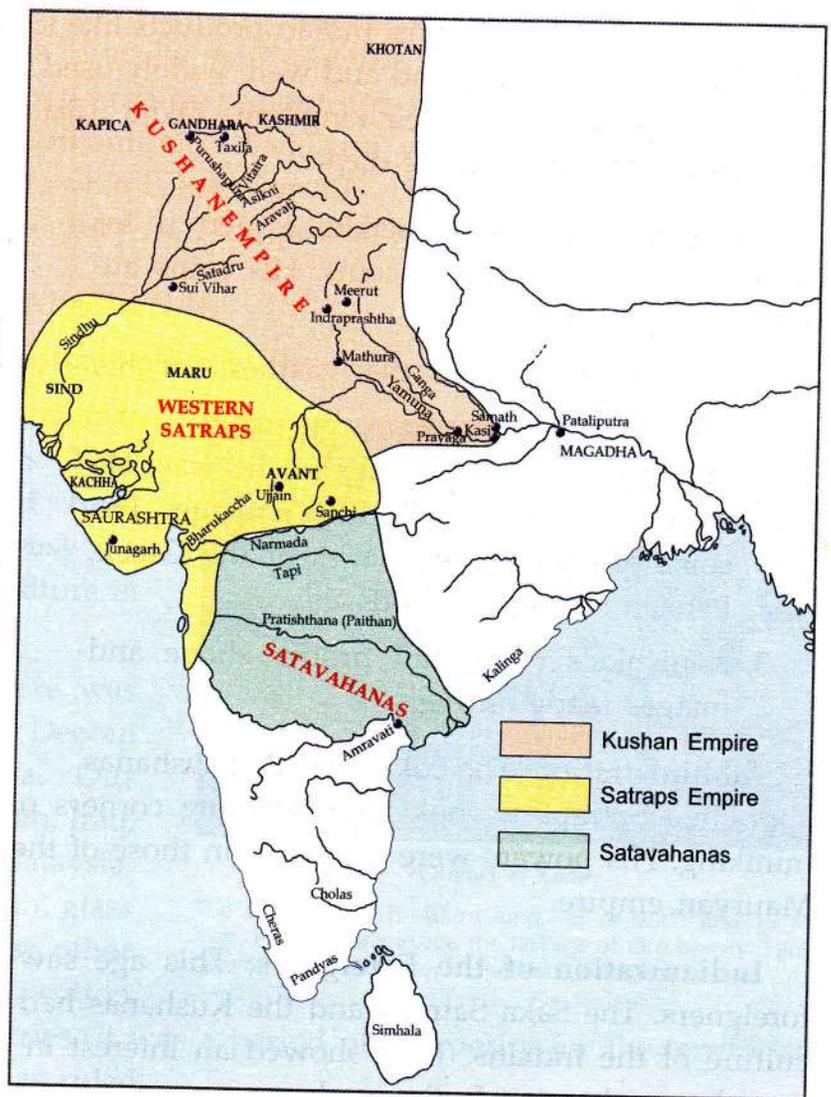
Kanishka's Empire: Kanishka was a great warrior. His empire included Afghanistan, Kashgar, Khotan, Yarkand, Peshawar, Punjab, Kashmir and parts of Uttar Pradesh and Bihar. The capital of this vast empire was Purushapur, modern Peshawar.



Headless statue of Kanishka, discovered in the Mathura district

His Religion: Kanishka was converted to Buddhism by a Buddhist monk, Ashvaghosha. During his reign Buddhism got split into two sects known as *Hinayana* (Lesser Vehicle) and *Mahayana* (Great Vehicle).

The followers of *Hinayana* looked upon Buddha as their teacher and guide. They did not regard him as being a deity or a god. They had no faith in idol worship. But the followers of *Mahayana* believed that Buddha was an incarnation of God like Rama and Krishna. They worshipped the images of Buddha and Bodhisattvas. They constructed many temples having Buddha's images. Kanishka followed the Mahayana sect. He issued many coins bearing Buddha's image.



Map of the Kushana Empire

Art and Sculpture: A new school of art, called the Gandhara School, developed during the reign of Kanishka. The images of the Gandhara school were greatly influenced by the Greeks.

A Great Patron of Learning: Kanishka was a great patron of learning. Ashvaghosha and Vasumitra enjoyed his favour. Ashvaghosha is the author of *Buddhacharita*. It is a long poem on the life of Buddha. The physician Charaka also lived at his court.

Trade with western Asia, China and Other Countries: Trade brought prosperity to the kingdom. The Kushanas traded with the Roman Empire. Trade relations existed with China and western Asia through the Silk Route. Kanishka controlled the Silk Route. The Silk Route extended from Central Asia down to the mouth of the Indus river. From these sea ports silk was exported to Rome. The traders along the sea

routes used Kanishka's coins. Indian products like silk, diamonds and other precious stones were in great demand and were widely used. The Kushanas imported copper, tin, glass and gold into their kingdom. Taxila, Ujjain and Mathura had become big commercial centres in those days.

Kanishka's Coins: Kanishka issued a lot of gold, copper and silver coins. His coins are important for three reasons.

1. The coins indicate the vastness of his empire.
2. The coins show how tolerant he was. He issued coins bearing Buddha's images. His coins also bore the images of the Greek, Persian and Hindu gods.
3. Kanishka's coins had proper shape and images made on them.



Kanishka's Coins

Administration: The Sakas and the Kushanas appointed Satraps to look after far-flung corners of the empire. The Satrap was a miniking. His powers were greater than those of the provincial governors under the Mauryan empire.

Indianization of the Foreigners: This age saw the rapid Indianization of the foreigners. The Saka Satraps and the Kushanas had no ill will towards religion and culture of the Indians. They showed an interest in the welfare of the people. They issued coins bearing Indian gods.

SUCCESSORS OF KANISHKA

Very little is known about the successors of Kanishka. Vashishka succeeded him. He ruled for about five years only. The Kushana rule continued in the Kabul valley till the invasion of the Huns in the fifth century AD.

THE DECCAN

The peninsular India consists of two main regions. The Deccan Plateau lies between the Narmada river in the north and the Krishna and the Tungabhadra rivers in the south. Territories to the south of Krishna and Tungabhadra came to be known as the Tamil country, that is the land of the Tamils. This region saw the rise of the kingdoms of the Pandyas, the Cheras and the Cholas.

THE KING KHARAVELA OF KALINGA

After the death of Emperor Ashoka, Kalinga was ruled by the Kharavela in the second century BC. The king was a follower of Jain religion. He built a number of caves at Udayagiri and Khandagiri hills for the use of Jain *munis*.

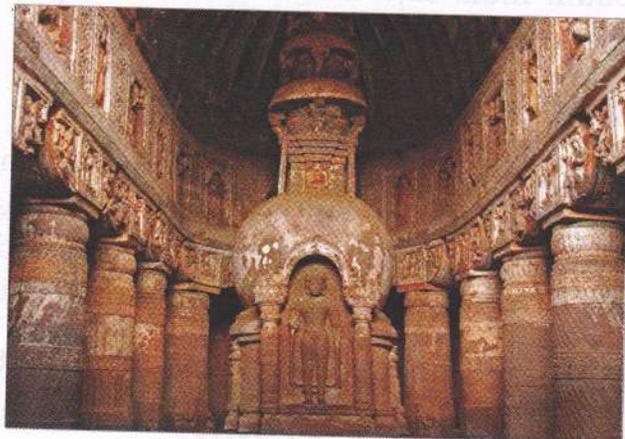
THE SATAVAHANAS

The founder of the Satavahana dynasty was Simuka. The Satavahanas were a dominant power in the Deccan (Andhra region) for more than three centuries (first century BC to 220 AD). Gautamiputra Satakarni who ruled from 106 AD to 130 AD and his son Vasishtaputra who ruled from 130 AD to 154 AD were powerful rulers. At the close of the first century AD, the power of the Satavahanas declined.

IMPORTANCE OF THE SATAVAHANAS

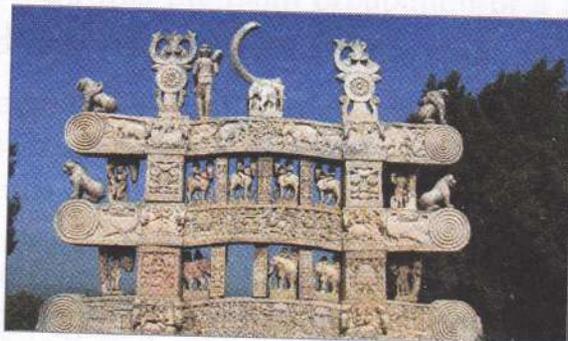
The Satavahanas occupy an important place in the history of the Deccan.

1. **Administration:** The Satavahanas were good administrators. They cleared the forests and built many roads. That made easy the expansion of the Aryan culture in the south.
2. **Trade and Economy:** There was a brisk trade between the Deccan and north-western India. Our merchant ships sailed to Iran, Iraq, the Arab countries and Malaysia. We bought wine, copper, tin, glass and precious stones from other countries. We sold spices, cotton and muslin to these countries. It was a period of prosperity for the territories over which the Satavahanas ruled.
3. **Religion:** Shiva and Vishnu were the most popular deities in the Deccan. The rulers performed sacrifices such as *Ashvamedha* or horse sacrifice. They were tolerant of other religious faiths. The Jain and the Buddhist monks received large donations from them.
4. **Art and Architecture:** The Satavahanas worshipped Lord Vishnu and Lord Shiva, but they also built the Buddhist *stupas* and temples. These kings had huge rocks cut into caves and built lovely temples inside. The prominent examples



Chaitya at Karle

The Chaitya hall is 40 m long, 15 m wide and 15 m high. The columns inside the hall are of rare beauty. Each column has a potbase, a shaft and a capital on top.



North gateway of the Sanchi Stupa



The Great Stupa at Amaravati

of the cave temples are those of Nasik, Karle and Bedsa. The *Chaitya* at Karle (Pune, Maharashtra) is one of the finest specimens of rock-cut temples.

The beauty of the sculptural art can be seen in the gateways of the Sanchi Stupa. You may have seen pictures of the beautiful statues at Amaravati and Nagarjunakonda in Andhra Pradesh. These were built by the Satavahana rulers.

THE SOUTHERN KINGDOMS

South India saw the rise of three important kingdoms. The Chola, the Pandya and the Chera rulers were collectively called 'Muvendar'.

THE CHOLA KINGDOM

The Chola kingdom comprised the modern districts of Thanjavur (Tanjore) and Tiruchchirappalli. Karikala was the greatest among the early Chola rulers. He defeated a number of kings including the Chera and the Pandya rulers. He brought prosperity to his kingdom. The successors of Karikala were weak. Their power, therefore, declined.

Pumpuhar was a very important port city of the Cholas.

THE PANDYA KINGDOM

The Pandyas occupied the southernmost tip of India. They had their capital at Madurai. The Pandyas had been having a very long history. The Pandya rulers were great patrons of art and literature. It is they who arranged the assembly of scholarly persons at Madurai from time to time.

THE CHERA KINGDOM

The Chera kingdom extended along the western coast. It comprised the regions which are now parts of Kerala. None of the Chera kings could become as famous as the Chola ruler Karikala was.

SANGAM LITERATURE

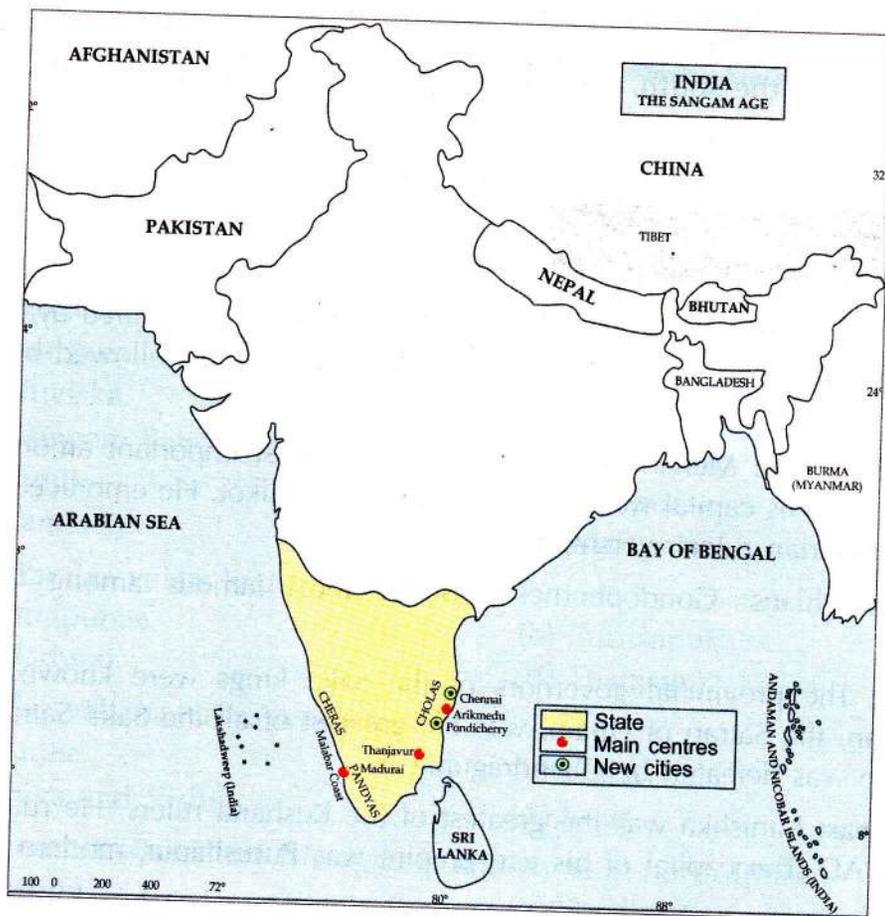
The word Sangam means an 'assembly'. Sangams or assemblies of literary men were held at Madurai. They produced excellent literature in Tamil.

The Sangam literature gives a detailed account of the history, society and culture of the kingdoms of south India.

IMPORTANCE OF THE SOUTHERN KINGDOMS

THEIR ADMINISTRATION

The king was assisted in his task by a group of ministers. The kingdom was divided into a number of provinces, each placed under the charge of a viceroy.



Map of Sangam Age

Each province was divided into several divisions. The village assemblies managed the rural affairs.

Trade and the Trade Routes

There was a brisk trade between India and the West. The Roman kings bought many south Indian goods such as pearls, spices, perfumes, sandalwood, silk and muslin. Hundreds of Roman coins have been found at places close to the south Indian coast. The ships laden with Indian goods sailed to the Arabian and African ports also. The trade and industry made south Indian kingdoms very rich.

Life of the People

Agriculture was the main occupation of a large section of the people. Barter system prevailed along with money economy.

The rulers beautified their capitals with magnificent temples. The temples also served as schools for the study of *dharmashastras* and various arts and sciences. On the whole, people lived happily in wealth and prosperity.

Religion

Ashoka had sent Buddhist missionaries to the three kingdoms of the south. Jainism had also reached there. But majority of the people had accepted Vishnu, Shiva and

Krishna as their main deities. *Murugan*, known as *Kartikeya* in the north, was the most popular deity in the south. The kings performed sacrifices of many kinds. They built many temples.

A Summary of the Lesson

- **The Sunga and the Kanva Rulers:** The last Mauryan ruler was killed by Pushyamitra Sunga. The Sunga dynasty ruled for about 112 years. It was followed by the Kanva dynasty.
- **The Indo-Bactrians:** Menander (Milinda) was the most important among the Indo-Bactrian kings. His capital was Sakala, the modern Sialkot. He embraced Buddhism. The other Bactrian rulers worshipped Lord Vishnu.
- **The Indo-Parthians:** Gondophernes was the most famous among the Parthian kings.
- **The Sakas:** The provincial governors of the Saka kings were known as Satraps. Rudradaman, the Satrap of Ujjain, was the greatest of all the Saka Satraps. The last Saka Satrap was defeated by Chandragupta II.
- **The Kushanas:** Kanishka was the greatest of the Kushana rulers. He ruled from AD 78 to 101 AD. The capital of his vast empire was Purushapur, modern Peshawar. Kanishka was converted to Buddhism by a Buddhist monk Ashvaghosha. Buddhism during Kanishka's time was split into two sects, Hinayana and Mahayana. During the reign of Kanishka a new school of art came up. It was called the Gandhara School of Art. Kanishka patronised Ashvaghosha and Vasumitra. The Kushanas traded with the Roman empire. Trade relations existed with China and Western Asia also. Kanishka issued a lot of gold, copper and silver coins. This age saw the rapid Indianization of the foreigners.
- **The Deccan:** The king Kharavela of Kalinga ruled in the second century BC. He was a good administrator.
- **The Satavahanas:** The Satavahanas were a dominant power in the Andhra region. These kings were good administrators. There was a brisk trade between the Deccan and north-western India. The Satavahanas worshipped Vishnu and Shiva. But it was during their reign that some of the Buddhist *stupas* and temples were built.
- **The Southern Kingdoms:** South India saw the rise of three important kingdoms, the Chola kingdom, the Pandya kingdom and the Chera kingdom. Karikala was the greatest among the early Chola rulers.
- **Sangam Literature:** The poets and scholars gathered together from time to time at Madurai. They produced a large volume of excellent literature in Tamil.
- **Importance of the Southern Kingdoms:** (1) Their administration; (2) Brisk trade between India and the Roman empire; (3) People lived happily in wealth and prosperity; and (4) *Murugan*, known as *Kartikeya* in the north, was the most popular deity in the south.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- The last Mauryan ruler Brihadratha was killed by his army general
(a) Devabhuti. (b) Vasudeva.
(c) Pushyamitra Sunga. (d) Agnimitra.
- The greatest of the Kushana rulers was
(a) Vasishka. (b) Kanishka.
(c) Huviska. (d) Naga.
- The Sangam literature was written in
(a) Tamil. (b) Telugu.
(c) Kannada. (d) Malayalam.
- The Pandya rulers had their capital at
(a) Pumpuhar. (b) Purusapur.
(c) Madurai. (d) Thanjavur.
- The Satavahana rulers worshipped
(a) Budha. (b) Mahavira.
(c) Shiva and Vishnu. (d) Jesus.
- The south Indian deity *Murugan* is known as in north India.
(a) Vishnu (b) Kartikeya
(c) Durga (d) Parvati

II. Match the columns.

Column A

- King Menander
- Rudradaman
- Mahayana
- Ashvaghosha
- King Kharavela
- Karle

Column B

- Saka Satrap of Ujjain
- Indo-Bactrian king
- An important Chaitya
- Ruler of Kalinga
- Author of *Buddhacharita*
- A buddhist sect

III. Give short answers for the following questions.

- Name any two rulers of the Sunga dynasty.
- Who was the founder of the Satavahana dynasty?
- What is the meaning of the word *Sangam*?
- How would you distinguish between the Mahayana and Hinayana sects of Buddhism?
- What is the importance of coins issued by Kanishka?
- Who was the greatest among the early Chola kings? Mention any two of his main achievements.

IV. Answer the following questions.

1. Discuss the development of trade during the Kushana period.
2. State the various contributions of Kanishka.
3. What place do the Satavahanas have in the history of the Deccan?

V. Who am I?

1. I founded the Sunga dynasty. I am
2. I am the founder of the Satavahana kingdom. I am
3. I am a sect of Buddhism. I mean greater vehicle. I am
4. I am a Buddhist monk. Menander became my disciple. I am
5. I am the famous physician at the court of Kanishka. I am

VI. Map Work

Shade the area under the control of the Kushana empire.

VII. Projects and Activities

Get into the groups of four and make a project on either the Kushanas or the Satavahanas. You can include the following points to make your project interesting.

- Important Satavahana/Kushana rulers.
- Period when the Satavahanas/Kushanas rose to prominence.
- Geographical regions controlled by the Satavahanas/Kushanas.
- Cultural achievements of the Kushanas/Satavahanas.

HOTS: THINK BEYOND

Why were Sangams organised by the Pandya rulers?



PROJECT WORK

(Based on Chapters 7–9)

I. Map Work

On an outline map of India, mark the extent of Ashoka's empire.

II. Make a Poster

Make a poster of the Ashokan Lion pillar found at Sarnath. Write the meanings of its symbols and the messages they convey.



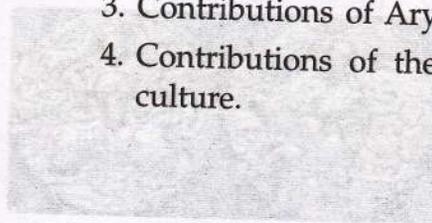
III. Assignment

Make a project report on the town of Arikamedu. Find out the present situation of the town and compare it with the ancient times.

IV. Presentation

Divide the class into four groups and let each group prepare a PowerPoint presentation on one of the four topics given below.

1. Sanchi Stupa
2. Any story from the *Jatak* tales
3. Contributions of Aryabhatta and Charak in the field of science.
4. Contributions of the Central Asian rulers of various ethnic origins to Indian culture.



New Words to Remember

Astronomer: A scientist who studies the stars, planets and other natural objects in space.

Patron: A person who supports and gives money to artists, scholars and musicians.

Prashast: A Sanskrit word meaning 'in praise of'.

CHANDRAGUPTA I

Maharaja Srigupta was the founder of the Gupta dynasty. He ruled over Pataliputra and some neighbouring areas. He was followed by his son Ghatotkachagupta. We do not know much about these rulers. After Ghatotkachagupta, Chandragupta I came to the throne. He was the first ruler to raise the power and prestige of the Gupta dynasty. He adopted the title of *Maharajadhiraja*. Chandragupta I ruled from 320 AD to 335 AD. He married the *Lichchhavi* princess Kumaradevi. He ruled over Magadha (South Bihar), Prayag (Allahabad) and Saketa (Ayodhya and its neighbouring areas).

SAMUDRAGUPTA (335 AD-375 AD)

Chandragupta I was followed by his son Samudragupta. Samudragupta's character and achievements are given in the Allahabad Pillar Inscription. The inscription, known as the *Prayag prashasti*, is in Sanskrit and was composed by his court poet Harisena.

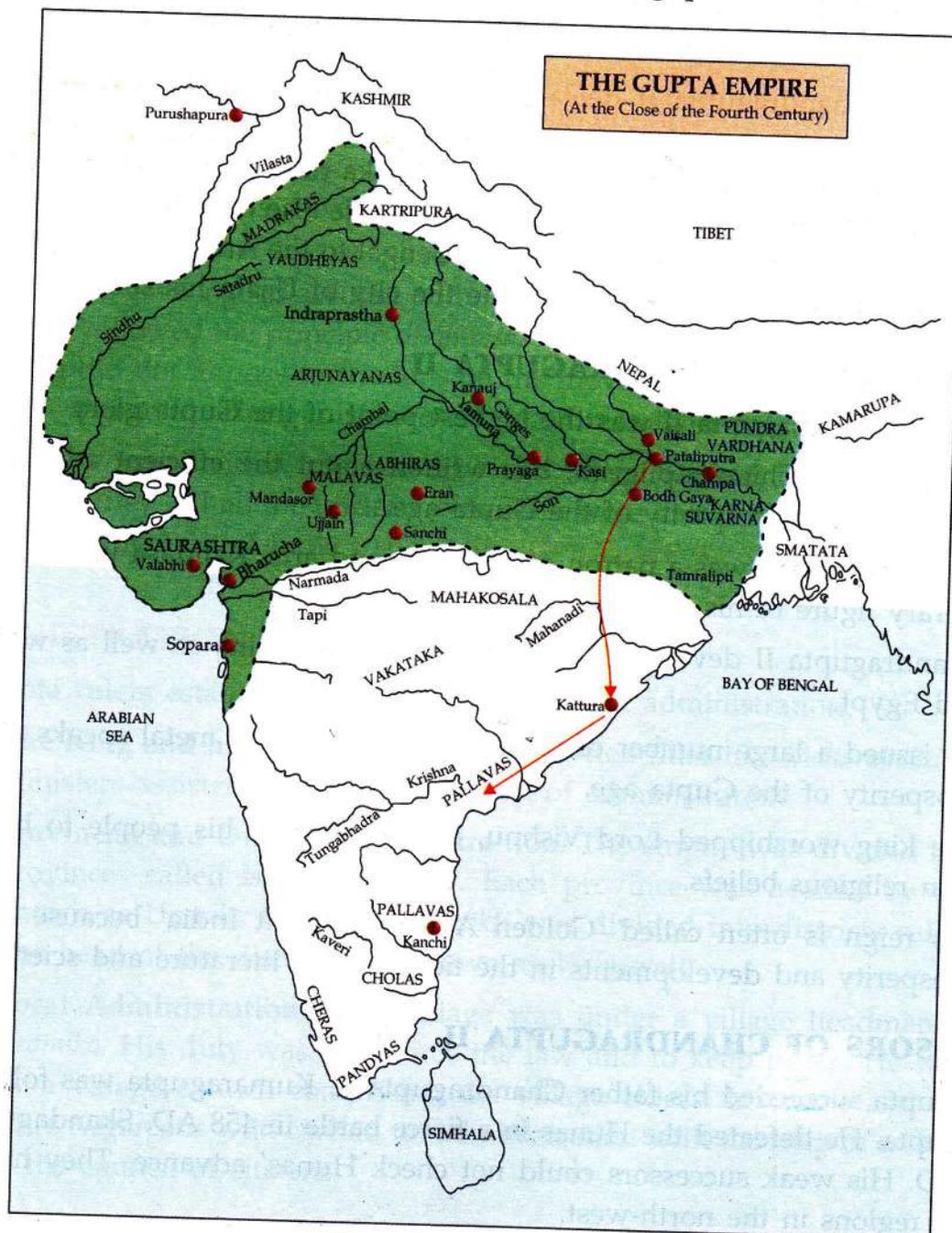
Samudragupta's Conquests and Policy towards Various Rulers

1. Samudragupta first defeated the rulers of *Aryavarta* or northern India. He annexed their kingdoms and made them a part of his empire. These territories included Mathura, Gwalior, west Uttar Pradesh and Bengal.



Coins of Samudragupta

2. Samudragupta then marched to south India (*Dakshinapath*). The Allahabad Pillar inscription said he won a victory over twelve rulers including those of Orissa (Odisha), Andhra Pradesh and Tamil Nadu. He defeated these rulers, but did not annex their kingdoms. He allowed them to rule but they pay tributes to the Gupta empire.
3. The kingdoms of Assam and Nepal and some republics (*gana sanghas*) of Rajasthan and Madhya Pradesh surrendered to Samudragupta. They also paid tribute (goods and money) to the emperor.
4. The frontier kingdoms (Kushana and Saka chiefs) also submitted because they were not powerful enough to oppose Samudragupta.



Extent of the Gupta Empire

Samudragupta's empire comprised nearly the whole of northern India with the exception of Kashmir and Sindh. We learn from the pillar inscriptions that he was never defeated in a war. He is often called 'Indian Napoleon'.

A Wonderful Personality: Samudragupta was not only a great conqueror, he was also a scholar, a poet and music lover. His coins show him playing on lute, that is *vina*. He worshipped Lord Vishnu, but he showed respect to all religious faiths. He was also a patron of learning.

CHANDRAGUPTA II (CHANDRAGUPTA VIKRAMADITYA)

Chandragupta II was the son of Samudragupta. He occupied the throne in 375 AD. He is better known as Chandragupta Vikramaditya. He married Kubernaga, a Naga princess. He gave the hand of his daughter to the Vakataka king, Rudrasen.

Conquests: Chandragupta II defeated the Saka satraps of Malwa, Gujarat and Kathiawar. An inscription on the Iron Pillar (near Qutub Minar) says that his victorious arms reached northern Afghanistan. He defeated Saka ruler Rudra Simha III. It ended the Saka rule from India. He took the title 'Sakari'. He also defeated several chiefs of Bengal. His empire extended from the Bay of Bengal to the Arabian Sea and from the Himalayas to the River Narmada. He made the city of Ujjain his second capital.

ACHIEVEMENTS OF CHANDRAGUPTA II

The reign of Chandragupta II was the highest point of the Gupta glory.

1. Fa-Hien, the Chinese pilgrim, has written about the efficient administration and economic prosperity of the Gupta age.
2. Chandragupta II was a patron of literature and arts. Kalidasa was the greatest literary figure of his age.
3. Chandragupta II developed trade relations with China as well as with Rome and Egypt.
4. He issued a large number of coins. The purity of the metal speaks about the prosperity of the Gupta age.
5. The king worshipped Lord Vishnu, but he allowed his people to have their own religious beliefs.
6. His reign is often called 'Golden Age of Ancient India' because of peace, prosperity and developments in the fields of art, literature and sciences.

SUCCESSORS OF CHANDRAGUPTA II

Kumaragupta succeeded his father Chandragupta II. Kumaragupta was followed by Skandagupta. He defeated the Hunas in a fierce battle in 458 AD. Skandagupta died in 467 AD. His weak successors could not check Hunas' advance. They had seized extensive regions in the north-west.

FA-HIEN'S ACCOUNT OF INDIA

Fa-Hien started from China in 399 AD. He travelled all over India for nearly 14 years. He visited Mathura, Kashi, Pataliputra, Nalanda and Kapilavastu. He collected many Buddhist books. He stayed at the capital city of Pataliputra for more than three years. He wrote a book called *Fo-kwo-ki* (The Travels of Fa-Hien). The book gives an account of the life of the people and the general condition of the country.



Chinese pilgrim Fa-Hien

1. Fa-Hien wrote that Pataliputra had two grand monasteries where some seven hundred Buddhist monks lived.
2. The wealth and prosperity of the people deeply impressed him. There was an excellent hospital run by wealthy persons at Pataliputra.
3. For comforts of the travellers rest houses existed in large towns as well as on highways.
4. Fa-Hien gave a good account of the life of people. They were mostly vegetarians. They followed the principle of *ahimsa*. People were honest and law-abiding. The king did not impose restrictions on the movement of his subjects. The criminal law was mild. The punishment of death remained unknown.
5. Society was divided into several castes. The *Chandalas* belonged to the lowest caste. They did all the unclean jobs. They were untouchables. This was certainly an ugly feature of India's social life.

ADMINISTRATION OF THE KINGDOM

The Gupta rulers established an efficient system of administration.

1. **The King and his Ministers:** The king carried titles like *Maharajadhiraj*. Several ministers assisted the king in the task of administration.
2. **Provincial and District Administration:** The empire was divided into several provinces called *bhuktis* or *desas*. Each province was headed by a governor known as *Uparika Maharaja*. A *bhukti* was divided into districts called *vishyas*. The head of the district was known as *Vishyapati*.
3. **Local Administration:** Each village was under a village headman known as *Gramika*. His duty was to enforce the law and to keep peace. He was assisted by a village council comprising the village elders. In towns and cities there were *Nagarpatris* who carried on administration with the help of a *Parishad*, that is the council of citizens.

RELIGIOUS CONDITIONS

1. **Revival of Hinduism:** The Gupta kings were strong supporters of Hinduism. They were the worshippers of Lord Vishnu. Among goddesses, Lakshmi, Durga and Parvati occupied a prominent position. Samudragupta and Kumaragupta performed the *ashvamedha* sacrifice.
2. **Bhakti Cult:** There was also the development of the *Bhakti Cult*. *Bhakti* meant 'intense devotion and love for god.' *Bhakti* united the various sections of the Hindu society. *Bhakti* literature (the *bhajans* and songs) tell us that all are equal before god.
3. **Religious Tolerance:** Under the Gupta rulers there was full religious freedom. The kings were tolerant towards Buddhism and Jainism.

TRADE AND COMMERCE

Trade and commerce, both internal and external, flourished. There was a network of good roads that connected the major cities, such as Ujjain, Prayag and Pataliputra.

There were good ports both on the eastern and western coasts. Tamralipti on the eastern coast handled trade with the islands of south-east Asia, such as Java, Sumatra, Borneo and Bali. Bharuch and Sopara were the important ports on the western coast. Silk was imported from China. Horses were obtained from Arabia and Iran. Sandalwood and clove were sent from the east coast to south-east Asian countries.

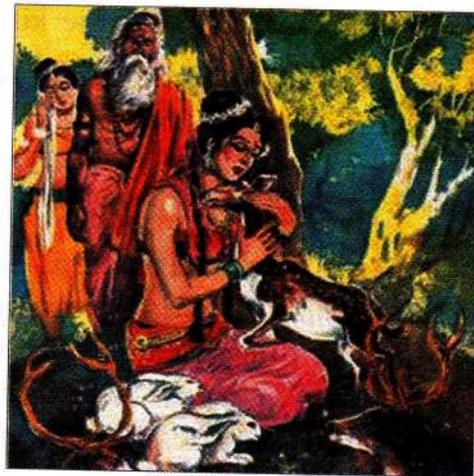
GOLDEN AGE OF INDIAN HISTORY

The golden age of Indian history was a period of rare prosperity and peace that led to remarkable progress in the fields of literature, art and sciences. That is why the period came to be known as the golden age of Indian history.

LITERATURE

The Gupta age has been called the golden age of Sanskrit literature. The court of Chandragupta II had nine literary gems. Kalidasa was the most brilliant of them all. His play *Abhijnan Shakuntalam* is a masterpiece of Sanskrit literature.

The *Panchatantra* is a collection of stories that teach moral lessons to children. It was written by Vishnu Sharma.

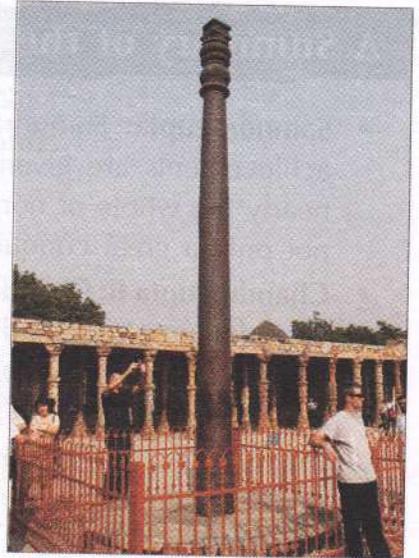


Shakuntalam

SCIENCE

Great progress was made in the field of astronomy, mathematics and medicine. Aryabhatta was a great astronomer and mathematician. Varahamihira was another great scientist of the Gupta age.

The Gupta coins show the skill of the metal workers. The Iron Pillar near Qutub Minar belongs to the reign of Chandragupta II. The iron has not rusted, although the pillar was constructed centuries ago.



The Iron Pillar

ART AND ARCHITECTURE

A large number of temples were built in those times. The *Dasavatara* temple (Vishnu temple) at Deogarh, near Jhansi, is an example of high quality architecture. Several images of Vishnu, Shiva and other deities were excavated in Sarnath and Mathura.



The Dasavatara Temple

There are 29 caves at Ajanta. They are famous for their wall paintings. The paintings have a bright appearance and look as if they have been recently done.



Ajanta cave painting

INDIAN CULTURE IN SOUTH-EAST ASIA

Many Buddhist and Hindu missionaries followed the merchants. They founded settlements in many parts of south-east Asia. This led to the spread of Indian culture in these countries. Vaishnavism and Buddhism had a great impact on the people of south-east Asia.

A Summary of the Lesson

- **Samudragupta:** Samudragupta ruled from 335 AD to 375 AD. His character and achievements are given in the Allahabad Pillar inscription. His empire comprised nearly the whole of northern India with the exception of Kashmir and Sind. He was not only a great conqueror, but also a scholar, a poet and a musician.
- **Chandragupta II:** Chandragupta II occupied the throne in 375 AD. He is better known as Chandragupta Vikramaditya. He defeated Saka satraps of Malwa, Gujarat and Kathiawar. He was a patron of literature and arts. Kalidasa was the greatest literary figure of his age.
- **Fa-Hien's Account of India:** Fa-Hien started from China in 399 AD. He visited Mathura, Kashi, Pataliputra, Nalanda and Kapilavastu. He stayed at the capital city of Pataliputra for more than three years. He wrote that Pataliputra had two great monasteries. The people were honest and law-abiding. Society was divided into several castes.
- **Administration of the Kingdom:** (1) The king and his ministers; (2) Provincial and district administration; and (3) Local administration
- **Religious Conditions:** The Gupta kings worshipped Lord Vishnu. There was the development of the Bhakti cult. The rulers were tolerant towards Buddhism and Jainism.
- **Trade and Commerce:** Trade, both internal and external, flourished. There was trade with Java, Sumatra, Borneo and Bali. Silk was imported from China.
- **Golden Age of Indian History:** (1) Golden age of Sanskrit literature. Kalidasa's plays and poems are masterpieces of Sanskrit literature. The *Panchatantra* also belongs to the Gupta period; (2) Aryabhatta and Varahamihira were great astronomers and mathematicians respectively; (3) A large number of temples were built in those times. The image of the seated Buddha at Sarnath has a touch of excellence; and (4) Expansion of Indian culture in south-east Asia.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Among the Gupta rulers, whose conquests and achievements are given in the Allahabad Pillar inscription?
(a) Chandragupta I
(b) Samudragupta
(c) Chandragupta II
(d) Skandagupta
2. Which Gupta ruler defeated the Saka Satraps and ended the Saka rule from India?
(a) Chandragupta II
(b) Kumaragupta
(c) Skandagupta
(d) Bhanugupta

3. The court of Chandragupta II had nine literary gems known as *Navratana*. Who was the most brilliant of them all?
 - (a) Amarsimha
 - (b) Vararuchi
 - (c) Kalidasa
 - (d) Dhanvantri
4. Who was Aryabhata?
 - (a) A great scientist
 - (b) A great physician
 - (c) An astronomer and mathematician
 - (d) A court poet
5. The *Dasavatara* temple (Vishnu temple) is situated at
 - (a) Sarnath.
 - (b) Deogarh, near Jhansi.
 - (c) Mathura.
 - (d) Delhi.
6. During the age of the Guptas, which of the following became the good ports to handle trade with the Asian countries?
 - (a) Prayag
 - (b) Pataliputra
 - (c) Tamralipti and Bharuch
 - (d) Kolkata

II. Match the columns.

Column A

1. Author of *Panchatantra*
2. Indian Napoleon
3. A province of the Gupta Empire
4. Author of *Fo-kwo-ki*
5. Vikramaditya
6. Iron Pillar

Column B

- (a) Fa-Hien
- (b) Chandragupta II
- (c) Delhi
- (d) Vishnu Sharma
- (e) Samudragupta
- (f) Bhukti

III. Give short answers for the following questions.

1. Who was the founder of the Gupta dynasty?
2. What is Prashasti? Who wrote the Prayag Prashasti?
3. Who was Fa-Hien? Name any two places he visited.
4. Which Gupta ruler defeated the Hunas?
5. Name one play written by Kalidasa.
6. Mention any two achievements of the imperial Guptas in the fields of art and architecture.

IV. Answer the following questions.

1. Discuss the important features of the Gupta administration.
2. Why is the Gupta Age called the 'Golden Age of Indian History'?
3. Give a brief description of Fa-Hien's account about the Gupta period.
4. Highlight important aspects of Samudragupta's personality.
5. Discuss the religious developments of the Gupta period.

V. Who am I?

1. I am the founder of the Gupta dynasty. I am
2. I am called the Napoleon of India. I am
3. I am the Chinese traveller who stayed in Pataliputra for three years. I am
4. I was the first Gupta ruler to adopt the title of Maharajadhiraj. I am
5. I succeeded Kumargupta. I am

VI. Projects and Activities

Get a picture of the Chinese pilgrim Fa-Hien and narrate what he says about (i) the life of the people in India (ii) the town of Pataliputra.

VALUE-BASED QUESTION

The Chinese pilgrim Fa-Hien says that during the age of the Guptas "the punishment of death remained unknown". What does it indicate? Why were people not given death punishment?

HOTS: THINK BEYOND

We got information about Samudragupta and other kings from the pillar inscriptions and the Prashasti Patras. What other source materials can be used to gather information about a king and his achievements?

11

Harsha, Chalukyas and Pallavas

New Words to Remember

Structural Temples: Temples that were built with bricks and mortar.

Rock-cut Temples: Temples carved out of a single granite stone.

The invasions of the Hunas damaged the Gupta empire. By the beginning of the sixth century AD the empire had broken into several kingdoms. The Hunas had occupied a vast area of Punjab and some parts of central India. Assam, Bengal, Sindh and Gujarat now had their own rulers. But in the beginning of the seventh century AD Harshavardhana or Harsha emerged as a mighty ruler in north India. He ruled from 606 AD to 647 AD.

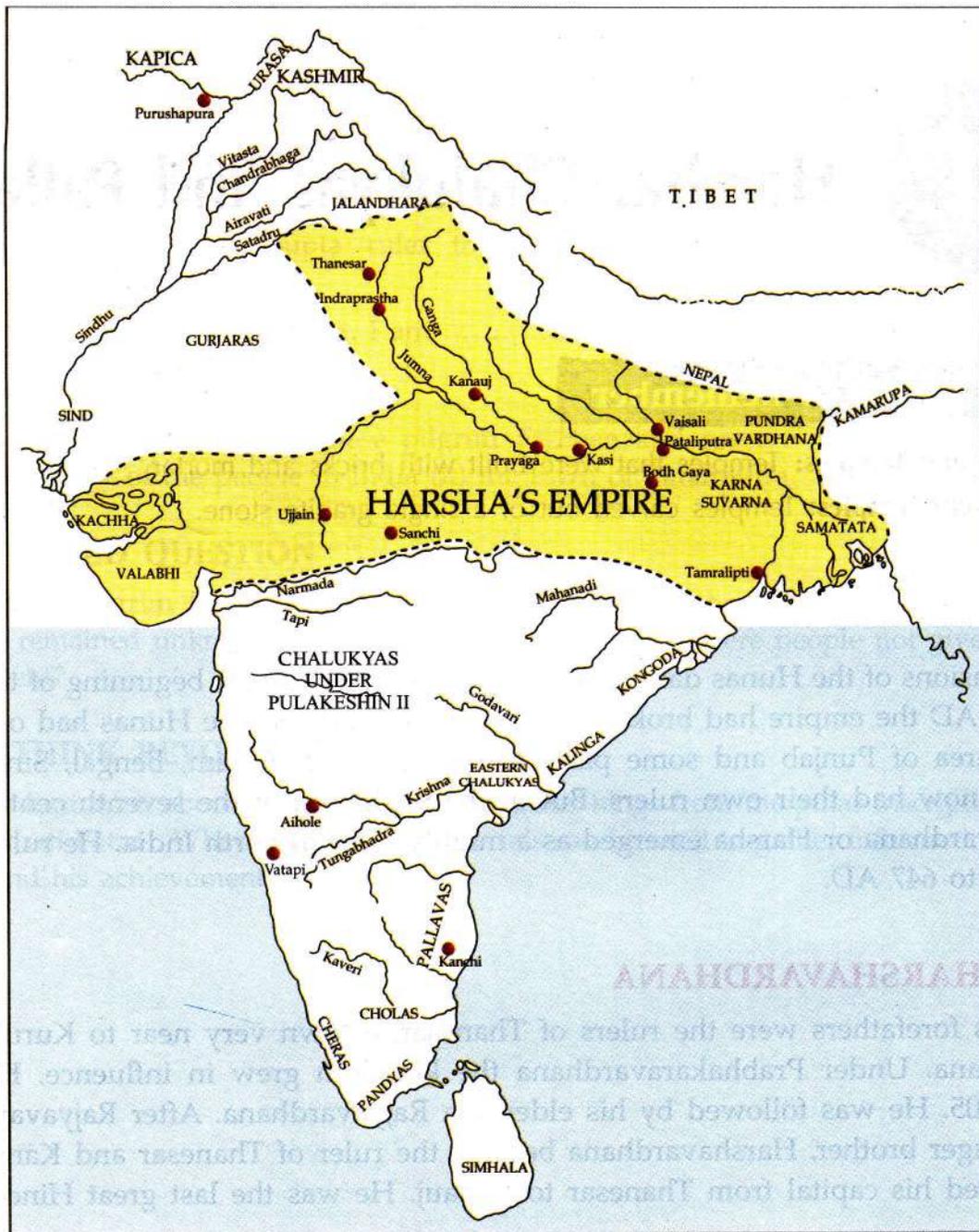
KING HARSHAVARDHANA

Harsha's forefathers were the rulers of Thanesar, a town very near to Kurukshetra in Haryana. Under Prabhakaravardhana the kingdom grew in influence. He died in AD 605. He was followed by his elder son Rajyavardhana. After Rajyavardhana, his younger brother, Harshavardhana became the ruler of Thanesar and Kanauj. He transferred his capital from Thanesar to Kanauj. He was the last great Hindu ruler of India.

HARSHA'S CONQUESTS

Harsha defeated king Shashank of Bengal and captured his territories. Hiuen Tsang, the Chinese pilgrim, said Harsha brought the five Indies under his control. These regions included (1) eastern Punjab; (2) Kanauj; (3) Bihar; (4) Bengal; and (5) Odisha. His empire extended from Brahmaputra in the east to eastern Punjab in the west and from the Himalayas in the north to River Narmada in the south.

Harsha tried to cross the Narmada river to conquer Deccan but was defeated by Pulakeshin II, the Chalukya ruler of Badami (Vatapi).



Extent of Harsha's empire

Harsha developed friendly relations with China. Harsha died in 647 AD. He had no heir. North India was in dreadful disorder again. His kingdom was split into many parts.

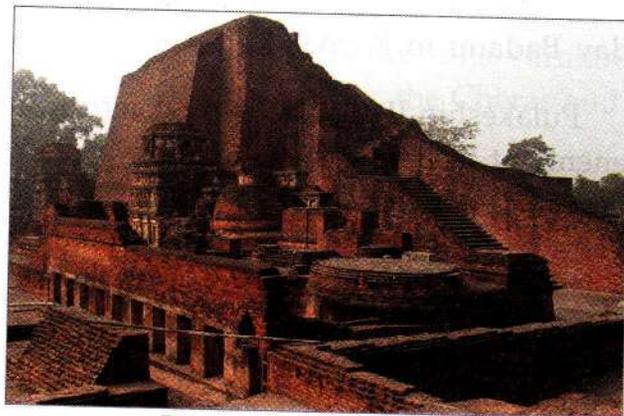
HARSHA'S RELIGION

Harsha worshipped Lord Shiva. In the later part of his life he was inclined towards Buddhism. He built many Buddhist monasteries and *stupas*. The Fifth Buddhist Assembly held at Kanauj was attended by some 20 kings and hundreds of Buddhist monks. The kings and the priests discussed many religious matters in detail. Hiuen Tsang presided over this grand event.

A PATRON OF LEARNING

Harsha was a patron of learning. Matang Diwakar was his court poet. Banabhatta wrote *Harshacharita*. Harsha himself was a scholar and an author of three plays—*Ratnavali*, *Nagananda* and *Priyadarshika*.

The Nalanda University was founded by Kumara Gupta in the fifth century AD. By the time of Harsha it had developed into a famous centre of learning. Thousands of students studied there. Courses of study included literature, mathematics, medicine, astronomy, religion and philosophy. This university was patronised by Harsha. Hiuen Tsang studied here for about five years.



The ruins of Nalanda University

HIUEN TSANG'S ACCOUNT OF INDIA

Hiuen Tsang was a Chinese scholar. He visited India during Harsha's reign. His purpose was to obtain the Buddhist works available in India. He travelled a lot in India between 630 AD and 644 AD. He spent five years at the Nalanda University.

1. Hiuen Tsang describes Harsha as a kind-hearted monarch. He said, "the king goes from place to place to punish the evil-doers and reward the good." At this time Harsha's army consisted of one lakh cavalry and some sixty thousand elephants.
2. Travelling had become more risky than in the Gupta age. Hiuen Tsang had several unpleasant experiences. The offenders were severely punished.
3. Hiuen Tsang informs us of the social conditions and life of the people. He said people led a simple life. The nobles and priests led a life of luxury.
4. The caste system was well-established. The *Brahmins* had a higher status in society. It was shocking how badly the untouchables were treated.



Hiuen Tsang

THE DECCAN AND THE SOUTHERN KINGDOMS

After the fall of the Satavahanas, the Vakatakas rose to power in the Deccan. They worshipped Lord Shiva. They also encouraged art and literature. But their dynasty did not last for a long time.

THE CHALUKYAS

The Chalukyas ruled over the Raichur doab between the rivers Krishna and Tungabhadra.

Pulakeshin II ruled from 608 AD to 642 AD. His capital city was Vatapi, modern-day Badami in Karnataka.

Pulakeshin II conquered northern Konkan, Gujarat and Malwa regions. His biggest enemy at that time was the Pallava ruler Mahendravarman. He defeated the Pallavas and reached very near to their capital, Kanchipuram. The Cholas and the Pandyas were on friendly terms with the Chalukya ruler. We know about Pulakeshin II from a *prashasti* written by his court poet Ravikirti.

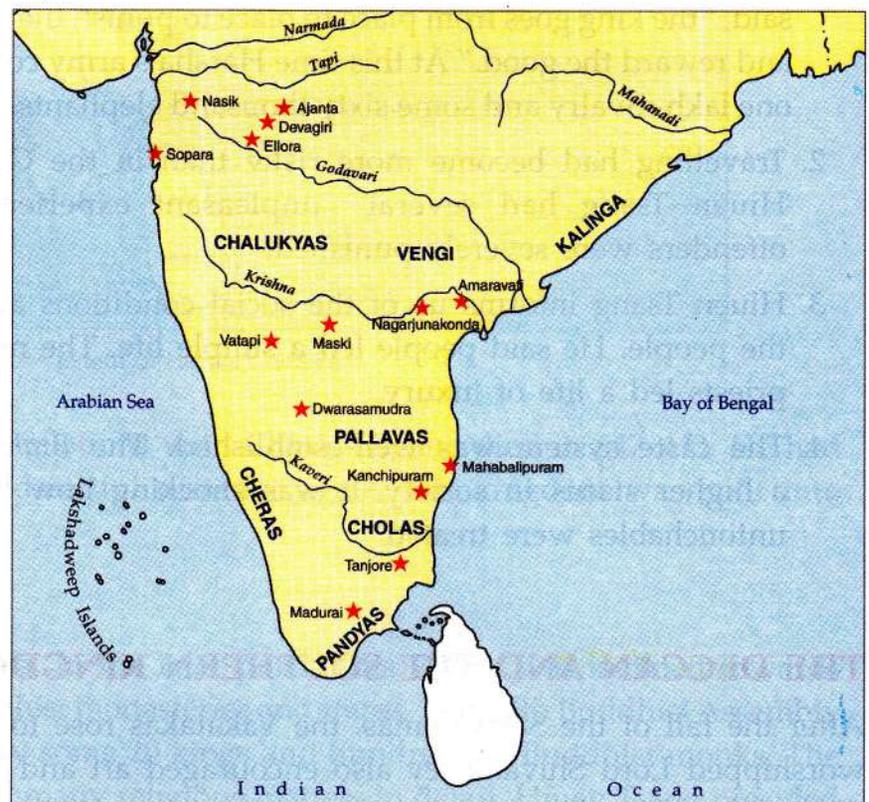
The Pallavas had been defeated, but they became powerful again. Mahendravarman's son Narasimhavarman invaded the Chalukyan kingdom. Pulakeshin was defeated and killed in 642 AD. The Pallavas occupied Vatapi, the Chalukyan capital. But by 680 AD the Chalukyas had risen to prominence again.

THE GREATNESS OF THE CHALUKYAS

Hiuen Tsang said, "Pulakeshin's people obeyed him with perfect submission. His plans and efforts were beneficial to people."

Foreign Trade and Foreign Relations: The Chalukya kingdom had ports both on the east coast and the west coast. This promoted trade. It also brought the kingdom in contact with a number of countries.

Art and Architecture: The Chalukyas were patrons of art and architecture. The rulers built many temples at Badami and Aihole. The Vishnu Temple at Badami is a very fine example of rock-cut architecture. Some of the caves at Ajanta were excavated during the reign of early Chalukya rulers.



The Deccan and Southern Kingdoms

THE PALLAVAS OF KANCHIPURAM

The Pallava kingdom extended from the regions around Kanchipuram to the Kaveri delta.

The Pallava ruler, king Mahendra-varman, ruled from 600 AD to 630 AD but was defeated by the Chalukya rulers. Later, Mahendravarman's son, Narasimha-varman won back the territories. Nara-simhavarman, also defeated the Cholas, the Cheras and the Pandyas. Hiuen Tsang visited Kanchipuram during his reign.

CONDITIONS UNDER THE PALLAVAS

1. **Literature:** The Pallava rulers patronised Sanskrit scholars. Mahendravarman himself was a scholar and a musician. The rulers also encouraged the growth of the Tamil language.
2. **The Bhakti Movement:** The Pallava kings were staunch Hindus but they were tolerant of other religions. At this time, there developed in south India the *Bhakti* cult. *Bhakta* saints made no distinction between castes and travelled from place to place singing hymns in praise of god. They sang hymns in Tamil, the language of the common man. The devotees of Lord Vishnu were known as *alvars* and those of Lord Shiva as *nayanars*. For these saints, rituals and ceremonies were unimportant.
3. **Art and Architecture:** The Pallava kings built many magnificent temples. The temples were of two kinds. Some of these were rock-cut and others were built with bricks and mortar. The best example of rock-cut temples are the *rathas* found at Mahabalipuram in Tamil Nadu.

The Shore Temple at Mahabalipuram was a structural temple built with bricks and mortar. It was dedicated to Lord Shiva and Lord Vishnu.

THE SIGNIFICANCE OF TEMPLES IN SOUTH INDIA

The temples were not only places of worship, but also the centres of social



Rath Temple at Mahabalipuram



The Shore Temple, Mahabalipuram

and cultural activities. Festivals and fairs were organised along with music and dance performances. Some portions of the temples were used as schools and dispensaries. Village Panchayats also held their meetings there.

A Summary of the Lesson

- **King Harshavardhana:** Harsha ruled from 606 AD to 647 AD. His empire extended from Brahmaputra in the east to eastern Punjab in the west and from the Himalayas in the north to River Narmada in the south. He built many Buddhist monasteries and *stupas*.
- Harsha was a patron of learning. Banabhatta wrote *Harshacharita*. Harsha himself was the author of three Sanskrit plays.
- **Hiuen Tsang's Account of India:** Hiuen Tsang was a Chinese scholar. His purpose was to obtain the Buddhist works available in India. He describes Harsha as a kind-hearted monarch. The offenders were severely punished. The caste system was well established in India.
- **The Chalukyas of Vatapi (Badami):** Pulakeshin II conquered Konkan, Gujarat and the Malwa regions. He defeated the Pallava ruler Mahendravarman. The Pallavas were determined to avenge their defeat. Pulakeshin II was defeated and killed in 642 AD.

The Chalukya kingdom had ports both on the east coast and the west coast. This promoted trade. The rulers built many temples at Badami and Aihole.

- **The Pallavas of Kanchipuram:** King Mahendravarman ruled from 600 AD to 630 AD. His son Narasimhavarman defeated Pulakeshin II. The Pallavas patronised Sanskrit scholars. There arose at that time the great *Bhakti* movement. The *alvar* and *nayanar* saints composed devotional songs. The Pallavas built magnificent temples. The best example of rock-cut temples are the *rathas* at Mahabalipuram in Tamil Nadu. The Shore Temple at Mahabalipuram was built with bricks and mortar. The temples became the centres of social and cultural activities.
- The *Bhakti* saints believed in personal devotion to god. They preached in Tamil the language of the common man.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The *Harshacharita* was written by
(a) Matang Diwakar. (b) Banabhatta.
(c) Harsha himself. (d) Harishen.
2. Which university had developed into a famous centre of learning during Harsha's reign?
(a) Varanasi (Banaras) University. (b) Prayag University.
(c) Nalanda University. (d) Sarnath University.

3. The rock-cut temples (*rathas*) are found at.

(a) Mahabalipuram.	(b) Kanchipuram.
(c) Vatapi.	(d) Malwa.
4. The Shore Temple at Mahabalipuram was dedicated to

(a) Lord Buddha.	(b) Lord Mahavira.
(c) Lord Shiva and Lord Vishnu.	(d) Goddess Durga.

II. Write true or false.

1. Harshavardhana transferred his capital from Thanesar to Kanauj.
2. The Fifth Buddhist Assembly was held at Prayag.
3. The Chalukya rulers built many temples at Badami and Aihole.
4. The Vaishnava saints were known as nayanars.
5. The Shore Temple at Mahabalipuram was built by the Chalukyas.

III. Match the columns.

Column A	Column B
1. Harsha	(a) Chalukya ruler
2. Hiuen Tsang	(b) Kanchipuram
3. Pulakeshin II	(c) Defeated king Shashank of Bengal
4. Pallava rulers	(d) Studied at Nalanda University
5. Alvars	(e) <i>Bhakti</i> saints

IV. Give short answers for the following questions.

1. Who defeated Harsha when he tried to cross Narmada?
2. Which country did Hiuen Tsang belong to? Why did he visit India?
3. Give an example of a rock-cut temple and a structural temple.
4. According to Hiuen Tsang, Harsha brought the five Indies under his control. Which regions was he referring to?
5. What do you know about Harsha's religious beliefs?
6. What do you know about the conquests of Pulakeshin II?
7. Write a brief note on the Bhakti Movement that developed in south India during the seventh and eighth centuries?
8. Write a note on the Nalanda University.

V. Answer the following questions.

1. What do you know about Harsha's patronage to different religions?
2. Describe the military conquests of Pulakeshin II?
3. How did Bhakti Movement progress under the Pallavas?
4. Who was Hiuen Tsang? What does he tell us about the life of the people during Harsha's period?

VI. Projects and Activities

1. Collect a picture of Hiuen Tsang and narrate what he said about (i) King Harshavardhana, and (ii) the caste system in India.
2. Arrange a symposium in your class on the social life of the people during the reign of Harsha and the Pallava rulers.
3. Write a Prashasti Patra about one of the kings of ancient India whom you admire. Make your Prashasti interesting by including the following points in it.
 - (a) Name of the king
 - (b) A brief life-sketch of the king
 - (c) His contributions in different fields that benefited the people

VALUE-BASED QUESTION

Hiuen Tsang mentioned the existence of a rigid caste system in the society during the reign of King Harshavardhana.

What name did Mahatma Gandhi give to the so-called Untouchables? Why did he choose that name?

12

Ancient India— Culture and Science

New Words to Remember

Stupas: Mounds containing relics or remains of either Buddha or other Buddhist holy men.

Chaityas: Assembly or prayer halls

Viharas: Monasteries

Garbhagriha: A small room where the chief deity was placed

Shikhara: A structure built over the *garbhagriha*.

Mandapa: Open space or courtyard of the temple

Gopurams: Outer walls of temple having entrance gateways.

Secular literature: Literature which is not based on religion.

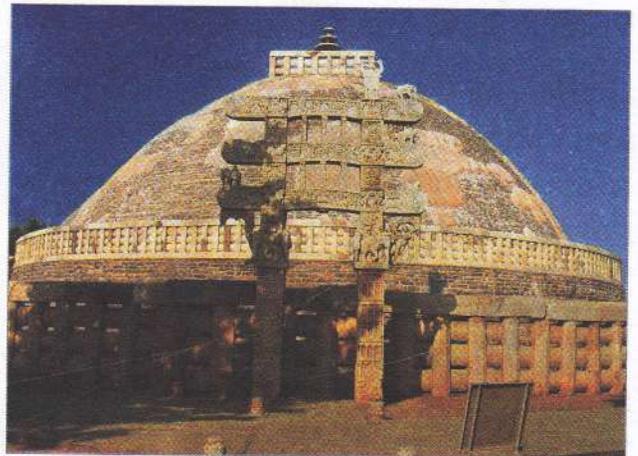
Linguistics: Study of language

The cultural heritage of India is spread over a vast geographical area with a long continuous history. There is a limitless variety and diversity in our cultural heritage.

ART AND ARCHITECTURE

Archaeological excavations and remains form an important part of our cultural heritage. These include structures and buildings that are either religious or secular. Among the religious monuments we have the *stupas*, *chaityas*, monasteries, temples, shrines, etc.

Stupas, *chaityas* and monasteries are mainly connected with Buddhism. A *stupa* means a mound. There are different kinds of *stupas*, big as well as small. Some of the Stupas are like circular domes. However,



The Sanchi Stupa

there is one common feature of all *stupas*. They have a small box-like structure at the centre called the relic casket. This contained the relics like the teeth, bone, hair or ashes of Buddha or other holy persons.

Generally, there is a path surrounding the *stupa*. It has railings and gateways beautified by sculptures. This is known as the *pradakshina patha*. Important *stupas* are found at Sanchi, (Madhya Pradesh) and Amravati (Maharashtra).

CAVE ARCHITECTURE

The development of the cave architecture is an important phase in the history of ancient India. More than a thousand caves have been found in different parts of India. Prominent among these are at Nasik, Karle and Bedsa. Lovely *chaityas* (halls of worship), *viharas* (monasteries), *mandapas*, *rathas* and cave temples have been cut out of rocks. A *chaitya* found at Karle (near Pune) was built during the Satavahana period. Some of the cave walls were beautifully decorated with sculptures and paintings in different designs.

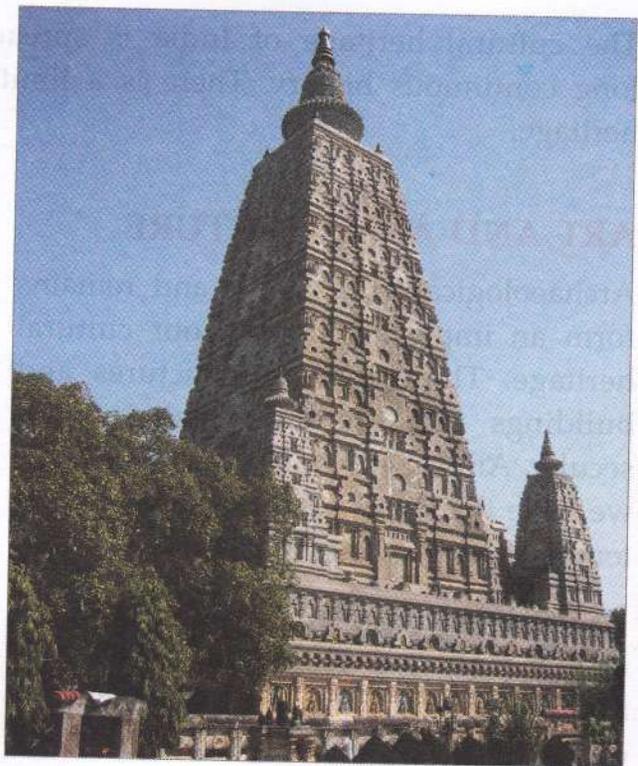


Chaitya found at Karle

TEMPLES OF NORTH INDIA

Many remains of the temples dating back to the Mauryan period have been found. Temples that have been found in good shape belong to the Gupta period such as the temples at Deogarh and Bhitargaon in Uttar Pradesh and Nachne and Sanchi in Madhya Pradesh. The deities included Vishnu, Shiva and Durga.

The chief deity was placed in a small room known as the *garbhagriha*. Here the religious rituals were performed by the priests. Later, as in Bhitargaon, a *shikhara* was built on top of the *garbhagriha*. The Bhitargaon temple was built about 1,500 years ago with baked bricks and stones. Some temples also had an open space for people to assemble. This was known as a *mandapa*.



Bodhi Gaya temple

The Bodh Gaya temple (Bihar) and the Nalanda University were built during the late Gupta period. A number of images of Buddha, Vishnu, Shiva and other deities have been discovered at Sarnath and Mathura. Image of the seated Buddha has a touch of excellence. Buddha is seated in *yogic* meditation with eyes half closed and a calm smile. The statue of the standing Buddha at Mathura is also very impressive.

TEMPLES OF SOUTH INDIA

In South India beautiful stone temples and cave shrines found at Aihole and Badami belong to the early Chalukyan period. These temples are dedicated to Vishnu and Shiva.

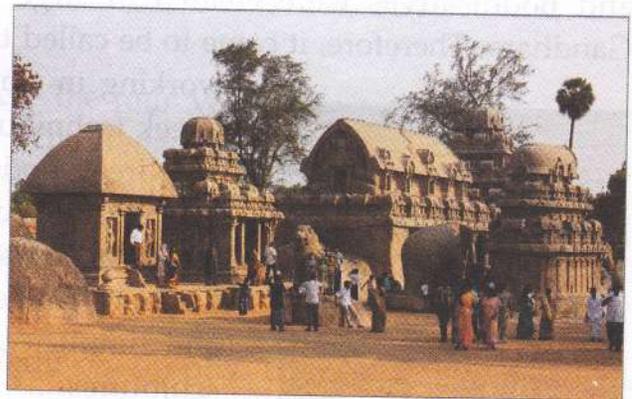
The monolithic temples like the *Rathas* and Shore Temple at Mahabalipuram were built by the Pallava rulers. The *Rathas* were carved from a single massive stone. There are eight *Rathas* of which *Draupadi Ratha* is the smallest, while the *Dharmaraja Ratha* is the largest. The Shore Temple built with bricks and mortars consists of three shrines, of which two are dedicated to Shiva and one to Vishnu. The Kailasanath temple at Kanchi also belongs to the Pallava period.

Temple building attained great heights under the Cholas and the Pandyas. The Cholas were great builders. A famous temple was the Brihadeshwara temple at Thanjavur (capital) built during the reign of Rajaraja I. With the Kalasa at the top, the whole building is 60.9 m in height. The temple is known for its grandeur. It combines in itself all the best traditions in temple building. It has sculptures and paintings. Its shadow does not fall on the ground.

The temple at Kanchi and Madurai have lofty gateways called *gopurams*. These *gopurams* are richly carved with sculptures of deities. The Meenakshi temple at Madurai has beautiful *gopurams* on all its four sides. It has many pillared halls. It has a holy tank called the Pool of Lilies.



Buddha found at Mathura



Rathas



Brihadeshwara temple at Thanjavur

SCULPTURE

The earliest sculpted objects belong to the Harappan civilization. The statues and figures of clay, stone and metal show a great development in the art of sculpture. The stone pillars of Ashoka were made up of one piece of stone. The Lion Capital of the Sarnath Pillar is an excellent piece of sculpture of the Mauryan age.



Meenakshi temple

GANDHARA AND MATHURA SCHOOLS

During the reign of Kanishka a new school of art came up. Life-size statues of Buddha and Bodhisattvas were created in large numbers. The centre of this new art was Gandhara. Therefore, it came to be called the Gandhara School of Art. Indian sculptors working in Gandhara were very much influenced by the Greek technique. The objects produced by them resembled the Greek gods. Rich carving and ornamentation are the main features of the Gandhara School of Art. Another main centre of art at this time was Mathura. The sculptors at Mathura made images that were known for their grace and simplicity. They did not copy the Greek style in their sculptures.



Specimen of the Gandhara School of Art

The images of the Gandhara School of Art were greatly influenced by the Greeks and Romans and were generally grey in colour. The images of the Mathura School of Art were indigenous in nature and were made of red sandstone.



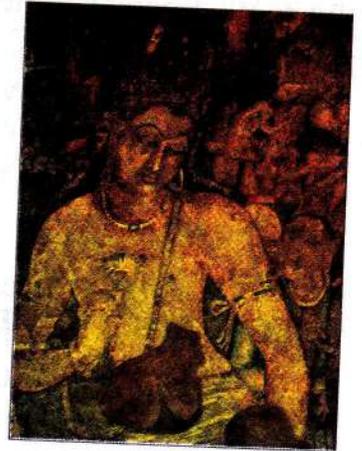
Specimen of the Mathura School of Art

CRAFTSMANSHIP

The Iron Pillar at Mehrauli, Delhi, is a unique example of Indian craftsmanship. It is 7.2 m high and weighs over three tonnes. It was made about 1,500 years ago but has still not rusted. The pillar inscriptions mention a ruler called Chandra who probably was Chandragupta II.

PAINTING

The art of painting dates back to the period of the early man when cave walls were painted with figures of animals and other objects. Cave temples at Ajanta and Ellora (Aurangabad) belonged to the Gupta period. They have beautiful paintings depicting scenes from the life of Buddha and the *Jataka* stories. They are called *murals*. The paintings have even now a bright appearance.



An Ajanta cave painting

LITERATURE

Our literary tradition is very rich and old. We have literature in different languages and dialects of our country, such as Sanskrit, Pali, Prakrit and Tamil.

RELIGIOUS LITERATURE

The earliest known work of the Aryans were the four Vedas. Most of the hymns are in praise of different gods and goddesses. The Vedas are in old or Vedic Sanskrit. They give valuable information about the social and religious life of the Aryans.

The Vedas were followed by the *Brahmanas*. These are prose texts that explain the meaning of the hymns.

The *Upanishads* contain the essence of Hindu philosophy. They deal with questions like the origin of the universe and relationship between individual soul and god. There are 108 *Upanishads*.

The Puranas: The word '*Purana*' means old. There are 18 *Puranas*. They contain stories about Hindu gods and goddesses. They also deal with religious beliefs and rituals of the Hindus. They were written in simple Sanskrit. Therefore, they continued to be read with great interest by all sections of the Hindu society: the priests, the households and the *Shudras*.

The Epics: The Ramayana and the Mahabharata are the two great epics of India.

The Ramayana is believed to be the work of Sage Valmiki. The central theme is the story of Lord Rama and Sita who were the incarnations of Lord Vishnu and Goddess

Lakshmi. It is a long story depicting the attainments and virtues of Rama, Sita and other ideal characters, such as Lakshmana, Bharata and Hanuman. Rama fought against Ravana, the ruler of Lanka. He killed Ravana and other demons who had abducted his wife Sita.

The Mahabharata is believed to be the work of Ved Vyasa. The main story is about the conflict between the Pandavas and the Kauravas who were cousins. Duryodhana, the eldest of Kauravas, felt jealous of the Pandavas and planned to destroy them. He refused to give Pandavas their share of the kingdom. This resulted in a fierce battle fought at Kurukshetra. In the battle that lasted for eighteen days, all the Kaurava brothers were killed. Yudhishtira, the eldest of the Pandavas became the king of Hastinapur.

IMPORTANCE OF THE EPICS

1. The epics are our main sources of information about political and social conditions of the Epic Age.
2. The epics are also praised for their literary value.
3. The epics reveal the high ideals of life.
4. The *Bhagavat Gita* is in the form of dialogues between Lord Krishna and Arjuna. It lays emphasis on doing one's duty fearlessly without a desire for results. It also stressed the immortality of the soul.

BUDDHIST AND JAIN TEXTS

The religious books of the Buddhists and the Jains were written in Pali and Prakrit respectively. The *Jatakas* deal with the previous births of Buddha. The *Tripitakas* in Pali contain the rules for the daily life of the Buddhist monks and nuns. The Jain texts *Angas* and *Upangas* contain the teachings of Mahavira and rules for the guidance of Jain monks.

SECULAR LITERATURE

The secular literature includes biographies, dramas, historical works and the accounts of foreign travellers. The *Arthashastra*, written by Kautilya, provides useful information about the social and political conditions of the Mauryan age. Banabhatta wrote *Harshacharita*. It deals with the life and times of King Harshavardhana. Kalidasa was the greatest literary figure of the Gupta Age. His famous drama *Malavikagnimitra* gives useful information about the Shunga dynasty. He also wrote *Abhijnana Shakuntalam* and *Meghadoot*.

Kalhan wrote the *Rajatarangini*. It is a historical work of great merit. It describes the history of Kashmir upto the twelfth century AD.

SANGAM LITERATURE

The word sangam means an 'assembly'. It seems that there were many fine poets, scholars and bards in south India in those days. They gathered together at Madurai from time to time. Three such *sangams* were held between second century BC and third century AD. The poets who gathered there produced a large volume of excellent literature in Tamil. A standard work on Tamil grammar called *Tolkappiyam* was produced by the second sangam. Tiruvalluvar, the famous Tamil poet attended the third sangam. He wrote *Kural*, a work of great merit.

TRAVELOGUES

Many pilgrims came to India to visit the sacred Buddhist places. Fa-Hien visited India in the fifth century AD. Hiuen Tsang, the famous Chinese pilgrim, arrived in India in AD 630. He wrote his memoirs about places and people whom he had known well. These works throw light on the political, economic and religious conditions of those times.

SCIENCE AND MATHEMATICS

The writers encouraged the growth of Sanskrit grammar and language. They laid stress on the correct pronunciation of the *mantras* and Vedic prayers.

In the field of Mathematics a distinct contribution was the introduction of the decimal system and the use of zero. This system was adopted by the Arabs and then went to Europe.

Ancient Indians had a good knowledge of measurement and geometry. That is evident in the brick construction of the Harappan times. Aryabhatta was a great mathematician and astronomer. He wrote two famous books: *Aryabhattiyam* and *Surya Siddhanta*. He was the first to state that day and night were caused by the rotation of Earth on its axis. He also explained the causes of the lunar and solar eclipses also.

Varahamihira was another great scientist of the Gupta Age. He proved that the moon revolves around the Earth and the Earth revolves round the Sun. Both these theories have been accepted. His book *Brihat Samhita* is an encyclopaedia of science and deals with astronomy and mathematics.

MEDICINE

Medical science was fairly advanced. The Atharva Veda mentions the different methods used to diagnose diseases. It also prescribed medicines. Sushruta, an ayurvedic scholar was expert in performing operations. He gave importance to diet and cleanliness. Charaka wrote the *Charak Samhita* which tells about different diseases and their cure.

A Summary of the Lesson

- Ancient architecture includes both religious and secular.
- Religious monuments include *stupas*, *chaityas*, monasteries, temples, shrines, etc.
- Sculpture was of high standard like the Lion Capital at Sarnath.
- Painting—wall paintings of the early man and those found at Ajanta and Ellora caves.
- Religious literature includes the *Vedas*, the *Brahmanas*, the *Aranyakas*, the *Puranas* and the two epics, the *Ramayana* and the *Mahabharata*.
- Buddhist literature—*Tripitikas* and the *Jatakas*
- Jain literature includes *Angas* and *Upangas*.
- Secular literature includes *Arthashastra*, *Indica*, accounts of foreign travellers and the Sangam literature.
- Science made remarkable progress in different fields such as astronomy, mathematics, medicine, etc.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Cave temples at Ajanta and Ellora belonged to the
(a) Vedic Age. (b) Mauryan Age.
(c) Kushana Period. (d) Gupta Age.
2. The *Bhagavat Gita* forms part of the
(a) *Rig Veda*. (b) *Upanishads*.
(c) *Ramayana*. (d) *Mahabharata*.
3. The *Meghadoot* was written by
(a) Kautilya. (b) Kalidasa.
(c) Banabhatta. (d) Harshavardhana.
4. Varahamihira was a great scientist of the:
(a) Mauryan Age (b) Gupta Age
(c) Chalukya Age (d) Pallavas Age

II. Fill in the blanks choosing the correct options.

1. The Chola ruler Rajaraja I built the temple at Thanjavur.
(a) Kailashanath (b) Brihadeshwara
(c) Bodh Gaya
2. The Lion Capital is at
(a) Sarnath (b) Mathura
(c) Pataliputra

3. Kalhan wrote the, a historical work.
 (a) *Arthashastra* (b) *Rajatarangini*
 (c) *Indika*
4. Aryabhatta was a
 (a) mathematician (b) astronomer
 (c) both

III. Match the columns.

Column A	Column B
1. <i>Chaityas</i>	(a) Monasteries
2. <i>Viharas</i>	(b) Halls of Worship
3. <i>Dharmaraja Ratha</i>	(c) Influenced by Greek technique
4. Gandhara School of Art	(d) Carved from single rock
5. Aryabhatta	(e) Sculptured gateways
6. <i>Gopurams</i>	(f) <i>Surya Siddhanta</i>

IV. Give short answers for the following questions.

1. What are *Puranas*?
2. Which literature gives an account of south India in ancient times?
3. Name any two temples built during the Pallava period.
4. Write a short note on the Iron Pillar at Mehrauli.
5. Mention any two features of the Meenakshi Temple at Madurai.

V. Answer the following questions.

1. Write a short note on the temples of south India.
2. What is a *Stupa*? Discuss its important features.
3. What is the Gandhara School of Art? How is it different from the Mathura school of Art?
4. What are the contributions of Aryabhatta in the field of science?
5. What contribution was made in the field of medicine during the ancient period?

VI. Who am I?

1. I am a great mathematician and astronomer from ancient India.
2. I am the famous book written by Kautilya.
3. I am the famous Tamil poet who attended the third sangam.
4. I am the author of the famous book *Rajatarangini*.

VII. Projects and Activities

1. Arrange a group discussion in the class on the achievements in the field of science and mathematics in ancient India.

VIII. Chart Work

Prepare a Chart showing a few features of the following temples: (i) Brihadeshwara Temple at Thanjavur, and (ii) Meenakshi Temple at Madurai.

VALUE-BASED QUESTION

The Epics like the *Ramayana* and *Mahabharata* reveal the high ideals of life. What are the key values revealed in the *Ramayana*?



PROJECT WORK

(Based on Chapters 10–12)

I. Map Work

On an outline map of India, show the extent of the Gupta Empire at the close of the 4th century.

II. Debate

Organise a debate in the class on the topic: *India's Glorious Past*. Was it a Myth or Reality?

III. Presentation

Prepare a PowerPoint presentation on various traveller's accounts giving the relevant pictures, so as to make the presentation colourful and interesting.

IV. Project Work

Make a project report on the temples during the periods of Pallavas and the Chalukyas. Mention the following points in it.

1. Main features of temples
2. The places where they are located
3. The king who built it



TEST PAPER



(Based on Chapters 7-12)

Total Marks: 50

Time: 2 Hours

A. Tick (✓) the correct answer.

1 × 8 = 8

- Who was the last Mauryan ruler?
(a) Ashoka (b) Bimbisara
(c) Chandragupta I (d) Brihadrath
- Which metal led to greater agricultural production?
(a) Steel (b) Iron
(c) Copper (d) Bronze
- Who had written the book *Indika*?
(a) Kautilya (b) Fa-Hien
(c) Megasthenese (d) Harsha
- Who was the greatest of Kushana rulers?
(a) Kanishka (b) Bimbisara
(c) Ashoka (d) Samudragupta
- Chandragupta II was the son of
(a) Ashoka. (b) Samudragupta.
(c) Ajatashatru. (d) Chandragupta I.
- was the second capital of Chandragupta II.
(a) Pataliputra (b) Ujjain
(c) Malwa (d) Prayag
- Where is the Meenakshi temple situated?
(a) Chennai (b) Madurai
(c) Bodh Gaya (d) Thanjavur
- The Ajanta temples belonged to the period.
(a) Maurya (b) Gupta
(c) Chalukya (d) Pallavas

B. Fill in the blanks.

1 × 6 = 6

- The Kalinga War was fought in BC.
- The contains hymns in praise of Vedic gods.
- The word sangam means a/an
- There are puranas.
- Hiuen Tsang was a scholar.
- Hiuen Tsang spent five years at the University.

C. Define the following.

2 × 3 = 6

1. Chaitya at Karle
2. Ashoka's edicts
3. Kalinga War

D. Write short answers in about 30 words.

2 × 5 = 10

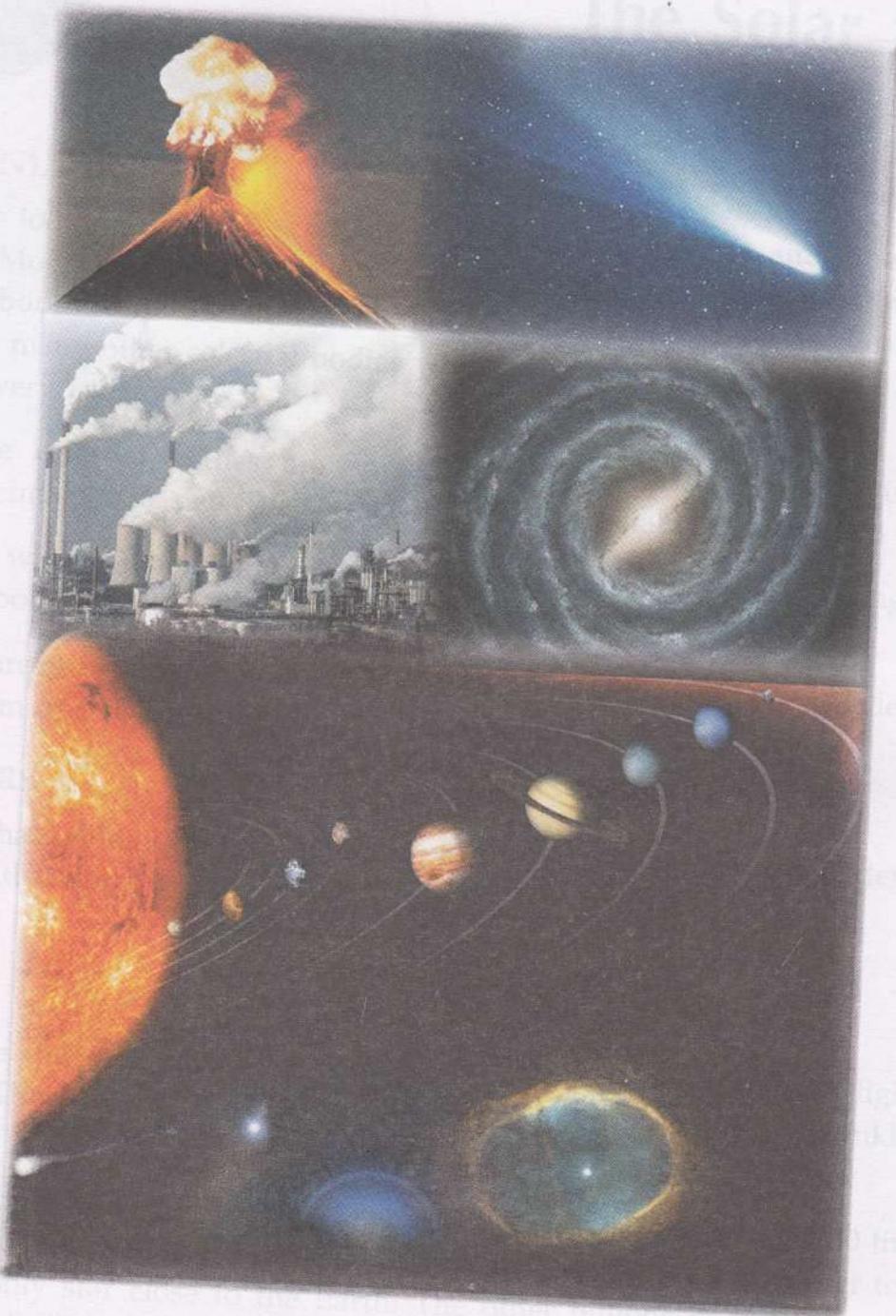
1. Who was Fa-Hien?
2. What are ring wells?
3. Why did Hiuen-Tsang visit India?
4. Who was the first historical emperor of India?
5. What were the teachings of Buddha?

E. Give long answers in about 60 words.

4 × 5 = 20

1. Write a brief note on Arikamedu town in Puducherry.
2. What is the importance of coins issued by Kanishka?
3. Why was the Gupta period called the Golden Age of Sanskrit literature?
4. What were Harsha's religious beliefs?
5. State the various contributions of Ashoka in spreading Buddhism in the world.

The Solar System



HEAVENLY

When we look up at the night sky and see the stars and other celestial bodies, we are looking at objects that are very far away from us. There are many different types of stars and other celestial bodies, and they are very different from each other.

All the stars in the universe are made of gas and are very hot. They are so hot that they are glowing and giving off light and heat.

Today, we have learned a lot about the stars and other celestial bodies. We have discovered that there are many different types of stars and other celestial bodies, and that they are very different from each other.

There are many different types of stars and other celestial bodies, and they are very different from each other. Some are very large and bright, while others are very small and dim.

THE STARS

The stars that we see in the night sky are just a tiny fraction of the stars in the universe. There are billions of billions of stars in the universe, and they are all very different from each other.

Stars are made of gas and are very hot. They are so hot that they are glowing and giving off light and heat. The light and heat from the stars travel through space and reach us on Earth.

Some stars are very large and bright, while others are very small and dim. Some stars are very close to us, while others are very far away.

Do you know what the Sun is? The Sun is a star, and it is the star that we see in the sky every day. It is the star that gives us light and heat.

The Sun is a very large star, and it is very hot. It is so hot that it is glowing and giving off light and heat. The light and heat from the Sun travel through space and reach us on Earth.

The Earth: Our Habitat

Size: Stars are much larger than the Earth. The largest stars have diameters more than a thousand times the diameter of the Earth. On the other hand, the tiniest stars are about 20 times smaller than the diameter of the Earth. Such is the variation in the sizes of the stars. Stars also differ greatly in colour and brightness due to their composition and size.

innumerable stars and other celestial bodies are scattered all over the universe. They are so far away from us that we cannot see them with our eyes.

The universe is so vast that it is impossible to measure its size. It is so large that it is beyond our imagination.

There are many different types of stars and other celestial bodies, and they are very different from each other. Some are very large and bright, while others are very small and dim.

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1

The Solar System

HEAVENLY BODIES

When we look up at the sky, we see the Sun during the day, and innumerable stars and the Moon at night. All the objects in the sky are called **heavenly bodies** or **celestial bodies**. The Sun, the stars, the planets and the Moon are heavenly bodies. There are many other celestial bodies which we cannot see with naked eyes because they are very far from us.

All the celestial bodies are spread over a vast space. The space is so vast that we cannot imagine its size. The space with all the celestial bodies is called the **universe**.

Today, with the help of powerful telescopes, we know many things about the heavenly bodies.

There are many types of celestial bodies in the universe. We will learn about a few of them in this chapter.

THE STARS

The stars that we see at night twinkling in the sky are things of wonder. A nursery rhyme rightly says:

“Twinkle, twinkle little star;
How I wonder what you are!”

Stars are the celestial bodies that generate their own heat and light in large quantities. They are made up of burning gases and look like tiny, twinkling objects in the night sky.

Do you know that some very big stars that we see are more than 300 times bigger than the Sun? The Sun is a middle-sized star. It looks big as it is nearer to the Earth and is the only star close to the Earth. The other billions of stars are so far away that they look like pinpoints of light and we cannot feel their heat and light.

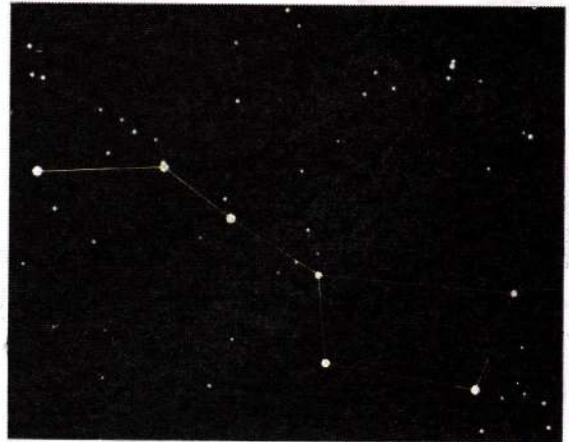
Size: Stars are of varying sizes. The Sun is a medium-sized star. It is about 109 times the diameter of the Earth. The largest stars have diameters more than a thousand times the diameter of the Earth. On the other hand, the tiniest stars are about 20 km in diameter. Such is the variation in the sizes of the stars. Stars also differ greatly in colour and brightness due to their temperature and size.

Why do stars twinkle? Stars twinkle because their light comes to us after passing through many layers of the atmosphere that surrounds the Earth.

Constellations

There are millions of stars scattered in the sky. Some of them appear to be in groups and form definite patterns. These groups which can be recognised by the shapes they form are called **constellations**.

The Great Bear, which is also called the *Saptarishi Mandal*, is one of the constellations visible in the northern sky. The two stars at the head of this constellation are called **pointers** as they always point towards the **Pole Star**. The pole star is one of the brightest stars in the sky and it helps us to find the north direction.



A constellation

THE SOLAR SYSTEM

Sol is a Latin word. It means the Sun. *Solar* means 'being connected to the Sun' in some way or the other. The solar system consists of the Sun at the centre, the eight planets that revolve around the Sun and the satellites that revolve around the planets. The solar system also includes various asteroids, comets and meteors.

Hence, **solar system** can be defined as the Sun together with the eight planets and all other celestial bodies that are bound by its gravity.

THE SUN

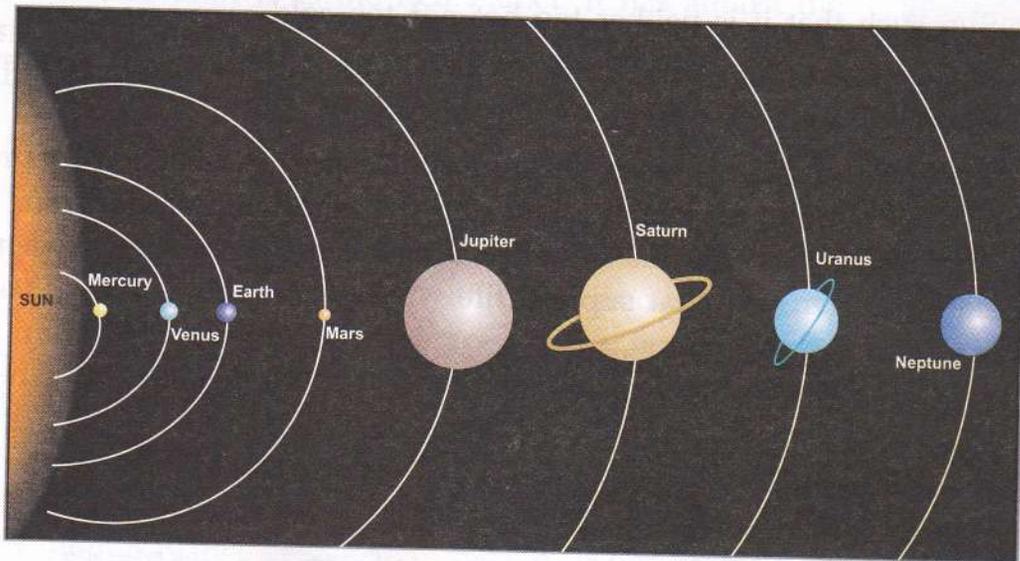
The Sun is the largest celestial body in the solar system and is located at the centre of it. It is approximately 109 times the diameter of the Earth. It is shaped like a huge ball and is made up of hot and burning gases that are primarily hydrogen and helium. The Sun provides heat and light to the entire solar system and is the greatest source of energy for all living beings on the Earth. However, the distance between the Sun and the Earth is approximately 150 million kilometres.

The Sun's gravitational pull does not allow the planets, satellites and other celestial bodies to fly away but keeps them revolving around it in their fixed orbits.

THE PLANETS

The word 'planet' comes from a Greek word *Planetai* which means 'wanderer'. They are celestial bodies that revolve around the Sun in elliptical fixed paths called **orbits**. Planets are spherical in shape. They have no heat or light of their own but they reflect

the light of the Sun. All planets revolve around the Sun as well as rotate on their axes. The time taken by each planet to complete one revolution around the Sun and one rotation on its axis varies greatly.



The relative sizes of the planets

In the order of their relative positions away from the Sun, the eight planets are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. Jupiter is the largest planet. It's volume is 1300 times that of the Earth. Mercury is the smallest planet.

Till a few years ago, Pluto was acknowledged as the ninth and the smallest planet in the solar system. However, in August 2006, a meeting of the International Astronomical Union took place in which it was decided that Pluto, along with other celestial bodies like Ceres and Iris, would henceforth be categorised as 'dwarf planets'.

Our Earth—A Unique Planet

The Earth is the fifth largest planet in the solar system. It is also the third nearest planet to the Sun. Due to the technological advancements, it has become possible to see the Earth and take its photograph from space. The Earth is flattened at the poles and bulging at the equator. Hence, its shape has been described as a **geoid**.



Find Out

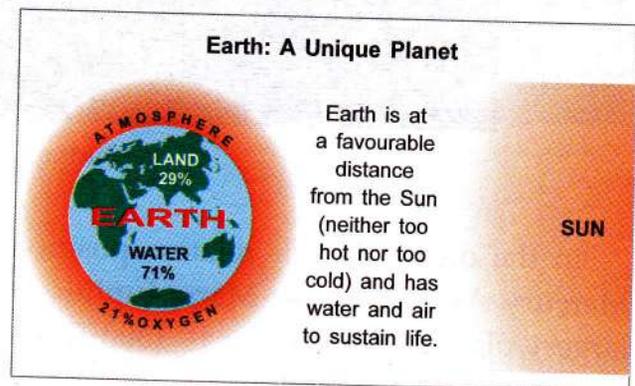
Which planet is known as the 'Morning Star' and the 'Evening Star'?



The Earth as viewed from space

The Earth is our home. It is a unique planet in the solar system where life is possible. This is because of the following reasons:

1. **Distance from the Sun:** The Earth is located at a favourable distance from the Sun such that it is neither too hot nor too cold.
2. **Presence of Oxygen:** The Earth is surrounded by a layer of atmosphere containing about 21% oxygen which sustains life on it.
3. **Presence of the Atmosphere:** The atmosphere acts as a blanket by preventing harmful ultraviolet rays of the Sun and extreme temperature from reaching the Earth. The Earth's atmosphere has necessary gases like oxygen, carbon dioxide, nitrogen, etc. that support life.
4. **Presence of Water:** The Earth is the only planet in the solar system in which water is found in liquid, solid and gaseous forms. It has abundance of water. Animals and plants need water to live. About 71% of the Earth's surface is covered with water. Therefore, to astronauts who see the Earth from space, the Earth appears blue in colour. That is why the Earth is also called the **Blue Planet**. It supports life by providing all the necessities of life.



Other Planets in the Solar System

•Mercury

Mercury is the smallest planet in the solar system. It is also closest to the Sun. It has no moon. There is no trace of water and nor any atmosphere around this planet. Hence, life is not possible on this planet. Mercury takes 88 days to complete one revolution around the Sun. Mercury is named after the messenger of Roman god.



Mercury

•Venus

Venus is the second planet from the Sun. It is often called 'Earth's twin' because of its size. Its size, mass and density are similar to that of the Earth. It is the brightest planet of the solar system. It is visible in the sky in the morning or immediately after the sunset. Therefore, it is also referred to as the *Morning Star* or the *Evening Star*. (It has no moon. Venus is named after the Roman god of love and beauty.)



Venus

• Mars

Mars is about half the size of the Earth. Its surface is red and therefore, it is also known as the Red Planet. It has almost the same period of rotation as the Earth. It has two moons. Mars is named after the Roman god of war.



Mars

• Jupiter

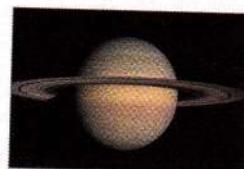
Jupiter is the largest planet of the solar system. It has light and dark bands around it. Jupiter, along with its 67 moons is referred to as the 'mini solar system'. Its average surface temperature is around -100°C . Jupiter is named after the ruler of the Roman gods.



Jupiter

• Saturn

Saturn is a unique planet in the solar system. It has bright rings around its equator. These rings are made of icy particles. It is colder than Jupiter. It has 62 moons. Saturn is named after Jupiter's father in Roman mythology.



Saturn

• Uranus

Uranus was discovered in the year 1781 by William Herschel. According to NASA, it has 27 moons. Uranus also has rings around its equator. Uranus takes 84 years to revolve once around the Sun. It is named after the Greek god of sky.



Uranus

• Neptune

Neptune is similar to Uranus in its size and structure. These two planets are called the 'Twin Giants'. It has 13 known moons. Neptune is named after the Roman god of sea.

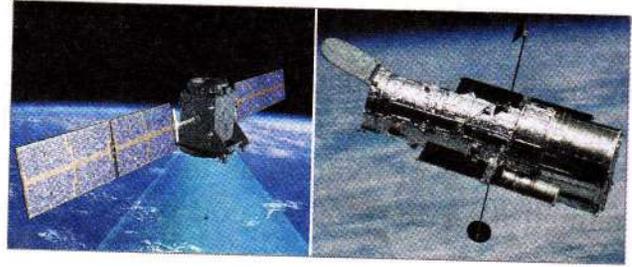


Neptune

SATELLITES

Satellites are small heavenly bodies that move around the planets as well as move along with their planets as they orbit around the Sun. In this manner, satellites also move around the Sun. Like planets, satellites also do not have any heat and light of their own, but they shine by reflecting the light from the Sun. The Moon is the only natural satellite of the Earth. Saturn has 62 satellites, Jupiter has 67 satellites and Uranus has 27 satellites. Other planets also have a small number of satellites, except Mercury and Venus which have no satellites. So far, around 180 satellites have been discovered in our solar system.

Besides natural satellites, there are many **man-made satellites** which have been placed in the earth's orbit by scientists. The television signals we receive are reflected from the man-made satellites. INSAT, IRS, EDUSAT, CARTOSAT are some of the satellites launched by India.

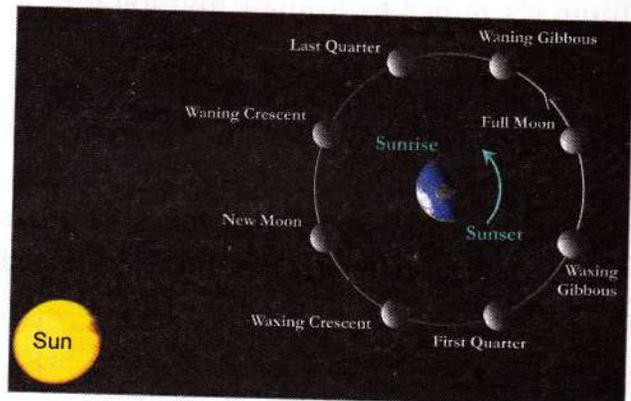


Artificial satellites

The Moon

The Moon is about 3,84,400 kilometres from the Earth. It looks so large in the night sky because it is closer to the Earth than any other celestial body. It has no light of its own. It shines because it reflects sunlight which takes about 1.28 seconds to reach the Earth. The Moon does not have any water or atmosphere. Hence, there is no life on the Moon. On 21st July 1969, Neil Armstrong became the first man to walk on the Moon. The Moon takes about 27 days to complete one revolution around the Earth. It also spins on its axis. It is interesting to note that it takes the same time to complete one rotation as it takes to complete one revolution. That is why we see only one side of the Moon.

When the Moon is between the Earth and the Sun, the part of the Moon facing the Earth is in complete darkness. This position is called the New Moon or *Amavasya*. On the 14th day after the New Moon, the Moon shines brightly as the Full Moon. This is called *Poornima*.



New Moon and Full Moon

OTHER HEAVENLY BODIES

Asteroids

Between the orbits of Mars and Jupiter, thousands of small planet-like bodies revolve around the Sun along with the planets. These are called **asteroids** or **planetoids**. Many believe that these are the pieces of some planet which exploded a long time back. The largest asteroid is the **Ceres**.



An asteroid

Meteors

Meteors are small pieces of rocks and sand in the solar system. We only come to know about them when they enter the Earth's atmosphere and start burning due to friction and become luminous. They are commonly called **shooting stars**. The unburnt part of a meteor that falls on the Earth is called a **meteorite**.

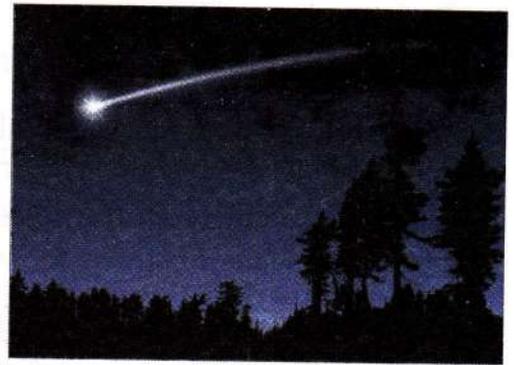
Some meteorites are big enough to hit the Earth. They are made up of iron or stone or both. A well-known site is the crater formed by a **meteorite** in Arizona state in the USA.

Comets

Comets are huge lumps of snow and rocky dust. Each comet has its own elongated orbit around the Sun. Comets are visible when they approach the Sun. They start glowing and develop a long tail. The most famous comet is the **Halley's Comet**. It was last seen in the year 1986. It will appear again in 2062, after 76 years.

OUTER SPACE—THE UNIVERSE

Stars are scattered in the vast space. They have a tendency to stay in clusters due to their gravitational attraction. Each cluster of millions of stars is called a **galaxy**. Most of the stars in a galaxy probably have their families of planets like the solar system. Our solar system is at the edge of a galaxy called the **Milky Way** or the *Akash Ganga*. In the given figure, the Sun is seen as a dot on the south-west part of the Milky Way Galaxy. There are perhaps crores of such galaxies in the universe, that is the outer space.



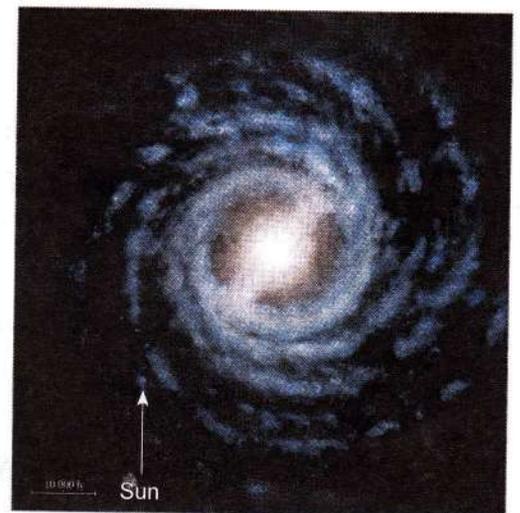
A shooting star



The crater formed by a meteor in Arizona (USA)



The Halley's comet



The Milky Way Galaxy

Geographical Terms

- **Asteroids:** Thousands of small, planet-like bodies which revolve around the Sun between the orbits of Mars and Jupiter.
- **Celestial Bodies:** All the objects in the sky and space.
- **Comets:** Huge lumps of snow and rocky dust that start glowing and develop a tail when they approach the Sun.
- **Constellation:** A group of stars forming a definite pattern.
- **Galaxy:** Millions of stars which form a group together. The Sun belongs to the Milky Way Galaxy.
- **Man-made Satellite:** An artificial body designed by scientists to gather information about the universe or for communication. It is carried by a rocket and placed in the orbit around the Earth. For example, INSAT, IRS, EDUSAT, etc.
- **Meteors:** Small pieces of rocks and dust that burn when they enter the Earth's atmosphere.
- **Meteorite:** The unburnt part of a meteor that falls on the Earth.
- **Orbit:** The elliptical path in which all the planets revolve around the Sun.
- **Planet:** A heavenly body moving in an elliptical orbit which revolves around a star like the Sun and reflects sunlight.
- **Satellite:** A heavenly body of small size which revolves around a planet.
- **Solar System:** The Sun along with the eight planets and all other celestial bodies that are bound by its gravity.
- **Stars:** Celestial bodies that look tiny, twinkling objects in the night sky and which generate their own heat and light in large quantities.
- **The Moon:** The largest and the brightest heavenly body that we see during the night in the sky. It is the Earth's natural satellite.
- **The Universe:** Vast infinite space having millions of galaxies.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The fifth largest planet of the solar system is
(a) Mercury (b) Jupiter
(c) Earth (d) Saturn
2. The only natural satellite of the Earth is
(a) Ceres (b) Moon
(c) Star (d) Mars
3. The planet which is known as the Morning Star or the Evening Star is
(a) Venus (b) Mars
(c) Sun (d) Uranus

4. Our solar system consists of planets.
 (a) five (b) nine (c) eight (d) ten
5. The planet with rings is
 (a) Venus (b) Jupiter (c) Saturn (d) Earth

II. Mark True or False against each of the following statements.

1. All the objects in the sky are called heavenly bodies. _____
2. All the celestial bodies revolve around the Sun in a fixed path called the axis. _____
3. The Earth is a unique planet in the solar system where life is possible. _____
4. A group of stars forming a definite pattern is called a galaxy. _____
5. Small pieces of rock and dust that burn when they enter the Earth's atmosphere are called meteors. _____

III. Match the columns.

Column A

- The first man to land on the moon.
- The galaxy to which our solar system belongs.
- Thousands of small bodies that revolve around the Sun between the orbits of Mars and Jupiter.
- The shape of the Earth — flattened at the poles and bulging at the equator.
- The 14th day after the New Moon when the moon shines brightly.

Column B

- Asteroids
- Poornima
- Neil Armstrong
- Milky Way
- Geoid

IV. Short Answer Questions.

- What are planets?
- Why is the Earth called a 'blue planet'?
- What is 'Great Bear' or the *Saptarishi Mandal*?
- What is meant by solar system?
- Name any two dwarf planets.

V. Long Answer Questions.

- Name the eight planets in the order of their size.
- How are stars different from planets?
- Why is the Earth called a unique planet in the solar system? Mention any three points.
- Write a short note on the Moon.
- Briefly describe the eight planets and their satellites.
- Briefly describe asteroids, meteors, meteorites and comets.

VI. Solve the crossword puzzle with the help of the clues given below.

CLUES	
Across	Down
1. The largest asteroid	A. The smallest planet
2. The largest planet	B. Blue Planet of the solar system
3. The star closest to the Earth	C. Millions of stars which form a group together
4. Group of stars forming a definite pattern	D. The elliptical path in which all planets revolve around the Sun

	A														
	M														
1→	C	E		E					C	G					
	4→	C		N		T	E			A		I	P	O	N
2→	J				T	B	R								
		R				A									
									Y						
3→	S													T	
						H									

VII. Projects and Activities.

- Imagine yourself to be an astronaut who is leaving for a voyage into the space. Prepare a report in about 100–120 words on your preparation for the venture into the space.

You can include the following points in the report:

- List of things you will carry with you.
- The special astronaut suit.
- The change in your food habits.

You can take help from the Internet.

- Prepare a PowerPoint presentation on any one celestial body.
 - Divide the class into groups of four students. Assign one celestial body to each group.
 - The presentation can be on any planet/Moon/asteroids/meteors/comets/Sun.
 - The presentation should include 10–12 slides. The slides should include definition, the origin, its position in the space, its typical features, any recent researches on it, pictures, etc.

3. Prepare a model of the solar system.

- Use a thermocol sheet for the base. Balls of different sizes and colours can be used to show the planets, satellites, etc. Cables can be used to show the orbits.

VALUE-BASED QUESTION

The Earth is termed as 'Blue Planet' of the Solar System. What can be done so that the Earth remains a 'Blue Planet'? Write any two activities.

HOTS: THINK BEYOND

Earlier, Pluto was considered a planet. Now it has been put into the category of a dwarf planet. Why?

ANSWERS TO THE CROSSWORD PUZZLE

Across

1. Ceres

2. Jupiter

3. Sun

4. Constellation

Down

A. Mercury

B. Earth

C. Galaxy

D. Orbit

2

Globe: Latitudes and Longitudes

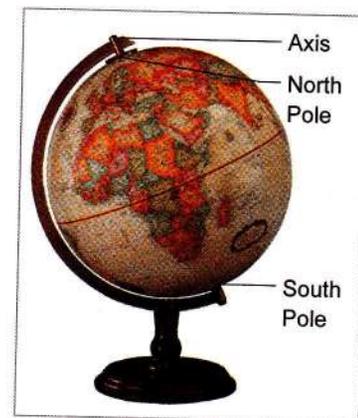
In Chapter 1, we had studied in detail about the celestial bodies. We had also learnt that most of the celestial bodies are almost round in shape.

The Earth is almost spherical in shape and is described as a **geoid** meaning 'Earth-shaped'. It looks like an orange that is bulging at the equator and slightly flattened at the poles.

Since the size of the Earth is very large, so to understand or teach about the location of continents and oceans on the Earth is very difficult. Hence, the simplest and the most accurate way to represent the Earth is to make a model of it. Such a man-made model of the Earth on a small-scale is called a **globe**. The first such globe was made in Germany in the year 1492.

GLOBE

A globe is a world map pasted or printed over the surface of a hollow sphere and mounted on an axle or needle so that it can rotate freely. On a globe, shapes, sizes and relative locations of continents and oceans are shown correctly. In the space, the Earth rotates around its axis and is tilted on one side. Similarly, globe can also be rotated around the tilted axle. The axle or needle of globe is same as the axis of the earth. The topmost point of the axis represents the 'North Pole' and the lower point of the axis represents 'South Pole'.



A globe

ADVANTAGES OF GLOBE

1. Globes are very useful for teaching and learning Geography in schools and colleges.
2. Relationships between the Earth and the Sun including the length of days, time differences and satellite paths can be easily demonstrated through a globe.
3. The estimation of distances and directions is also correct on a globe.
4. Countries, continents and oceans are shown in their correct sizes on a globe.

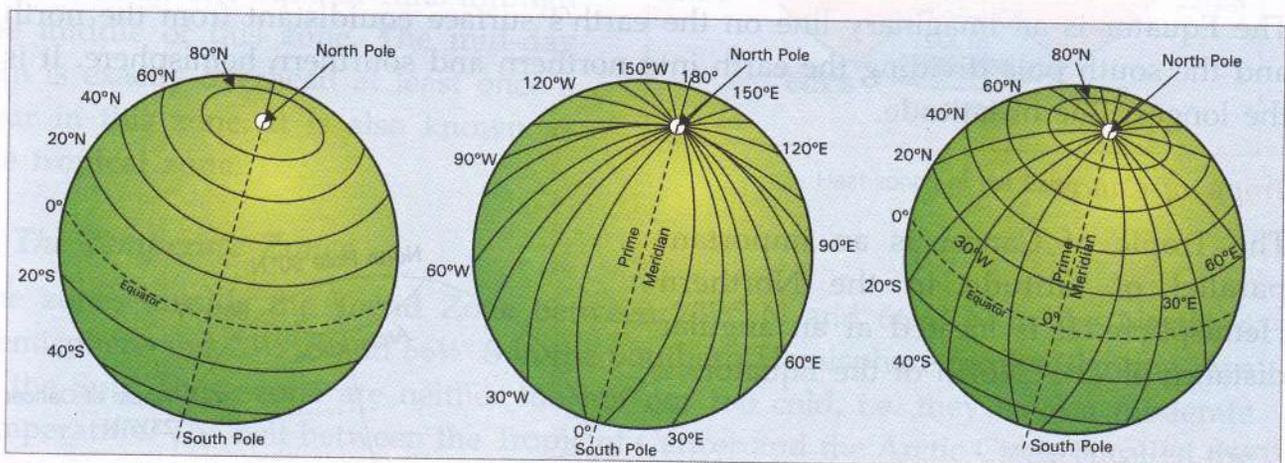
5. Navigators find out the shortest distance between two points with the help of a globe.

LIMITATIONS OF GLOBE

1. Due to its size, globe is difficult to carry everywhere and every time for geographical references. Although globes of very small sizes are also in use these days.
2. Half part of the globe can be seen in one time.
3. Globe is not suitable for representing one part of the Earth.
4. Details like small towns and villages, roads and railways cannot be shown on a globe of usual size. It would need a large-sized globe.

LATITUDES AND LONGITUDES

If you look at a globe or a world map, you will notice two sets of lines drawn on them. One set of lines runs horizontally or in the east-west direction while the other set of lines runs vertically or in the north-south direction. They cut each other, like the lines on a graph paper. The horizontal lines are the lines of **latitudes** or **parallels** and the vertical lines are the lines of **longitudes** or **meridians**. In maps, you will see both the lines intersecting each other. This is known as the **grid** of parallels and meridians and it helps us to locate different places.



(a) Lines of latitudes

(b) Lines of longitudes

(c) Grid

LATITUDES

The most important imaginary line on the Earth is the **Equator**. The Equator is defined as the imaginary circle drawn around the globe exactly halfway between the two poles. It divides the Earth into two equal halves called the **hemispheres**. To the north of the Equator is the Northern Hemisphere and to the south is the Southern Hemisphere. It is the reference or the basic line that helps to draw and name other horizontal lines parallel to it and indicates whether they are north or south of the Equator. Since it is the starting line, it is marked as 0°.

Important Facts about Latitudes

1. The imaginary circular lines running parallel to the Equator are called parallels or **latitudes**.
2. The parallels of latitude or latitudes are measured in degrees.
3. The equator represents 0° latitude.
4. The distance from the equator to either of the poles is one-fourth of a circle round the earth. That is, $360^\circ \times \frac{1}{4} = 90^\circ$.

Thus, 90° North latitude represents the North Pole and 90° South latitude represents the South Pole.

5. All parallel lines to the north of the equator are called 'Northern latitudes' and all parallel lines to the south of the equator are called 'Southern latitudes'.
6. North or South is written along with the value of latitude which represents the direction. North is indicated as N and South is indicated as S.
7. There are 90 parallels in each hemisphere.
8. The length of the parallels (latitudes) decreases gradually from the Equator to the poles.

Important Latitudes

Equator

The Equator is an imaginary line on the earth's surface equidistant from the north and the south pole dividing the earth into northern and southern hemisphere. It is the longest line of latitude.

Tropic of Cancer

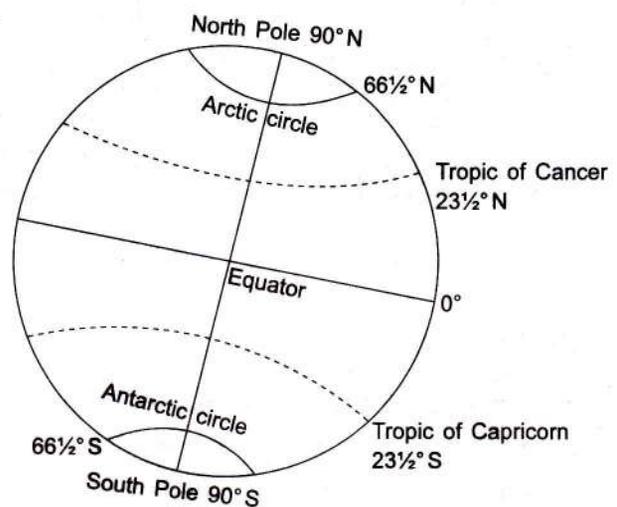
The Tropic of Cancer is an important parallel of latitude in the Northern Hemisphere. It is located at an angular distance of $23\frac{1}{2}^\circ$ North of the Equator.

Tropic of Capricorn

The Tropic of Capricorn is an important parallel of latitude in the Southern Hemisphere. It is located at an angular distance of $23\frac{1}{2}^\circ$ South of the Equator.

Arctic Circle

The Arctic Circle lies at an angular distance of $66\frac{1}{2}^\circ$ North of the Equator.



Important Latitudes

Antarctic Circle

The Antarctic Circle lies at an angular distance of $66\frac{1}{2}^{\circ}$ South of the Equator.

Importance of Latitudes

1. Latitudes help us to find the location of a place away from the Equator.
2. Latitudes help us to know the temperature of a place.
3. With the help of both—latitudes (horizontal lines) and longitudes (vertical lines)—we can locate a place on globe or map easily.

HEAT ZONES OF THE EARTH

The Earth is divided into three heat zones. They are—Torridd Zone, Temperate Zone and Frigid Zone.

1. The Torrid Zone

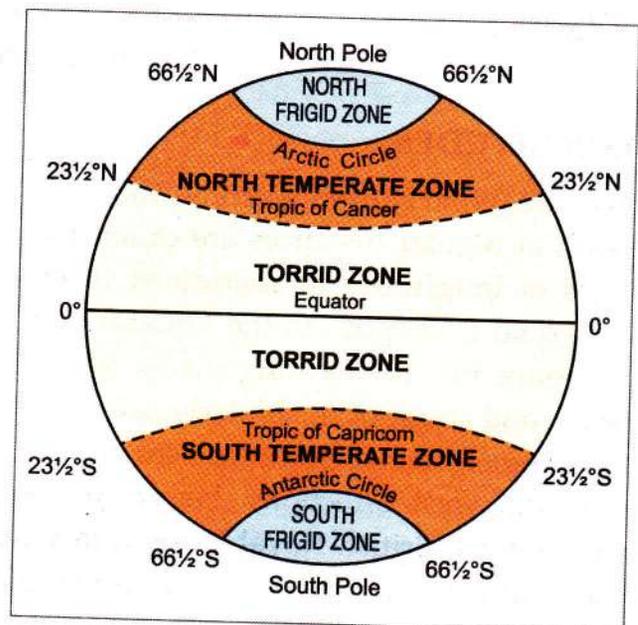
The Torrid Zone lies between the Tropic of Cancer and the Tropic of Capricorn. The Sun's rays fall almost vertically here all the year round. It receives maximum heat and is the hottest zone on the Earth. The Equator runs through the middle of this zone. The mid-day Sun is exactly overhead at least once a year in this zone. It is also known as the **tropical zone**.

2. The Temperate Zones

The zones outside the Torrid Zone between $23\frac{1}{2}^{\circ}$ N and $66\frac{1}{2}^{\circ}$ N in the Northern Hemisphere and $23\frac{1}{2}^{\circ}$ S and $66\frac{1}{2}^{\circ}$ S in the Southern Hemisphere receive slanting rays of the Sun. These zone are neither too hot nor too cold, i.e. they have a moderate temperature. The belt between the Tropic of Cancer and the Arctic Circle is called the North Temperate Zone. The belt between the Tropic of Capricorn and the Antarctic Circle is called the South Temperate Zone. The mid-day Sun is never overhead beyond the Tropic of Cancer or the Tropic of Capricorn.

3. The Frigid Zones

The Frigid Zones between $66\frac{1}{2}^{\circ}$ N and the North Pole and $66\frac{1}{2}^{\circ}$ S and the South Pole receive minimum heat. These are the coldest zones. The North Frigid Zone lies between the Arctic Circle and the North Pole. The South Frigid Zone lies between the Antarctic Circle and the South Pole. Here, the mid-day Sun never rises much above the horizon.

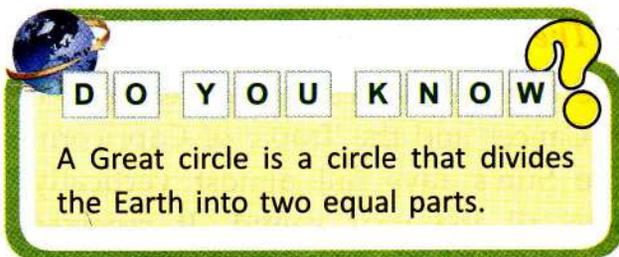


Heat zones of the Earth

Torrid Zone	Temperate Zone	Frigid Zone
1. Torrid zone extends to the either sides of the equator between the Tropic of Cancer and Tropic of Capricorn.	Temperate zone extends from the Tropic of Cancer to the Arctic Circle in the North and from the Tropic of Capricorn to the Antarctic Circle in the south.	Frigid zone extends from the Arctic Circle to the North Pole and from the Antarctic Circle to the South Pole.
2. The Sun's rays fall directly throughout the year. Twice a year the mid-day Sun is at 90° in this zone.	This zone receives slanting rays of the Sun and it is never overhead throughout the year.	This zone receives extreme slanting rays of the Sun. Even the mid-day Sun never rises much above the horizon.
3. Torrid zone is the extremely hot area of the Earth.	Temperate zone is neither too hot nor too cold.	Frigid zone is the coldest area of the Earth.

LONGITUDES

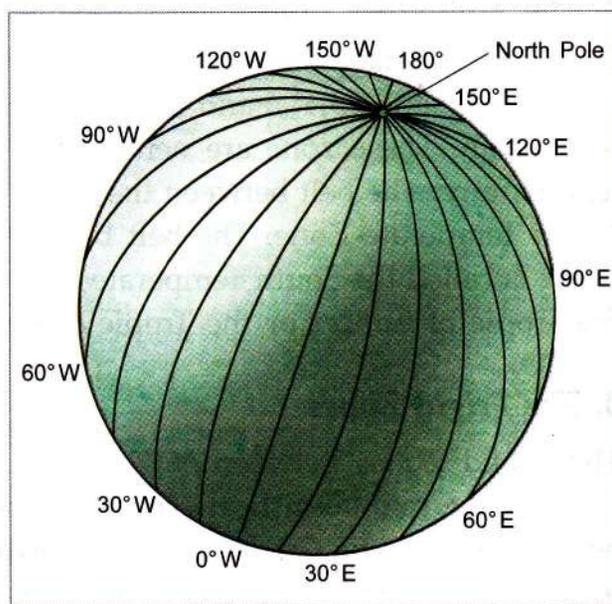
The imaginary lines joining the two poles at regular distances are called the lines of **longitudes** or meridians. They are equal in length. As the Equator is a reference line for locating places to the north and south of it, similarly, we need a reference line to locate places in the east and west directions. Hence, it was decided that the line of meridian passing through the British Royal Observatory at Greenwich (near London) should be called the **Prime Meridian**. It is also known as the **Greenwich Meridian**.



Hence, it was decided that the line of meridian passing through the British Royal Observatory at Greenwich (near London) should be called the **Prime Meridian**. It is also known as the **Greenwich Meridian**.

Important facts about Longitudes

1. The imaginary lines that run from the north pole to the south pole are called meridians or lines of longitude.
2. The distance between the meridians is measured in degrees. Each degree is further divided into minutes and minutes are divided into seconds.
3. Each meridian is a semi-circle in itself.
4. The distance between meridians decreases steadily as they approach to the poles and becomes zero at the poles. Thus, all the meridians meet at poles.



Longitudes

5. All the meridians are of equal length.
6. The value of Prime Meridian is 0° longitude.
7. In total, there are 360° longitudes, out of which 180° are to the east of Prime Meridian and 180° are to the west of Prime Meridian.
8. 180° East and 180° West meridians are on the same line known as **International Date Line**.
9. The Prime Meridian and 180° meridian divide the Earth into two equal halves—the eastern hemisphere and the western hemisphere.
10. The meridians east of the Prime Meridian are indicated by the letter E and those on the west are indicated by the letter W.

Importance of Longitudes

1. Longitudes help us to calculate the local time of a place.
2. Longitudes and latitudes together help to locate a particular place on the globe or a map.
3. On a given longitude, the local time remains the same.

LONGITUDE AND TIME

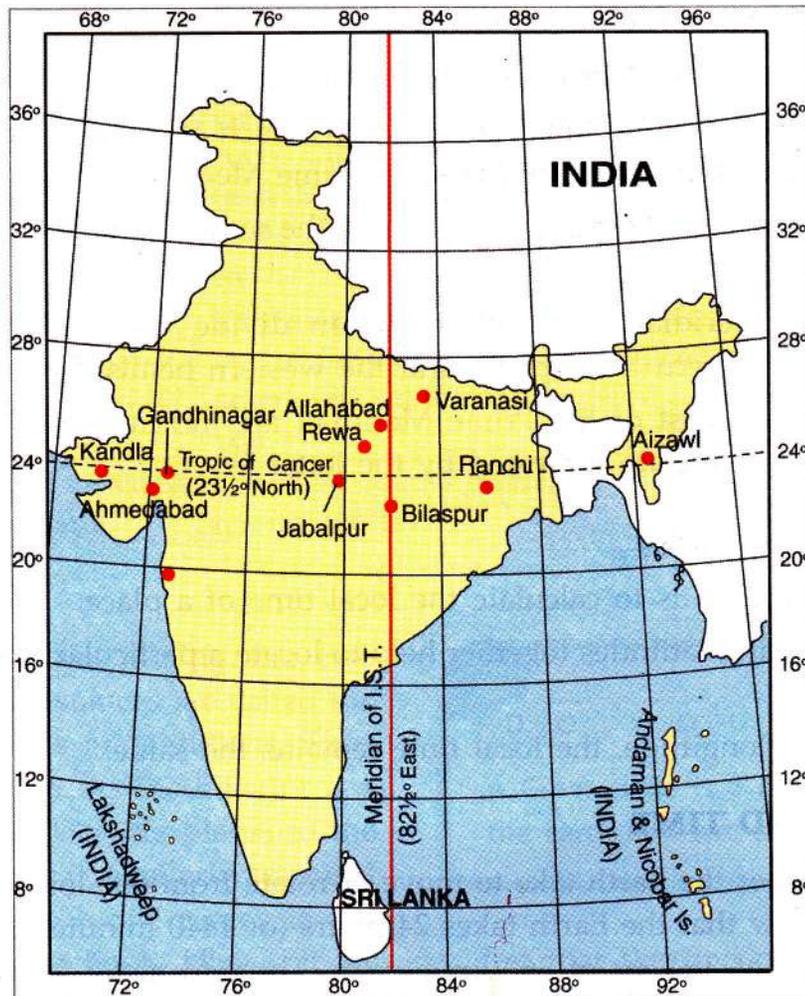
How much time does the Earth take to move or rotate from one longitude to the next longitude? We know that the Earth takes 24 hours (or 1440 minutes) to complete one round of an angle of 360° or of 360 longitudes. Thus, to move from one longitude to the next longitude (1°), it will take $1440/360$ or 4 minutes.

Local Time

The local time of a place can be calculated on the basis of the height of the Sun. When the Sun shines at the highest point in the sky at a place, say A (at 10° W longitude), it is considered the middle of the day (mid-day), that is, 12 noon. Thus, at the next longitude (11° W), the Sun will be shining at the highest point after 4 minutes. Hence, the local time will be 12 noon at that place. Thus, the local time of every different longitude will be different and this can cause great confusion. For example, the local time of a place in Gujarat may lag 1 hour 45 minutes the local time of a place in Assam.

Standard Time

To solve the problem of different local times at different places within a country, we have selected a central meridian or longitude that passes almost from the middle of the country. We call it the **standard meridian** of that country. We consider its local time as the standard time for all the places within the country. Thus, the standard meridian of India is $82\frac{1}{2}^\circ$ E ($82^\circ 30'$ E) running close to Naini, Allahabad. The local time on this meridian is the standard time for the whole country. This is called the **Indian Standard Time (IST)**.

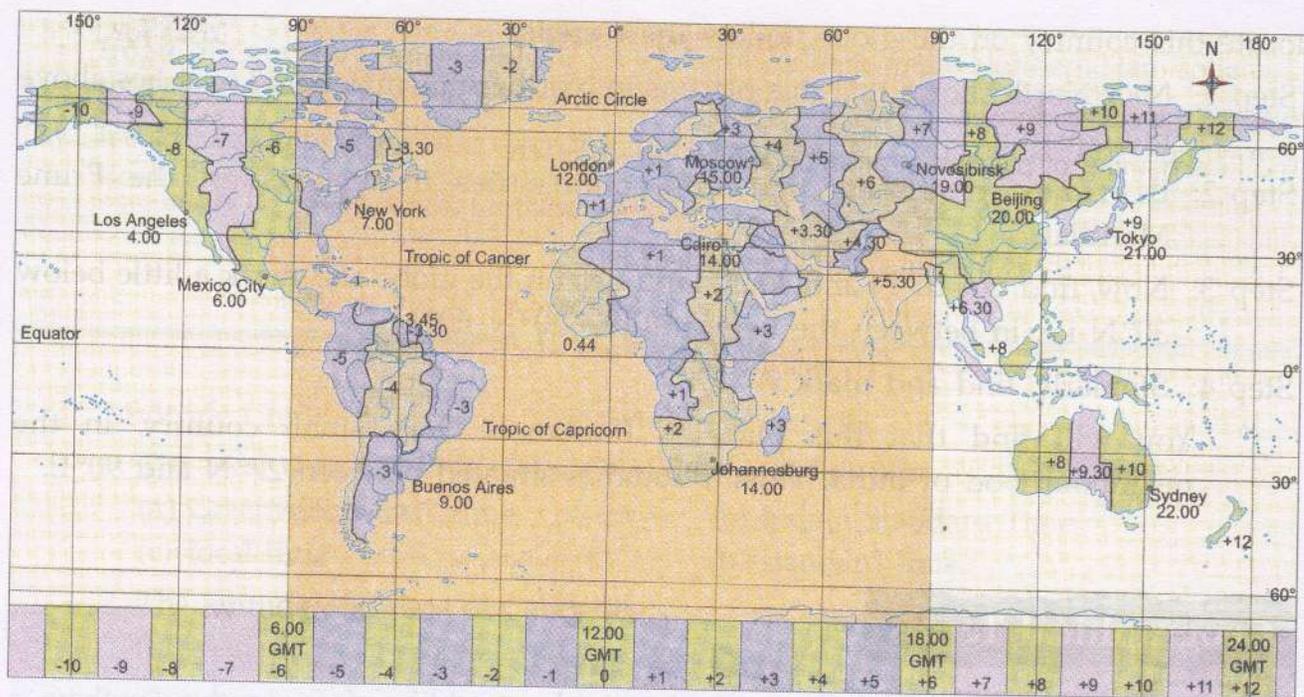


Standard meridian of India

The time at the Prime Meridian is called the **Greenwich Mean Time (GMT)** which is the standard time all over the world. Often, the standard times in different countries are expressed as a difference in the number of hours from the GMT. Since the Earth rotates from west to east, any place east of the Prime Meridian will have its sunrise or midday earlier than the GMT. Similarly, any place which is to the west of the Prime Meridian will have its sunrise or mid-day later than the GMT. The difference of time between the IST and the GMT is $5\frac{1}{2}$ hours. As our standard meridian is to the east of Greenwich, our standard time is $5\frac{1}{2}$ hours ahead of the GMT. This means that when it is 12 noon at Greenwich, it is 5.30 p.m. in India. Since the Earth moves from west to east, the time in the Eastern Hemisphere will be ahead of Greenwich and that in the Western Hemisphere will be behind Greenwich.

Time Zones

The world is divided into 24 time zones of 1 hour each. We know that there are 360° meridians of longitudes ($180^\circ\text{E} + 180^\circ\text{W}$). So, $360 \div 24 = 15^\circ$. Thus, each time-zone covers 15° longitude. A country like Russia, which has a large east-west extent, has 11 time zones, while the USA has 4 time zones.



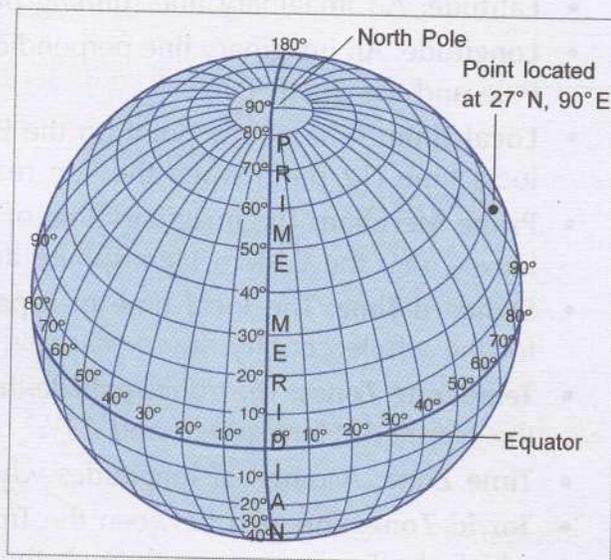
World—Time zones

Difference between Latitudes and Longitudes.

Latitudes	Longitudes
1. Latitudes are horizontal lines.	Longitudes are vertical lines.
2. Equator is the main latitude which divides the Earth in two equal parts. Its value is 0°.	Prime Meridian is the main longitude. Its value is 0° longitude.
3. The length of the latitudes decreases gradually from the Equator to the poles.	The length of the longitudes remains the same.
4. The distance between the latitudes remains the same.	The distance between the longitudes decreases steadily polewards and becomes zero at the poles.
5. Latitudes represent north and south directions.	Longitudes represent east and west directions.

LOCATING A PLACE ON THE GLOBE

You will find on a globe that the latitudes and longitudes intersect each other and make a network. This network is called **grid**. With the help of this grid, the exact position of any place on the Earth can be located. For example, the main land of India lies between 8°–37°N and 68°–97°E. This shows, India is located in the Northern Hemisphere and east to the Prime Meridian. Suppose a country is situated between 27°N and 90°E. To



Locating a place with the help of grid on a globe

locate this country on the globe, follow these steps:

Step 1: N or North shows that this place is in Northern Hemisphere i.e., it lies above the equator.

Step 2: E or East represents that this country lies in the east of the Prime Meridian.

Step 3: Now, find out 20°N and 40°N latitudes on the globe and mark a little below 30°N i.e. in between the two latitudes 20°N – 40°N .

Step 4: Similarly, find and mark 90°E .

You will find that this place is Bhutan, a very small country, in the neighbourhood of India. Thus, Bhutan is situated between 27°N and 90°E .

Geographical Terms

- **Antarctic Circle:** An imaginary circle on the Earth's surface in the Southern Hemisphere at an angular distance of $66\frac{1}{2}^{\circ}\text{S}$ from the Equator.
- **Arctic Circle:** An imaginary circle on the Earth's surface in the Northern Hemisphere at an angular distance of $66\frac{1}{2}^{\circ}\text{N}$ from the Equator.
- **Equator:** The imaginary line drawn at 0° which divides the Earth into two halves, i.e., the Northern Hemisphere and the Southern Hemisphere.
- **Frigid Zones:** The areas lying between $66\frac{1}{2}^{\circ}\text{N}$ and the North Pole and $66\frac{1}{2}^{\circ}\text{S}$ and the South Pole.
- **Greenwich Mean Time:** The time at the Prime Meridian.
- **Grid:** The network of parallels of latitudes and meridians of longitudes intersecting each other.
- **Indian Standard Time (IST):** The local time of $82\frac{1}{2}^{\circ}\text{E}$ longitude.
- **International Date Line:** The meridian of 180°E and 180°W which is the same line.
- **Latitude:** An imaginary line running parallel to the equator.
- **Longitude:** An imaginary line perpendicular to the equator, passing through the North Pole and the South Pole.
- **Local Time:** Time at any point on the Earth's surface calculated by considering noon local time (12 p.m.) when the Sun reaches the highest point in the sky.
- **Prime Meridian:** The imaginary line of 0° longitude which divides the Earth into two halves, i.e., the Eastern Hemisphere and the Western Hemisphere.
- **Standard Time:** The local time of a particular longitude adopted as a uniform time for the whole country.
- **Temperate Zones:** The zones outside the Torrid zone between $23\frac{1}{2}^{\circ}\text{N}$ and $66\frac{1}{2}^{\circ}\text{N}$ in the Northern Hemisphere and $23\frac{1}{2}^{\circ}\text{S}$ and $66\frac{1}{2}^{\circ}\text{S}$ in the Southern Hemisphere.
- **Time Zone:** A range of longitudes where a common standard time is used.
- **Torrid Zone:** The area between the Tropic of Cancer and the Tropic of Capricorn in which the Equator passes through the middle.

- **Tropic of Cancer:** An imaginary line on the Earth's surface in the Northern Hemisphere at an angular distance of $23\frac{1}{2}^{\circ}$ N from the Equator.
- **Tropic of Capricorn:** An imaginary line on the Earth's surface in the Southern Hemisphere at an angular distance of $23\frac{1}{2}^{\circ}$ S from the Equator.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- The local time of $82^{\circ} 30'$ E longitude is known as the
 (a) Greenwich Mean Time (b) Indian Standard Time
 (c) local time (b) standard time
- The latitude of Tropic of Cancer is
 (a) $23\frac{1}{2}^{\circ}$ S (b) $23\frac{1}{2}^{\circ}$ E (c) $66\frac{1}{2}^{\circ}$ N (d) $23\frac{1}{2}^{\circ}$ N
- The standard meridian of India passes through
 (a) Ahmedabad (b) Allahabad (c) Aurangabad (d) Adilabad
- helps to calculate the local time of a place.
 (a) Latitude (b) Equator (c) Longitude (d) Prime Meridian
- The length of the latitudes gradually from the Equator to the poles.
 (a) increases (b) decreases (c) wider (d) narrowed

II. Mark True or False against each of the following statements.

- The Prime Meridian divides the Earth into the Northern and the Southern hemispheres. _____
- The latitude of the Tropic of Cancer is $23\frac{1}{2}^{\circ}$ N. _____
- Only longitudes help us to locate any place on the Earth. _____
- The meridian of 180° E and 180° W is the same line known as the International Date Line. _____
- The Indian Standard Time is ahead of GMT by $5\frac{1}{2}$ hours. _____

III. Match the columns.

- | Column A | Column B |
|--|---|
| 1. Network of parallels of latitude and meridians of longitude | (a) Latitude |
| 2. The place where the Prime Meridian passes through | (b) Grid |
| 3. The standard meridian of India which shows the Indian Standard Time | (c) North Frigid Zone |
| 4. The zone between the Arctic Circle and the North Pole | (d) $82\frac{1}{2}^{\circ}$ E longitude |
| 5. An imaginary line running parallel to the Equator | (e) Greenwich |

VII. Find Out.

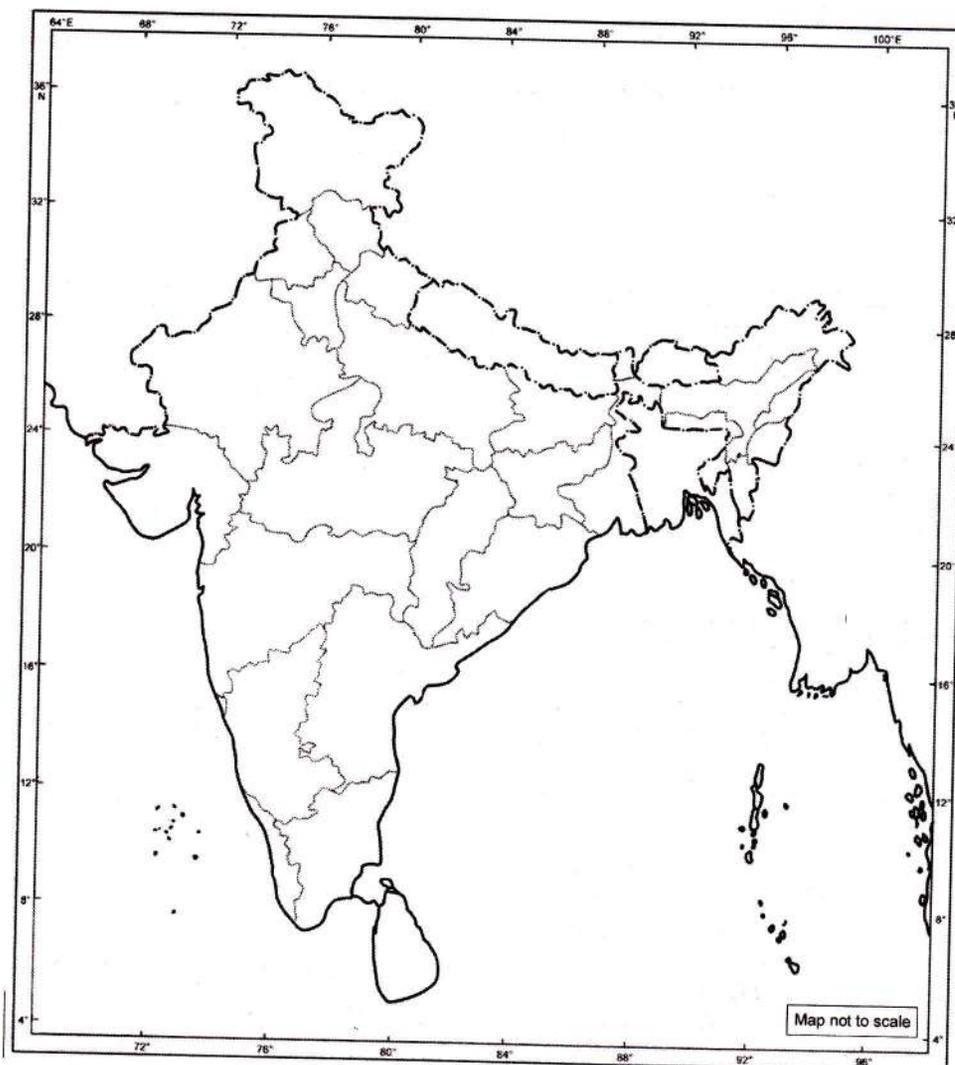
1. With the help of an atlas, find out the approximate locations (latitudes and longitudes) of the following cities:
(a) Allahabad (b) Mumbai (c) Tokyo
(d) Chicago (e) Sydney (f) New York
2. From the atlas, find out the names of four countries each through which the Equator, the Tropic of Cancer and the Tropic of Capricorn pass.
3. Name the states of India through which the Tropic of Cancer passes.

VIII. Projects and Activities.

1. Prepare a chart or a model to show the heat zones of the Earth.
2. Working in groups, create a model of the Earth using plasticine, clay, play dough or plastic ball. Mark the different lines of latitudes and longitudes on it.

IX. Map Work.

On an outline map of India, mark the Tropic of Cancer and the standard meridian. Write the names of the states through which the two pass.



VALUE-BASED QUESTION

Ria and her brother Rahul reside in Kolkata (90°E) and want to watch a football match which is being played in London. The match is scheduled to be telecast on TV from 4.00 p.m. GMT. Rahul sat in front of the TV at 4.00 p.m. sharp while Ria finished her homework and sat down to watch the telecast at 9.30 p.m.

1. Why did Ria come at 9.30 p.m. to watch the football match?
2. Write any two characteristic values of Ria.

HOTS: THINK BEYOND

What is the location of our country on the grid in terms of angles of latitude and longitude? How does the location affect the temperature and climate of our country?

ANSWERS TO THE CROSSWORD PUZZLE

Across

1. Tropic of Cancer
2. Antarctic Circle
3. North Temperate
4. Russia

Down

- A. Standard time
- B. Prime Meridian
- C. Longitude

3

Motions of the Earth

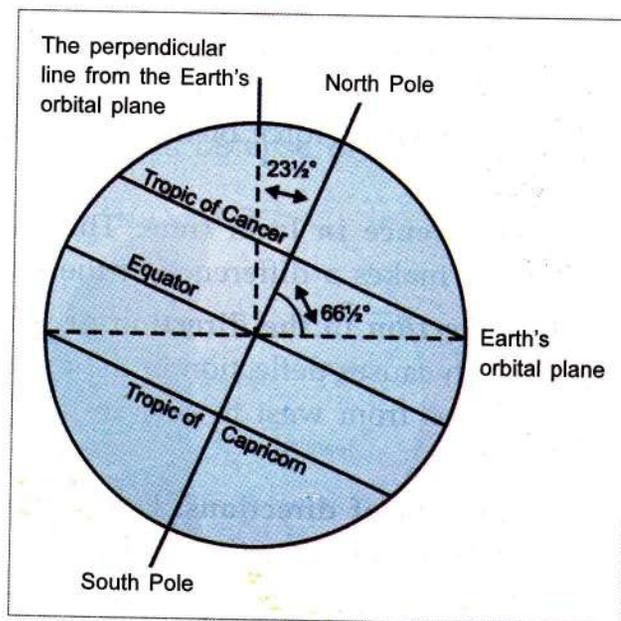
We see the Sun rising in the east in the morning and setting in the west in the evening. It seems as if the Sun revolves around the Earth. However, it is just the opposite. The Earth revolves around the Sun. The Earth spins on its axis from the west to the east. Hence, we see the Sun moving in the sky from the east to west. This phenomenon can be understood as follows—while travelling in a train, it seems the trees, houses and telephone poles are moving in the opposite direction. However, in reality, the train moves and the other things remain stationary.

In chapter 1 we have read that all the planets and satellites revolve around the sun as well as rotate on their own axis. Thus, the Earth also has two kinds of motions—Rotation and Revolution. In this chapter we will study about these two motions of the Earth in detail.

ROTATION

The movement of the Earth on its axis is called **rotation**. The rotation of the Earth can be compared with the rotating movement of a top. The top rotates on its axle. Similarly, the Earth rotates on its axis continuously. The Earth's axis is tilted at an angle of $23\frac{1}{2}^\circ$ from the perpendicular position and $66\frac{1}{2}^\circ$ from the orbital plane. The plane formed by the orbit is known as the **orbital plane**. This tilting of the Earth's axis is called the **inclination of the Earth's axis**. The Earth completes one rotation on its axis in 24 hours. It rotates with the speed of 1674 km/hr. Although, this speed is not same everywhere on the Earth. The rotating speed of the Earth is fastest at the equator whereas at poles it is the slowest.

The angle of inclination of the Earth's axis always remains the same. The axis of the Earth is inclined towards right side at an angle of $23\frac{1}{2}^\circ$ to the perpendicular



Inclination of the Earth's axis

from the Earth's orbital plane. Whereas the orbital plane makes an angle of $66\frac{1}{2}^{\circ}$ towards the left side. This direction of inclination of axis does not change even during the revolution of Earth around the Sun.

EFFECTS OF ROTATION

1. **Formation of days and nights:** When the Earth rotates on its axis, one half of its surface faces the Sun while the other half is away from the Sun. Hence, the half part facing the Sun experiences day while the other half away from the Sun experiences night. The parts of the Earth that receive slanting sunrays experience either morning or evening. Since the slanting sunrays fall on a large area of the Earth, hence, the mornings and evenings are relatively cooler. At noon, the sunrays are almost vertical since they fall on a small area of the Earth. Hence, it is hot at noon. The period of diffused light before sunrise is called **dawn**. The period of diffused light after sunset is called **dusk**. The circle which divides the Earth into day and night is called the **circle of illumination**. In other words, the circle of illumination is an imaginary line which separates the lighted part of the Earth from the dark one.

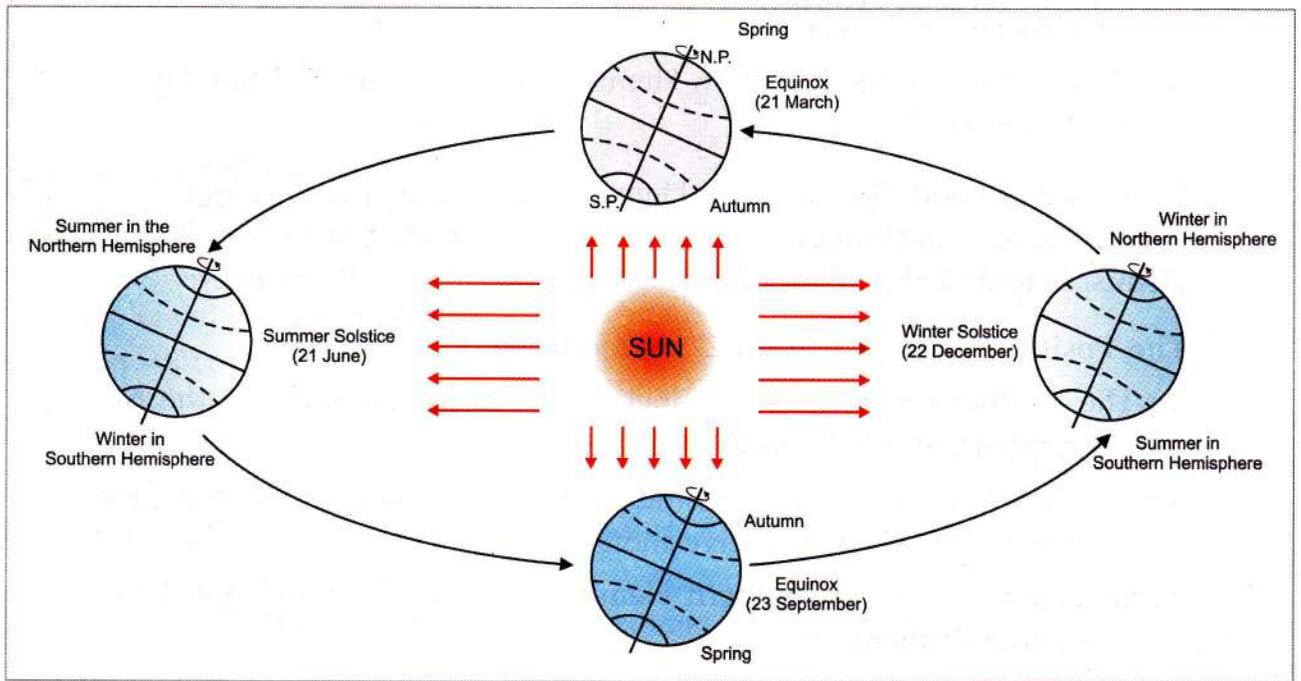
Comparison between Morning and Evening Time

1. Morning is the time of sunrise whereas evening is the time of sunset.
2. The duration of morning is from sunrise to mid-day and the duration of evening is from mid-day to till the night starts.
3. In the morning the Sun seems rising up the sky whereas in the evening the Sun appears to be coming down.
4. In the morning the sunrays come from the east direction and in the evening the sunrays appear to come from the west direction.

2. **Occurance of tides:** The rotation of the Earth causes tides in oceans. The gravitational force of the Sun and the Moon causes 'high tides' and the gravitational force of the Earth causes 'low tides'. Thus, it causes tides twice a day.
3. **Difference in local time:** The Earth takes 4 minutes to rotate 1° longitude. This makes a difference in the local times at different longitudes.
4. **Deflection in the direction of winds and ocean currents:** The rotation of the Earth causes deflection in the direction of winds and ocean currents. The Earth rotates from west to east so the ocean currents and wind flows from east to west.
5. **Concept of directions:** Due to the rotating movement of the Earth, we come to know the direction of Sun-rise and Sun-set. On the basis of these two, we can guess the other directions too.
6. Rotation gives us a day of 24 hours.

REVOLUTION

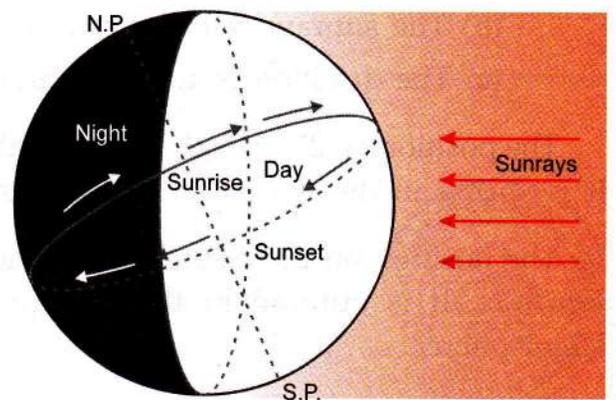
The Earth revolves around the Sun while rotating on its axis. The movement of the Earth around the Sun on a fixed path is called **revolution**. It takes about 365 days and 6 hours to complete one **revolution** around the Sun. To make it convenient, we count only 365 days in a year and add one day in the fourth year. This extra day is added to the month of February. Every fourth year has 366 days. This year is called the **leap year**. The Earth revolves around the Sun in an **elliptical orbit** at a speed of 29.8 km per second or at about 1,00,000 km per hour.



Revolution of the Earth and the formation of seasons

EFFECTS OF REVOLUTION

- Changes in the lengths of days and nights:** The lengths of days and nights throughout the year are not the same. This is because of the inclination of the Earth's axis. The Northern Hemisphere is inclined towards the Sun for half of the year while the Southern Hemisphere remains away from the Sun. Thus, larger parts of the Northern Hemisphere receive sunlight for long time. This results in longer days and shorter nights in the Northern Hemisphere. The reverse is the case in the Southern Hemisphere as the days are shorter and nights are longer here.



Day and night on the Earth

The places lying at and nearer to the Equator have equal length of days and nights of 12 hours each.

2. **Change of seasons:** Change of seasons is caused by the revolution of the Earth and the inclination of the Earth's axis.

The Position of the Earth on 21st June

- (a) The Northern Hemisphere is inclined towards the Sun and the Southern Hemisphere is away from the Sun.
- (b) The sunrays fall vertically on the Tropic of Cancer. As a result, the areas near Tropic of Cancer receive more heat.
- (c) Greater parts of the Northern Hemisphere have long and hot days. Hence, it is summer there.

On the other hand, the Southern Hemisphere is away from the Sun. Thus, it is winter there. This position is known as the **Summer Solstice** in the Northern Hemisphere and the **Winter Solstice** in the Southern Hemisphere.

The Position of the Earth on 22nd December

- (a) The Southern Hemisphere is inclined towards the Sun and the Northern Hemisphere is tilted away from the Sun.
- (b) The sunrays fall vertically on the Tropic of Capricorn. As a result, the areas near Tropic of Cancer receive more heat.
- (c) Greater parts of the Southern Hemisphere have long and hot days. Thus, it is summer there.

On the other hand, the Northern Hemisphere is away from the Sun. Hence, it is winter there. This position is known as the **Winter Solstice** in the Northern Hemisphere and the **Summer Solstice** in the Southern Hemisphere.

The Position of the Earth on 21st March and 23rd September

- (a) On 21st March and 23rd September neither of the poles is tilted towards the Sun.
- (b) The sunrays fall vertically on the Equator.
- (c) The duration of day and night is equal all over the world.

The position on 21st March in the Northern Hemisphere is called the **Spring Equinox**. It is spring in the Northern Hemisphere and autumn in the Southern Hemisphere.

The position on 23rd September in the Northern Hemisphere is called the **Autumn Equinox**. It is autumn in the Northern Hemisphere and spring in the Southern Hemisphere.

Difference between Rotation and Revolution

Rotation	Revolution
1. The movement of the Earth on its axis is called rotation.	The movement of the Earth around the Sun is called revolution.
2. The Earth rotates on its axis.	The Earth revolves in an elliptical orbit.
3. The Earth takes 24 hours to rotate once on its axis.	It takes 365 days and 6 hours to complete one revolution around the Sun.
4. The rotation of the Earth causes day and night.	The revolution of the Earth causes change in the length of days and nights and also change of seasons.

Geographical Terms

- **Axis:** The imaginary line passing through the centre of the Earth, joining the North Pole and the South Pole.
- **Equinoxes:** Two days when the whole earth experiences equal days and nights *i.e.*, 21st March and 23rd September.
- **Inclination of the Earth's axis:** The tilting of the Earth's axis at an angle of $23\frac{1}{2}^{\circ}$ from the axis and $66\frac{1}{2}^{\circ}$ from the orbital plane.
- **Leap year:** A year having 366 days which occurs every four years.
- **Orbital Plane:** The plane formed by the orbit.
- **Revolution:** The motion of the Earth around the Sun in a fixed orbit in $365\frac{1}{4}$ days or one year.
- **Rotation:** The spinning of the Earth on its axis once, in every 24 hours.
- **Summer Solstice:** The day of 21st June when the sunrays fall directly on the Tropic of Cancer.
- **Winter Solstice:** The day of 22nd December when the sunrays fall directly on the Tropic of Capricorn.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Earth rotates from
(a) east to west
(b) west to east
(c) north to south
(d) south to north
2. Day and night are equal on
(a) 22nd December
(b) 21st June
(c) 21st March
(d) 20th September



3. Seasons are caused by the of the Earth.
 - (a) rotation
 - (b) revolution
 - (c) Both (a) and (b)
 - (d) None of the above
4. The spinning of the Earth on its own axis is called
 - (a) revolution
 - (b) equinox
 - (c) rotation
 - (d) solstice
5. On 21st June, the Sun is overhead at the
 - (a) Equator
 - (b) Tropic of Cancer
 - (c) Arctic Circle
 - (d) Tropic of Capricorn

II. Mark True or False against the each of the following sentences.

1. Solstice refers to unequal days and nights. _____
2. The Earth completes one rotation in 88 days. _____
3. The axis of the Earth is tilted at an angle of $23\frac{1}{2}^{\circ}$ to the perpendicular from the Earth's orbital plane. _____
4. The position of 22nd December is the Winter Solstice for Southern Hemisphere. _____
5. Days and nights occur due to the rotation of the Earth. _____

III. Match the columns.

Column A	Column B
1. A year having 366 days	(a) Orbit
2. Period of diffused light after sunset	(b) Summer solstice
3. An imaginary line passing through the centre of the Earth joining the North Pole and the South Pole	(c) Leap year
4. 21 st June and 22 nd December	(d) Axis
5. Elliptical path of revolution of the Earth around the Sun	(e) Dusk

IV. Short Answer Questions.

1. What is the circle of illumination?
2. On which two days are the sunrays vertical on the Equator?
3. When does a leap year occur?
4. In summers days are longer than nights. Why?

V. Answer the following questions.

1. State three points of difference between rotation and revolution.
2. Explain how seasons are caused.
3. Write three differences between the equinox and solstice.
4. When do the Spring Equinox and the Autumn Equinox take place? What is the position of the Earth with respect to the Sun on these days?
5. Why is the duration of days and nights unequal throughout the world?

VI. Solve the wordsearch with the help of the given clues to find the answers vertically or horizontally.

S	R	V	S	T	N	U	V	X	Y	A
B	L	E	A	P	Y	E	A	R	Z	X
A	C	B	V	W	O	P	Q	R	O	S
W	H	O	M	O	R	N	I	N	G	D
X	Y	Z	M	N	L	O	I	P	Q	R
O	R	E	V	O	L	U	T	I	O	N
C	B	D	E	F	N	R	T	S	U	D
M	N	O	P	E	H	O	R	I	T	A
Y	W	I	N	T	E	R	Z	M	O	W
E	Q	U	I	N	O	X	G	H	I	N

CLUES
1. The movement of the Earth around the Sun
2. The time of sunrise
3. Period of diffused light before sunrise
4. A year with 366 days
5. Period in which the days and nights are equal all over the world
6. Season in which nights are longer than the days

VII. Find Out.

Which of the following years was a leap year?

- (a) 1860 (b) 1857 (c) 1947 (d) 2012

VIII. Projects and Activities.

1. Prepare a chart to show how days and nights are caused.
2. Make a PowerPoint presentation to show the four seasons.
3. If there was to be just one season, which season would you like it to be? Write an article of 100 words on your favourite season.

VALUE-BASED QUESTION

It was the month of December. Arun and his friend Sanjay were going to the Gym on a motorcycle. Arun asked Sanjay to switch-on the headlight of the motorcycle. By saying so, Arun played the role of a responsible citizen.

1. Why did Arun ask Sanjay to switch-on the headlight of the motorcycle?
2. Arun was a responsible citizen. How?

HOTS: THINK BEYOND

What will happen if the Earth is not tilted on its axis?

ANSWERS TO THE CROSSWORD PUZZLE

- | | | |
|---------------|------------|-----------|
| 1. Revolution | 2. Morning | 3. Dawn |
| 4. Leap year | 5. Equinox | 6. Winter |

In chapter 2, we had studied about globe which is a model of the Earth. A globe is ideal for representing the relative location of various landforms, continents, oceans etc. but it has certain limitations also. Besides difficulty in carrying, it cannot represent the details of a place. For this, a large-sized globe would be needed. To overcome this limitation of the globe, maps are prepared.

MAP

The word 'map' has been derived from the Latin word *mappo* meaning 'napkin'.

The Science of map-making called **cartography** was started by a Greek scholar Claudius Ptolemy. He is known as **Father of Cartography**.

Mercator and Hondt were the first people to publish a collection of maps in the form of a book, called **Atlas**.



Claudius Ptolemy

A map is a representation or a drawing of the Earth's surface or a part of it drawn on a flat surface according to a scale.

The whole of the Earth's surface or a part of it can be represented on a sheet of paper. We can put as many details as we like by making a large map. We can fold or roll a large map or divide it into several sheets to be put in a book form called an **atlas**. Thus, maps can have more information and are easier to handle than globes.

On maps, the curved surface of the Earth is represented on a flat surface. However, a curved shape cannot be flattened completely. Hence, when parts of the world are shown on a flat surface, the shapes and sizes of the continents and oceans get distorted. The maximum distortion appears in the regions around the poles. This is the reason why maps are not as accurate as globes.

TYPES OF MAPS

Maps can be of many types. It depends on what we want to show through the map.

Political Map

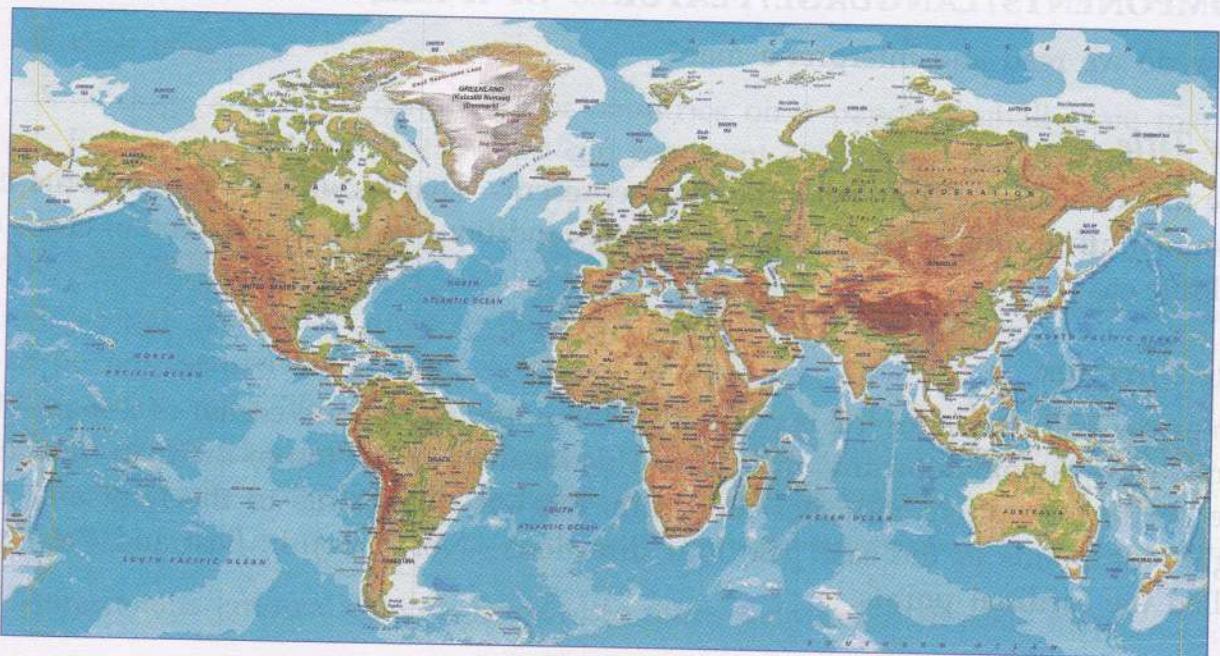
A **political map** shows the various administrative units in the form of different countries or states along with their capitals, and the locations of important cities and towns.



Political map of World

Physical Map

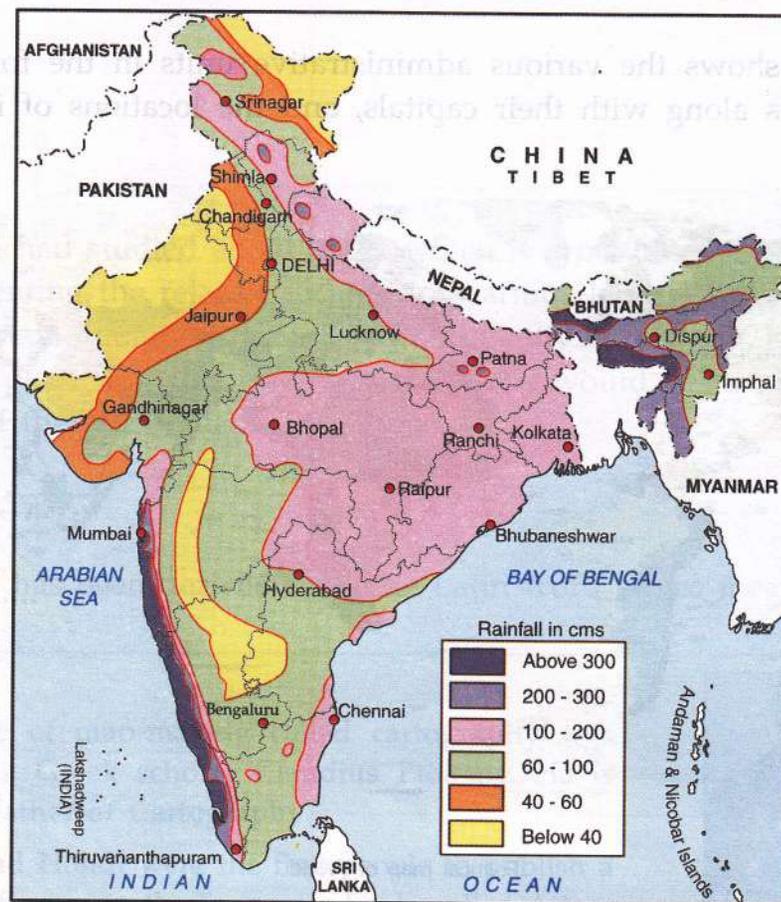
A **physical map** shows the major landforms such as mountains, plateaus, plains, rivers, seas, lakes and oceans.



Physical map of World

Thematic map

A **thematic map** gives specific information such as temperature, pressure, direction of winds, rainfall, distribution of forests, etc.



Thematic map—Average rainfall in India

COMPONENTS/LANGUAGE/FEATURES OF A MAP

How do we read and interpret a map?

The Title

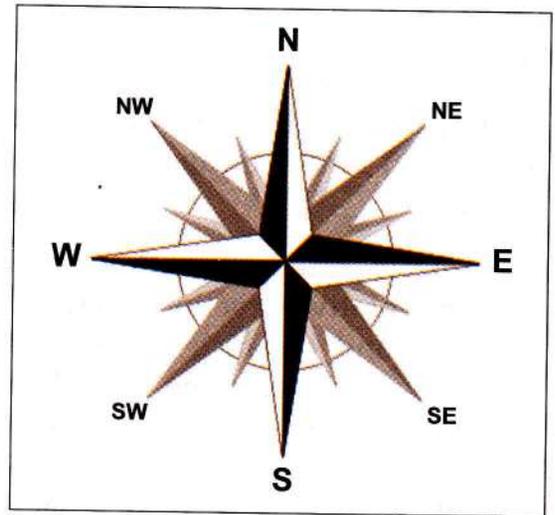
The title of a map tells us what the map represents. That is, whether it represents the administrative units or landforms or climatic conditions or the distribution of crops or wildlife etc.

The Direction

An arrow with the letter 'N' is printed on the upper right hand corner of a map. The arrow always points towards the north. This means that the top of the map indicates the north, the bottom indicates the south, the left side points to the west and the right side points to the east. The four directions—North, South, East and West are called the **cardinal points**.

Other than these, there are four intermediate directions. They are—North-East (NE), South-East (SE), South-West (SW) and North-West (NW).

We can find the direction with the help of an instrument called **magnetic compass**. The magnetic needle of the compass always points towards North-South direction.



The four cardinal points of a compass and the four intermediate directions

The scale and distance

A map is the representation of a portion of the Earth's surface on paper. To represent a big area on paper, we use scale. This means that the actual distance on ground is reduced to a much smaller distance that can fit on the available sheet of paper.

The ratio between the distance on the map and the corresponding distance on the ground is called the **scale** of the map. For example, the distance between your school and your home is 10 km. You can represent 10 km distance as 2 cm on a map. This means 1 cm on the map will represent 5 km on the ground. Therefore, the scale of the map will be 1 cm = 5 km.

The scale of the map is determined on the basis of size of the Earth's surface being represented on the map. If we know the scale of a map, we can find the actual distance between two places shown on the map.

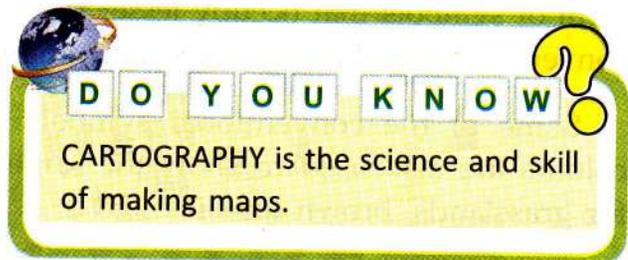
Thus, on the basis of scale, maps can be classified as—Small scale maps and Large scale maps.

Small scale map

To show large areas like continents or countries on a paper, a small scale map is used. For example, 4 cm on the map can represent 400 km on the ground. Such a map is called a **small scale map**.

Large scale map

When a small area like a town or village is to be represented on a paper, we use a large scale map. For example, 4 cm on the map can also represent 400 m on the ground. Such a map is called a **large scale map**.



More details are available on large scale maps than on small scale maps.

Methods of showing scale on a map

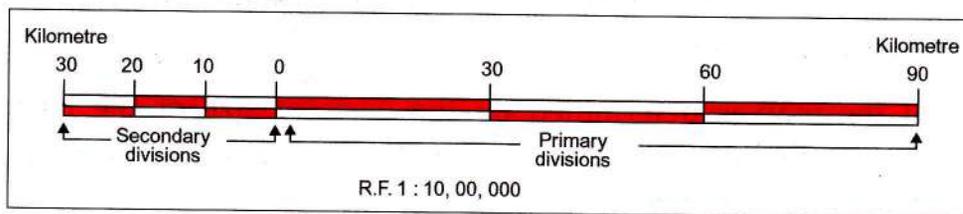
There are different ways of showing scale on a map. These are as follows:

- **Statement method:** In the statement method, the scale is given in words such as 1 cm : 3 km. It means the map distance of 1 cm is equal to 3 km distance on the ground.
- **Numeric fraction method:** The numeric fraction method is also called the representative fraction method (RF). In this method, the map distance and the ground distance are represented through a fraction. The numerator of this fraction represents the map distance and the denominator represents the ground distance.

If $R.F = \frac{1}{10,000}$, then 1 is the map distance and 10,000 represents the actual distance.

This method has universal application.

- **Linear or graphic scale:** In the linear scale method, map distance is graphically represented through straight lines. The line is divided into different parts. Each part is called a primary division and each primary division is further divided into secondary divisions.



Linear Scale

Conventional Symbols

A map becomes more useful if more information or details can be obtained from it. Suppose, we want to show the location of a bridge, river, well, temple, church, metalled road, cart track, post office, police station, etc. in a survey map. It is impossible to draw their actual pictures or write their names at the appropriate places in the map due to the limitation of space. Hence, these objects are shown in the form of symbols that occupy lesser space and are internationally accepted. The same conventional symbols are used and understood by cartographers all over the world.

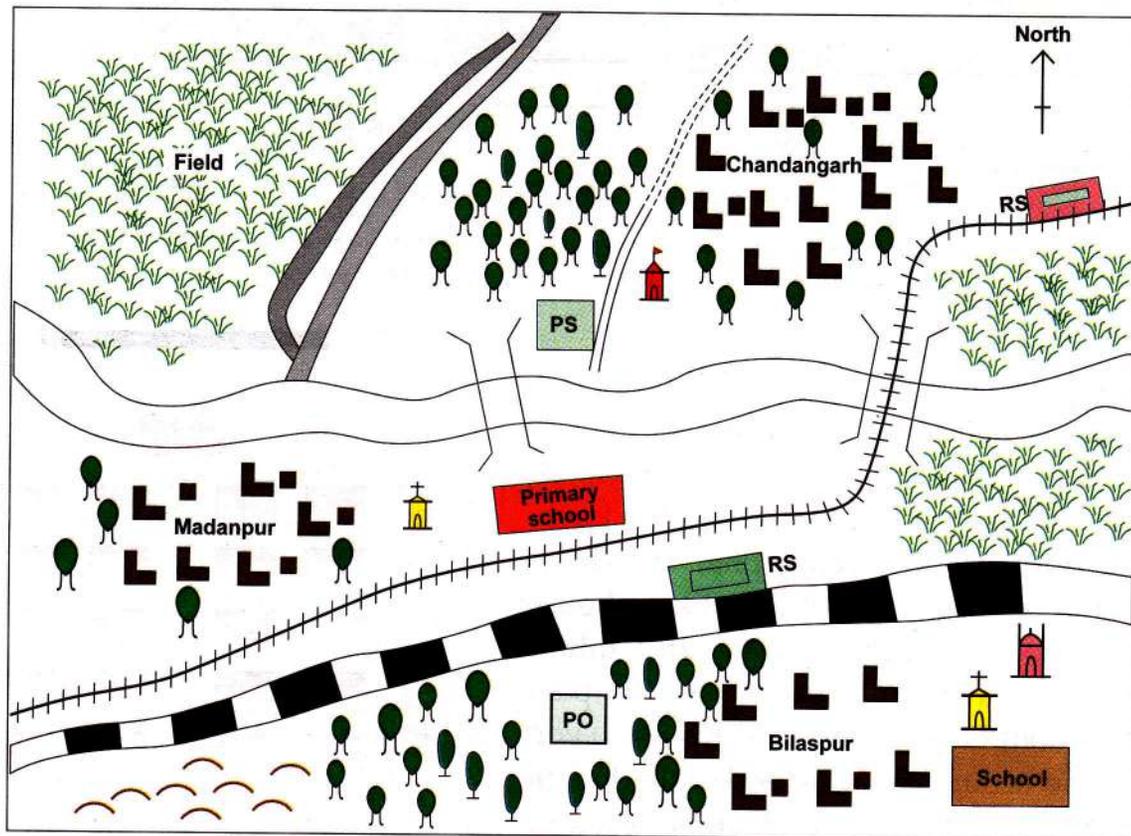
Some of the conventional symbols are given in the table below. Sometimes, colours are also used to show the same purpose, e.g. blue for water bodies, green for grasslands, brown for hills, etc.

Boundaries: International	-----	River or stream		Bridge	
State	- - - - -	Canal		Grass	
District	- - - - -	Well	● ○	Temple	
Roads: Metalled	====	Tree		Mosque	
Unmetalled	- - - - -	Settlement	■ ■ ■	Church	
Cart track	— — — — —	Post Office	PO	Dak Bungalow	DB
Footpath	Telegraph Office	TO	Graveyard	
Railways: Broad gauge	— — — — —	Police Station	PS	Height:	
Metre gauge	+++++	Forest		Triangulated	△ 200
Railway Station	 RS			Benchmark	BM 200

Some common conventional symbols

Look at the map with conventional symbols shown below and answer the following questions:

1. In which direction is the Metre gauge?
2. Name the colour you will use to represent the river in a map?
3. How many settlements are shown here?
4. In which direction is Madanpur located?
5. How many Railway Stations are shown in the map?
6. Locate and mark the Graveyard in the picture.



Use of conventional symbols in a map

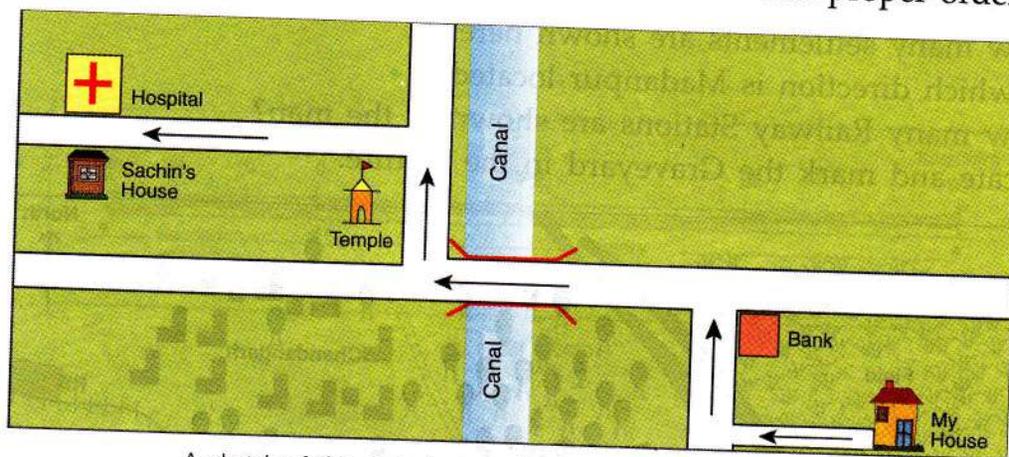
SKETCH

Sometimes, we need to help a friend by drawing a rough diagram of our locality and its roads to enable her/him to locate our house. This rough diagram indicates where she/he should turn, and which landmarks are to be checked on the way to reach. Such a diagram which gives an idea of the location and is drawn without any scale is called a **sketch**.

Suppose somebody has come to your house and asks how to reach your friend Sachin's house. You may tell him: "As you go out, turn to the right and move on till you reach a bank at the end of the street. Now turn to the left and proceed. You will find a bridge over a canal. Cross it. You will find a road parallel to the canal. Turn right and follow this road. You will pass by a temple on your left. Turn left on the first turning. You will reach a hospital. Just opposite to it is Sachin's house."

Now look at the sketch. It appears to be more useful than words.

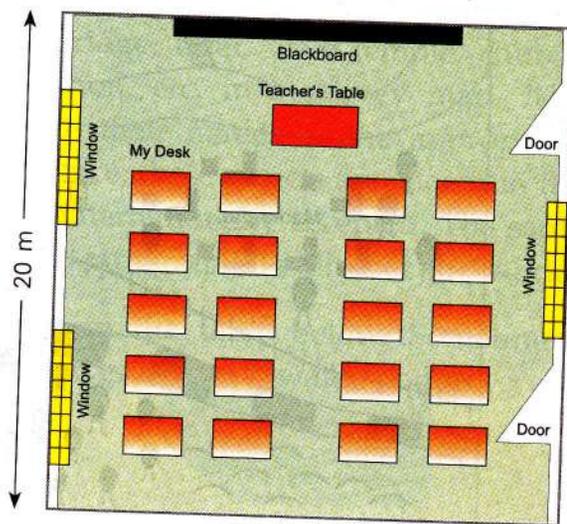
A sketch can be drawn more easily and quickly than plans and maps as it is not drawn to scale (maps and plans are drawn to scale) and does not show all the details of the place. However, it shows the important landmarks and proper order of roads.



A sketch of the route to be taken to reach Sachin's house

PLAN

A map represents a large area. Therefore, it is drawn to a small scale, for example, 1 cm to 1 km. Such a map cannot provide details of a school building or a small area of a town. For this purpose, we need a plan. A **plan** is an accurate map of a small area like a house or a classroom which shows many minor details. It is drawn on a large scale. The plan of a classroom is given here. In this plan, you can see the arrangement of desks, the length and breadth of the room and the location of windows and doors.



A plan of a classroom

A map covers a large area on a small scale whereas a plan covers a small area on a large scale and shows the details of the area as well.

Difference between Map, Sketch and Plan

Map	Sketch	Plan
1. A map is drawn on scale, either small scale or large scale.	A sketch is a drawing mainly based on memory.	A plan is a drawing of a small area on a large scale.
2. It is accurate.	A sketch is not accurate.	A plan is accurate as it is drawn on scale.
3. A map generally represents a large area.	A sketch represents a locality or an area of a colony.	A plan represents small areas like, a house, school, classroom etc.
4. In a map conventional symbols are used which are internationally accepted.	A sketch is a rough drawing that a person draws for reference.	In a plan, symbols and signs are used.

Geographical Terms

- **Atlas:** A collection of maps bound into a book.
- **Cardinal points:** The four major directions, namely, North, South, East and West.
- **Conventional symbols:** The symbols used to represent various features on a geographical map.
- **Map:** A representation of the Earth's surface or a part of it on a flat surface according to a scale.
- **Plan:** A drawing of a very small area showing details using a very large scale.
- **Scale:** The relation between the distance on the map and the corresponding distance on the ground.
- **Sketch:** A rough drawing usually made without measuring the actual distance on the ground.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- The science of making maps is called
 - geomorphology
 - cartography
 - thematic map
 - calligraphy
- The instrument used for finding directions is a
 - wind vane
 - magnetic compass
 - anemometer
 - barometer

3. A rough diagram that gives an idea of the location and which is drawn without any scale is known as a

(a) plan	(b) sketch
(c) map	(d) None of the above
4. A collection of maps bound into a volume is called a/an

(a) encyclopaedia	(b) atlas
(c) work book	(d) dictionary
5. Symbols used in maps to show various features are called

(a) pictures	(b) conventional symbols
(c) key	(d) index

II. Mark True or False against each of the following statements.

1. Maps are drawn to scale. _____
2. Political map shows the physical features of a country. _____
3. A plan shows the details of a small area on a large scale. _____
4. The ratio between map distance and actual distance is called the scale of a map. _____

III. Match the columns.

Column A

1. A map which gives specific information about any one topic
2. A map showing small area on a large scale
3. Representation of the Earth or a part of it according to a scale
4. A drawing based on memory and not to scale
5. Four major directions

Column B

- (a) Sketch
- (b) Thematic map
- (c) Cardinal points
- (d) Large scale map
- (e) Map

IV. Short Answer Questions.

1. What are the three components of a map?
2. What is a physical map?
3. How are directions shown on a map?
4. State the advantages of a sketch.
5. Name the cardinal points.

V. Long Answer Questions.

1. State the differences between a map and a globe.
2. Explain the different types of maps.
3. Why are conventional symbols necessary?
4. What is a plan? Differentiate between a map, plan and sketch.

VI. Solve the crossword puzzle with the help of the clues given below.

		S		T				H	
				B					E
									S
		N							A
	P	O		T		C			L
		H							
		E							
									E
		T							

CLUES	
Across	Down
1. can be drawn easily.	A. A collection of maps
2. Water bodies are shown by colour.	B. An intermediate direction
3. A map which shows administrative units of a country.	C. A map showing a large area on a small scale.

VII. Projects and Activities.

- Organise a game based on atlas in the class. It can be based on the names of countries and their capitals. Divide the class into four teams. Give chance to every student to say a name of a country/capital.
- Role Play—Globes versus Maps
There should be two teams—Globes and Maps. Each team should have four to five students. The Globe team shall try to prove their supremacy over the Map team by emphasising their merits and the other team's demerits. The Map team shall do the same. In the conclusion, it can be proved that both of them have their own respective importance.
- Prepare a sketch to explain the route that you take to reach your home from school.
- Draw a sketch of your locality and use conventional signs to show various features like post office, school, temple, park, market, etc.

VALUE-BASED QUESTION

Sudhir and Saurabh were returning home on foot. They met a foreigner lady. The lady asked them the location of Hotel Blue Star which was in their neighbourhood. Sudhir answered, "I don't know" and moved ahead. However, Sudhir drew a sketch on a piece of paper and explained the way to reach Hotel Blue Star.

1. In the sketch, which landmarks should be used by Saurabh so that they are easily understood by the foreigner lady?
2. What should be our behaviour towards the tourists?

HOTS: THINK BEYOND

Why is it not possible to draw an accurate map?

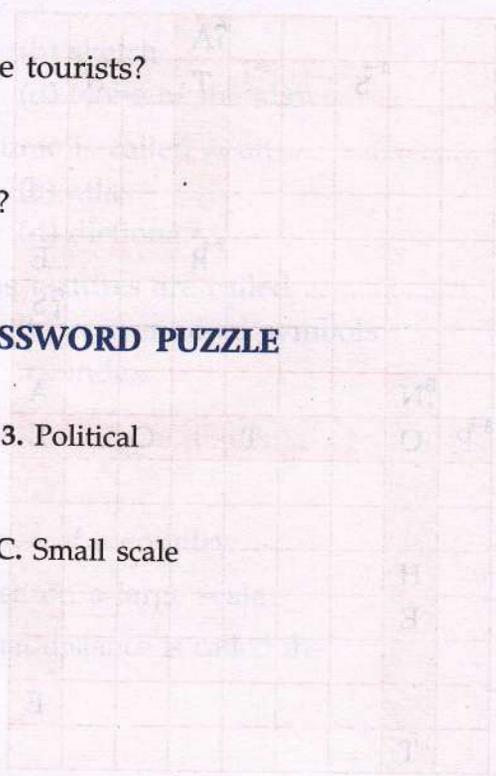
ANSWERS TO THE CROSSWORD PUZZLE

Across

1. Sketch
2. Blue
3. Political

Down

- A. Atlas
- B. North-East
- C. Small scale



VALUE-BASED QUESTION

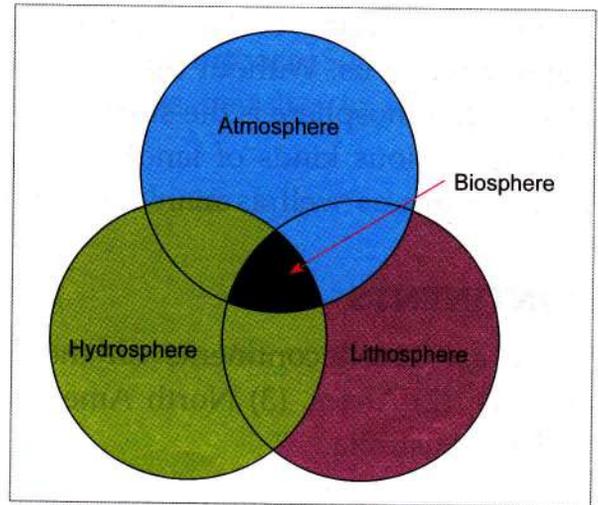
Sudhir and Saurabh were returning home on foot. They met a foreigner lady. The lady asked them the location of Hotel Blue Star which was in their neighbourhood. Sudhir answered, "I don't know" and moved ahead. However, Sudhir drew a sketch on a piece of paper and explained the way to reach Hotel Blue Star.

1. Why?
2. What should be our behaviour towards the tourists?
3. In the sketch, which landmarks should be used by Saurabh so that they are easily understood by the foreigner lady?
4. What should be our behaviour towards the tourists?

5

Major Domains of the Earth

Our Earth is the only planet which is habitable and that supports life. Land, water and air are the three realms of the Earth which sustain life. The landmass or the solid crust of rocks that forms the surface of earth is called the **lithosphere**. The vast water mass which includes the oceans and seas is called the **hydrosphere** and the realm of air that surrounds the Earth is called the **atmosphere**. The narrow zone on and near the surface of the Earth where all the three realms (land, water and air) meet and make conditions capable of supporting life is called the **biosphere** (the sphere of life). 'Bio' means life. It is the zone which supports all forms of life. Therefore, it is very important for all living beings.



The four major domains of the Earth

LITHOSPHERE

The Earth's crust, *i.e.*, the uppermost solid layer of the Earth made up of soil and rocks is called the **lithosphere**. Litho means 'stone', hence, lithosphere is the realm or sphere of stones or rocks. The Earth's crust includes the continents as well as the ocean basins (land beneath the oceans).

About one-third of the Earth's surface is covered by land and the rest is covered by water. Large landmasses are called **continents**. Their surfaces vary from low, green valleys to high rocky mountains. Antarctica, the continent at the South Pole, is completely bound under ice and snow. Similarly, large water bodies are called **oceans**. All the oceans of the world are connected with one another. Therefore, the level of the sea water remains the same everywhere. From the sea level, which is taken to be zero, we measure the height of land or the depth of the ocean floor. The

highest peak (Mt. Everest) is 8,848 metres above the sea level. The deepest place in the world is Mariana Trench in the Pacific Ocean. It is 11,022 metres below the sea level. The continents have an average height of 700 metres above the sea level and the oceans have an average depth of 4,000 metres.

The thickness of the Earth's crust varies from about 8 kilometres under the oceans to about 40 kilometres under the continents. The temperature within the deepest parts of the crust may reach upto 870°C, which is hot enough to melt the rocks.

IMPORTANCE OF THE LITHOSPHERE

The outer covering or the crust of the Earth, known as the lithosphere, is of great importance to us. Without the soil cover there would not be any plants on the Earth. Moreover, lithosphere is the storehouse of various mineral resources including coal and oil. The various kinds of landforms on the lithosphere affect the climatic conditions on the Earth as well as man's life and his activities.

CONTINENTS

There are seven continents on the Earth. In the order of their sizes, they are— (1) Asia, (2) Africa, (3) North America, (4) South America, (5) Antarctica, (6) Europe and (7) Australia.

A greater part of the total landmass lies in the Northern Hemisphere.

(1) Asia

- (i) Asia has an area of about 44.5 million square kilometres.
- (ii) It is the **largest continent** both in terms of its area and population.
- (iii) It is located in the Eastern Hemisphere.
- (iv) **Tropic of Cancer** passes through this continent.
- (v) Asia is surrounded by oceans on the three sides—the Pacific Ocean in the east, the Arctic Ocean in the north and the Indian Ocean in the south.
- (vi) The **Bering Strait** separates Asia from the North America.
- (vii) The **Suez Canal** separates Asia from Africa.
- (viii) The **Himalayan Ranges** are the main hilly area of Asia. The world's highest peak, Mount Everest is in Asia. Its height is 8,840 m above the sea level.
- (ix) **India** is located in Asia.

(2) Africa

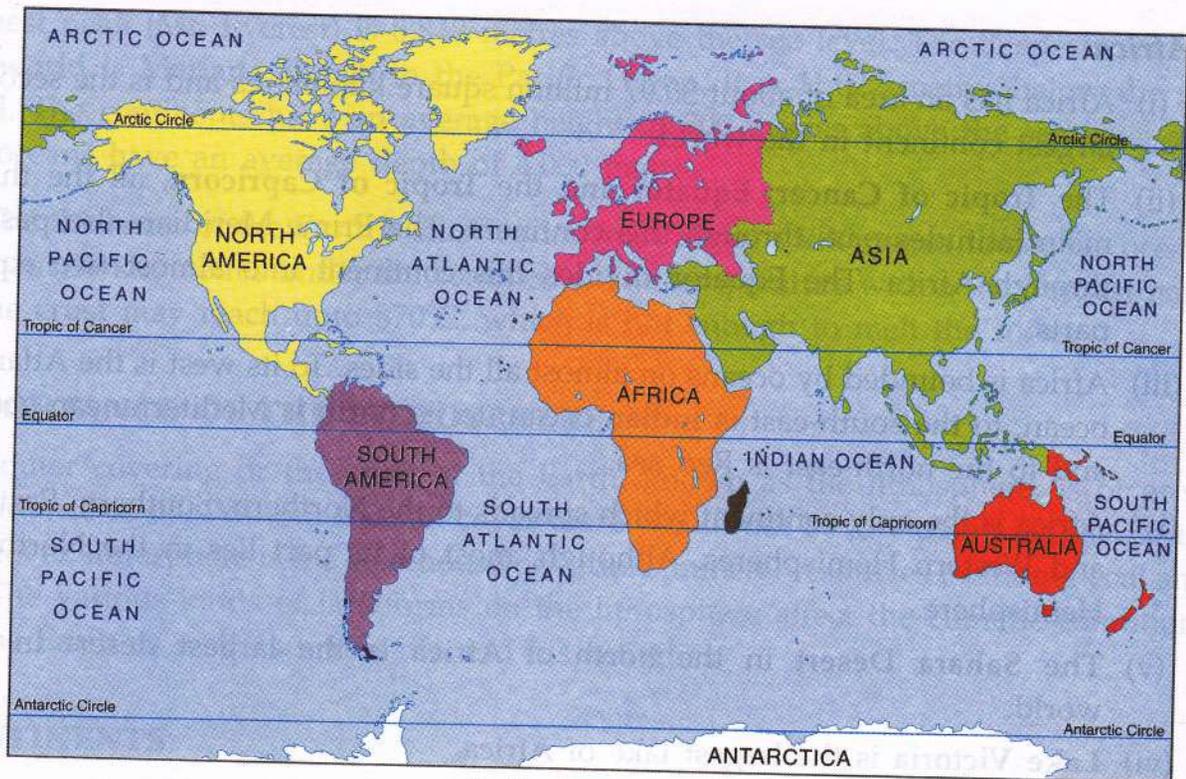
- (i) Africa has an area of about 30.97 million square kilometres and is the second largest continent in the world.
- (ii) The **Tropic of Cancer**, **Equator** and the **Tropic of Capricorn**, all the three main latitudes pass through this continent. The Prime Meridian also passes through Africa. The Equator divides this continent into almost two equal parts.
- (iii) Africa is bounded by oceans on almost all the sides. To its west is the Atlantic ocean, to the south-east is Indian ocean, to its north is Mediterranean ocean and to the north-east is Red sea.
- (iv) Africa is the only continent which spreads to the Northern, Southern, Eastern and Western Hemispheres. Although, most of its part lies in the Northern Hemisphere.
- (v) **The Sahara Desert** in the north of Africa is the largest desert in the world.
- (vi) **Lake Victoria** is the largest lake of Africa.
- (vii) **Nile**, the longest river in the world, flows through this continent.

(3) North America

- (i) North America is the third largest continent of the world and has an area of about 24 million square kilometres.
- (ii) It lies entirely in the Northern and Western Hemisphere.
- (iii) North America is surrounded by three oceans. To its west is the Pacific ocean, to its east is the Atlantic ocean and to the north is the Arctic ocean.
- (iv) It is linked to South America by the **Isthmus of Panama** and is separated from Asia by the **Bering Strait**.

(4) South America

- (i) South America is the fourth largest continent of the world. It has an area of about 18 million square kilometres.
- (ii) It is situated in the Southern and Western Hemispheres.
- (iii) The **Equator** and the **Tropic of Capricorn** pass through this continent.
- (iv) This continent is surrounded by four different oceans— the Caribbean Sea in the north, the Southern ocean in the South Atlantic ocean and Pacific ocean in the east.
- (v) The **Andes mountain** runs through the western part of the continent. It is the longest mountain range in the world.
- (vi) **Amazon**, the largest river in the world in terms of volume, flows through this continent.



Continents and oceans

(5) Antarctica

- (i) Antarctica lies within the Antarctic Circle and is permanently covered with thick ice sheets. Therefore, this large continent does not have any permanent human settlement.
- (ii) It is also called the **White Continent** as it is covered with ice and snow throughout the year.
- (iii) It lies completely in the Southern Hemisphere and extends to the Eastern and Western Hemispheres.
- (iv) It is surrounded by Southern sea.
- (v) Many countries have research stations in Antarctica. On 9 January 1982, the Indian team established a research station named **Dakshin Gangotri**. In 1988–89 another station called **Maitri** was established. Recently, India built an additional research station named **Bharti**.

(6) Europe

- (i) With an area of about 10.5 million square kilometres, Europe is the second smallest continent in the world.
- (ii) It is situated in the Northern and Eastern Hemispheres.
- (iii) **Prime Meridian** (Greenwich) and **Arctic circle** pass through this continent.
- (iv) Europe and Asia are a continuous landmass although they are separated by the **Ural mountains**. Together they are known as **Eurasia**.

- (v) Europe is surrounded by the Arctic Ocean in the north, the Atlantic Ocean in the west and the Mediterranean Sea in the south.
- (vi) The **Strait of Gibraltar** separates Europe from Africa.



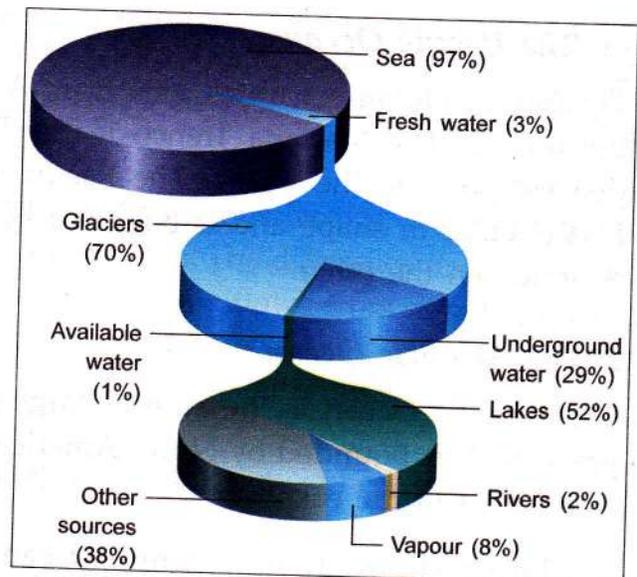
The Strait of Gibraltar

(7) **Australia**

- (i) Australia has an area of about 8.51 million square kilometres and is the smallest continent in the world.
- (ii) It lies entirely in the Southern Hemisphere. It is often called the **Island Continent** as it is surrounded by oceans and seas on all sides.
- (iii) Australia is surrounded by Indian Ocean in the West, Southern Ocean in the South, Pacific Ocean in the east and Arafura sea in the north.
- (iv) The **Great Barrier Reef** along the north-eastern coast of Australia is a unique feature of this continent. It is made of corals and is a great attraction for tourists.
- (v) Australia is the only continent which is also a country.
- (vi) Along with New Zealand and other nearby islands, it is called **Australasia**.

HYDROSPHERE

The hydrosphere consists of water on and below the surface of the Earth as well as in the atmosphere. It includes water in all forms such as the oceans, seas, rivers, lakes, underground water, water vapour and ice sheets. About two-thirds (71%) of the Earth's surface is covered by water bodies like oceans, seas, lakes and rivers. Therefore, Earth is also termed as the **Blue Planet**. 97% of the water present on the Earth is in the form of oceans and seas. The salty water of sea cannot be used directly by us. So, only 3% of fresh water is available. About 70% of this fresh water is present in the form of glaciers



Availability of water on the Earth

and snow at poles and on the mountain peaks. Rain water is the primary source of fresh water which we get from rivers, lakes, ponds and underground water.

IMPORTANCE OF THE HYDROSPHERE

The hydrosphere comprising oceans, lakes, rivers and other water bodies has great importance. All these water bodies are quite necessary for the existence of life on Earth. Life is impossible without water. Plants, animals and human beings cannot survive without water. The benefits of oceans and seas to living beings are as follows:

1. Oceans and seas are the source of food for all living beings.
2. Oceans and seas regulate the climate on the Earth. They are also a source of rain and the chief agents of cooling the atmosphere.
3. Sea animals provide useful products like oil, leather, etc.
4. Huge reserves of petroleum and natural gas are found in the offshore regions.
5. Oceans and seas are a good source of tidal energy.
6. They also provide excellent means of transportation for people and goods. It is much cheaper to ship goods by water than transport them by land or air. Hence, modern shipping has proved to be the cheapest link between landmasses.

OCEANS

Oceans constitute more than 90% of the total area covered by water. Most of the Southern Hemisphere is covered by oceans and seas making it the **Water Hemisphere**. Oceans are large water bodies and the main constituent of the hydrosphere. The movement of ocean waters is governed by waves, tides and currents.

There are five major oceans on the Earth.

1. *The Pacific Ocean*

The Pacific Ocean separates Asia from Australia. It is the **largest and deepest** of all the oceans. The Mariana Trench in the Pacific Ocean (about 11,022 m deep) is the deepest point in the world. The Pacific Ocean spreads over one-third of the Earth. It is circular in shape and is bounded by Asia and Australia on one side and South America on the other.

2. *The Atlantic Ocean*

The Atlantic Ocean is the **second largest ocean** in the world. It is shaped like the letter 'S'. It is bounded by North America and South America in the west and Europe and Africa in the east.

The coastline of the Atlantic Ocean is long and irregular, providing an ideal location for natural harbours. All the important sea routes pass through it and trade wise, it is the busiest ocean.

3. The Indian Ocean

The Indian Ocean is the only ocean named after a country, i.e., India. It is triangular in shape and is bounded by Asia in the north, Africa in the west and Australia in the east.

4. The Arctic Ocean

The Arctic Ocean surrounds the North Pole and lies within the Arctic Circle. It is connected with the Pacific Ocean by a narrow stretch of shallow water known as **Bering Strait**. It is bounded by North America and Eurasia in the south. It remains covered with thick sheets of ice all round the year.

5. The Antarctic or Southern Ocean

The Antarctic Ocean is bounded by Antarctica. Due to extremely low temperature, this ocean remains frozen throughout the year.

Water bodies smaller than oceans are called **seas**. A sea may be a part of an ocean. The Arabian Sea and the Bay of Bengal are some examples of seas.

ATMOSPHERE

Atmosphere is the envelope of air surrounding the Earth. It extends up to about 1,600 kilometres above the Earth's surface and represents the gaseous realm of the Earth. It is held to the Earth by the force of gravity and rotates along with the Earth. The air generally becomes thinner and cooler as we go up.

The density of the atmosphere varies with height, *i.e.*, it is maximum at the sea level and decreases as we go up. Due to this reason, mountaineers have problems in breathing on high altitudes. They have to carry oxygen cylinders to be able to breathe at high altitudes.

Air exerts pressure on the Earth's surface. Due to various factors, the atmospheric pressure on the Earth's surface varies from place to place. The difference in atmospheric pressure between two areas would make the air flow. Air flows from the area having a high pressure to the area having a low pressure. Moving air is known as **wind**.

LAYERS OF ATMOSPHERE

On the basis of composition, density, temperature etc. the atmosphere is divided into five major layers:

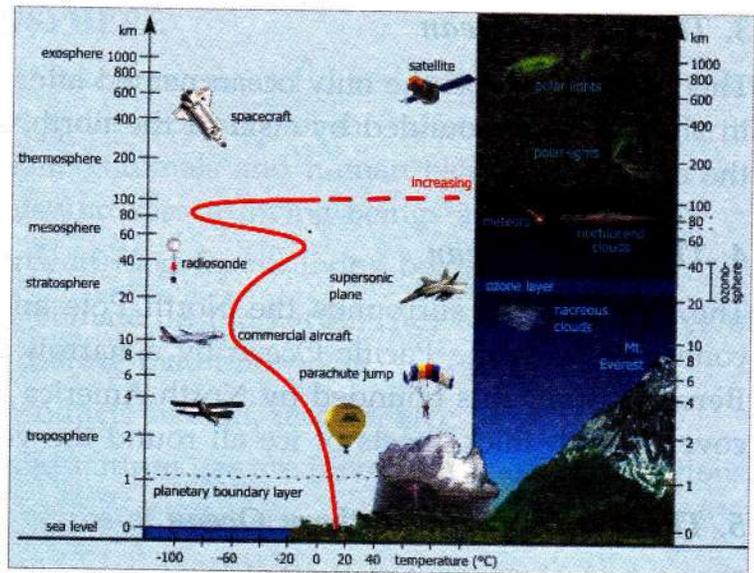
1. **Troposphere:** Troposphere is the lowest layer of the atmosphere and is attached to the Earth's surface. This layer extends upto 20 kilometres high. All weather phenomena, formation of clouds, lighting etc. take place in this layer. Oxygen, carbon dioxide and nitrogen are the main gases of this layer. We live in the direct contact of troposphere.

2. **Stratosphere:** This is the second layer of the atmosphere from the Earth's surface. Its height is about 50 km. This layer is suitable for flying jets and aeroplanes. Ozone is the main component gas of this layer. Ozone absorbs the ultraviolet rays of the sun and thus makes this layer too hot.

3. **Mesosphere:** The layer above the stratosphere is known as mesosphere. Its height is about 80 km. In this layer, the temperature of the atmosphere begins to fall down.

4. **Thermosphere:** This is the fourth layer of the atmosphere. Its height is about 400 km. This layer reflects the radio waves on the Earth's surface.

5. **Exosphere:** This is the outermost layer of the atmosphere. Its height is about 750 km from the Earth's surface. This layer gradually blends into the space.



Layers of atmosphere

COMPOSITION OF ATMOSPHERE

The atmosphere is composed of the following three constituents:

1. **Gases:** The atmosphere consists of a mixture of gases. Nitrogen is the biggest component, constituting 78% of the atmosphere. Oxygen is the second important component forming 21% of the atmosphere. Other gases together form only 1%. They include argon (0.93%), carbon dioxide (0.03%), hydrogen (0.01%) and other gases (0.05%). The composition of the atmosphere remains almost constant in its lower layers. Oxygen is the most important gas for supporting all forms of life. Nitrogen keeps soil fertile and helps in the growth of living organisms. Carbon dioxide is absorbed by plants for their growth. It also absorbs heat and regulates the temperature of the Earth.
2. **Water Vapour:** Water vapour represents 2% of the air by volume. It is the source of precipitation on the Earth.
3. **Dust Particles:** Dust particles also remain suspended in the atmosphere. These are responsible for the formation of fog and smog.

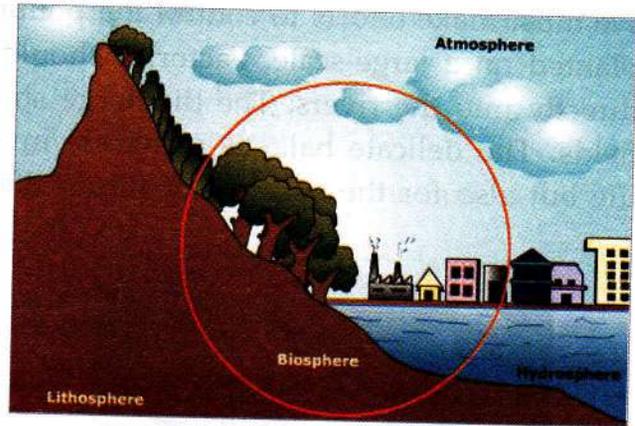
IMPORTANCE OF THE ATMOSPHERE

1. Atmosphere is very important for the existence of humans on Earth. It has life supporting gases — (i) oxygen for human beings and animals (ii) carbon dioxide and nitrogen for plants.

2. The atmosphere acts like a blanket for the Earth. It receives the radiation of the Sun but does not allow all the heat to reach the earth.
3. The ozone layer in the atmosphere protects us from the harmful ultraviolet rays of the Sun.
4. It moderates the extremes of heat and cold.
5. The sunrays heat the atmosphere unevenly and thereby create winds, clouds and rains.
6. The atmosphere serves as the medium of air transport for aeroplanes.

BIOSPHERE

The narrow sphere where the three realms—land, water and air—meet is called the biosphere, that is the sphere where life exists. It is the home of all the living things. Our Earth is the only planet in the solar system where life exists. The living organisms of the biosphere can be broadly classified into two kingdoms—the Plant Kingdom and the Animal Kingdom. There are more than 15,00,000 varieties of animals and plants. Some are microscopic, that is, we can see them only with the help of a microscope. Some are quite big and huge like elephants and whales. Some live deep under water. Others roam about on the Earth or in the air. All living beings, including man, are dependent on each other as well as on the biosphere for survival.



Biosphere

Changes in the environmental conditions affect all forms of life. Plants make suitable adaptations such as they shed their leaves in the dry season. Animals and birds migrate from a place to another to adjust to the various environmental changes.

DISTURBING THE BALANCE OF THE BIOSPHERE

The different components of our environment interact with one another. Changes in one may lead to changes in others. Thus, there is an equilibrium in the environment. With the rapid growth of population, this balance of co-existence has come under severe threat. Natural resources are being exploited recklessly to meet the various needs of the additional population.

To meet the demand of the growing population for land, food, clothing, houses, transport, etc., we are using up the earth's resources like coal, oil, etc., which take millions of years to regenerate. We are cutting down trees and clearing forests to create more space for human settlements. Trees hold the top fertile soil firmly. With

the cutting down of trees, the fertile soil gets washed away. The absence of trees reduces rainfall and turns areas into deserts. We are harming the environment not only by using up all resources, but also by polluting it.

Factory dumps and discharges are continuously polluting water bodies as well as the air. Wastes from factories and other pollutants are constantly poured into water bodies. Smoke from factories and motor vehicles is also polluting the air with harmful and poisonous gases. The increased amount of carbon dioxide in the atmosphere has increased the global temperature. This is called **global warming**.

ATTEMPTS TO CHECK THE MISUSE

If we wish to maintain the environmental balance, we must use our resources wisely. We must make efforts to control the pollution of air, water and land. Trees should be planted on a large-scale. Factories should not be allowed to discharge their wastes directly into the rivers. The discharge should be treated and used for irrigating the fields. The delicate balance of nature must be maintained not only for the present life but also for the survival of future life on the Earth.



Air Pollution



Water Pollution

Geographical Terms

- **Atmosphere:** Envelope of air surrounding the Earth.
- **Biosphere:** The narrow sphere where land, water and air meet and which is the home of all living beings.
- **Ecological balance:** The delicate balance maintained between living and non-living components of our environment.
- **Global warming:** Increase in global temperature due to the increase of carbon dioxide in the atmosphere.
- **Hydrosphere:** The water mass on or surrounding the surface of the Earth which includes oceans and seas as well as water in the atmosphere.
- **Continents:** Landmasses of large extent covering a few million square kilometres.
- **Isthmus:** A relatively narrow stretch of land that joins two landmasses.

- **Lithosphere:** The realm of the Earth consisting of solid crust or rocks.
- **Mountain Range:** A chain of mountains arranged in parallel lines.
- **Oceans:** Vast water bodies surrounding the continents.
- **Strait:** A relatively narrow stretch of water separating two landmasses.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- The sphere where the three realms meet (land, water, air) and which is the home of all living things—

(a) Lithosphere	(b) Atmosphere
(c) Biosphere	(d) Hydrosphere
- The gas that protects us from the harmful ultraviolet rays of the Sun.

(a) Carbon dioxide	(b) Ozone
(c) Helium	(d) Oxygen
- The Ocean which has the deepest place of the world, the Mariana Trench—

(a) Indian	(b) Atlantic
(c) Arctic	(d) Pacific
- The main constituents of the hydrosphere are—

(a) rivers	(b) canals
(c) lakes	(d) oceans
- The busiest ocean in the world—

(a) Arctic	(b) Atlantic
(c) Indian	(d) Pacific
- The solid layer of the Earth consisting of rocks and soil—

(a) hydrosphere	(b) lithosphere
(c) biosphere	(d) atmosphere
- Largest water body among the following—

(a) seas	(b) ocean
(c) rivers	(d) ponds
- The largest continent in terms of both area and population—

(a) Africa	(b) Asia
(c) Europe	(d) North America

II. Mark True or False against each of the following statements.

- The Indian Ocean is the only ocean named after a country. _____
- Moving air is known as air current. _____

3. The density of the atmosphere is maximum at the sea level and decreases upwards. _____
4. Seas are bigger than oceans in size. _____
5. Maitri and Dakshin Gangotri are research stations in Antarctica. _____
6. The atmosphere is divided into four major layers. _____

III. Match the columns.

Column A

1. The ocean that surrounds the North Pole
2. Blanket of air surrounding the Earth
3. The only planet where life exists
4. The ocean which remains frozen throughout the year
5. About two-thirds of the earth is covered by
6. The largest river
7. An island continent
8. The realm of Earth where all living beings live

Column B

- (a) Earth
- (b) Arctic Ocean
- (c) Atmosphere
- (d) Water bodies
- (e) Antarctic Ocean or Southern Ocean
- (f) Biosphere
- (g) Amazon
- (h) Australia

IV. Short Answer Questions.

1. Name the four major realms of the Earth.
2. Name the ocean which is shaped like the letter 'S'.
3. Which are the two major gases present in the atmosphere?
4. What is global warming?
5. Which is the deepest part of the world?
6. In which continent is the world's largest desert located?
7. What is the Great Barrier Reef famous for?
8. Which continent is called the 'White Continent'? Why?

V. Long Answer Questions.

1. What is the importance of hydrosphere for sustaining life on the Earth?
2. How is the atmosphere significant to us?
3. Write a few steps that must be undertaken to maintain the ecological balance.
4. List four examples to show how man has disturbed the ecological balance.
5. How is lithosphere important to us?

VI. Map Work.

On an outline map of the world, mark the seven continents and the five oceans.

VII. Solve the crossword puzzle with the help of the clues given below.

										^B ↓B
¹ →A			S		H					
										R
² →O	E			S						
					^A ↓W					I
³ →A	T			N						
										G
					D					

CLUES	
Across	Down
1. Envelope of air that surrounds the Earth	A. Moving air
2. Large water bodies	B. The strait that connects Pacific Ocean and Arctic Ocean
3. The second largest ocean in the world	

VIII. Projects and Activities.

1. Divide the class into five groups. Assign one ocean to each group. Let each group prepare a PowerPoint presentation on the assigned ocean. The presentation should have about ten slides. The presentations can be screened for the whole class.
2. Write an article of about 100–150 words on 'Global Warming'. The article should include the following points:
 - Definition of global warming
 - Causes, the human activities responsible for it.
 - Effects on environment and human health
 - Measures to control it
3. Biosphere refers to the realm of the Earth where life exists. Prepare a collage on the theme 'Different Faces of the Biosphere'. Collect pictures showing life in water, living organisms in air, living beings on different landforms, etc.

VALUE-BASED QUESTION

Shri Ramkumar is a prosperous farmer. To sell more of his crops, he uses different types of chemical fertilizers in the fields.

1. Do you support this act of Shri Ramkumar as by doing so, the food requirement of many people is being fulfilled?
2. What is the moral responsibility of Shri Ramkumar towards the environment?

HOTS: THINK BEYOND

What is the role of stratosphere in maintaining the existence of life on the Earth?

ANSWERS TO THE CROSSWORD PUZZLE

Across

1. Atmosphere
2. Oceans
3. Atlantic

Down

- A. Wind
- B. Bering



TEST PAPER

(Based on Chapters 1–5)

Total Marks: 50

Time: 2 Hours

A. Tick (✓) the correct answer.

(1 × 8 = 8)

- Which celestial body is nearest to the Earth?
(a) Moon (b) Sun
(c) Venus (d) Saturn
- In which direction does the Earth rotate around its axis?
(a) East to west (b) West to east
(c) North to south (d) South to north
- Which is the longest day in the Southern Hemisphere?
(a) 22nd December (b) 21st June
(c) 21st March (d) 18th March
- How many parallels are drawn on the Earth?
(a) 181 (b) 360
(c) 191 (d) 161
- Which is the longest parallel?
(a) Equator (b) Tropic of Cancer
(c) Tropic of Capricorn (d) Arctic Circle
- How many cardinal points are there?
(a) 6 (b) 5
(c) 3 (d) 4
- Which continent is called the White Continent?
(a) Antarctica (b) Africa
(c) Australia (d) South America
- Which mountain range separates Europe and Asia?
(a) Alps (b) Ural
(c) Andes (d) Himalayas

B. Fill in the blanks.

(1 × 6 = 6)

- is a rough drawing which is not drawn to a scale.
- The axis of the Earth is at an angle of from the orbital plane.
- The Earth completes one rotation on its axis in hour.
- The Equator is the longest
- is also called a shooting star.
- is the largest and deepest Ocean in the world.

C. Distinguish between the following:

(2 × 3 = 6)

1. Lithosphere and hydrosphere
2. Eurasia and Australia
3. Map and Sketch

D. Give short answers in 30 words each.

(2 × 5 = 10)

1. Name the planets according to their increasing sizes.
2. How is the grid useful in locating places on the globe?
3. Why do we have leap years?
4. How can the Pole Star help in finding direction?
5. What are the main elements of biosphere?

E. Answer the following questions in 60 words each.

(4 × 5 = 20)

1. How are human beings disturbing the delicate balance of nature?
2. Describe the different methods of showing scale on a map?
3. Explain the phenomena of seasons with the help of a diagram.
4. What are the main characteristics of meridians?
5. How is the Earth a unique planet in the solar system?

6

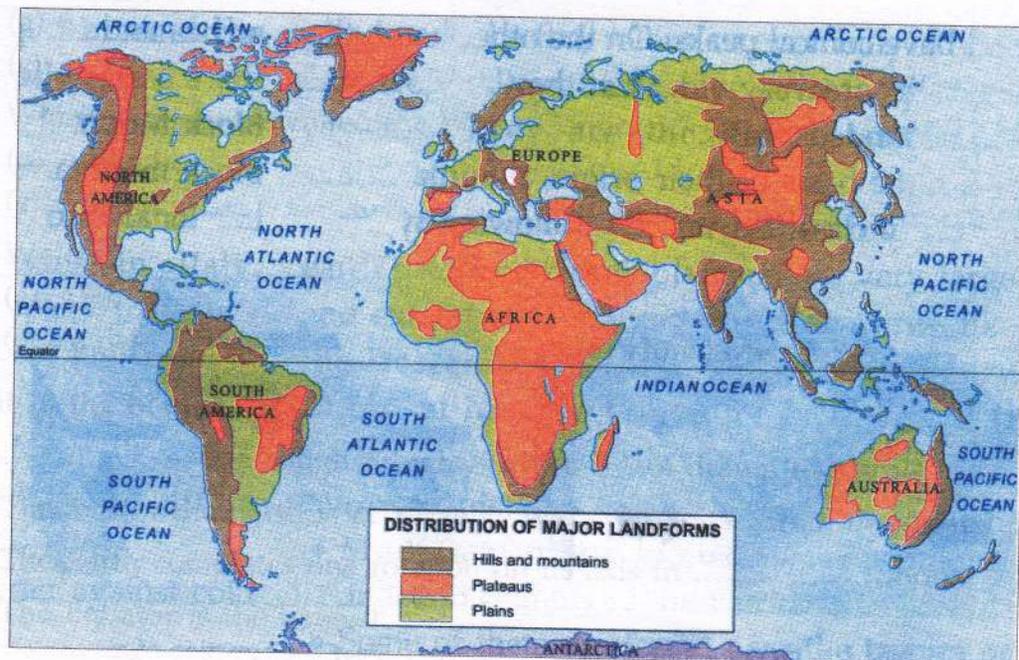
Major Landforms of the Earth

The Earth's surface is highly uneven and consists of many mountains, extensive plateaus and lowlands or plains. These landforms are formed by two processes.

Internal Processes: The processes in which forces are generated within the Earth resulting in the upliftment or sinking of the Earth's surface at various places are called internal processes. These processes bring about sudden changes.

External Processes: The processes in which forces are generated by external agents like wind, water, Sun, tides, glaciers, etc. resulting in the formation of various landforms on the Earth's surface are called external processes. These processes result in the removal of materials called **erosion** and in the accumulation of materials called **deposition**. External processes bring about slow changes.

Internal and external processes take place simultaneously leading to differences in levels of landforms.



Major landforms on the Earth

THE MAJOR LANDFORMS

On the basis of elevation, slope etc. various landforms on the Earth's surface can be classified in three major types—

- (i) Mountains (ii) Plateaus (iii) Plains

26% of the total area of the lithosphere is mountainous, 33% is plateau region and 41% is occupied by plains.

MOUNTAINS

Mountains are the landforms that rise abruptly from the surrounding areas. The height of a mountain above the sea level is called its **elevation** and its highest point is called the **summit** or a **peak**.

The base of the mountains is broader as compared to the pointed conical peaks. Mountains have sharp slope. Due to their elevation, slope and peak mountains can be recognised distinctly.

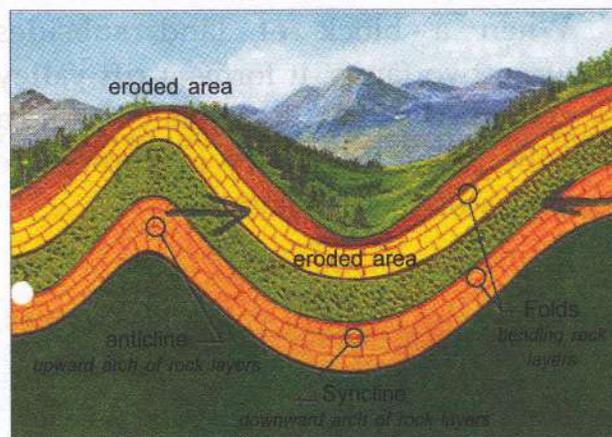
Types of Mountains

Mountains are formed due to the effect of certain internal forces like compression, pressure, volcanic eruptions and deposition. On the basis of their formation, mountains are of the following types—

- (i) Fold mountains (ii) Block mountains (iii) Volcanic mountains (iv) Residual mountains

(i) Fold mountains:

Fold mountains are formed when the layers of the Earth's crust are folded by the process of compression. The inner movements of the Earth causes compression. Due to this, the weaker part of the Earth's surface gets folded. As a result very high mountains are formed. The upper fold of the Earth's crust is called **anticline** and the lower fold is called **syncline**. Thus, mountains that are formed due to compression are known as fold mountains.



A fold mountain

Fold mountains are further classified as—Old fold mountains and Young fold mountains on the basis of age or time of their formation.

Old fold mountains: Fold mountains which were formed long ago are known as Old fold mountains. Their height is reducing day-by-day due to weathering or

erosion. Examples of Old fold mountains are—Appalachians of North America, Ural mountains of Russia, Aravalli hills and Vindhya ranges of India.

Young fold mountains: Young fold mountains are recently formed. They have lofty heights with pointed peaks. Examples of young fold mountains are—Rockies in America, Andes in South America, Alps in Europe and Himalayan range in India.

Difference between Old Fold Mountains and Young Fold Mountains

Old Fold Mountains	Young Fold Mountains
1. Formed long long ago.	Recently formed.
2. Lower than new fold mountains.	Higher than old fold mountains.
3. Rounded peaks.	Pointed peaks.
4. Gentle slopes.	Steep slopes and deep valleys.
5. Eg. Aravalli hills and Vindhya ranges in India.	Eg. Alps in Europe and Himalayan range in India.

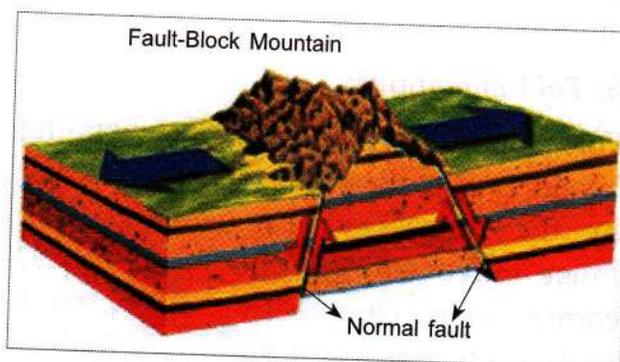
(ii) Block mountains

These are formed by the vertical movements of the Earth's crust. When a block of land is uplifted between two parallel faults, it forms a block mountain or a **horst**. The Vosges mountain and the Central Massif in France are examples of such mountains.

When a block of land subsides between two faults, it forms a **rift valley** or **graben**. The Great Rift Valley in Africa and the Rhine Rift Valley in Europe are examples of such valleys.

(iii) Volcanic mountains

These are the result of volcanic activities. At the time of volcanic explosion, molten lava from deep inside the Earth comes out of the surface through cracks in the Earth's crust, called **crater** and accumulate around it. Mt. Kilimanjaro in Africa, Mt. Fujiama in Japan, Mt. Vesuvius in Italy and Mt. Chimbarazo in South America are examples of such mountains.



A block mountain



A volcanic mountain

(iv) Residual mountains

Residual mountains are formed as a result of denudation of land masses. Fold, block or volcanic mountains are eroded by wind, water or glaciers and thus, form Residual mountains. Nilgiri hills, Rajmughal hills in India and Mamuli mountains in Northern Mazambique are examples of residual mountains.

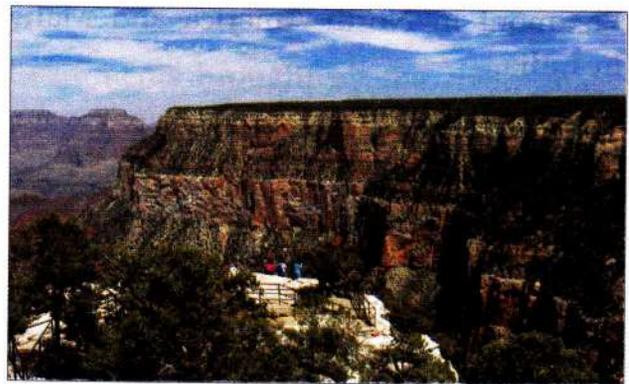
Importance of Mountains

Mountains play a significant role in human life. They cover about 26% of the Earth's surface but support only about 1% of world's population. It is because of its irregular topography and thin layer of soil. Agriculture cannot be practised on high mountains. Further, the difficulty in transport, shortage of level land and harsh climatic conditions make this region thinly populated. Still, they are of great use to mankind.

- (a) Mountains serve as efficient barriers because they prevent us from getting attacked.
- (b) Mountains also serve as barricades against cold or hot winds. For example, the Himalayas protect India from northern hilly winds. They also obstruct the way of monsoon winds and help in bringing rainfall.
- (c) Mountains are the sources of many rivers which originate from glaciers and provide abundant water for various human activities like irrigation, navigation, power generation etc.
- (d) They are the home to wildlife.
- (e) They provide many valuable raw materials like timber, rubber, wood pulp, medicinal herbs, etc.
- (f) Mountains are the centres of tourism and recreation activities such as paragliding, hang gliding, rafting, skiing, etc.
- (g) The valleys in the mountains are good for horticulture.
- (h) Mountainous forests also provide many products like fodder, fuel, shelter, gum, raisins, etc.

PLATEAUS

An elevated area of vast extent rising steeply from the surrounding area but having a flat top is termed as plateau. Plateaus are generally lower than mountains and higher than plains. Their height is usually from 300 m to 1000 m. But some plateaus are even higher than this. For example, plateau of Bolivian is 3600 m high and the Tibet plateau is about 6100 m high. The Tibet plateau in Asia is the highest plateau in the world



Plateaus

and is known as the 'Roof of the world'. Thus, plateaus cannot be distinguished from the mountains only on the basis of their height.

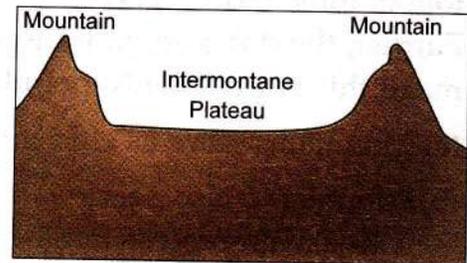
Classification of Plateaus

Plateaus are classified according to their situation as follows—

- (i) Intermontane Plateaus
- (ii) Continental Plateaus
- (iii) Piedmont Plateaus
- (iv) Volcanic or Lava Plateaus

(i) Intermontane Plateaus

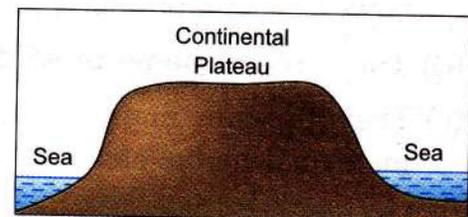
Plateaus which are situated between two or more mountain ranges are known as Intermontane plateaus. These plateaus are normally very high. Tibet plateau is the best example of this type. It lies between the Himalayas and the Kunlun mountains. Other examples are plateaus of Bolivian, Peruvian and Mexican.



Intermontane plateau

(ii) Continental Plateaus

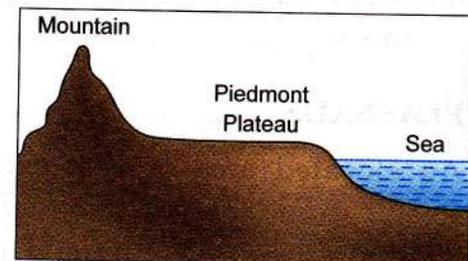
These plateaus are extensive and massive table lands which rise abruptly from the lowlands or from the seas. These plateaus are very high from their bordering lowland. Examples of continental plateaus are, the plateaus of Brazil, South Africa, Greenland, Deccan plateaus of peninsular India and the Chhotanagpur plateau.



Continental plateau

(iii) Piedmont Plateaus

These plateaus lie at the foot of the mountains. They are bounded on the opposite side by a plain or an ocean. Examples are, Patagonia in Argentina, Piedmont in North America and Malwa plateaus in India.



Piedmont plateau

(iv) Volcanic or Lava Plateaus

Due to volcanic explosion, the lava spreads on a vast area and the extensive and repeated volcanoes help lava solidify into layers. This results in the formation of volcanic or lava plateaus. Examples are, Malwa plateau of India, Bohemia in Europe and plateaus of Spain.

Importance of Plateaus

Plateaus are economically very important. Plateaus cover about 33% of the Earth's surface but support only about 9% of the world's population. The benefits of the plateaus can be evaluated as follows—

1. **Minerals:** Some of the old plateaus are rich in minerals as their crystalline rocks are exposed for extraction of minerals. For example, in India, Chhotanagpur plateau is considered as a store house of minerals like coal, iron, manganese, limestone etc. The African plateau is famous for gold and diamond mining.
2. **Agriculture:** Lava plateaus are good for agriculture because of their fertile soil. For example, in India cotton is extensively grown in black soil region of Deccan plateau.
3. **Climate:** The higher parts of plateau in tropical regions have cool climate. They are great places of attraction for tourists. In some areas plantation agriculture is also practised.
4. **Hydroelectricity:** At some places rivers descend from the plateaus to the plains to form waterfalls. The Jog falls in Karnataka and the Hundru falls in Chhotanagpur plateau are examples of such waterfalls. These waterfalls provide suitable sites for the development of hydroelectricity.

PLAINS

Plains are the most important landforms on the Earth. Usually plains are 200 m to 300 m high above the sea level. Some plains are also found 400 m high above the sea level. Thus, the land that is relatively low as compared to the plateau and has very less slope is termed as **plain**.



Plains

Types of Plains

On the basis of formation, plains are classified as follows—

- (i) Alluvial Plains (ii) Coastal Plains (iii) Delta Plains

(i) Alluvial Plains

These plains are formed by the deposition of sediments brought by the rivers that flow down the slopes of mountains. The rivers carry the sediment and deposit it in the foothills or in the valleys. The Indo-Gangetic plain of Indian subcontinent, Hwang Ho Plains of North China and the plains of Mississippi river are examples of alluvial plains.

(ii) Coastal Plains

These plains are formed by the deposition of sediments brought by the sea waves and wind. The Malabar and Coromandal Coast of India and the coastal plains of Belgium and Netherlands are the best examples of these plains.

(iii) Delta Plains

These plains are formed at the mouth of the river by its distributaries. When the rivers enter into the sea or ocean their speed reduces. The sand and silt which they carry along with them are deposited at the mouth of the river resulted in the formation of triangular shaped plain called 'Delta'. Plains formed by the Ganga and Brahmaputra in India are famous examples of delta plains.

Importance of Plains

Plains are the most densely populated regions on the Earth, as they offer several advantages like—

- (i) **Supports agriculture:** Alluvial plains are made of fertile soil that support a large variety of crops. Hence, they are often termed as 'The Granery of the World'.
- (ii) **Supports industrial growth:** Plains have the advantage of cheap labour, availability of raw materials, a big consumer market and easy accessibility. These have facilitated sound industrial growth of the economy.
- (iii) **Easy transport and communication:** It is easier to build roadways and lay railway tracks in the plains because of soft bedrock. This has favoured the growth of towns and industries.
- (iv) **Supports huge population:** Deep and fertile alluvial soil for cultivation, nearness of water table for irrigation, flat surface for easy transportation and communication have made plains the home of two-thirds of world's population.

All these advantages make plains 'the cradles of civilisation'. The Indo-Gangetic plains of India are the most densely populated regions of India.

LANDFORMS AND THE PEOPLE

The life of the people living on different landforms is very different. In mountains, life is difficult whereas plains provide ample opportunities for living and employment. This is because crops can be grown and transport can be easily developed in plains rather than in the mountains. Similarly, plateaus and coastal plains sustain the livelihoods of people through activities like mining and agriculture, respectively.

Thus, are various ways in which the landforms are used in a particular area. However, many times, people also misuse or waste the available land. For example, the use of fertile land for constructing houses or factories and dumping wastes on land pollutes the landforms. It is our moral duty to use these resources for our development judiciously. We must preserve our landforms for the future generations as well.

Geographical Terms

- **Deposition:** The process of accumulation of soil and other materials resulting in the formation of various landforms.
- **Erosion:** The process by which the surface of the Earth is worn away by the action of water, glaciers, winds, waves, etc.
- **External Processes:** The processes in which forces are generated by external agents like wind, water, tides, sun, etc. resulting in the formation of various landforms on the Earth's surface.
- **Glaciers:** Slow moving rivers of snow and ice.
- **Graben:** A portion of the Earth's crust, bounded on at least two sides by faults, that has dropped downward in relation to adjacent portions.
- **Horst:** A portion of the Earth's crust, bounded on at least two sides by faults, that has risen in relation to adjacent areas.
- **Internal Processes:** The processes in which forces are generated within the Earth resulting in the upliftment or sinking of the Earth's surface at various places.
- **Mountains:** Narrow landmasses which rise steeply from a lowland and contain high peaks.
- **Mountain Range:** A chain of mountains arranged in parallel lines.
- **Plains:** Vast extent of level land formed by the deposition of soil and materials.
- **Plateaus:** Extensive areas of upland bounded by steep slopes.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. When a block of land subsides between two faults, it forms a—
(a) horst (b) rift valley (c) plateau (d) strait
2. The percentage of plain in the total area of lithosphere is—
(a) 34% (b) 41% (c) 26% (d) 48%
3. An example of old fold mountains:
(a) Himalayas (b) Ural mountain
(c) Arawali hills (d) Alps mountain
4. An example of rift valley is:
(a) Rhine river valley (b) Nile river valley
(c) Ganga-Brahmputra valley (d) Amazon river valley
5. A level area of land higher than its surroundings is called:
(a) mountain (b) plateau
(c) rift (d) plain

6. The famous example of delta plain is:
 (a) plains of Ganga (b) plains of Satluj
 (c) plains of Ganga-Brahmaputra (d) plains of Ganga-Yamuna
7. A relatively narrow stretch of land that joins two landmasses:
 (a) strait (b) isthmus (c) plateau (d) horst

II. Mark True or False against each of the following statements.

1. By the process of weathering the soil deposits which results in the formation of plains. _____
2. Mountains have broader base and conical peak. _____
3. Alps mountain in Europe is the example of young fold mountains. _____
4. Plateaus which are situated between two or more mountain ranges are known as Intermontane plateaus. _____
5. Alluvial plains are generally triangular in shape. _____

III. Fill in the blanks.

1. Various internal and external processes take place slowly and continuously in the formation of
2. per cent of the total area of the lithosphere is occupied by mountains.
3. Vosges mountain and the Central Massif in France are examples of mountains.
4. and hills are examples of residual mountains.
5. are the store houses of minerals.
6. Malwa plateau in India is the example of plateau.
7. On the basis of formation, plains are of types.
8. plains are formed by the deposition of sediments brought by the sea waves and wind.

IV. Match the columns.

Column A

1. Volcanic mountain
2. Old fold mountain
3. Intermontane plateau
4. Continental plateau
5. Coastal plains
6. Alluvial plains

Column B

- (a) Tibet plateau
- (b) South India
- (c) Malabar and Coromandal plains
- (d) Mt. Fujiama in Japan
- (e) Indo-Gangetic plain
- (f) Aravalli Hills

V. Short Answer Questions.

1. What are the major landforms?
2. Why plains are known as the 'cradles of civilisation'?
3. Under what circumstances are the block mountains formed?
4. Write two characteristics of the delta plains formed by the Ganga and Brahmaputra.
5. Write two main characteristics of plateaus.

VI. Long Answer Questions.

1. Differentiate between the formation of fold mountains and block mountains.
2. Classify plains on the basis of their formation. Write the characteristics and examples of each.
3. What are mountains? How they are significant for mankind?
4. Write about the various types of plateaus and their characteristics.

VII. Solve the crossword puzzle with the help of the given clues.

				B ↓ C							
										C ↓ A	
		A ↓ R		I						R	
		1→ H									S
				B						V	
		N		A							
										L	
2→ D			C		N						
				Z						I	
			3→ J								

CLUES	
Across	
1.	Highest mountain range in the world
2.	A large plateau
3.	Highest waterfall in India
Down	
A.	A rift valley in Europe
B.	A volcanic mountain in South America
C.	An example of old fold mountain

VIII. Map Work.

1. On an outline map of India, mark the following:

(a) Indo-Gangetic plains	(b) Roof of the world
(c) Delta of Ganga-Brahmaputra	(d) Nilgiri hills
(e) Aravalli hills	(f) Vindhyachal range
2. On an outline map of the world, mark the following:
Plains of Siberia, Mt. Fujiyama, Ural mountain, Plateau of Brazil, Alps mountain.

IX. Projects and Activities.

1. Suppose you went to the mountains in your summer vacation with your parents. You stayed there for a week. Write a report on your journey and how life there is different from that in the plains.
2. Using the Internet, find out the names of the highest mountain range of each continent and fill in the following table with the details of each mountain range.

Name of the Continent	Name of the Mountain Range	Average Height (in metre)	Highest Mountain Peak	Type of Mountain	One Interesting Fact
1.					
2.					
3.					
4.					
5.					
6.					
7.					

VALUE-BASED QUESTION

Hill stations have become popular health and tourist centres because of their pollution-free climatic conditions and captivating natural beauty. As tourists, what are our responsibilities towards these places?

HOTS: THINK BEYOND

The Great Himalayas is a boon to India. How?

ANSWERS TO THE CROSSWORD PUZZLE

Across

1. Himalayas 2. Deccan 3. Jog

Down

- A. Rhine B. Chimbarazo C. Aravalli

7

India in the World

India is a country of great geographical extent. The area of our country is 32,87,263 sq. km. It is the seventh largest country in terms of area and the second most populous country in the world. The huge expanse of India contains a variety of natural landscapes ranging from the snowy heights of the mountain ranges in the north, the vast Indo-Gangetic plains, the Thar desert in the west, the Deccan Plateau and the coastal plains that extend from the Ganga delta in Bengal to Kachchh in Gujarat. India not only has great geographical prosperity but its history also goes back to at least five thousand years.

LOCATION

India is located in the world's largest continent Asia. It lies completely to the north of the Equator, hence, it belongs to the Northern Hemisphere. India is also situated to the east of the Prime Meridian, thus, it lies in the Eastern Hemisphere. In the Northern-Eastern Hemisphere of the Earth, India stretches between $8^{\circ}4'N$ to $37^{\circ}6'N$ latitudes and from $68^{\circ}7'E$ to $97^{\circ}25'E$ longitudes.

The mainland of India is a large peninsula as it is surrounded by water bodies on three sides, viz. the Indian Ocean in the south, the Bay of Bengal in the east and the Arabian Sea in the west. **Kanniyakumari** is situated at the southernmost point of the Indian mainland.

The Lakshdweep Islands lie to the south-west of the Indian mainland. This group of islands consists of 36 coral islands. Likewise, the Andaman and Nicobar group of islands lie in the Bay of Bengal to the south-east of India which includes 572 islands. The southernmost point of the Indian Union is the **Indira Point** which is located in the Great Nicobar islands.

The Tropic of Cancer passes almost midway through the country and thus, provides sufficient amount of temperature for agricultural purposes. Being a subtropical country, India also receives good amount of rainfall.

The $82.5^{\circ}E$ longitude passes almost halfway through India. We know that the local time of a place changes by 4 minutes for every one degree of longitude. Thus, the difference in 29° degrees of the Prime Meridian gives a time lag of nearly 2 hours between Arunachal Pradesh in the east and Gujarat in the west in their local times.

In other words, the sun rises two hours earlier in the east, in Arunachal Pradesh than in the west, in Gujarat. To follow the same time and to avoid confusion, the central longitude 82.5°E has been chosen as the standard meridian of India. The time on this meridian is referred as the Indian Standard Time (IST). The IST is ahead of the GMT by 5 hours 30 minutes.

INDIA'S BOUNDARIES AND NEIGHBOURING COUNTRIES

The Great Himalayan ranges in the north, the Arabian Sea in the south-west, the Bay of Bengal in south-east and the Indian Ocean in the south form the geographical boundaries of India.

The countries which share their terrestrial boundaries with India are:

- (i) In the west and north-west: Pakistan and Afghanistan
- (ii) In the north: China, Nepal and Bhutan
- (iii) In the east: Bangladesh and Myanmar
- (iv) Sri Lanka and Maldives are our nearest neighbours across the sea. The narrow Palk Strait and the Gulf of Mannar separate Sri Lanka and India.

India, Pakistan, Nepal, Sri Lanka, Myanmar, Maldives, Bangladesh and Bhutan together are called the **Indian subcontinent**. The Indian subcontinent is a naturally demarcated entity and has a distinct physical, cultural and socio-economic identity which separates it from the rest of Asia.

India-At a Glance

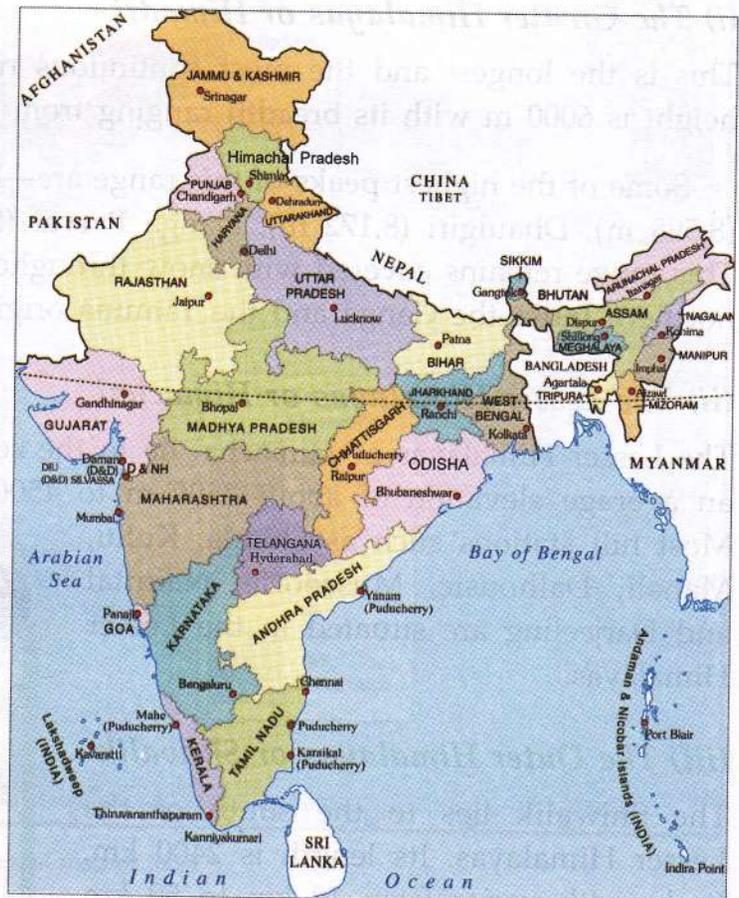
1. **Length:** 3,214 km from north to south
2. **Breadth:** 2,933 km from east to west
3. **Area:** 32,87,263 km²
4. **Location:** in the Northern-Eastern Hemisphere
5. **Latitude:** $8^{\circ}4' - 37^{\circ}6' \text{N}$
6. **Longitude:** $68^{\circ}7' - 97^{\circ}25' \text{E}$
7. **Southernmost part of the Mainland:** Kanniyakumari
8. **Southernmost part of the Indian Union:** Indira Point
9. **Position in terms of Area:** Seventh largest in the world
10. **Position in terms of Population:** Second largest in the world
11. **Neighbouring Countries of India:** Pakistan, Afghanistan, China, Nepal, Bhutan, Bangladesh, Myanmar, Sri Lanka and Maldives

ADMINISTRATIVE DIVISIONS OF INDIA

India is divided into 29 states and 7 union territories for administrative purposes. This division has been done mainly on the basis of languages. The main points about the administrative units of India are as follows:

- In terms of area, Rajasthan is the largest state while Goa is the smallest state.
- Among the union territories, the Andaman and Nicobar Islands in the Bay of Bengal are the largest while the islands of Lakshadweep in the Arabian Sea are the smallest.
- States have been further divided into districts and *tehsils*.
- Uttar Pradesh is the most populous state and has the maximum number of districts.
- The seven states in the north-eastern part of India are called the **seven sisters**. They are—Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland, Manipur and Tripura.
- Chandigarh is the common capital of two states—Punjab and Haryana.
- There are seventeen such states which share their boundaries with the neighbouring countries. These are:
 - Gujarat, Rajasthan, Punjab, Jammu-Kashmir (Pakistan)
 - Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Jammu-Kashmir (China)
 - Uttarakhand, Uttar Pradesh, Bihar, West Bengal, Sikkim (Nepal)
 - West Bengal, Assam, Arunachal Pradesh, Sikkim (Bhutan)
 - West Bengal, Assam, Tripura, Meghalaya, Mizoram (Bangladesh)
- Delhi is the national capital of India.

Telangana, which was earlier a part of Andhra Pradesh, came into existence as a new state in June 2014.



Political map of India

PHYSICAL DIVISIONS OF INDIA

India is a vast country and has a variety of landforms. The Indian mainland can be broadly divided into six physical divisions. They are:

1. The Northern Mountains
2. The Northern Plains
3. The Peninsular Plateau
4. The Coastal Plains
5. The Indian Desert
6. Two Groups of Islands

1. THE NORTHERN MOUNTAINS

The Himalayas are stretched from the north-west to the north-east along the northern boundary of India. They are about 2400 km long and their width varies from 500 km to 200 km. The Himalayas run into three parallel ranges—

- (i) The Greater Himalayas or Himadri
- (ii) The Lesser Himalayas or Himachal
- (iii) The Outer Himalayas or Shiwalik

(i) The Greater Himalayas or Himadri

This is the longest and the most continuous range of the Himalayas. Its average height is 6000 m with its breadth ranging from 120 km to 190 km.

Some of the highest peaks of this range are—Mt. Everest (8,848 m), Kanchenjunga (8,598 m), Dhaulgiri (8,172 m), Nanga Parvat (8,126 m) and Nandadevi (7,817 m). This range remains covered with snow throughout the year. The two main rivers of northern India—the Ganga and the Yamuna originate from the Greater Himalayas.

(ii) The Lesser Himalayas or Himachal

The Lesser Himalayas or Himachal lie to the south of the Himadri. This range has an average elevation of about 3500 m to 4500 m and is 60 km to 80 km wide. Most hill stations such as Shimla, Kullu, Manali, Dalhousie, Mussoorie, Nainital and Darjeeling are situated in the Lesser Himalayas.

(iii) The Outer Himalayas or Shiwalik

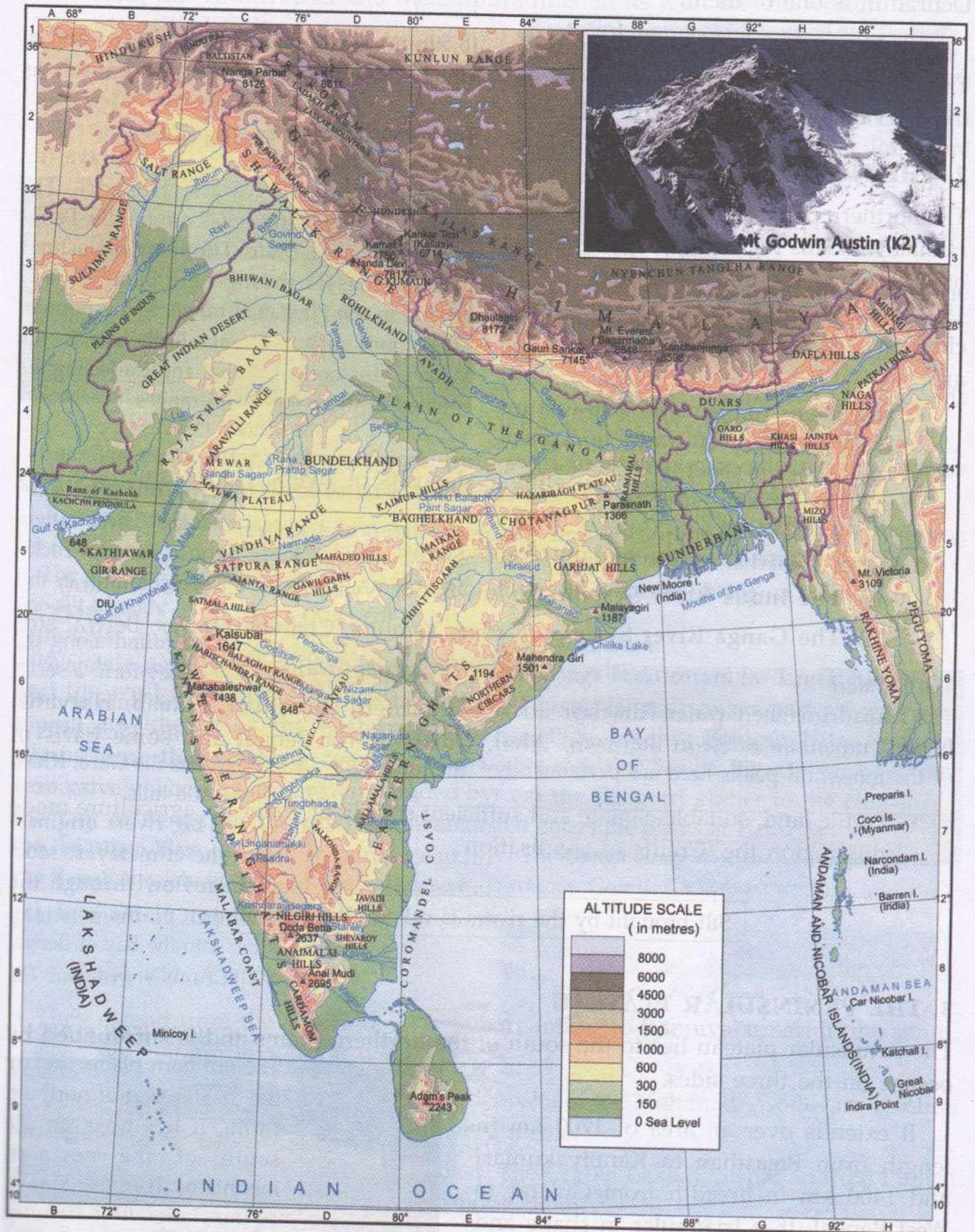
The Shiwalik lies to the south of the Lesser Himalayas. Its length is 2400 km. Its breadth varies from 10 km to 50 km and its height varies from 900 m to 1200 m.



DO YOU KNOW?



India's highest peak, Godwin Austin or K2 which is in the north-east of Laddakh, is in the Karakoram range. The world's highest peak, Mt. Everest in the Himadri range is located in Nepal.



Physical map of India

It has many broad valleys called *duns*. Most of these duns are in Uttarakhand. Dehradun is one of them.

The Purvanchal hills in the north-east lie along the eastern boundary of India. They are the eastward extensions of the Himalayas and are collectively known as the **Purvanchal or the Eastern Hills**.

2. THE NORTHERN PLAINS

The northern plains lie to the south of the Himalayas. This region covers a distance of 3200 km. Its breadth varies from 150 km to 300 km. Some other characteristics of the northern plains are—



The Northern Plains

- Northern plains are extremely level and have very low slopes.
- These plains are formed by alluvial deposits of rivers. Hence, they are very fertile and suitable for cultivation.
- These plains have three main river-systems:
 - (i) **The Indus River System:** (Indus, Satluj, Vyas, Ravi, Chenab, Jhelum)
 - (ii) **The Ganga River System:** (Ganga, Yamuna, Chambal, Indus, Betwa, etc.)
 - (iii) **The Brahmaputra River System:** (Brahmaputra)
- The northern plains are spread over northern Rajasthan, Punjab, Haryana, Uttarakhand, Uttar Pradesh, Bihar, Odisha, West Bengal and some parts of Assam.
- Fertile land, suitable climate and sufficient supply of water for agriculture made this region the 'Cradle of Civilisation'.

Silt brought by the rivers is called **alluvial soil**.

3. THE PENINSULAR PLATEAU

The peninsular plateau lies to the south of the northern plains and is surrounded by oceans on the three sides.

It extends over an area of 1700 km in length from Rajasthan to Kannyakumari and 1400 km in breadth from Gujarat to West Bengal. It is triangular in shape and is elevated at a height of 600 m to 900 m from the sea level.



The Peninsular Plateau

- This plateau region is surrounded from three sides—in its north are the Aravalli hills, the Vindhyachal and the Satpura hills, in its west are the western coastal plains and in its east are the eastern coastal plains.
- The main rivers of peninsular India are—Narmada, Tapi, Mahanadi, Godavari, Krishna and Kaveri.
- The main hills of this region are—Aravalli hills, Vindhyachal, Satpura, Rajmahal hills, Anamalai, etc. Out of these, Anaimudi Peak is the highest peak of South India.
- River Narmada divides peninsular India into two parts—
 - **Central Highlands** which has the Chhotanagpur Plateau in its east and the Malwa Plateau in its north. The Bundelkhand and Baghelkhand Plateaus are also in this region.
 - **Southern land** which is also known as the Deccan Trap. This region extends from Vindhyachal in the north to the southern tip of the peninsula.
- The peninsular plateau slopes from west to east. Hence, most rivers of this area flow from west to east and enter into the Bay of Bengal.
- This plateau region has mostly volcanic and metamorphosis rocks which are the store houses of various kinds of minerals.

4. THE COASTAL PLAINS

The coastal plains are situated on the east and the west of the Deccan Plateau. These plains are known as the **eastern coastal plains** and the **western coastal plains**, respectively. These plains are surrounded by the Bay of Bengal in the east, the Arabian Sea in the west and the Indian Ocean in the south. The eastern and western coastal plains meet at Kanniyakumari in the south.



The coastal plain

(i) *Eastern Coastal Plains*

- They extend from the mouth of river Subarnarekha to Kanniyakumari in the south. They are 100 km to 120 km wide.
- These plains are formed by the alluvial deposits of the Mahanadi, Godavari, Krishna and Kaveri rivers and therefore, are very fertile.
- Many lagoons are found near their coast. The Chilka Lake (Odisha) and the Pulicat Lake (Andhra Pradesh) are famous among them.
- The northern part of the eastern coast is known as the 'Northern Circars' and the southern part is known as the 'Coromandel Coast'.

(ii) Western Coastal Plains

- They extend from the Rann of Kachchh to Kanniyakumari and are about 1500 km long. Their average width is about 64 km.
- The northern part of the western coast is called Konkan and the southern part is called the Malabar Coast.



DO YOU KNOW?



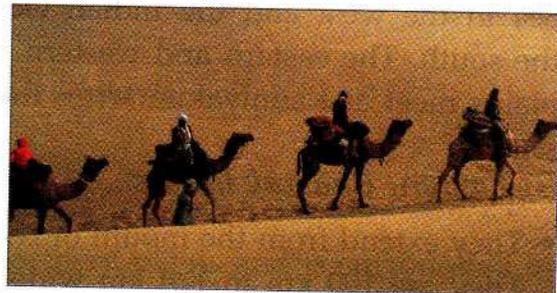
The southernmost tip of India, Kanniyakumari was known as 'Cape Comorin' during the British rule.

Differences between Eastern and Western Coastal Plains

Eastern Coastal Plains	Western Coastal Plains
<ul style="list-style-type: none">• Extend from the mouth of river Subarnarekha to Kanniyakumari	<ul style="list-style-type: none">• Extend from the Rann of Kachchh to Kanniyakumari
<ul style="list-style-type: none">• 1100 km long with an average width of 120 km	<ul style="list-style-type: none">• 1500 km long with 10 km to 25 km width
<ul style="list-style-type: none">• Straight shoreline with well-defined beaches	<ul style="list-style-type: none">• Broken and uneven shoreline
<ul style="list-style-type: none">• Big rivers like Mahanadi, Godavari, Krishna, Kaveri, etc. have their delta.	<ul style="list-style-type: none">• No big river flows in this region. Numerous short and swift streams flow in the western coastal plains.
<ul style="list-style-type: none">• They are divided into two parts—the Northern Circars and the Coromandal Coast.	<ul style="list-style-type: none">• They are divided as—the Konkan Coast and the Malabar Coast
<ul style="list-style-type: none">• The famous ports are Vishakhapatnam and Chennai.	<ul style="list-style-type: none">• The famous ports are—Mangalore, Cochin, Mumbai, etc.

5. THE INDIAN DESERT

The Great Indian Desert lies in the western part of India. It is also known as 'Thar Desert'. This is the hottest driest and sandy stretch of land in India. Due to less rain and insufficient amount of underground water, this land has very less vegetation. The only big river of this region is the 'Luni'. The Great Indian Desert is primarily spread over Rajasthan and some parts of Punjab, Haryana and Gujarat.



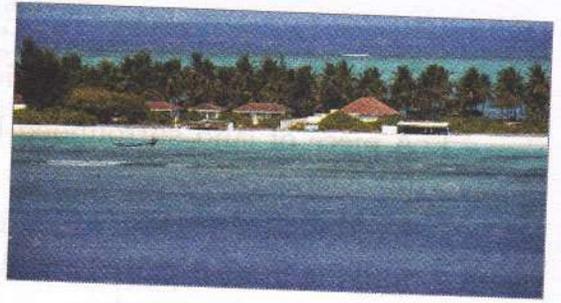
The Indian Desert

6. TWO GROUPS OF ISLANDS

Besides the mainland of India, there are two groups of islands. One of these, the Andaman and Nicobar Islands lie in the Bay of Bengal. On the other hand, the Lakshdweep Islands are located in the Arabian sea.

(i) Andaman and Nicobar Islands

The Andaman and Nicobar Islands is a group of 572 islands, out of which 36 are inhabited. These islands are actually the peaks of submerged volcanic mountains. They include the Barren Islands which has the only active volcano in India. These islands are of volcanic origin.



Island

(ii) Lakshdweep

In the Arabian Sea, at a distance of 220 km – 440 km from Kerala, is Lakshdweep, a group of 36 islands. These islands are made of coral polyps which are tiny marine animals. These islands are known as **Paradise for Tourists**. **Minicoy** is the largest island among all.

GEOGRAPHIC UNITY OF INDIA

The major physical divisions together play an important role in shaping the climate, economy and defence of our country. Through monsoon, the physical features ensure a common cycle of seasons as well as a tropical monsoon climate for the whole country. The northern and the coastal plains provide the country with food and raw materials for many industries. We also get rich minerals from the peninsular plateaus which greatly help in the development of our nation.

Geographical Terms

- **Deccan Trap:** The north-western part of the Deccan Plateau that is made up of lava.
- **Delta:** A triangular piece of land formed at the mouth of a river.
- **Duns:** Longitudinal valleys formed in the Shivalik range.
- **Glacier:** A river of snow formed in the high mountains that moves very slowly down a valley.
- **Lagoon:** Shallow salt water lakes along the sea coast.
- **Peninsula:** An area of land surrounded by water on three sides.
- **Subcontinent:** A big geographical unit that stands out distinctly from the rest of the continent.



DO YOU KNOW?



TSUNAMI

The Andaman and Nicobar Islands were struck by a Tsunami in 2004. Tsunami involves huge tidal waves generated by underwater earthquakes on the sea floor. These killer waves cause extensive damage to lives and property.



Destruction caused by Tsunami

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. A piece of land surrounded by water on three sides:
(a) Island (b) Peninsula
(c) Gulf (d) Bay
2. India is located entirely in the:
(a) Western Hemisphere (b) Eastern Hemisphere
(c) Northern Hemisphere (d) Southern Hemisphere
3. A slow moving river of snow and ice:
(a) Iceberg (b) Glacier
(c) Snowfall (d) Icesheet
4. The group of islands located in the Bay of Bengal:
(a) Maldives (b) Sri Lanka
(c) Lakshadweep (d) Andaman and Nicobar
5. The southernmost tip of the Indian mainland:
(a) Indira Point (b) Kanniyakumari
(c) Dwarka (d) Thiruvananthapuram

II. Mark True or False against each of the following statements.

1. India is the second largest country in the world. _____
2. The Mount Everest is the highest peak in the world. _____
3. The north-western part of the Deccan Plateau is called the Western Ghats. _____
4. The western coastal plains are generally narrow. _____
5. The only active volcano in India is in the Lakshadweep islands. _____

III. Match the columns.

Column A

1. The desert located in the north-western part of India
2. The huge tidal waves generated by underwater earthquakes
3. The place where the Western Ghats and the Eastern Ghats meet
4. The island country located to the south of India
5. The largest state of India

Column B

- (a) Rajasthan
- (b) Nilgiri Hills
- (c) Sri Lanka
- (d) Thar
- (e) Tsunami

IV. Short Answers Questions.

1. State the latitudinal and longitudinal extent of India.
2. How many states and union territories are there in India?

VII. Projects and Activities.

1. Imagine you are travelling from Kashmir to Kanniyakumari by train. Make a diary entry describing the journey, mentioning the landscapes, climate, dress, and the food of the states that you are passing through.
2. Prepare a collage on the theme: 'Unity in Diversity'. Students can work in groups of 4-5 students. Collect and paste pictures of the different landforms of India, dresses, monuments, etc.

VALUE-BASED QUESTION

In this chapter, we studied that 'language' was the main basis of the division of administrative units in India. What do you think was the main basis of division of the countries in the World? The concepts of 'Division' and '*Vasudhaiva Kutumbkam*' are opposite to each other. What do you think is more important and why?

HOTS: THINK BEYOND

How can you prove that the geographical diversity of India is the gift of nature?

ANSWERS TO THE CROSSWORD PUZZLE

Across

1. Duns

2. Pakistan

3. Lagoon

Down

A. Bay of Bengal

B. Shiwaliks

C. Narmada

D. Nainital

8

India—Climate, Natural Vegetation and Wildlife

There is a deep relation between human life and the climate. Wherever humans live, their life-style is greatly influenced by the climate of that place. The climate determines the type of the clothes men wear, the food they eat and the type of house they live in. Not only this, the climate of a country also influences its vegetation, wild-life and economy.

WEATHER AND CLIMATE

Weather is the condition of the atmosphere at any moment with regard to certain elements *i.e.*, temperature, atmospheric pressure, wind velocity, humidity and precipitation.

The **climate** of a place refers to the average condition of its weather over a long period of time. In other words, if the condition of atmosphere of a given place does not change for a long time, it is called the climate of that place. For example, India generally has a tropical monsoon climate.

Monsoon is a seasonal wind which blows in a fixed direction during a particular season.

Difference between Weather and Climate

Weather	Climate
1. The word 'weather' refers to the day-to-day changes in the conditions of the atmosphere of a place.	• Climate of a place refers to the average weather conditions over a long period of time.
2. The weather of a place does not remain same. It is variable.	• The climate of a place is the sum total of weather conditions of that place. Thus, climate is constant.
3. Temperature, rain, humidity, sun and clouds are the factors responsible for change in weather.	• Temperature, rain, humidity etc. do not influence climate of a place for a long time.

UNIQUENESS OF INDIAN CLIMATE

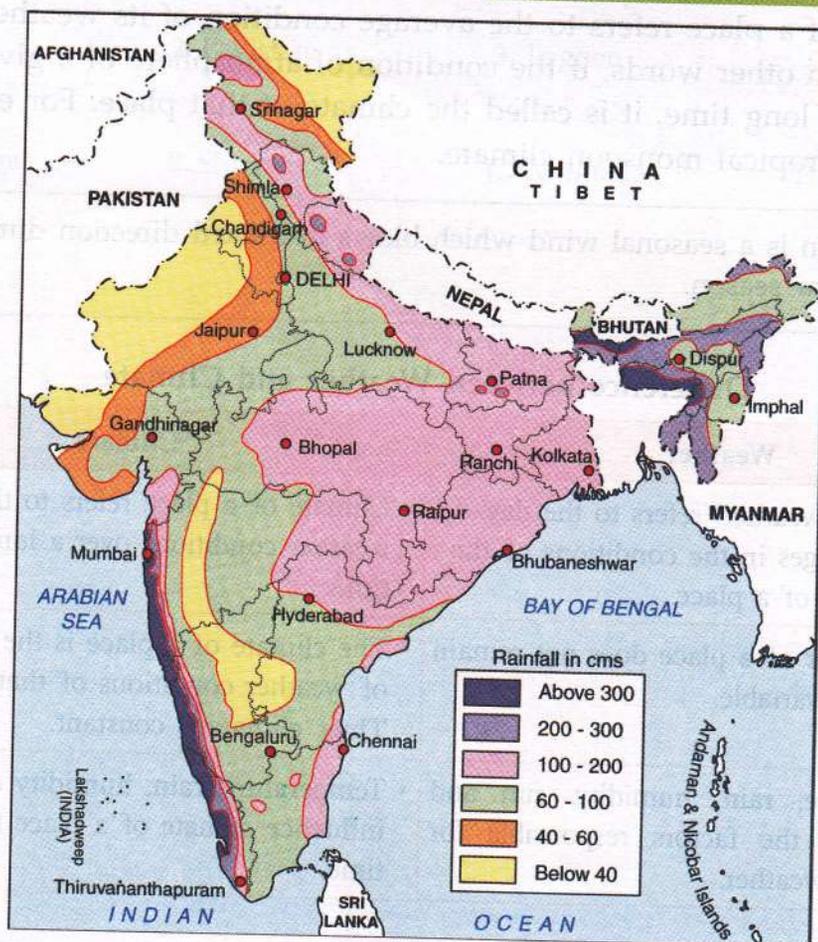
Owing to the huge size, distance from the Equator and various land reliefs, climate-related diversities can be observed in different parts of our country.

1. India has a **Tropical Monsoon** climate *i.e.*, it experiences relatively high temperature during summers and almost dry winters.
2. The high peaks of the Himalayan ranges in the north prevent the cold winds from Central Asia to enter into India. This results in the distinctive changes in the climatic conditions of the northern parts of our country. The northern parts of our country enjoy hot summers, cool winters and adequate amount of rainfall.
3. The coastal regions of India have a tropical climate. Mostly, the climate in this region remains the same *i.e.*, neither very hot nor very cool.



DO YOU KNOW?

1. The word 'monsoon' has come from the Arabic word '*mausim*' meaning season.
2. The world's highest rainfall has been recorded in 'Mawsynram' near Cherrapunji, in Meghalaya where the average rainfall recorded is 1141 cm annually.



Distribution of rainfall

4. In India, the monsoon winds blow from sea to land and bring rain in the summer season.
5. In winters, the winds blow from land to sea and so, the winters are dry and cold.
6. The Thar Desert in the western part of India receives an average rainfall of less than 12.5 cm annually whereas, Cherrapunji in the north-east receives about 1087 cm average rainfall annually.
7. The delta region of Ganga and the coastal area of Odisha receive heavy rainfall with thunder and storm in the month of July-August whereas, the Coromandal coast in the South remains dry during this time.
8. The beginning and ending of monsoon also differs in various parts of our country.

FACTORS INFLUENCING THE CLIMATE OF INDIA

Various factors which influence the climate of India are as follows:

- | | |
|-----------------------------|-------------------|
| (i) Latitudinal location | (iv) Altitude |
| (ii) Northern Himalayas | (v) Monsoon winds |
| (iii) Distance from the sea | |

- (i) **Latitudinal location:** The Tropic of Cancer passes almost through the middle of India. So, the northern part of India (Punjab, Haryana, Uttar Pradesh, Bihar, Himachal Pradesh, Jammu and Kashmir etc.) face chilly winters and hot summers.

The southern part of India is near the Equator and thus, faces warm climate throughout the year.

- (ii) **Northern Himalayas:** Himalayas act as a climatic-divider for India. They shield India from the cold winds originating from the northern polar area. In the absence of the natural wall of Himalayas, India would be very cold.

Himalayas also help India in getting rains through monsoon winds as these act like a barrier for them.

- (iii) **Distance from the sea:** The climate of a place is greatly affected by the distance from the sea as it affects the rainfall and temperature of that place. The southern peninsular India is surrounded by water on the three sides. This causes rainfall throughout the country. The places near the sea are benefited by the local sea breezes that cause rain. The regions near the water bodies have moderate climate. To the contrary, the regions that are far away from the water bodies have extreme climate and the difference between their maximum and minimum temperature is very high.

- (iv) **Altitude:** It is also one of the important factors that influence the climate of a place. After rising above every 165 m from the the sea level, there is a decrease of 1°C in temperature. That is why the mountainous areas face low temperature while valleys or plains face high temperature.
- (v) **Monsoon winds:** India receives rainfall between mid-June and mid-September. At that time, the sun shines directly on the Tropic of Cancer and brings great changes in the atmospheric condition. Due to low atmospheric pressure, monsoon winds blow from south-west to north-east. 80% of the rainfall in India depends on these monsoon winds.

On the basis of these characteristic of weather, the year can be divided into different seasons.

THE INDIAN SEASONS

In India, the year is divided into four distinct seasons. They are:

1. The Winter Season (December–February)
2. The Summer Season (March–May)
3. The Rainy Season (June–September)
4. The Autumn or the Retreating Monsoon Season (October–November)

1. The Winter Season

The winter season, characterised by cold weather, begins in the middle of November and continues till the end of February. The months of December and January are very cold in the northern India. In this season, there is low temperature due to the slanting rays of the Sun and cool, dry winds that blow from north to south. In winter season, days are shorter and the nights are longer.

2. The Summer Season

The summer season, characterised by hot weather, begins in March and lasts till the end of May. In some places, it continues till the end of June. The north and the north-western parts of India become hotter than the eastern and southern India. The temperature rises above 50° C. During this period, hot, dry and dusty winds called *loo* blow over the northern plains during the day. In summers, days are longer and the nights are shorter.

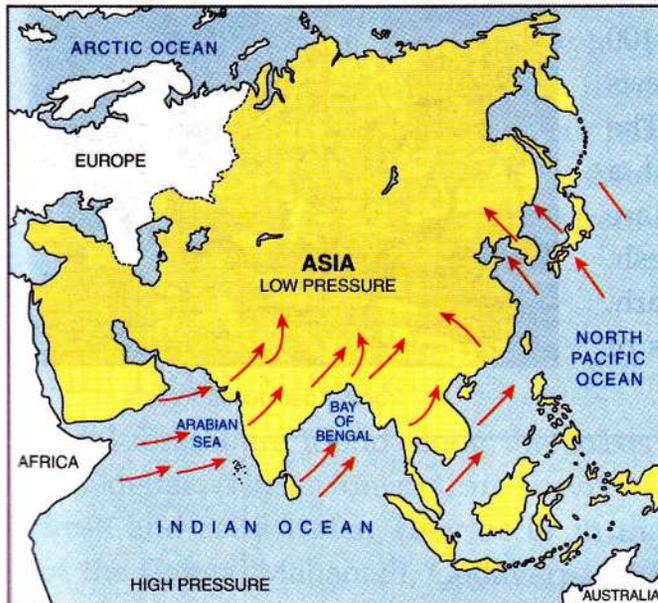
3. The Rainy Season (South-West Monsoon)

The rainy season or south-west monsoon season begins in the month of June and continues till the end of September. The monsoon winds carry moisture and bring heavy rainfall in India after being obstructed by the mountains in the north. These are called **advancing monsoons**. During this time, atmospheric pressure in the northern plains is so high that the monsoon winds get attracted towards Indian ocean from

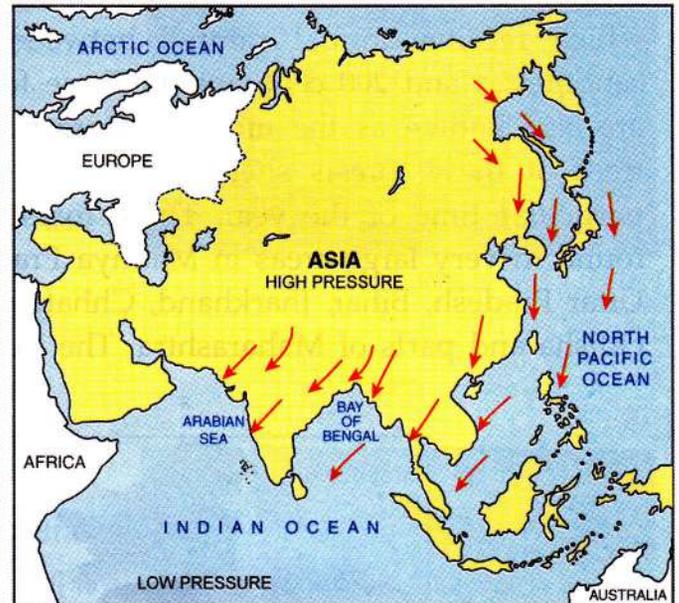
noth-east. They enter India from the south-west and so, they are also known as **south-west monsoon winds**.

4. The Autumn or the Retreating Monsoon Season

October and November are the two months known for the retreating monsoon. During this period, the south-west monsoon retreats or withdraws from India. Since the monsoon winds blow from land to sea so, they are dry and cool. It is a period of change from the hot-wet weather to a cool-dry weather. The southern parts of India, particularly Tamil Nadu and Andhra Pradesh, receive rainfall during this season.



South-West Monsoon



North-East Monsoon

NATURAL VEGETATION

Natural vegetation refer to the trees, plants, shrubs and creepers that grow naturally. India possess a large variety of natural vegetation because of the various kinds of climate, soil and relief features present in it.

Natural vegetation *i.e.*, forests in India can be divided into five major categories.

1. The Tropical Rainforests
2. The Tropical Deciduous Forests
3. The Thorn Forests
4. The Tidal Forests
5. The Himalayan Forests

THE TROPICAL RAINFORESTS

Tropical rainforests are found in areas which receive more than 200 centimetres of annual rainfall. These forests are also called **evergreen forests** as the trees do not

shed their leaves over seasons. These forests are found on the western slopes of the Western Ghats, in the plains of Odisha and West Bengal, on the hills of Assam and in the Andaman and Nicobar Islands. The most important trees found in these forests are ebony, mahogany, rosewood, cinchona, wild rubber and bamboo.

THE TROPICAL DECIDUOUS FORESTS

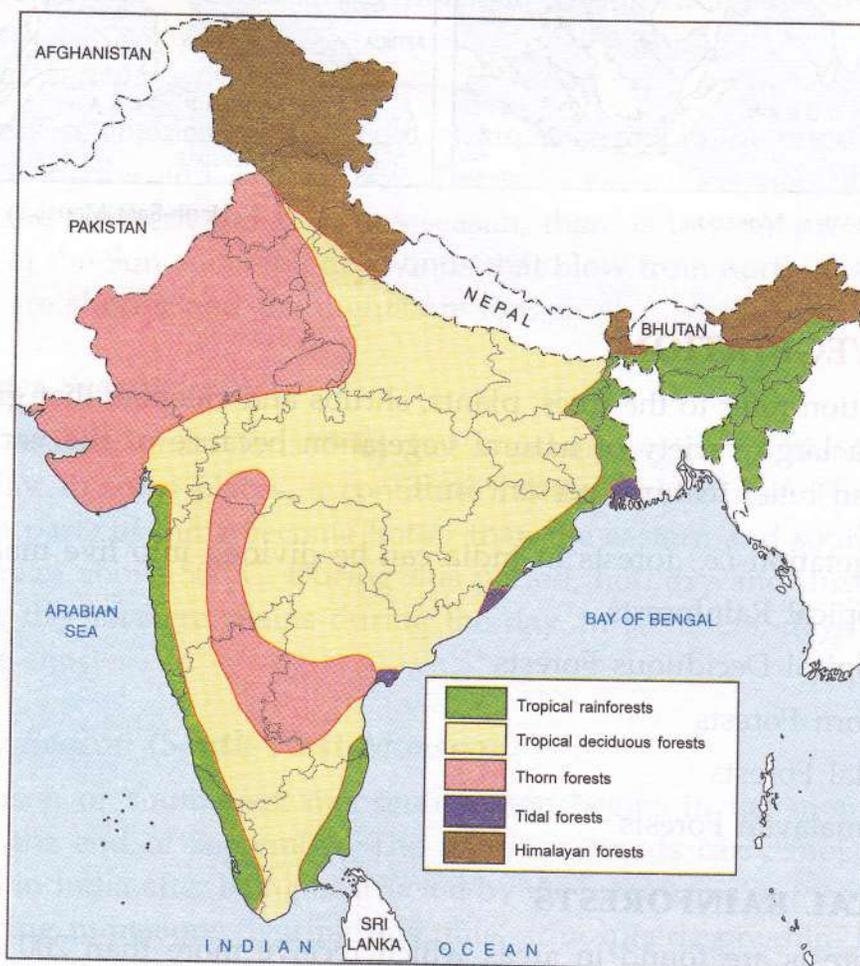
Tropical deciduous forests are found in areas which receive annual rainfall between 100 centimetres and 200 centimetres. These forests are also known as the **monsoon forests**. The trees of these forests shed their leaves at a particular time of the year. These forests are found in very large areas in Madhya Pradesh, Uttar Pradesh, Bihar, Jharkhand, Chhattisgarh, Odisha and parts of Maharashtra. The trees of



Tropical rainforests



Tropical deciduous forests



Natural Vegetation of India

these forests have great economic importance. The important species of trees found here are teak, sal, shisham, mahua, sandalwood and bamboo.

THE THORN FORESTS

Thorn forests are found in the areas which receive rainfall less than 75 centimetres. They are found in the dry parts of the Deccan Plateau and in Punjab, Haryana, Rajasthan and in some parts of Madhya Pradesh and Gujarat. The vegetation consists of short trees like acacia, thorny bushes and shrubs. Trees of these forests have thorns and waxy leaves that prevent them from losing moisture from the leaf's surface. This helps them to withstand long dry conditions. *Kikar*, *babul*, date palms and *khair* are the useful trees of these forests.



Thorn forests

THE TIDAL FORESTS

Tidal forests are found along the coasts and in the deltas. These forests can survive in both fresh and salty water. They occur in the deltas of the Ganga, Mahanadi, Godavari and Krishna rivers and along the eastern coast. These forests are covered by mangrove trees. Mangrove trees are found mainly in the deltas of tropical regions near river mouths. Sundari tree is one of the species of mangrove forests. The Ganga-Brahmaputra delta is known as the Sundarbans as the forest here is the home to Sundari trees. The wood of these trees is durable and is used in making boats.



Tidal forests

THE HIMALAYAN FORESTS

The Himalayas have a wide variety of vegetation due to their altitude. Pine, cedar, silver fir and spruce are found here. These trees are found in **coniferous forests**. Shrubs, scrubs and grass belonging to the Alpine family are found beyond the altitude of 3,300 metres.



Himalayan forests

Types of Forests	Other Name	Trees	Climate	Region	Characteristics
1. Tropical Forests	Evergreen forests	Ebony, Mahogany, Rose wood, Cinchona, Wild Rubber, Bamboo	200 cm of annual rainfall, hot and humid climate	Western slopes of the Western ghats, West Bengal, Odisha, North-east state and Coromandal coast.	Trees grow rapidly and are very tall and dense. These trees remain green throughout the year.
2. Tropical Deciduous Forests	Monsoon forests	Teak, Sal, <i>Shisham</i> , <i>Mahua</i> , Sandalwood, Bamboo	100 cm to 200 cm rainfall, dry and humid climate	Madhya Pradesh, Uttar Pradesh, Bihar, Jharkhand, Odisha, Maharashtra etc.	The trees shed their leaves at a particular time of the year.
3. Thorn Forests	—	Acacia, Babool, Date, Palm, <i>Khair</i> , thorny bushes and shrubs	Hot and dry climate	Deccan Plateau, Rajasthan, Gujarat, Haryana, Punjab, Western Madhya Pradesh	Trees have thorns and waxy leaves to prevent the loss of moisture from the leaf surface.
4. Tidal Forests	Mangrove forests	Sundari	Hot and humid coastal climate	Ganga-Brahmputra delta, Delta regions of Godawari Mahanadi, Krishna etc.	These forests dwell in both fresh and salty water. The roots remain submerged in water while special roots come out of the water and help in respiration.
5. The Himalayan Forests	Coniferous forests	Pine, Cedar, Silver fir, spruce	At an altitude of 3,300 m., cold and dry climate	Northern Himalayas	The trees are cone-shaped. So that the ice or snow slides-off the branches.

IMPORTANCE OF FORESTS

Forests provide us with timber, fuel, fodder, medicines, oil, gum, dyes, rubber and other products. Forests help in reducing soil erosion, controlling floods and maintaining the balance in nature. Trees absorb carbon dioxide and release oxygen. They bring rainfall as well as prevent the environment from being polluted. They are the home to wildlife.

Deciduous trees like sal and teak are major sources of hardwood which is very durable. They are used for construction purposes, making furniture and railway sleepers.

Softwood trees like pines, spruce and *fir* are ideal for furniture and paper making. Bamboo is also used for making paper.

WAYS AND MEANS OF CONSERVATION OF FORESTS

The cutting and clearing of forests is called **deforestation**. India not only needs to maintain its existing forest cover but also needs to increase it. This can be done by **afforestation** which means growing more trees to increase the forest area.

The Indian Forest Research Institute has been set up in Dehradun with the aim to conserve forests. The Indian Institute of Forest Management, Bhopal provides training in forest management. **The Chipko Movement** and the celebration of **Van Mahotsav** has also helped to create awareness amongst the people about the need to conserve forests.

Therefore, we should not cut down trees unnecessarily. We should plant more trees. Overgrazing of cattle should also be avoided to protect our forest area.

WILDLIFE

There are more than 89,000 species of animals and 1,200 species of birds in our forests. Elephants are found in large numbers in the forests of Assam, the Nilgiris and the southern hilly areas of Karnataka and Kerala. Camels have adjusted themselves to the hot and dry regions of Rajasthan and Gujarat. The one-horned rhinoceros are found in the marshy land of Assam and West Bengal. Lions are found in India and Africa only. The Gir forests of Gujarat are their natural habitat. Tiger is our national animal. The Sundarbans delta having tidal forests is the natural habitat of the Royal Bengal tigers. Leopards, clouded leopards and snow leopards are found in the cooler climate. Snow leopards are found in the upper Himalayan regions while others are commonly found in forests of northern plains and plateau area.



Elephants in a national park

The Himalayas are the habitat of a wide range of animals and birds. Wild sheep, mountain goats, the ibex, the shrew and the tapir are some of the other animals found

in the Himalayas. In the upper part of these mountains, Panda and Himalayan bear find suitable habitat.

Monkeys are commonly found almost in every region of India. They have the ability to survive in a wide range of climate. We see the monkeys in the hot deserts of Rajasthan as well as in the high mountainous areas of Himalayas even upto 2000 m high. Langoor is the most common species of monkeys. The lion-tailed macaque is another species of monkey which has hair around its face.

Nature has enriched India with bird life of all colours and variety. Peacock is a very common and beautiful bird of India. It is the national bird of India. Pheasants, geese, ducks, mynahs, parrots, pigeons, parakeets, cranes, hornbills and sunbirds are found in forest and wet lands of India. The famous Indian cuckoo bird has made the tropical deciduous forest region its habitat. Besides these, we are lucky enough to see migratory birds like Siberian cranes in winter season, when these birds migrate from Siberia to India.

Rivers and lakes in India provide the habitat to Crocodiles and 'Ghariais'. Gharial found in our country is a rare specie of crocodiles. Along the eastern and western coastal areas, salt water crocodiles are also found.

WILDLIFE CONSERVATION

Conservation of wildlife is very important as it is not only our national heritage but also maintains ecological balance. Our government has set up many national parks, wildlife sanctuaries and bird sanctuaries in different parts of India.



Tigers

For example, tigers are preserved in the Corbett National Park, rhinos are preserved in Kaziranga National Park, etc. At present, 100 national parks and 515 wildlife sanctuaries are in action in India. We have bird sanctuaries at Bharatpur, Vedanthangal and Ranganathitoo and wildlife sanctuaries at Kaziranga, Manas, Ranthambhore, Periyar and other places. Project Tiger (1973) and Project Elephant (1992) have also been launched to save the animals from extinction. To save the crocodiles from extinction, a project for breeding them was started in 1974. At present about 12 such schemes are in operation in different states of India. We can't help to conserve wildlife by buying things made of ivory, horns and animal skin. The first week of October is observed as **Wildlife Week** every year to spread awareness among people to preserve the wildlife.



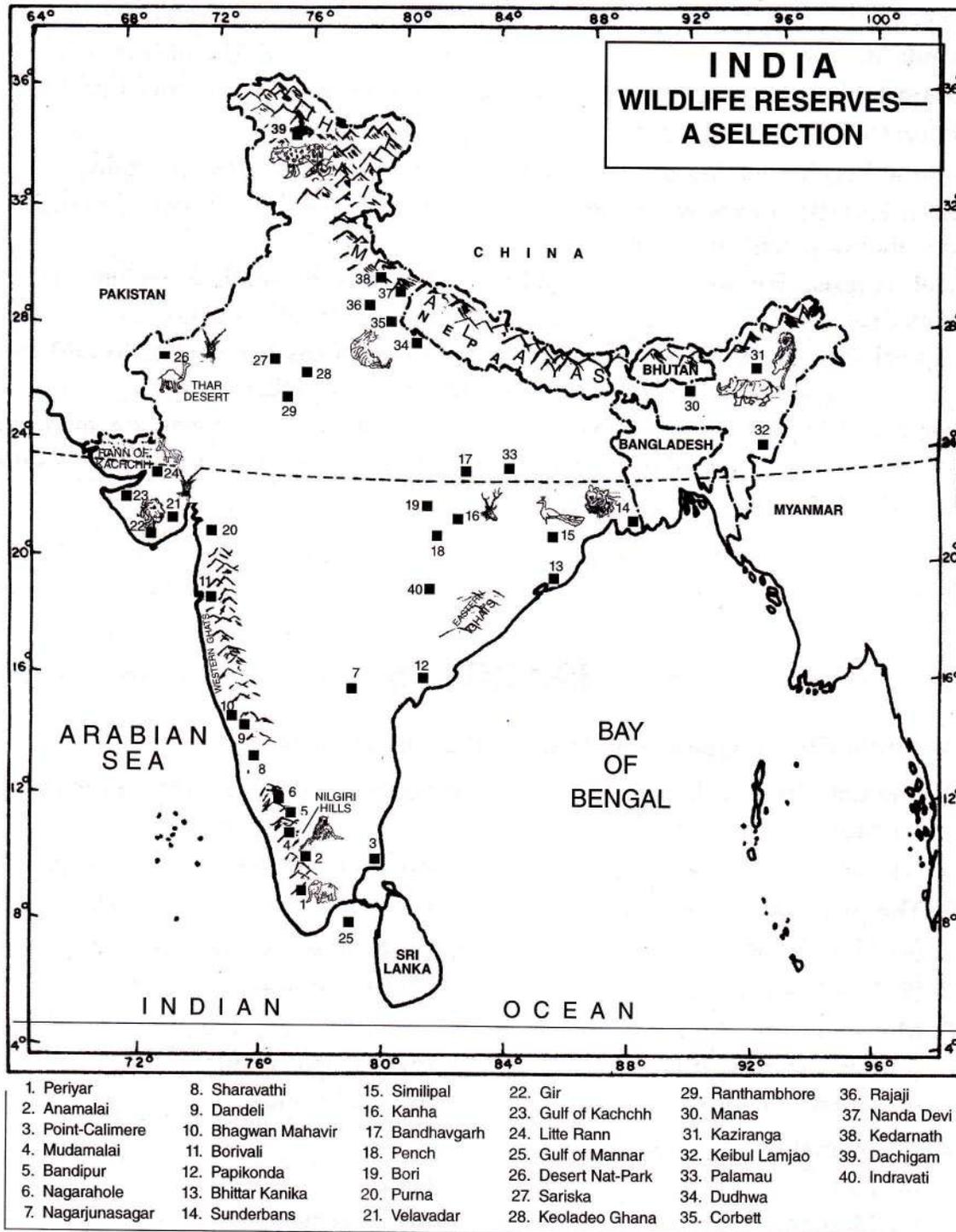
Wild buffalo in a sanctuary



Kaziranga National Park: It is one of the few natural habitats of the one-horned Great Indian Rhinoceros



Asiatic lion in the Gir Sanctuary



Selected National Parks and Wildlife Sanctuaries

Geographical Terms

- **Climate:** The average weather condition over a large area and for a long period of time.
- **Loo:** Hot dry winds that blow over the northern plains during summers.
- **Monsoon:** The period during which the monsoon winds change their directions during summer and winter seasons and which is commonly marked by heavy rainfall.
- **Weather:** Condition of the atmosphere over a small area for a short period of time.
- **Wind:** Moving air
- **Afforestation:** The process of growing more trees to increase the forest area.
- **Deforestation:** The cutting and clearing of forests.
- **Natural Vegetation:** Trees, plants, shrubs and creepers that grow naturally.
- **Thorn Forests:** Forests which grow in areas having less than 75 cm of rainfall and have thorny plants and scrubs.
- **Tidal Forests:** Forests mainly found in the deltas of tropical regions like the Sundarbans.
- **Tropical Deciduous Forests:** Forests which grow in areas having 100 to 200 cm of annual rainfall and in which trees shed their leaves at different times.
- **Tropical Rainforests:** Forests which grow in areas which experience more than 200 cm of rainfall and have trees which do not shed their leaves completely during any part of the year.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The hot, dry winds that blow over the northern plains during summer.
(a) Monsoon (b) Mango showers
(c) Loo (d) Trade winds
2. The place that receives the maximum rainfall:
(a) Moradabad (b) Shillong
(c) Chennai (d) Mawsynram
3. Monsoons are:
(a) permanent winds (b) seasonal winds
(c) variable winds (d) local winds
4. The climate of Mumbai:
(a) Hot (b) Cold
(c) Moderate (d) Extreme

5. The forests which are found in the areas that receive more than 200 cm of annual rainfall are:

(a) Monsoon forests	(b) Evergreen forests
(c) Tidal forests	(d) Thorn forests
6. The most important species of tropical deciduous forests:

(a) Kikar and Babool	(b) Ebony and Mahogany
(c) Teak and Sal	(d) Pine and Fir
7. One of the species of mangrove forests:

(a) Date palms	(b) Sundari	(c) Rubber	(d) Bamboo
----------------	-------------	------------	------------
8. Our national bird:

(a) Parrot	(b) Peacock	(c) Myna	(d) Humming bird
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9. The home of the Royal Bengal tigers:

(a) Kanha	(b) Kaziranga	(c) Periyar	(d) Sundarbans
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II. Mark True or False against each of the following statements.

1. India has a tropical desert climate. _____
2. The monsoon winds retreat from India during the months of October and November. _____
3. In most of the parts of India, rainfall is experienced during the months of June to September. _____
4. Condition of the atmosphere over a large area for a longer period is known as weather. _____
5. Thorn forests are found in areas which receive more than 200 cm of rainfall. _____
6. The one-horned rhinoceros are found in Assam. _____
7. The most dominant forest type in India is the tropical rainforest. _____
8. Sandalwood trees are typical of monsoon forests. _____

III. Match the columns.

Column A

1. Moving air
2. A place with extreme climate
3. A place where the lowest temperature is recorded
4. Home of Indian lions
5. An area of tropical rainforests
6. Important species of coniferous forests
7. An area of tidal forests

Column B

- (a) Drass near Kargil
- (b) Andaman and Nicobar Islands
- (c) Jaisalmer in Rajasthan
- (d) Wind
- (e) Sundarbans
- (f) Gir
- (g) Pine and cedar

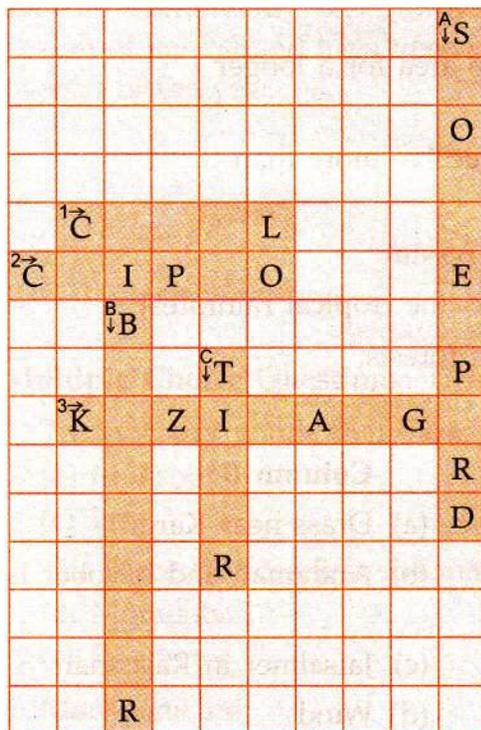
IV. Short Answers Questions.

1. State the factors that influence the climate of India.
2. Which type of climate does India experience?
3. Define the term 'monsoon'.
4. India possesses a large variety of natural vegetation — why?
5. Why are monsoon forests called Tropical deciduous forests?
6. Name any two national parks in India.
7. What is deforestation?

V. Long Answer Questions.

1. Distinguish between the terms 'moderate' and 'extreme' climate?
2. Distinguish between weather and climate.
3. What is retreating monsoon? How does it affect the climate of our country?
4. State four advantages of forests to human beings.
5. Write three differences between tropical rainforests and tropical deciduous forests.
6. List four methods of conservation of wildlife.

VI. Solve the crossword puzzle with the help of the clues given below.



CLUES	
Across	
1.	An animal found in Rajasthan
2.	A movement for the conservation of forests
3.	Home of the one-horned rhinoceros
Down	
A.	An animal found in the Himalayan region
B.	A bird sanctuary in Rajasthan
C.	Our national animal

VII. Projects and Activities.

1. Every newspaper has a column on 'Weather Report'. Collect newspapers of the last seven days. Cut out the Weather Report from these newspapers and paste them in your scrapbook and write a brief report on the weather conditions of the place.

2. A rain gauge measures the rainfall of a place. You can make a simple rain gauge to measure the rainfall in the monsoon season.
3. Make a brochure on any national park of India. Include the following points in it:
 - (a) Pictures of the national park
 - (b) The location, the nearest railway station and airport; means of transport available to reach the place.
 - (c) The accommodation available there.
 - (d) The best time to visit the national park.
4. Prepare a PowerPoint presentation on the natural vegetation of India. Divide the class into five groups and assign one vegetation type to each group. The presentation should have 10–12 slides, including the following information:
 - (a) Location
 - (b) Climatic requirements
 - (c) Important characteristics
 - (d) Economic importance
 - (e) Important species of trees and wildlife found there.

VIII. Map Work.

1. On an outline map of India, mark the following:
 - (a) Areas of thorn forests
 - (b) Areas of tidal forests
 - (c) Areas of tropical rainforests
 - (d) Areas of tropical deciduous forests
2. The state/states:
 - (a) of maximum rainfall.
 - (b) that receive rainfall during retreating monsoon
 - (c) very hot and dry

VALUE-BASED QUESTION

Every Saturday, in the month of July, Mahima's school celebrates 'Vriksharopan' (tree plantation) or the activities related to it. Mahima takes leave every Saturday to study at home. Is her act sensible? What is our moral duty towards the trees?

HOTS: THINK BEYOND

What would be the climate of India if there were no Himalayan ranges?

ANSWERS TO THE CROSSWORD PUZZLE

Across

- | | | |
|----------|-----------|--------------|
| 1. Camel | 2. Chipko | 3. Kaziranga |
|----------|-----------|--------------|

Down

- | | | |
|-----------------|--------------|----------|
| A. Snow leopard | B. Bharatpur | C. Tiger |
|-----------------|--------------|----------|



PROJECT WORK

(Based on Chapters 6–8)

I. Project Work

Using the Internet, magazines and newspapers, collect information on the seven sisters states. Make a project report on the languages spoken, the clothes worn, the food eaten and the festivals that people celebrate. Mark the seven states in a political map of India and paste it in your project report.

II. Let's Talk

Have you been to a hill station? Discuss why did you choose to go there, what did you see there—any special bird or animal along with the climate of the place.

III. Diary Entry

Suppose you live in a desert. Write a diary entry elaborating on how you spend your day and the difficulties you face in your everyday life.

IV. Group Discussion

Discuss about the need of national parks and wildlife sanctuaries.

Why are some animals put into the category of extinct and endangered species?



TEST PAPER

(Based on Chapters 6–8)

Total Marks: 50

Time: 2 Hours

A. Tick (✓) the correct answer.

(1 × 8 = 8)

- Which is the largest desert in the world?
(a) Kalahari (b) Sahara
(c) Thar (d) Namib
- Which continent was called the 'Dark Continent' until the middle of the nineteenth century?
(a) Asia (b) Africa
(c) Australia (d) North America
- Which river is called Tsangpo in Tibet?
(a) Ganga (b) Brahmaputra
(c) Yamuna (d) Tapi
- What is the northern part of the western coastal plains called?
(a) Konkan (b) Malabar
(c) Coromandel (d) Northern Circar
- Which area in the world receives the maximum rainfall?
(a) Mawsynram (b) Darjeeling
(c) Kashmir (d) Chennai
- What does the word '*mausim*' mean?
(a) Rain (b) Weather
(c) Season (d) Climate
- In which year was the Project Tiger launched?
(a) 1983 (b) 1973
(c) 1953 (d) 1963
- What is the other name for tropical rainforests?
(a) Monsoon Forests (b) Mangrove Forests
(c) Thorny Forests (d) Evergreen Forests

B. Match the columns.

(1 × 6 = 6)

Column A

- Dun
- Mahanadi
- Thorn forests
- Minicoy
- Tidal forest
- Chhotanagpur

Column B

- (a) Dry regions
- (b) Sundarban
- (c) Island
- (d) Plateau
- (e) River
- (f) Dehradun

C. Fill in the blanks.

(1 × 6 = 6)

1. is the national animal of India.
2. The wood from Sundari trees is used for making
3. The Tropic of divides India into two halves.
4. is known as the Roof of the World.
5. is the second highest peak of the world.
6. Europe and Asia together are called

D. Give short answers in 30 words each.

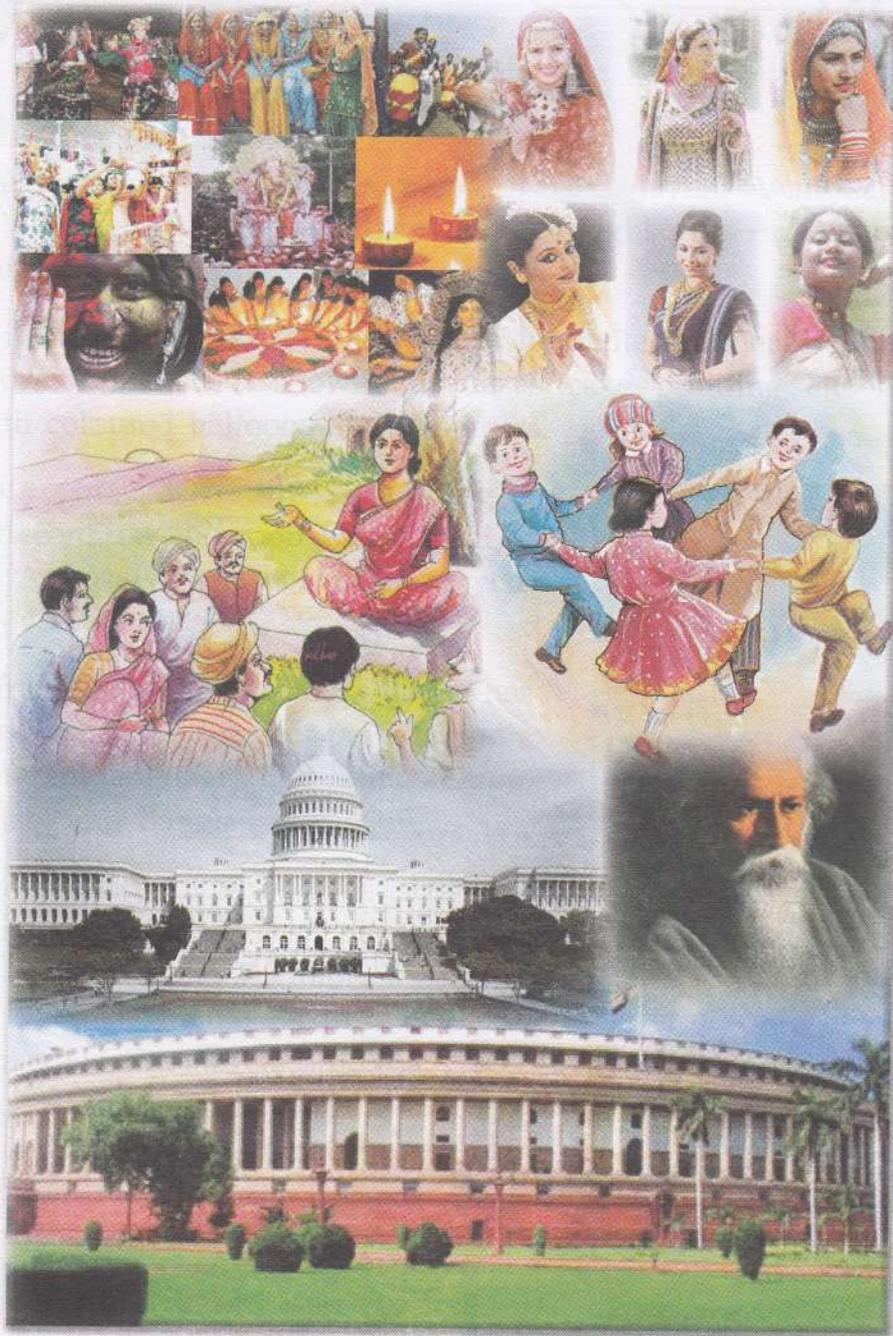
(2 × 5 = 10)

1. Name the countries with whom India has common boundaries.
2. What is the shape of the peninsular plateau?
3. What is Chipko Movement?
4. State any two steps which have been taken to conserve wildlife.
5. Name the major types of forests found in India.

E. Answer the following questions in 60 words each.

(4 × 5 = 20)

1. Distinguish between the IST and the GMT.
2. Why is the Ganga-Brahmaputra plain the most fertile region of India?
3. Describe the monsoon winds.
4. What is the importance of forests?
5. What is the Indian Standard Time? Why was there a need to adopt an Indian Standard Time?



Social and Political Life-I

1

Diversity

It was the birthday of Apoorva. His friends Rushil, Jayati, Avantika, Ananya and others were invited to his house. All of them brought gifts for Apoorva. It was a feast of *idli* and *dosa*.

Next day it was the birthday of Avantika. She invited all her friends. Her mother prepared a variety of dishes—chowmein, pizzas, cake, pudding, etc. The room was decorated with coloured balloons and streamers.

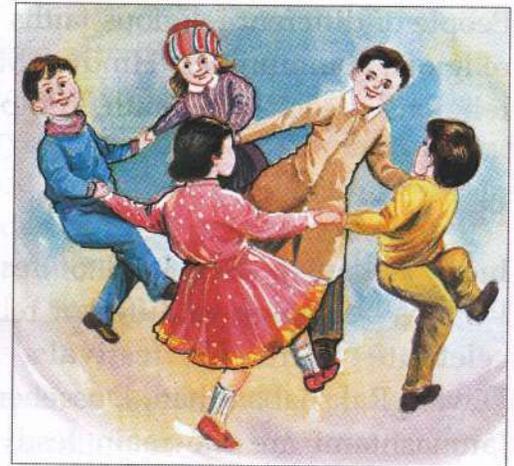
Anoushka's party was different. Being a Bengali, the decoration and food was typical of West Bengal. A variety of sweets were served. Everyone enjoyed.

All these friends live in a building which has 140 flats. They belong to different parts of India and speak different languages like Tamil, Telugu, Marathi, Punjabi and Bangla.

India is a country of enormous size and diversities. It is the seventh largest country in the world. It has 29 States and 7 Union Territories including the National Capital Territory of Delhi. With a wide range of climatic conditions, India is full of contrasts in its physical features. In India one can meet the people of different racial groups, tribes, religions, etc.

Avantika's mother asked her to prepare separate lists of the following.

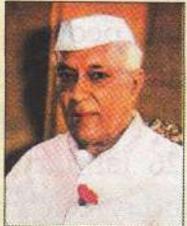
1. What were the children wearing in these parties?
2. What was the variety of food at these parties?



Unity in diversity

 **DO YOU KNOW?** 

The phrase 'unity in diversity' was coined by the great historian Vincent Smith. It was Shri Jawaharlal Nehru, the first Prime Minister of India, who placed much emphasis on the *composite culture* of Indian people.



3. Which language did the children at the parties speak at home?
4. In which language do the children speak when they are together?
5. What are their favourite sports?

Answers to these questions would make an interesting story.

We have a variety in our celebrations, sports, languages, dresses and food habits. Languages also have different dialects. But basically we all are one. So we are all united. This is called **unity in diversity**. Diversity means a wide variety of cultures, opinions, beliefs, customs and traditions. It is this diversity that makes the secular fabric of India strong.

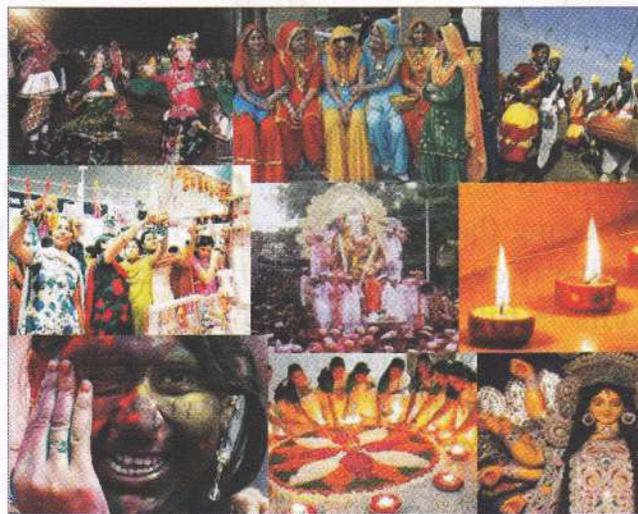
Your class is a good example of unity in diversity. Your classmates have different cultural backgrounds. Find out a few more things about your classmates.

RELIGIONS OF INDIA

People of different religious faiths live in India. Here are to be found people of various religious communities: Hindus, Muslims, Sikhs, Christians, Parsis and Buddhists. All religions preach love, faith, compassion, tolerance and brotherhood.

FESTIVALS OF INDIA

India is known as a land of festivals. Persons belonging to different religions celebrate different festivals. Holi, Diwali, Rakshabandhan, Dussehera and Janmashtami are the main festivals of the Hindus. Eid is an important festival of the Muslims. Baisakhi is the harvest festival of Punjab. Pongal and Bihu are harvest festivals of Tamil Nadu and Assam respectively. Onam is celebrated in Kerala. There are three national festivals which are celebrated unitedly by the people of all castes and creeds. These are: Independence Day celebrated on 15 August, Republic Day celebrated on 26 January and Mahatma Gandhi's birthday celebrated on 2 October.



Indian festivals

Avantika remembers the Eid celebration at Ali's home. On Eid, Ali goes to the mosque to offer *Namaz* with his father. On his return, he celebrates Eid by exchanging greetings and distributing sweets among his friends.

Mandip lives on the second floor. He celebrates Gurupurab with great passion. His parents organize *langar*, i.e. a common kitchen where people of all castes and creeds have a meal together.

On 25 December, Christmas is celebrated by the Christians. This festival is celebrated in a big way by John, who also lives in the same building. Greetings and sweets are exchanged.

Holi, a festival of colours is celebrated with much zest and enthusiasm. People of all faiths and castes living in the building participate in this festival. Then they all have lunch together. Thus, festivals promote national unity and integrity.

As we have seen from the above examples, the people of India belong to different parts, speak different languages and follow different religions, yet they all are — Indians. Undoubtedly India is the best example of unity in diversity.

ECONOMIC ACTIVITIES

In India, people are engaged in three main economic activities.

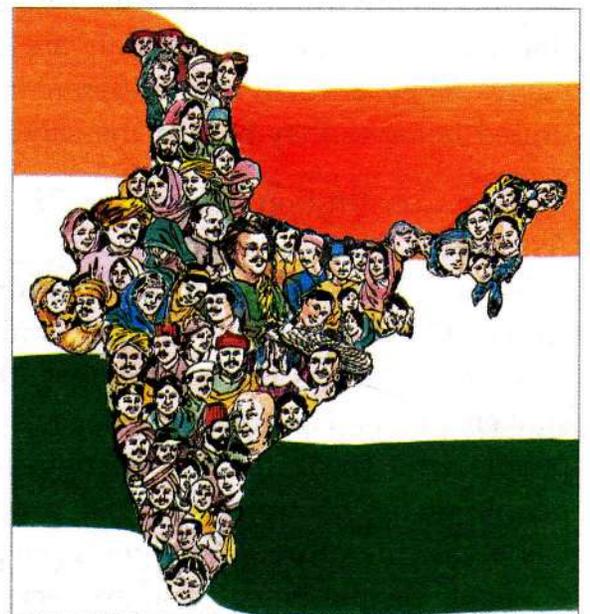
- (a) Most people in rural areas are engaged in agriculture and related activities such as dairy products, fishing and forestry (Forestry means—Practice of planting and taking care of trees and forests, to earn livelihood from their products). These are 'primary activities'. They do these things in order to raise the natural resources.
- (b) Many people in urban areas are engaged in production of manufactured goods from primary products. They work in industries. We refer to them as secondary activities.
- (c) People engaged in tertiary activities do not produce any tangible goods. They provide transport, communications or banking facilities, etc.

All these activities are the backbone of our economy.

NEED FOR DIVERSITY

Is it necessary to encourage diversities? Why do we need diversity in the country? Let us assume for a while that we all are similar in our looks. We live in the same manner. We think alike. We wear the same clothes or clothes of same colour. We react in the same manner. Will it be a colourful living? No, not at all.

First of all, unity in all respects is not possible due to varying human nature.



Diversity in Indian culture

Just look at your classmates. Some of you are always doing good in the class. Some others are good in mathematics. Somebody sings well in school functions. Some boy or girl receives an award for his or her performance in the school play and you might be awarded a prize for your paintings.

All religions are true.
God can be reached by
different religions. Many
rivers flow by many ways,
but they fall into the sea.
They are all one.



— Ramakrishna Paramhansa

Secondly, diversity leads to the development of both the individual and the society. Every individual is dependent on others to fulfil his or her needs. It is a long chain where every individual contributes to the healthy growth of society. Can you imagine a school without students and teachers or a factory without workers and managers? Similarly, is it possible to construct a house without a mason, carpenter, plumber and electrician? Answer is, no. These varied interests and skills bring people together and make them interdependent. This process of coming together of people from different backgrounds, faiths and experiences brings unity in diversity.

Diversity adds colour to life. It adds beauty to our culture.

India's diversity has been considered as a source of her strength. During the time when India was fighting against the British rule, people from different walks of life united in the struggle for independence. It was a unique show of India's unity.

The British rulers practised the policy of 'Divide and Rule' because they thought Indians were fundamentally different from one another. But the unity of our people proved them wrong.

Mahatma Gandhi led this struggle. Many revolutionaries sacrificed their lives for this cause. Shahid Bhagat Singh, Rajguru, Sukhdev, Ashfaqullah are among a few such great names. They were all from different backgrounds but they were united because they shared the same belief.



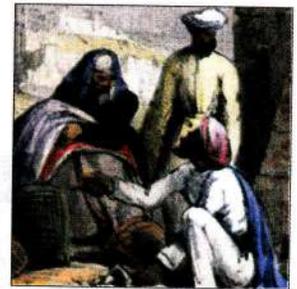
Mahatma Gandhi

Our Constitution recognises 22 languages. These are — Assamese, Bengali, Bodo, Dogri, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Maithili, Manipuri, Marathi, Malayalam, Nepali, Oriya, Punjabi, Sanskrit, Santhali, Sindhi, Tamil, Telugu and Urdu. Besides these languages, there are plenty of dialects spoken in our country. Language is both a unifying and dividing force. It unifies people who speak the same language. At the same time, the language may divide people of the country. We must respect all our national languages. Every language has a vast literature. Many good novels are translated from one language to another to enable people to read and appreciate them. This makes our Indian literature varied and rich.

HISTORICAL FACTORS THAT INFLUENCE THE DIVERSITY OF THE REGION

India had trade relations with countries of the East and the West from ancient times. The Indian merchants sailed to foreign lands. Likewise merchants of other countries also came to India to strengthen trade relations. In the course of invasions many kings and nobles from different lands came to India and settled here. They brought their beliefs, thoughts, culture and traditions with them.

Trade and cultural relations have existed between India and China from the ancient times. The rulers of China helped Buddhism grow rapidly in Tibet. Buddhism reached Tibet via Ladakh. The Arabs also used to visit India's western coast for trade and commerce. During the Gupta period many Romans had come to India for trade and intellectual pursuits. St. Thomas brought Christianity to Kerala in AD 57.



Traders from other countries

By about eighth century AD, people of India had come into contact with the different religions of the world. As a result, various cultures began to spread here. The exchange of new ideas and cultures had a deep impact on the Indian society.

GEOGRAPHICAL FEATURES THAT INFLUENCE THE DIVERSITY OF THE REGION

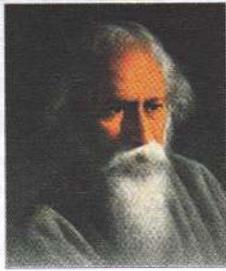
The geographical features also play an important role in influencing the diversity of a region. The geographical conditions like climate, soil, and landforms decide the dresses, food habits, culture and customs of the people. The land and the climate of West Bengal, Bihar, Jharkhand and southern India are good for the cultivation of paddy. Therefore, most of the foods of these places are prepared from rice. The long seashore of peninsular India provides abundant fish for South Indians. Kashmiris wear long woollen *phirans* to keep themselves warm in winter. Pashmina shawls are also made in Jammu & Kashmir. The fisherwomen wear saree in *dhoti* style (called *laang wali dhoti*). This helps them in the work they do. Thus, we see that geographical conditions of a place have a deep impact on the lifestyle of the people.

FACTORS THAT PROMOTE UNITY IN INDIA

1. Geographical Unity: India, inspite of its physical, climatic and regional differences, is largely a single geographical unit.
2. India has a continuous history. Our history is not the history of small kingdoms but the history of the whole country.
3. It has political unity. Many of our rulers like Ashoka, Samudragupta, Allauddin Khilji and the Mughals maintained control over most of northern India and some parts of Deccan. The British ruled over whole of India.

FEATURES SIGNIFYING THE UNITY OF INDIA

1. Our national anthem is a symbol of national unity. It was written by Rabindra Nath Tagore. It is a true expression of the unity of India.
2. Our national song, *Vande Mataram*, was written by Bankim Chandra Chatterjee.
3. Our national flag or the tri-colour has three colours. The *saffron* at the top denotes *sacrifice*, *white* in the centre stands for *truth and peace* and *green* at the bottom for *prosperity*. The Chakra (adopted from Lion Capital at Sarnath) stands for *dharma*—ethical virtue.



Rabindra Nath Tagore



Bankim Chandra Chatterjee

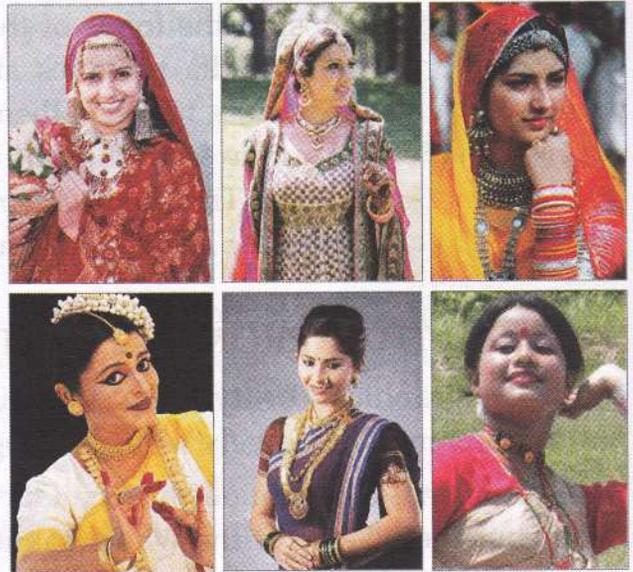


National Flag



National Emblem

4. Our Constitution reflects the aspirations of people of India. It came into force on 26 January 1950. It is the basic document according to which our country is governed.
5. Our freedom struggle promoted the spirit of common brotherhood. Hindus, Muslims, Sikhs, Christians and people of all communities were united in their dislike of the British *raj*.
6. Different regions of India are interdependent. Uttar Pradesh is the 'sugar bowl' of India. Maharashtra is well known for its cotton and West Bengal for its jute. Jharkhand is rich in minerals. People of all regions depend on each other.
7. There is an underlying cultural unity which binds people of India. Our religious books, our sacred rivers, our temples, mosques, churches and gurudwaras are respected and admired greatly by us all.



Indian women from different regions

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- Pongal is an important festival of
(a) Assam. (b) Uttar Pradesh. (c) Tamil Nadu. (d) West Bengal.
- Mosque is a
(a) Muslim place of worship. (b) Hindu place of worship.
(c) Sikh place of worship. (d) Christian place of worship.
- Our Constitution recognises
(a) Eighteen languages. (b) Twenty languages .
(c) Twenty-two languages. (d) Twenty-four languages.
- Our national song *Vande Mataram* was written by
(a) Rabindra Nath Tagore. (b) Bankim Chandra Chatterjee.
(c) Mahatma Gandhi. (d) Sarojini Naidu.
- Christianity was introduced in India (Kerala) by
(a) St. Thomas. (b) St. Francis. (c) St. Dominic. (d) St. Cecilius.

II. Write true or false.

- Unity in diversity means that people of different faiths, customs and opinions live as one.
- India is known as a land of festivals.
- Hindi is the only national language of India.
- The British practised the policy of Divide and Rule.
- Keralites eat wheat as a major component of their food.
- The geographical conditions do not affect the lifestyle of the people.

III. Give short answers for the following questions.

- Name any four famous foods of India.
- What is the common dress of women in Punjab?
- What is the significance of the three colours in our national flag?
- Name the national festivals of India.
- How many languages are recognised by the Constitution of India?

IV. Match the columns.

Column A

- Baisakhi
- Bihu
- People of rural India
- Tibet
- Kannada
- Tamil

Column B

- (a) Chief festival of Assam
- (b) Harvest festival of Punjab
- (c) Buddhism
- (d) Agriculture and dairy products
- (e) Tamil Nadu
- (f) Karnataka

V. Answer the following questions.

1. How is India a diverse country?
2. Do you think the term 'Unity in diversity' is an appropriate term to describe India?
3. Make a brief mention of the factors that promote unity in India.
4. What do the three colours in our national flag stand for?
5. Make a brief mention of the three main economic activities people of India are engaged in.

VI. Data Analysis.

Make a questionnaire and ask the students of your class to give the following information.

S. No.	Name of student	State	Mother tongue	Traditional dress	Religion	Festival
1.						
2.						
3.						
4.						
5.						
6.						

What do you all have in common?

.....
.....

VII. Who am I?

1. I am the long woollen cloth worn by Kashmiris.
2. I am called the harvest festival of Assam.
3. I have written the national anthem of India.
4. I brought Christianity in Kerala.
5. I am called the sugar bowl of India.

VIII. Projects and Activities.

1. Collect pictures of some important festivals celebrated in your region.
2. Collect pictures of different religious places and make a collage. Write down in this picture collage the statement of Ramakrishna Paramhansa about different religions. (Given in this chapter)

VALUE-BASED QUESTION

Can you think of a situation in which you made friends with someone who was very different from you in matters such as religion and mode of eating, etc. Write down your experience in a diary. Explain why you are proud of your friendship with him.

HOTS: THINK BEYOND

There is unity in diversity in our country. But at the same time social and economic inequalities also exist in our country. What can we do to lessen such inequalities?

2

Prejudice, Discrimination and Inequality

In Chapter 1 you have read that India displays many diversities in respect of physical features, races, languages and religious beliefs. Our country has very rightly been described as a “museum of cults and creeds, customs and cultures.” In India more than sixteen hundred languages and dialects are spoken. Here, people following all major religions of the world — Hindus, Muslims, Sikhs, Jains, Jews, Christians, Parsis and the Buddhists are found.



All religions are equal

PREJUDICE

The feeling that we are superior to other people makes us narrow-minded. We begin to like only those persons who belong to our religion, who talk in our language and who follow the customs we like. When we meet people who are different from us, we develop a strange and different attitude towards them. We form certain opinions about them. Our views become prejudiced and we start thinking negatively about others. Prejudice means bias against certain people. We can develop prejudice or negative opinions about many things, such as skin colour, language, caste, religion, region, state and financial position of certain people. Sometimes we are so strongly prejudiced that we become rude with certain people. We may even hurt their feelings.

JUDGE YOURSELF

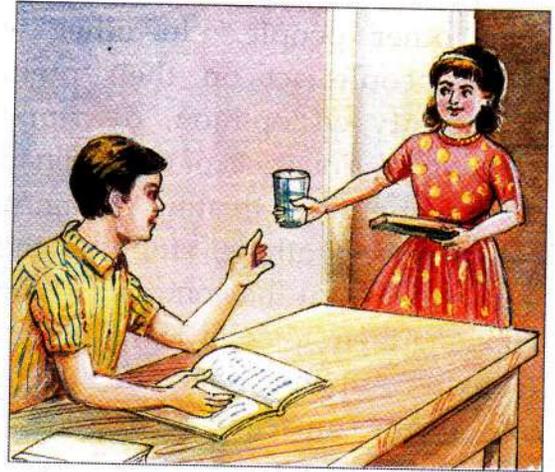
Tick (✓) the opinions which you have about your servant.

• Servants are illiterate and careless.	<input type="checkbox"/>
• They live in unhygienic conditions.	<input type="checkbox"/>
• One should not play with their children.	<input type="checkbox"/>
• Servants are also human beings like us. They should be treated properly.	<input type="checkbox"/>
• Servants should be punished severely for their mistakes.	<input type="checkbox"/>
• They are cunning and thieves.	<input type="checkbox"/>
• They are like our family members.	<input type="checkbox"/>

If we have only negative opinions about all the servants, we become prejudiced. Then we always think negatively about them.

STEREOTYPES

Do you often say — villagers are backward looking or you feel that they live a simple life? When we form a fixed idea or image of certain people, we stereotype them. For example, if we say that all villagers are illiterate and backward-looking, then we are having a fixed image of them. Let us have one more example. Most of the Indians think that girls are meant only for housekeeping job. By forming such an image of all girls, we are stereotyping them. In fact, such an image of girls is created by the society around us. If we ask a boy to cook food or do dusting, he will feel ashamed to do these jobs because in our society only girls (or women) are supposed to do so.

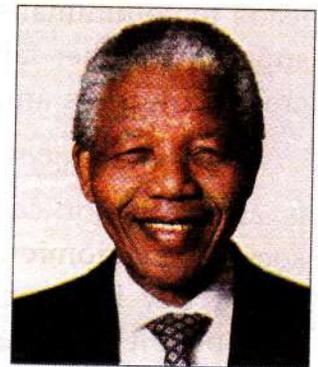


Stereotype thinking

In foreign countries there is no gender bias in doing any housekeeping work. Boys and girls (or men and women) are equally involved in running a home. No work is associated particularly with boys or with girls. No quality is peculiarly inherited by the boys or girls. It is only the society that creates such stereotypes. Boys should not feel ashamed to do any housekeeping work. They should do it willingly. On the other hand, girls also should never feel that they are physically weaker than boys. They can also do those jobs which are taken for granted for boys. Now-a-days we can see many women pilots and astronauts. This is the only way to lessen the man-made differences between a boy and a girl.

EFFECTS OF PREJUDICE AND STEREOTYPED ROLES

Prejudice or stereotyped thinking causes differences in society. Such opinions prevent us from looking at the qualities of individuals. Every person has a unique quality and each individual is different from others. By creating stereotypes we give a large number of people a fixed image. Sometimes we become partial. Prejudice and stereotyped thinking lead to hatred, bitterness and enmity amongst the people. Societies where such opinions prevail cannot develop and prosper. Sometimes such ideas become dangerous for peace and progress of the nation. In South Africa the Whites and the Blacks were kept apart by law. This system was known as *apartheid*. It had many bad effects on the lives of Blacks. Nelson Mandela fought against racial discrimination.



Nelson Mandela

DISCRIMINATION

Discrimination is “the practice of treating one person or group of people less fairly than other people.” In other words, when people act on their prejudices or stereotyped opinion, discrimination happens. Various acts of discrimination in the society are — treating certain people as inferior to others, stopping them to take water from the common well or not allowing them to enter temples. We often look down upon people who are engaged in certain unclean occupations. The inequalities give rise to discrimination. In the Vedic Age people were classified into four major *varnas* — *Brahmins*, *Kshatriyas*, *Vaishyas* and *Shudras*. Brahmins were supposed to be next to god while Shudras were doing a good deal of menial work and had a low status in society. This system later gave rise to casteism. It causes quarrels and dissensions in society. Due to casteism the evil of untouchability also came into being.

‘Dalit’ is the term used for the people who belong to the so-called lower classes. It denotes those people who had been isolated due to social prejudices and discrimination. They have now been categorised as the Scheduled Castes.

No religion in the world asks people to be unfair or unjust to others. Intolerance leads to communalism. Some people believe that only their religion is true and it is superior to other faiths. This generates hatred towards other religions. Such feelings create bitterness among the people.

The difference in economic status is also a major cause of bitterness in society. Economic inequalities divide the society into a class of rich persons and people who are poor. The poor face discrimination in schools, hospitals and offices. They are treated rudely and badly.

 **DO YOU KNOW?** 

Separateness has always been the weakness of India. Fissiparous tendencies whether they belong to Hindus, Muslims, Sikhs, Christians or others are very dangerous and wrong tendencies. They belong to petty and backward minds.



— Jawaharlal Nehru

 **DO YOU KNOW?** 

- Gandhiji called the untouchables as ‘*Harijan*’ that means ‘People of God’.
- Article 1 of the UN Declaration of Human Rights proclaims—“All human beings are born free and equal in dignity and rights.”



Economic inequality

Similarly, racial difference is also the main cause of discrimination or inequality in society. Mahatma Gandhi himself was a victim of racial discrimination during his stay in South Africa. The British called Asians as Blacks. They treated them very rudely and inhumanly.

Some people suffer from physical or mental disabilities. Differently-abled people may be lame, blind, deaf or dumb. Others may be mentally handicapped. Often people are unconcerned about their needs and aspirations. The society and the government should help them to become self-reliant.

Gender equality is important for the upliftment of the nation. Gender equality means equal status and opportunities for men and women. But we find strong gender-bias and wider gender inequality in our country. In our society, women are treated as unequal in many areas, such as education, health care, their basic needs and economic rights.

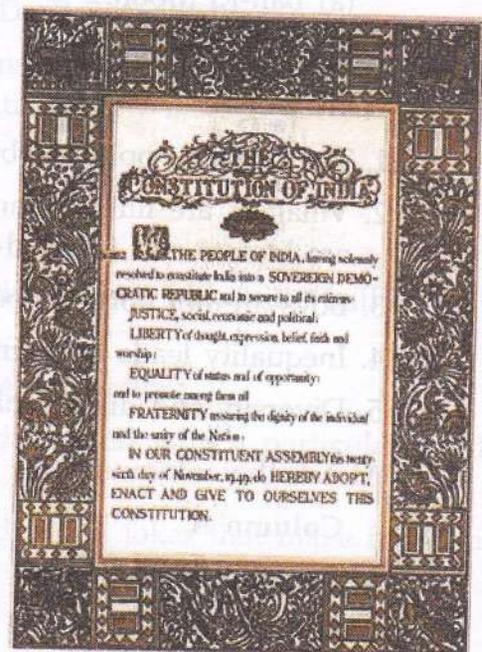


Gender equality

DISCRIMINATION AND THE INDIAN CONSTITUTION

Constitution is that body of rules and laws according to which a state is governed. The founding fathers of Indian Republic gave us a Constitution which assures — “Dignity of the individual and the unity and integrity of the Nation.”

Our Constitution ensures equality before the law. Ours is a secular State that equally protects all religions. It treats all its citizens as equal in rights and dignity, whatever religious beliefs she or he may have. The Constitution safeguards the freedom of religion of all people. It does not discriminate against persons on any such ground. Untouchability has been completely abolished and cannot be practised in any form. In other words, no person can be deprived of taking water from public well or from entering temple. The Constitution directs the State to take some special measures to protect women. Remarkable advances have been made by a few women in many walks of life.



Preamble of the Constitution

Time to Think

Our Constitution has given us Fundamental Rights, such as the Right to Equality and the Right to Freedom. But because of many factors justice remains a remote reality for our people. Two major factors responsible for this sorry state of affairs are poverty and illiteracy. Therefore, efforts should be made to remove poverty and make people aware of their rights.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- Dalit* is the term used for people belonging to the
(a) lower classes. (b) lower-middle classes.
(c) middle classes. (d) higher classes.
- Mahatma Gandhi in South Africa was a victim of
(a) caste discrimination (b) religious intolerance.
(c) racial discrimination. (d) bias against poor persons.
- Gender equality means equal status and opportunities for
(a) children and grown up persons. (b) men and women.
(c) lower and higher classes. (d) Brahmins and Shudras.
- The name of the person who fought against racial discrimination in South Africa is
(a) Ban-Ki Moon. (b) Aung San Suu Kyi.
(c) Nelson Mandela. (d) Mother Teresa.

II. Write true or false.

- The negative opinion about certain people is called prejudice.
- Villagers are illiterate and backward-looking while those living in urban areas are literate and forward-looking.
- Boys are not born to cook food.
- Inequality leads to discrimination.
- Diversity and discrimination mean exactly the same .

III. Match the columns.

Column A

- Constitution defined
- Secular State
- Stereotyping people
- Lame and blind

Column B

- Protects all religions
- Having fixed ideas about people
- Differently-abled
- Being the same in value and status

- | | |
|----------------------|---|
| 5. Right to Equality | (e) Rules and laws according to which a state is governed |
| 6. Apartheid | (f) Power to act and think freely |
| 7. Right to Freedom | (h) People of different races are kept apart |

IV. Give short answers for the following questions.

1. What is discrimination?
2. In the Vedic Age, people were classified into which four *varnas*?
3. What is the discrimination on the basis of colour known as?
4. How does prejudice or stereotyped thinking cause differences in society?
5. What name did Mahatma Gandhi give to the so-called untouchables? What does it mean?

V. Answer the following questions.

1. Mention how the Constitution of India prohibits discrimination.
2. What are the ill effects of prejudice and stereotyped thinking?
3. What problems do Indian women generally face?
4. List various discriminatory practices in the Indian society.
5. Name any two political leaders who fought against untouchability.

VI. Projects and Activities.

1. There is a girl who comes in your class in a wheel chair. Put yourself in her place and write a story describing a day in your life. Focus on the challenges you might have faced to lead such a life.
2. (a) Read important incidents from the life of Dr. B R Ambedkar.
(b) Name an Indian leader who fought against racial discrimination in South Africa the way Nelson Mandela did. Mention a few incidents from his life.

VALUE-BASED QUESTION

What would you do in the following situations?

1. A boy of your class remarks about girls not being able to play volleyball as well as they do.
2. One of your friends teases a classmate because he is poor.
3. Some children of your class refuse to share their food with a particular child because he is from lower caste.
4. While playing in the field some of your friends crack jokes that make fun of a particular community.

HOTS: THINK BEYOND

The *varna* system of the Vedic Age later gave rise to casteism. What evils are associated with Casteism?

3

What is Government?

The teacher opened the pages of a newspaper. She had marked some news headlines with red ink. She asked Raman to read one of the marked portions. It was "Government reduces the fares of AC first and second class". Teacher then asked Jayati to read the second marked portion. It read "Government to give aid to earthquake victims". Teacher then asked Ayesha to read the third marked portion. It was "Government warns Pakistan against terrorist activities in India". Now it was the turn of Avantika who read "Government plans to make Delhi a world class city". And then Apoorva read "Riot-hit victims to get compensation from Government". These were five different news headlines. All the news headlines had one common word — the 'Government'.

The children asked: Who is this government? How does it work? What are the functions of the government? What is the need of the government? The teacher answered these questions.

A government is a body that governs. It makes laws and has the power to enforce these laws. 'To govern' means to administer or supervise an area of land and a group of people.

The teacher explained it by giving an example. Your school has a premise. It has a boundary wall. There are teachers. They teach the students. There are security guards. Their job is to guard the building. It has an office to collect fee. There is Mr. Ramesh Kumar to supervise the administration. There is one transport manager. He has to arrange the coming and going of all the school vehicles. Brother Jose looks after the discipline of the school. Thus, the whole work is distributed among the teachers and other people. The Principal is overall in-charge of the school. A school is a small unit and the Principal looks after everything that is related to the school. But the running of the government at various levels needs many arrangements to be made.

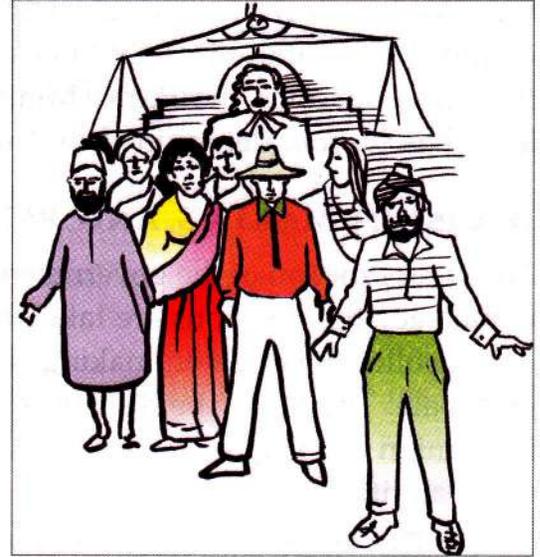


Newspapers

VARIOUS ACTIVITIES OF THE GOVERNMENT

1. The government protects the borders of the nation.
2. It maintains cordial relations with other countries.
3. It protects life and personal liberty.
4. It ensures enough food for the people.
5. It makes arrangements for the safety of its people from natural disasters like floods, droughts and earthquakes.
6. It makes arrangements for the education and health of its citizens.
7. It provides justice to all the citizens.
8. It ensures equality before law.
9. It maintains the price level of all commodities.

There can be a long list of activities. The government works with the help of various officials and employees. Government functions on behalf of the people. The officials have the authority to take decisions and then implement them. Their acts have the legal legitimacy. Effective governments possess two main attributes: authority and legitimacy.



Human rights

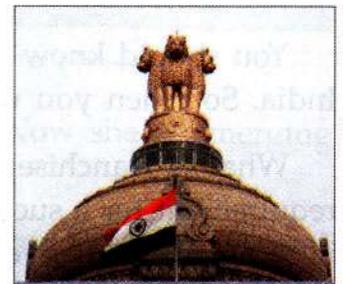
FUNCTIONS OF THE GOVERNMENT

Government performs three functions. First, Government makes rules and laws. This is called **legislative function**. Secondly, it enforces the rules and the laws. This is called **executive function**. Thirdly, it has **judicial functions**. The courts interpret the rules and decide the legal matters.

FUNCTIONS OF LEGISLATURE

There are many kinds of laws in a country. For example, the law says that you should safeguard public property. A person causing damage to public property may be arrested. One can be sent to jail for dangerous driving also. It is against the law to hurt or kill people. Anyone who breaks the laws will be punished. Without such rules, peace or order is impossible.

If a person feels he has been arrested without a valid reason, he can go to the court of law. If someone is not involved in a crime, the court will declare that he is innocent. He would then be released from prison.



Law for all

LEVELS OF THE GOVERNMENT

A question is often raised as to how the government functions. The entire work is huge and complex. It includes keeping the city clean, maintaining the schools and hospitals and maintaining law and order. Protecting the country is one of the most important functions. Maintaining international relations is essential. These functions are quite different from each other but are essential for the public.

Our government works at **three different levels**: the **local** level, the **State** level and the **Central** level. Local government means administration of a locality by officials such as the District Magistrate and the Superintendent of Police. At the State level we have the Governor, the Chief Minister and State legislature. At present, the Union of India is composed of 29 States. At the Union or the Central level we have the President of India, the Prime Minister and the Parliament. The government at each level has its role determined by the Constitution of India.

DECISION MAKING AND PARTICIPATION

The main function of the government is to make laws. We have democracy in India. In a democracy the decisions are taken by the elected representatives of the people. This is called collective decision-making. The decisions are taken after a thorough discussion or debate. There may be differences of opinions also. When our representatives differ in opinion on any matter, such matter shall be decided according to the opinion of the majority.

1. The views expressed by the elected representatives are regarded as the views of the public at large.
2. It means participation of all in the decision-making process.
3. Collective decisions are essential for the smooth running of the government. It shows the maturity of the people.
4. This is a fine example of unity in diversity. People have different opinions but they agree to act according to the decisions taken by majority of legislators.
5. People agree to act in this manner in wider interests of society.

UNIVERSAL ADULT FRANCHISE

What are elections? How many members of your family vote in the elections? What is the voting age in India?

You should know that a person who is 18 years or more of age can be a voter in India. So when you will be 18 years of age, you shall also be entitled to vote.

What is franchise? Franchise means the right to vote. It is the most important requirement for a successful democracy. When this right is available to all the adults, it is called the **Universal Adult Franchise**. In our country this right is enjoyed by

every person who is a citizen of India and is 18 years of age. This right is needed because

1. every one should have an equal voice in the governance of the country. It establishes political equality.
2. a Democracy is defined as "the government of the people, for the people and by the people."
3. government is collectively responsible to all the people who have elected it to power.



Right to vote

KEY ELEMENTS INFLUENCING SUCCESS OF THE GOVERNMENT

The success of a democracy depends upon three factors. First, democracy demands from the common man an active participation in the government. Secondly, there is need of free and fair elections in a democracy. Thirdly, there should not be any discrimination against any citizen. All should be equal in the eye of law. Freedom and equality are of vital importance in a democracy.

Thus, a democratic government should see that everybody gets her or his due in society.

TYPES OF GOVERNMENT

Most of the countries have democratic governments, but in some countries we find "the rule by one person" called the king or the queen. Such a form of government is known as *monarchy*.

DEMOCRACY

Democracy means the government of the people, by the people and for the people. In a democracy the people have right to choose their representatives. They have the right to participate in the governance of the country. They influence the decision-making processes. They share the responsibility as well. India is a large democracy. India got freedom after a long continued struggle and many sacrifices. Now she is emerging as one of the most powerful democratic nations of the world.



The Parliament House

A democratic government may either be a **unitary government** or a **federal government**. In a unitary State all authority and power are vested in a single Centre.

The United Kingdom (Great Britain) is a good example of a unitary government. In a federation all powers of the government are divided between State governments and a Union (Central) government. India and USA are the principal examples of federal governments.



The White House

MONARCHY

A monarchy is a system of government dominated by a single individual. The monarch has all the powers. She/He may have a group of advisors or ministers to advise her/him.

In a monarchy people have no real say in the decision-making process. Some monarchs believed that they had been chosen by god and so people could not challenge their authority.

India has had a long history of monarchical system. We had great kings like Ashoka and Akbar. They united the whole country.



Jigme Khesar Namgyel Wangchuck (King of Bhutan)

DICTATORSHIP

Dictatorship is a government by a dictator. It may be military dictatorship or personal dictatorship. Under dictatorship absolute power is vested in a single individual. People have no right to participate in the governance of the nation. There are no checks on powers of the dictator. In the modern world many dictators came to power. Hitler in Germany, Mussolini in Italy and Stalin in Russia were the real dictators.



Hitler



Mussolini



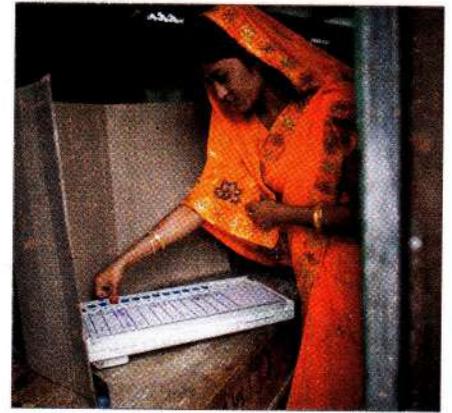
Stalin

THE SUFFRAGE MOVEMENT — WOMEN'S RIGHT TO VOTE

The word 'suffrage' means the right that people have to vote in order to elect their representatives. The voting right should not be denied to women. But for a long time women were excluded from the suffrage in all countries. Many societies were formed in Europe and America for the extension of voting rights to women. In 1903, the Social and Political Union was formed in England. Instead of peaceful methods this society practised violent methods, such as destruction of public property. Its members

went on hunger strikes. Many of the suffragettes were imprisoned. The women had played an important role in the course of the First World War (1914–18). It proved women were eligible for the same rights as men. In 1918 all women over 30 years of age got voting rights in Britain. In 1928 the age requirement for women voters was reduced to 21 years, the same as for men.

In the United States of America the agitation for the women's rights had begun in 1850s. All women got the right to vote in America in 1920. With a few exceptions, women today have the same voting rights as men. They have the right to own property, to vote, and to choose their own careers.



Woman's rights to vote

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- The government performs many functions. Its 'legislative function' includes
 - making of laws.
 - enforcing laws.
 - interpreting laws.
 - protecting borders of the nation.
- At present the union of India is composed of
 - twenty-seven States and eight Union Territories.
 - twenty-nine States and seven Union Territories.
 - twenty-nine States and six Union Territories.
 - twenty States and five Union Territories.
- Under dictatorship the political power is vested in
 - the people.
 - a Monarch.
 - a single individual.
 - small group of people having much wealth and land.

II. Write true or false.

- In a monarchy people are free to elect their representatives.
- In a democracy people have the right to express their opinions.
- Suffrage means right to vote in an election.
- Indira Gandhi was the President of India.
- In federal government all authority and power are vested in a single Centre.

III. Match the columns.

Column A

1. Judiciary
2. Executive
3. Adult Franchise
4. Stalin
5. Local government
6. Hitler

Column B

- (a) Responsible for the administration of a small area
- (b) Decides legal matters and administers justice
- (c) To enforce rules and laws
- (d) Germany
- (e) All adults have right to vote
- (f) Russia

IV. Give short answers for the following questions.

1. Which form of government is run by an individual?
2. What is meant by Universal Adult Franchise?
3. What do you understand by the word 'democracy'?
4. In which form of government power is divided between State governments and a Central government?
5. What are the different levels of government?

V. Answer the following questions.

1. What is government?
2. Mention the two main rights of people in a democracy.
3. What was the suffrage movement?
4. What is a Unitary system of government?
5. What is the main distinction between monarchy and democracy?

VI. Who am I?

1. I am the part of government that makes rules and laws.
2. I enforce the rules and laws of the land.
3. People call me a government of the people,
by the people and for the people.

VII. Projects and Activities.

1. Find out a few facts about any two kings of India and write a paragraph on them.
2. Collect pictures of any two Presidents or Prime Ministers of India and paste them in your scrapbook. Write a few sentences on each of them.
3. Imagine you are contesting an election. Prepare a poster asking people to vote for you.

VALUE-BASED QUESTION

Ask your parents to give you the power to manage household expenses for a week. Describe the difficulties you face and how you manage them with the budget allocated to you.

HOTS: THINK BEYOND

Who is the Chief Minister of your State?

Name any public welfare scheme launched by the State government for the rural people.



PROJECT WORK

(Based on Chapters 1–3)

I. Make a Collage

You must have seen the parade held at Rajpath on 26 January in New Delhi every year. In this parade every State of India presents its special features. Collect such pictures and make a collage to show the diversity of India.

II. Writing an Article

Make a list of all forms of discrimination that you witness at your home, school, among friends, markets and other places. Write an article for your school magazine citing examples from your observation.

III. Project Work

Collect pictures and information on the persons who hold the following posts. Paste these pictures in your notebook and make an interesting project.

1. President of India
2. Speaker of Lok Sabha
3. Chairperson of Rajya Sabha
4. Leader of the ruling party (Prime Minister)
5. Leader of the Opposition
6. Chief Justice of India

IV. Find Out

Find out the names of a few countries where a Monarch reigns. Name the Monarchs of these countries.

4

Key Elements of a Democratic Government

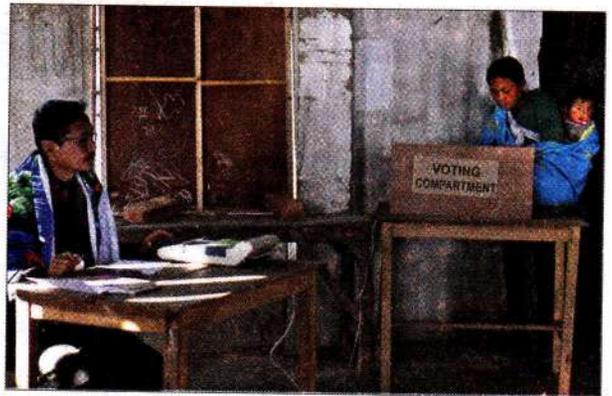
In the last chapter we talked about the working of government and democracy. Now you should know what democracy means and how it works. We have learnt that a democracy is that system in which people collectively share the functioning of government. **Collective decision** involves people's representatives in the functioning of government.

PEOPLE'S PARTICIPATION IN A DEMOCRATIC GOVERNMENT

The citizens of a country play vital role in a democracy. The public opinion cannot be ignored in any way. People can participate in the functioning of government directly or through their representatives. Let us see how this participation takes place.

PARTICIPATION OF PEOPLE

People can participate in the affairs of government in many ways. We talked about the voting right. All persons of at least 18 years of age can vote. They elect their representatives. The elections are held at regular intervals. There are free and fair elections in a democracy. The supreme power resides in the people. A democratic government ensures that interests of people shall be taken care of. If the government failed to work for the good of the people, it can be changed. Thus, for the successful functioning of a government, active participation of the people is essential.



Polling booth

OTHER WAYS OF PEOPLE'S PARTICIPATION

There are many other ways of participating in the affairs of government. Actions of the government are open to criticism. People are free to express their views on policies and acts of the government. A democratic government runs by open discussion and debate. The government has to listen to the views of people.

Recently, the court had acquitted some persons accused of the murder of Jessica Lal. People were not happy at this judgement. They expressed their opinions through

letters, SMS, radio and television channels. Ultimately, the higher court intervened. Police had filed an appeal in this case before the Delhi High Court that penalised the accused. That shows the strength of public opinion in a democracy.

People have also the right to hold meetings. They may take out processions and hold demonstrations. They may compel government to reconsider some of its decisions. A withdrawal of an increase in prices of petrol and LPG is an example of the people bringing pressure to bear on government.

You might have heard such words as strikes, *dharna*, *bandh* and *andolan*. These are the ways of mobilising people against actions of the government. But people should not cause loss to national property.

In a democracy all citizens are allowed to raise their voices against injustice. Launching movement is also one of the ways of showing disapproval of some action or policy of the government. The movement displays people's solidarity and their strength.

Have you ever seen who organises these *dharnas* or agitations? Generally, they belong to political parties or other groups opposing the government. In a democracy **role of opposition** is equally important. Opposition serves as a check upon the government. But when **opposition** opposes for the sake of opposing, politics becomes a dirty affair. Criticism of the government should be constructive in character.

Newspapers play a vital role in a democratic country in organising public opinion. Today television has become enormously popular. We watch news, serials, listen to music and follow the ball-by-ball game through cricket commentary. Radio and newspaper are powerful mediums of entertainment and information, especially in rural areas. The newspapers throw light on the problems and difficulties faced by the people. A number of things are published in the newspapers about political parties and political leaders. Letters to the Editor reflect people's views on various issues.

Time to Think

Find out from newspapers or news channels about Medha Patkar. Why was she on hunger strike? What were her demands?



Protest



Strike

This not only makes the people aware of the activities around them but also helps to mobilise public opinion. The role of mass media in the formation of public opinion is very important in a democratic country.

RESOLVING THE CONFLICT

Have you heard about the Kaveri water dispute? If not, ask your teacher about it. Do you know of any other conflict over the sharing of rivers' waters. These are the conflicts between two or more States, each claiming more water which flows through the rivers. Sometimes there is a dispute between workers and their employers. Political parties, very often, disagree about certain policies. The women are agitated about their inferior position in society.

Conflict may be between two or more people, or between groups and parties. It may be between two or more States. It may also be between a State and the Union Government. Often party in power and the opposition clash over various issues.

Conflict occurs when our interests collide. People not only have a heated argument about something, they even hurt each other. In such situations, law and order problems arise and the police face a difficult task. Sometimes processions are organised by some religious communities. If these processions cause any disturbance, it should be tactfully handled by the police.

Conflict resolution means the final solution of a problem to the satisfaction of all the parties. There are a number of ways of resolving the problem in a democracy. A democratic system provides an opportunity for discussion and debates. Leaders may agree to consider a problem from different points of view. Usually a broad agreement emerges after discussion. There should be tolerance for others' views even if we do not agree with them. Decisions that are taken by a majority should be respected.



Conflict

EQUALITY AND JUSTICE

All the citizens of India are equal before the law. There should be no discrimination against any citizen on grounds of religion or caste. Justice means fairness in the way people are treated. Equality and justice always go together. Inequalities between different classes of people mean lack of justice in society.

The institution of untouchability caused inequalities in Indian society. People of upper castes would not even touch those who belonged to the lowest caste. Mahatma Gandhi, BR Ambedkar and others fought against this injustice, especially untouchability. Now untouchability has been abolished and its practice is punishable by the law.



Dr. BR Ambedkar

The progress of any society depended on the progress and well-being of women. The women suffrage abolished the gender bias to some extent. But women continue to be neglected in Indian society even now. Female babies are generally unwelcome in India. In most families the girl child does not get the same attention as a boy in matters of diet and health care. The government has enacted many laws to bring about welfare of women.

Many measures have been taken by the Indian government to promote the interests of the Scheduled Castes, the Scheduled Tribes, the minorities and other weaker sections of society. All human beings are born free and equal in dignity and rights. The Constitution of India gives the citizens many rights.

DO YOU KNOW?

8 March is observed as the Women's Day all over the world.



Women's participation

- **Right to Equality:** The Right to Equality guarantees equality before law and prohibits any discrimination on the grounds of caste, race, religion or sex.
- **Right to Freedom of Religion:** The Right to Freedom of Religion states that all citizens are free to practise and propagate their religion.
- **Right to Education:** The Right to Education states that the State shall provide free and compulsory education to all children in the age group of 6 to 14 years.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Equality means that
 - (a) all persons should be given the same wages or salaries.
 - (b) all children should be awarded equal marks in all subjects.
 - (c) all citizens are equal before the law.
 - (d) there should be discrimination between man and woman.
2. Right to freedom of religion means
 - (a) one religious community may be permitted to dominate the other communities.
 - (b) all citizens are free to practise their religion.
 - (c) people may be compelled to pay taxes which are meant for promotion of any particular institution.
 - (d) religious instructions should be imparted in every educational institution.
3. Justice means
 - (a) fairness in the way that people are treated.
 - (b) resolving our conflicts through violent means.
 - (c) all people should own equal wealth and property.
 - (d) punishment and prison sentence cannot be given to any person in society.

II. Write true or false.

1. Traffic jams are the results of rallies and demonstrations.
2. Opposition has no role in a democracy.
3. Mass media plays an important role in a democracy.
4. Launching movement is one of the ways of showing dissatisfaction against the government decision or its working.
5. Public opinion can change the decisions of government.
6. The conflicts or differences should be resolved through violent methods.

III. Match the columns.

- | Column A | Column B |
|----------------------------------|---|
| 1. Dharnas and demonstrations | (a) Caused inequality in society |
| 2. B R Ambedkar | (b) Newspapers and television channels |
| 3. Opposition | (c) Opposed injustice and untouchability |
| 4. Mass media | (d) Weaker section of Indian society |
| 5. Institution of untouchability | (e) Mobilising people against some action of government |
| 6. Scheduled Castes | (f) A check upon government |

IV. Give short answers for the following questions.

1. Describe one of the methods by which people participate in the affairs of government.
2. Give any two reasons why conflicts arise in our society.
3. Suggest two ways in which conflicts can be resolved.
4. Explain the Right to Education.

V. Answer the following questions.

1. How did the institution of Untouchability cause inequalities in Indian society?
2. How do women continue to be neglected in Indian society even now?
3. What measures have been taken by the Government of India to promote the welfare of the Scheduled Castes and Scheduled Tribes.
4. What is the significance of the Right to Equality and the Right to Freedom of Religion that the Constitution gave to the citizens of India?

VI. Projects and Activities.

1. Have you ever attended a rally organised by a political party or any other group? What were the demands of the people who organised it?
2. Every year Labour Day is celebrated on 1 May. Celebrate this Day in your school for the benefit of persons belonging to poor class. Organise a lunch or tea for them. Give each staff a gift for his or her services to the school.

VALUE-BASED QUESTION

Suppose you live in a slum. Every morning you see quarrels between people because of shortage of water. What can you do to resolve this conflict?

5

Local Government— Panchayati Raj-I

India is a vast country. We have 29 States and 7 Union Territories. We have read that our country has enormous geological, religious and cultural diversities. People of different regions speak different languages. Their customs are different. They have different lifestyles.



India has diverse cultures

Similarly, India also has diversified physical features. Some parts of our country have deserts, while other parts receive heavy rainfall. The needs of the people in hilly areas are different from those living in the plains.

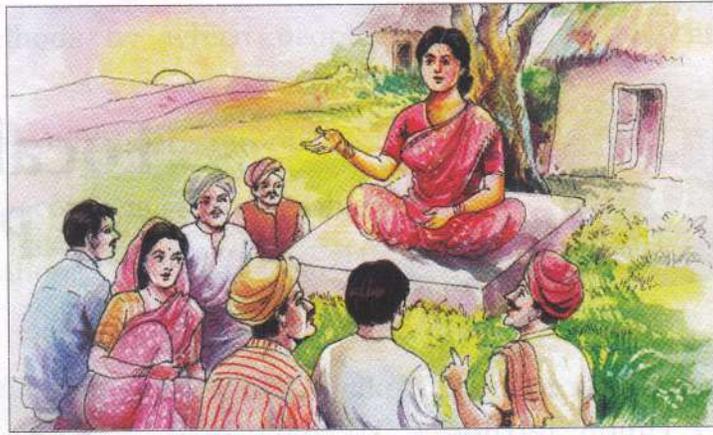
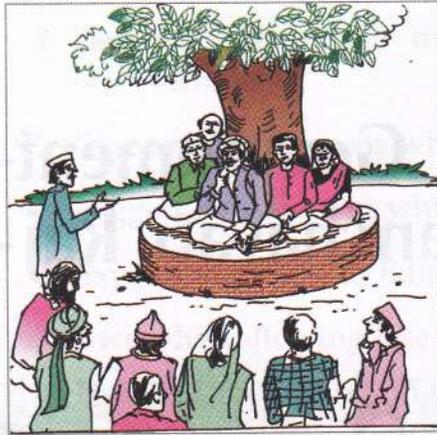
Due to these diversities, every region has its own problems. At some places there is very little rainfall, whereas at other places people have to face floods every year. In a city the problems of sanitation and transportation are very serious as compared to a village.

Local people know their problems much better than anybody else. For solving these local problems local self-institutions have been set up. In villages these are known as **Panchayati Raj Institutions (PRIs)**, but in cities we have municipal bodies. In big cities or metropolitan towns **municipal corporations** have been established.

The local self-government has its own importance. (1) It provides opportunity to the people to govern themselves. (2) Local matters like sanitation, water supply and primary education can be better handled by local people. (3) Local self-government takes democracy to the doorsteps of people living in the remotest corners of the country.

PANCHAYAT SYSTEM

The Panchayat system is quite old in India. In ancient times we had Panchayats that looked after many things. Usually, a Panchayat consisted of five persons called 'the Panch'. This system lost its importance during the British rule. However, after independence the government took effective steps to organise the Gram Panchayats.



Village Panchayat at work

PANCHAYATI RAJ

The Panchayati Raj is a system of local self government. It is administered by Panchayati Raj institutions. Their functions include provision of safe drinking water, health care, primary education, good drainage and family welfare.

Panchayati Raj is a three-tier system. At the village level two bodies have been set up—**Gram Sabha** and **Gram Panchayat**. At the block level there exists the **Panchayat Samiti**. At district level we have **Zila Parishad**.

It was the dream of Mahatma Gandhi to see every village as a republic under the Panchayati Raj system.

VILLAGE PANCHAYAT

The following two bodies have been set up at the village level.

GRAM SABHA

The Gram Sabha is the general assembly of the village. It is made up of all the village people who are at least 18 years of age. The Gram Sabha elects the Gram Pradhan (the President). The Gram Sabha meets twice in a year to perform certain functions.

PANCHAYATI RAJ INSTITUTIONS

Zila Parishad
(top district level)

Panchayat Samitis
(intermediate block level)

A Number of Gram Panchayats
(First Tier at Village Level)

- The Gram Sabha is a body which comprises all the adult members.
- In all Panchayats seats are reserved for scheduled castes, scheduled tribes and women.
- Independent Election Commission for direction and control of electoral process
- A Finance Commission has to be constituted every five years.



Villagers assemble for a Gram Sabha

- These are: (i) To approve the income and the expenditure estimates for the year.
(ii) To consider new taxes which the Gram Panchayat would like to levy.

GRAM PANCHAYAT

For the purpose of election, the village is divided into many wards. The members of the Panchayat are elected by the Gram Sabha. Seats are reserved for the Scheduled Castes and the Scheduled Tribes in Gram Panchayat. One-third of total number of seats are reserved for women. Every Panchayat has a *Sarpanch*, who is elected by the Gram Sabha. He presides over the meetings of the Gram Panchayat. The Gram Pradhan, the *Sarpanch* and other *Panch* are all honorary members. They do their job without payment. The Panchayat also has a Secretary, who receives a salary. He keeps record of all activities of the Panchayat.

Functions of the Gram Panchayat

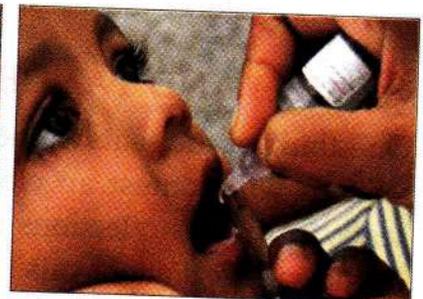
Gram Panchayat performs many functions. These functions can be divided into two categories.

Compulsory Functions

- (i) Provision of safe drinking water, sanitation and health care facilities.
- (ii) To maintain roads and bridges
- (iii) To provide street lights
- (iv) To maintain and repair public wells and tanks
- (v) Registration of births and deaths and maintenance of watch and ward service (*chowkidars*).

Optional Functions

- (i) Rural electrification
- (ii) To run small-scale industries
- (iii) To provide help to weaker sections of society.
- (iv) To organize *akhadas* or village sports
- (v) To acquire and maintain radio and television sets in the community hall.



A primary health centre in rural area

Sources of Income of Panchayat

- (i) Taxes on village fairs, shops and houses
- (ii) The rental of Panchayat buildings, such as *Barat Ghar* (place for celebrating marriages) and rest houses.
- (iii) Registration fee on sale and purchase of land and cattle.
- (iv) Grants-in-aid and loans from the State government

NYAYA PANCHAYAT

At some places Panchayat acts as a court. In other states **Nyaya Panchayat** is a separate institution which administers justice. There can be one Nyaya Panchayat for a group of villages. In that case each Village Panchayat elects a person to represent it in the Nyaya Panchayat. A person cannot be a member of the Village Panchayat and the Nyaya Panchayat at the same time. A person seeking election to the Nyaya Panchayat should be educated. If no educated person is available, the government may nominate someone. Nyaya Panchayat deals with minor criminal and civil cases, such as petty thefts, cheating and physical attack on a person. It can impose a fine up to ₹ 1,000. It has no power to imprison anybody.

Nyaya Panchayat is an useful institution. The villagers can get speedy justice without much expenditure. They do not require any lawyer to plead the case. The justice is available at the doorstep. If anybody feels unhappy with the judgement she/he can go to a higher court.

IMPORTANCE OF VILLAGE PANCHAYAT

1. The village Panchayat helps the villagers in solving their local problems.
2. A Panchayat protects democracy at grass-root level. The villagers feel that they have a democratically elected body.
3. Local self-government is less expensive because the *Panch* do their job without payment.
4. The villagers learn to cooperate with each other for community development.
5. A Panchayat makes the villagers self-sufficient.

WOMEN AND PANCHAYAT

One-third of the seats in local bodies have been reserved for women. This means only women will contest an election from these wards. As a result of the reservation of seats, in the first elections of 1993–94 about 8,00,000 women could become members of the village Panchayats.

Women participation in local government has proved quite important.

1. The village women could understand the significance of democratic institutions.
2. They were not shy to talk to anyone in the village. They even met district officials to discuss their problems. For any success, boldness is required.
3. It has helped in achieving the goals of equality, development and peace.

Even now women have insufficient representation at most levels of government. They have not made much progress in attaining political power at state and national levels. The reason is a bias against women. In our society women could not achieve much mobility. They have domestic responsibilities which consume much of their time and strength.



Elections of village Panchayat

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The Gram Pradhan (the President) is elected by
 - (a) the Gram Panchayat.
 - (b) the Gram Sabha.
 - (c) the Nyaya Panchayat.
 - (d) women members of the Panchayat.
2. In Panchayati Raj Institutions atleast one-third of total number of seats are reserved for
 - (a) women.
 - (b) Scheduled Castes.
 - (c) Scheduled Tribes.
 - (d) Differently-abled people.
3. The Nyaya Panchayat is an institution which
 - (a) maintains public wells and tanks.
 - (b) imposes taxes on villagers.
 - (c) provides speedy justice.
 - (d) meets government officials to discuss villagers' problems.

II. Write true or false.

1. The Panchayati Raj is a three-tier system.
2. The Zila Parishad looks after the administration of a village.
3. The Nyaya Panchayat has power to imprison anybody.
4. The Block Samiti is a part of three-tier system of the Panchayati Raj.
5. The President of the Panchayat is called Sarpanch.

III. Match the columns.

Column A	Column B
1. Panchayat Samiti	(a) Taxes on village houses
2. Source of income	(b) Exists at block level
3. To run small-scale industries	(c) Compulsory function
4. Provision of water and sanitation	(d) Optional function
5. Honorary members	(e) Opportunity to people to govern themselves
6. Local self-government	(f) Doing a job without any payment

IV. Give short answers for the following questions.

1. What is Panchayati Raj?
2. Who is the head of the Gram Panchayat? What is her/his role in the Gram Panchayat?
3. What is Gram Sabha?
4. List three compulsory functions of Gram Panchayat.

V. Answer the following questions.

1. How is the Gram Panchayat formed?
2. Give any two reasons why the local self-government is important.
3. What are the functions of Nyaya Panchayat?
4. What kind of taxes can a Panchayat impose on the villagers?
5. How is the Sarpanch of a Panchayat elected?

VI. Who am I?

1. I am the head of Gram Panchayat.
2. I am the village court.
3. I am the lowest level of local self-government.

VII. Projects and Activities.

1. Try to imagine some of the problems faced by the villagers. Also make a few suggestions about how we could solve these problems. Make a report.

2. Can you make a few suggestions about how the sources of income of a Panchayat may be raised? Write an article for a local newspaper.
3. Transform the Class into a Panchayat. The students shall choose the members of the Panchayat and also the Sarpanch. They will act as the village people and shall go to the Panchayat with their problems. The Panchayat will solve their problems.
4. Ask your teacher to invite some Panch or Sarpanch of the village. Ask her/him about the programmes being undertaken by the Panchayat for the welfare of weaker sections of society.

VALUE-BASED QUESTION

Why women's participation is necessary in local government?



TEST PAPER

(Based on Chapters 1–5)

Total Marks: 50

Time: 2 Hours

A. Tick (✓) the correct answer.

(1 × 8 = 8)

1. Our Constitution recognises languages.
(a) 32 (b) 12 (c) 22 (d) 16
2. Maharashtra is well known for its production and Bengal for its production.
(a) Jute, Cotton (b) Silk, Jute
(c) Cotton, Jute (d) Silk, Cotton
3. Who was the dictator of Germany during the Second World War?
(a) Stalin (b) Hitler
(c) Mussolini (d) Saddam Hussain
4. Which form of government is run by the people?
(a) Democracy (b) Dictatorship
(c) Autocracy (d) Monarchy
5. Women's Day is celebrated on
(a) 8 March. (b) 6 March.
(c) 8 April. (d) 15 March.
6. Which of the following is a village court?
(a) Gram Panchayat (b) Gram Sabha
(c) Nyaya Panchayat (d) Zila Parishad
7. The Gram Panchayat is elected after every
(a) 5 years. (b) 3 years.
(c) 6 years. (d) 4 years.
8. How many seats are reserved for women in Panchayati Raj Institutions?
(a) Half (b) Two-thirds
(c) One-third (d) Three quarters

B. Fill in the blanks.

1 × 6 = 6

1. There is unity in in India.
2. The South African leader fought against apartheid.
3. In India we have type of government.
4. Every citizen above the age of years has the right to vote in India.
5. The word Panchayat literally means a group of people.
6. The Panchayat Secretary keeps a record of of the Panchayat.

C. Distinguish between.

$2 \times 3 = 6$

1. monarchy and dictatorship.
2. unitary and federal government.
3. Gram Sabha and Gram Panchayat.

D. Write short answers in about 30 words.

$2 \times 5 = 10$

1. What is meant by the term unity in diversity?
2. Explain stereotypes. Is it fair to have stereotypes?
3. What are the various levels of government in India?
4. What is Right to Equality?
5. What is Nyaya Panchayat?

E. Give long answers in about 60 words.

$4 \times 5 = 20$

1. Explain the three-tier system of Panchayati Raj.
2. What is the role of Opposition in a democracy?
3. Discuss the various factors on which success of democracy depends.
4. What are the ill effects of prejudice?
5. How did geographical factors contribute to India's diversity?



Local Government— *Panchayati Raj-II*

PANCHAYATI RAJ — AT BLOCK AND DISTRICT LEVELS

In the earlier chapter you studied the organisation and working of village Panchayats. At the block level there exists the *Panchayat Samiti*. It supervises the work of the Gram Panchayats in the respective block. A block consists of a number of villages.

BLOCK SAMITI OR PANCHAYAT SAMITI

Block samiti or Panchayat Samiti is known by different names in different States. In Uttar Pradesh these are known as *Kshetra Samiti*, while in Madhya Pradesh and Gujarat these are known as *Janpada Samiti* and *Taluka Panchayats* respectively.

COMPOSITION

The Panchayat Samiti consists of the following.

- (i) All the Sarpanchs of the Panchayats within the block.
- (ii) The MPs and MLAs of that area.
- (iii) The Chairpersons of the Town Area Committees (now known as Nagar Panchayats).
- (iv) The elected members of the Zila Parishad.

Every Panchayat Samiti must have seats reserved for women. It should also have representation of Scheduled Castes and Scheduled Tribes. The Panchayat Samiti has a term of 5 years.

OFFICE BEARERS

The members of the Samiti elect a Chairperson and a Vice-Chairperson. In the absence of the Chairperson, the Vice-Chairperson functions as its head.

FUNCTIONS OF THE BLOCK SAMITI (PANCHAYAT SAMITI)

The villagers need the services of experts in these fields — agriculture, education, land development and animal husbandry. The functions of a Panchayat Samiti are:

1. To help the villagers in obtaining improved seeds and fertilizers.

2. To educate people about new and improved agricultural implements and the use of pesticides.
3. To make them aware of the need of immunization for their children so as to protect them against many diseases.
4. To tell the people about the family welfare programmes.
5. To establish small enterprises in the rural areas.



Health care centre

The Block Development Officer works in close cooperation with Block Samiti. She/he ensures the implementation of the plans prepared by the Block Samiti.

SOURCES OF INCOME

The main sources of income of a Panchayat Samiti are:

1. Grants and financial assistance given by the State governments.
2. Income from the taxes levied by the Samiti.
3. Taxes imposed on fairs, markets and houses.
4. Realising a levy (tax) on electricity and water used by the people.

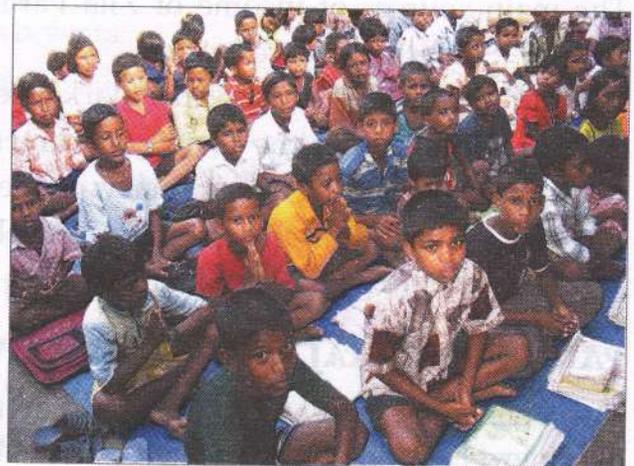
ZILA PARISHAD

Zila Parishad is the highest body under the Panchayati Raj. A district consists of a number of Blocks. Zila Parishad coordinates the activities of the various Panchayat Samitis.

COMPOSITION

Zila Parishad has the following members.

- Pradhans of the Panchayat Samitis of the district, the MPs and MLAs elected from the district.
- One representative of each cooperative society of the district.
- Representatives of women, Scheduled Castes and Scheduled Tribes.
- Chairpersons of the municipalities in the district.



Zila Parishad establishes educational institutions

OFFICE BEARERS

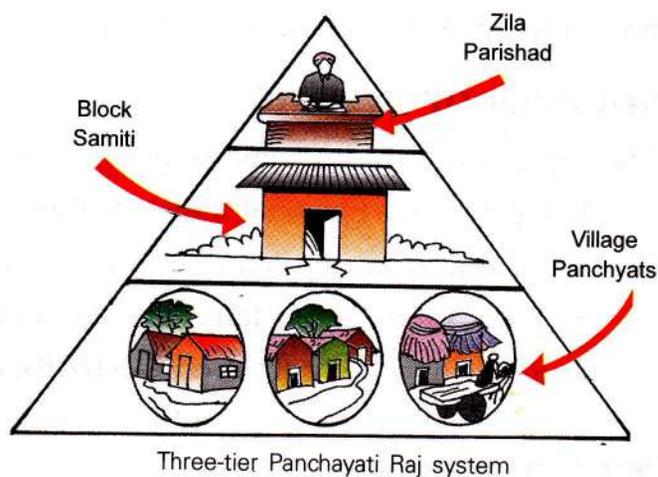
Each Zila Parishad has a Chairperson and a Vice-Chairperson. They are elected by the members of the Parishad.

Offices of the Chairpersons are reserved for the Scheduled Castes, the Scheduled Tribes and women.

FUNCTIONS

Following are the functions of Zila Parishad.

- To supervise the activities of the Panchayat Samitis. The Zila Parishad examines and approves the budgets of the Samitis.
- To develop the land, water and human resources of the area.
- To maintain educational institutions and to promote technical and vocational education.
- To promote welfare of the weaker sections of the society.
- To undertake minor irrigation and water management schemes.
- To provide relief in times of drought and scarcity.
- To pay attention to the public distribution system.



The Zila Parishad as well as Block Samitis appoint sub-committees to look after developmental works. This is done to ensure smooth implementation of various programmes.

SOURCES OF INCOME

The main sources of income of Zila Parishad are:

- (i) Share in land revenue;
- (ii) Taxes, licence fees and market fees;
- (iii) Grants from the State government;
- (iv) Income from the property of the Zila Parishad;
- (v) Funds allotted by the Central government under centrally sponsored schemes.

PANCHAYATI RAJ AND STATE GOVERNMENT

The State government has to assist in the establishment of the Panchayati Raj at every level. At district level the District Magistrate or the Deputy Commissioner gives

proper advice to the Zila Parishad. He heads the district administration. At the block level the Block Development Officer works in close cooperation with Chairperson of Block Samiti and Zila Parishad.

SOME MORE FACTS

1. The district is the most important unit of administration.
2. The Zila Parishad is the highest body under the Panchayati Raj.
3. The Zila Parishad informs the State government regarding needs of the people in rural areas. It receives funds from State government. It distributes these funds among the Panchayat Samitis.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The Panchayati Raj Institutions have a term of
(a) two years. (b) three years. (c) four years. (d) five years.
2. The highest body under the Panchayati Raj is
(a) Gram Panchayat. (b) Zila Parishad.
(c) Panchayat Samiti. (d) Block Development Officer.
3. The Zila Parishad receives grants and funds from the
(a) Village Panchayat. (b) Panchayat Samiti.
(c) State Government. (d) Municipal Corporation.

II. Write true or false.

1. The Zila Parishad works at the village level.
2. The Chairperson of Zila Parishad is elected by the members of the Zila Parishad.
3. The members of the Panchayat Samiti are elected by the Gram Sabha.
4. The Panchayat Samiti has a term of two years.
5. The Block Development Officer is responsible for implementation of plans at district level.

III. Match the columns.

- | Column A | Column B |
|---------------------|---|
| 1. Janapada Samiti | (a) Uttar Pradesh |
| 2. Kshetra Samiti | (b) Gujarat |
| 3. Taluka Panchayat | (c) Madhya Pradesh |
| 4. Block Samitis | (d) Examines budgets of Panchayat Samitis |
| 5. Zila Parishad | (e) A number of villages |

IV. Give short answers for the following questions.

1. What is the composition of the Block Samiti (Panchayat Samiti)?
2. Mention any two functions of a Block Samiti.
3. Mention any two functions of a Zila Parishad.
4. Mention any three sources of income of the Zila Parishad.
5. Who is at the head of the district administration?

V. Answer the following questions.

1. Who is a Block Development Officer? What is her/his responsibility?
2. What is the composition of Zila Parishad?
3. What role does the State Government play in the Panchayati Raj?
4. What are the main sources of income of a Panchayat Samiti?

VI. Who am I?

1. I am the highest body under the Panchayati Raj.
2. I am responsible for implementing the plans prepared by the Block Samiti.
3. I head the district administration.

VII. Projects and Activities.

1. Make a chart of the organisational structure of Panchayati Raj Institutions, showing two important functions of each of these bodies: Gram Panchayats, Panchayat Samitis and Zila Parishads.
2. Ask your teacher to invite any of the elected persons such as Panch, Sarpanch or the member of Zila Parishad. Prepare a detailed questionnaire with the help of your teacher for seeking information regarding a few projects undertaken by them for welfare of the people.

VALUE-BASED QUESTION

Imagine you have been elected the Sarpanch of a Panchayat. What plans or projects would you undertake first so that you could be popular among the village people?



PROJECT WORK

(Based on Chapters 4–6)

I. Cartoon Competition

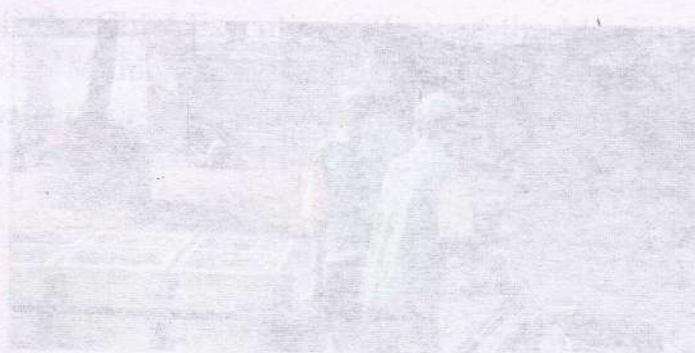
Today strikes, *dharna*, *bandh* and *andolan* have become tools of protest against the Government. Organise a cartoon competition in your class depicting such events.

II. Role Play

A mock Village Panchayat can be enacted in the classroom. Show various decisions are taken by the members of Gram Panchayat.

IV. Debate and Discussion

“It is acceptable to show protest through strike, *dharna*, and *bandh*”. Hold a discussion about the advantages and disadvantages of such modes of protest.



7

Urban Local Self-Government

In the previous two chapters you studied the working of the Panchayati Raj institutions. We have self-governing institutions in urban areas also. These are called the municipalities and municipal corporations. Let us know some of the problems faced by the city dwellers.

Mumbai is a big city. It will give you an opportunity to meet all kinds of people. But very often you get the disturbing news that Mumbai is affected by gastroenteritis and many people are suffering from it. You must have read in the newspapers that the municipal corporation is working round the clock in checking the spread of this ailment. As it is a water-borne disease, care is being taken to make drinking water safe. Advertisements are published in the newspapers warning everybody to be cautious in this regard. It is the duty of the municipal corporation to supply clean and pure drinking water.

Every year in the months of October and November, the people in Delhi are warned against the danger of the dengue fever. A team of inspectors goes from door-to-door with equipments and they disinfect the whole area. The municipal corporation starts a campaign to educate the people to take precautions against this ailment. Dengue spreads because of water-logging, open manholes and drains which become the breeding ground for mosquitoes. The municipal corporation undertakes the responsibility of disinfecting the surroundings from time to time.

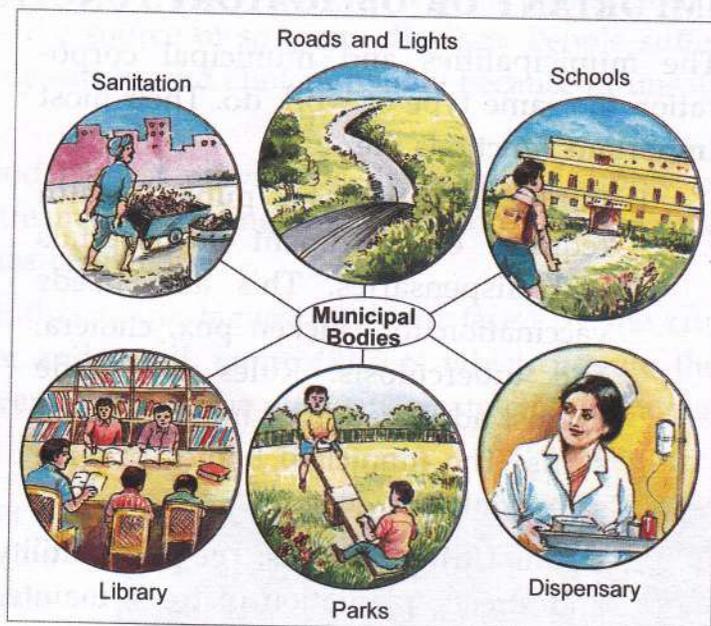
In 1994, the city of Surat was troubled by 'plague'. It was so widespread that a warning was given to hospitals so that they could be ready to deal with it. The



People from municipal corporation engaged in sanitation work

municipal committees in other towns were also concerned with keeping things clean. If cleaning was done regularly such situations could be avoided.

Besides the above mentioned functions, municipalities and municipal corporations have other functions also. Municipalities and municipal corporations are almost similar kinds of bodies. The corporations have been established in some major cities of India, such as Mumbai, Kolkata, Chennai, Delhi and Patna. Municipalities are constituted in smaller towns and cities.



Different functions undertaken by municipal bodies

MUNICIPAL CORPORATIONS/MUNICIPALITIES

The corporation or a municipality is an elected body. Its General Council consists of members elected by all the adult citizens. All those who are 18 years of age and above can cast their votes. The persons who contest elections should be at least 21 years of age. For the purpose of election, the whole city is divided into several wards and each ward has to elect one member. There is reservation for Scheduled Castes in municipal bodies. The elected members are called Councillors. In addition to the elected members, the Council has a few Alderman. They are important and respected persons of the city. They are elected by the Councillors.

DECISION-MAKING STRUCTURES AND A FEW OFFICIALS

The Mayor of the Corporation is elected by the Councillors from among themselves. Similarly, the President or Chairperson of a Municipality is elected by the Councillors from among themselves. In some states the Mayor and the President of a municipal body are elected directly by the citizens. They preside over the meetings of these bodies. The Municipal Commissioner is the Chief Executive Officer of the Municipal Corporation. The day-to-day working of a Municipal Committee is looked after by an Executive Officer. He is the senior most officer of the municipality. Other important officers in a corporation or a municipality are the Chief Medical Officer and the Chief Engineer.

IMPORTANT OR OBLIGATORY FUNCTIONS OF THESE BODIES

The municipalities and municipal corporation the same type of work do. Their most important functions are:

- 1. Public Health:** The public health requires establishment of hospitals and dispensaries. This also needs vaccination for chicken pox, cholera, and tuberculosis. Rules are made against adulteration of milk and food stuffs. The municipal bodies provide safe drinking water.
- 2. Public Utility Services:** The public utility services include maintenance of roads and streets, plantation of trees, maintenance of vegetable and fruit markets, construction of public toilets, supply of electricity and arrangements for local transport.
- 3. Education:** Education is one of the most important functions. The corporations and municipal bodies establish schools, public libraries and adult education centres. Primary education in our country is free and compulsory for all. It is the responsibility of the municipal corporations and municipalities to make arrangements to achieve this objective.
- 4. A Few Other Functions:** A few other functions performed by these bodies are registration of births and deaths, maintaining fire brigades, framing rules for the auto and taxi drivers and to provide facilities for sports.
- 5. Provision of Safe Drinking Water:** Water is one of the most important requirements of the people. This problem has three aspects.



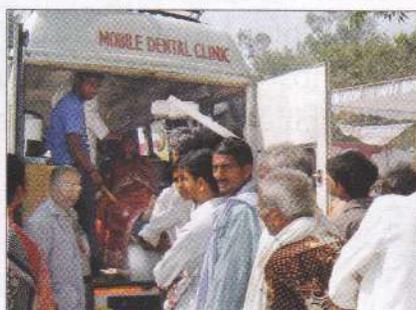
Immunization is provided by municipal bodies



Educational institutions are set up by municipal bodies



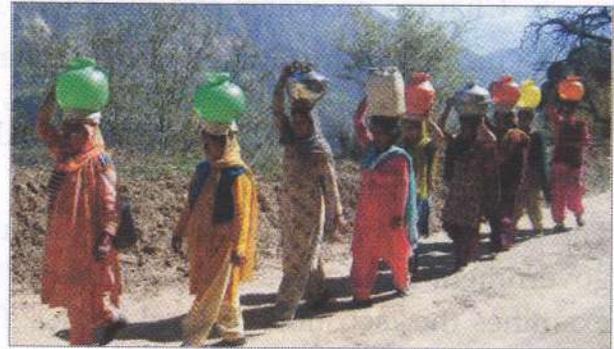
Health care centres provide free treatment to people



Municipal bodies keep the area clean

- **Unsafe Water Causes Diseases:** Everybody has now become conscious of the fact that unsafe water is the source of so many diseases. People suffer from diseases like jaundice, dysentery and cholera mainly because of unsafe drinking water.
- **Paucity of Water:** The second biggest problem is the irregular supply of water. Rivers, ponds and streams are drying up. Rains too have become erratic. The seasonal cycle has changed.
- **Water Pollution:** Water pollution is the biggest problem faced by the city dwellers. The industries, big and small, emit effluents which pollute the water of nearby ponds or rivers. Besides, the effluents create environmental pollution.

It is the duty of the corporation or a municipality to provide clean and safe water to the people. They should also see that water supply is maintained regularly. Checking that the drinking water is of a satisfactory standard requires better quality control. Rainwater may be harvested (collected) in a tank. It may meet our requirements during dry seasons.



People facing shortage of water

Citizens on their part are expected to do their duties. It is the duty of every citizen to see that she or he does not pollute water. They should not waste water, while washing clothes or brushing their teeth. They should avoid washing their cars or watering the garden and plants with drinking water. It is a precious thing and should not be wasted.



Polluted water

OPTIONAL FUNCTIONS

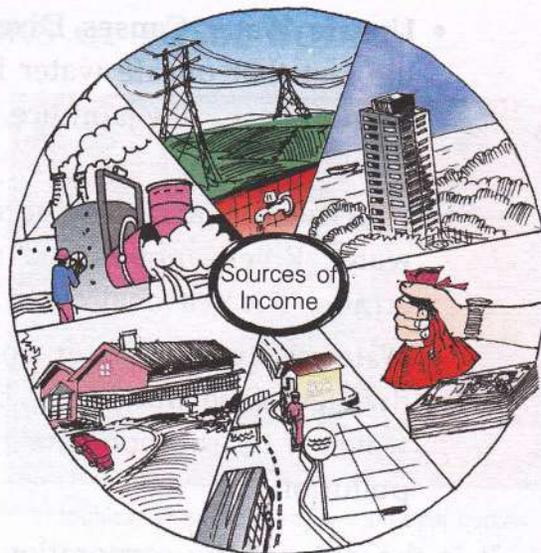
There are certain other types of functions called Optional. Such functions are:

1. To develop parks and gardens.
2. To maintain a zoo or to establish museum and bigger libraries.
3. To construct and maintain creche, children's homes, orphanages, night shelters and rest houses.
4. To provide transport facilities within the municipal limits.

SOURCES OF INCOME

The municipal bodies need money to carry out their duties. Their main sources of income are:

1. Grants and loans from the State government
2. Toll tax and octroi duty
3. Taxes on property, like the house tax.
4. Taxes on vehicles, professions and traders
5. Charges on water and electricity
6. Income from municipal properties



Different sources of income of municipal bodies

RELATIONS BETWEEN MUNICIPAL BODIES AND STATE/CENTRAL GOVERNMENT

The municipal bodies work under the supervision of State governments. The Central government supervises the activities of Municipal Corporation: (1) The government examines the accounts of local bodies. (2) It can advise local bodies to raise, remove or introduce new taxes. (3) If the government finds that a body is not working in a satisfactory manner, it can warn that body to improve its functioning. It can even dissolve a municipal body.

The objectives of both the Central/State government and the municipal bodies are the same. Both work for the welfare of the people. So they should maintain harmonious relationships with one another.

Municipal Corporations	Municipalities
1. Municipal corporations are established in bigger cities.	1. Municipalities are meant for smaller cities.
2. The corporations serve larger population and bigger areas.	2. They serve smaller population and have smaller areas to serve.
3. Their resources are much wider.	3. Their resources are limited.
4. They have direct link with the State governments.	4. They usually deal with the State government through district administration.
5. It is an elected body. Its chairperson is called Mayor and he is elected by the members of the corporation. In some States the Mayor is directly elected by the citizens.	5. It is also an elected body. The Councillors elect the Chairperson from among themselves. In some States the Chairperson is elected directly by the citizens.
6. The Mayor presides over the meetings of the general body.	6. The Chairperson presides over the meetings of the general body.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

- The local-self government bodies in major cities of India, such as Delhi or Mumbai, are known as
 - Zila Parishad.
 - Nagar Panchayat.
 - Municipal Corporation.
 - Municipality.
- The persons who are entitled to contest an election for the municipal bodies
 - should be at least 18 years of age.
 - should be at least 21 years of age.
 - should be at least 25 years of age.
 - should be at least 30 years of age.
- The Mayor of the municipal corporation is elected/selected by
 - Councillors from among themselves.
 - State government.
 - Union government.
 - President of India.
- Unsafe drinking water may cause
 - cancer.
 - jaundice and cholera.
 - brain tumour.
 - high blood pressure.

II. Write true or false.

- A municipality and a municipal corporation have almost the same type of work to do.
- To maintain a museum is an obligatory function of the municipality.
- Municipality has a Mayor to preside over the meetings of the General Body.
- The Chief Engineer is the Chief Executive Officer of the municipal corporation.
- The removal of stray cattle from the streets is the job of the State government.

III. Match the columns.

Column A

- Nagar Panchayat
- Mayor
- Chief Engineer
- Chief Medical Officer
- Government grants
- Aldermen

Column B

- A chief source of income
- Construction of municipal streets, toilets, etc.
- Presides over meetings of municipal corporation
- Important persons of the city
- Municipal hospitals
- Small urban area

IV. Give short answers for the following questions.

- What is the main difference between a municipality and a municipal corporation?

2. Who looks after the day-to-day working of a municipal body?
3. Name any two obligatory functions of the municipal bodies.
4. Who is an Alderman?
5. Is there a provision of the reservation of seats for Scheduled Castes in municipal bodies?

V. Answer the following questions.

1. Who are the important officials of the municipal corporations?
2. Discuss the functions of municipality and municipal corporation.
3. Differentiate between municipal corporation and municipal councils.
4. What is the need to have a local government in cities and towns?
5. What are the sources of income of a municipal body?

VI. Who am I?

1. I am the elected head of a municipal corporation.
2. I am the senior most officer of the municipality.
3. I am called an Alderman.

VII. Projects and Activities.

1. Visit the zoo and see how it is maintained.
2. Meet the Municipal Councilor of your area and talk to him about the work a municipal body does.
3. Try to see the Water Treatment Plant and find out how it functions.
4. Write an application addressed to the Mayor or the Chairperson of the municipal corporation/municipality drawing her/his attention to some of the problems regarding health, sanitation and drinking water being faced by the people in your locality.
5. Find out the name of the Mayor of your city or town. Name any two women Councilors. Where is your municipal corporation/Municipality office located?

VALUE-BASED QUESTION

Municipalities are responsible for keeping your locality clean and green. How can you contribute in such activities? Planting trees is one of the ways. Begin with your neighbourhood.

HOTS: THINK BEYOND

What is Right to Information (RTI)? How is it important to us?

Rural Administration

Ria's maternal grandmother lived in a village. She lived there all alone. She was liked by the whole village. She had a small piece of agricultural land which was the only source of her livelihood. She would give it on contract for tilling. Ria's father used to visit her once a week and see that things were moving smoothly.

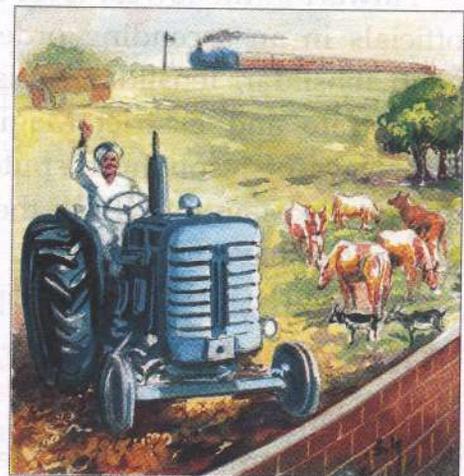
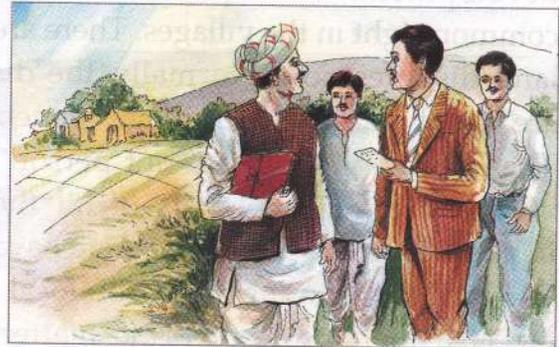
One day a villager came rushing to Ria's father. He told him that a neighbour, Ramesh had put his claim on Ria's grandmother's land. He further told him that Ramesh had got the records in Patwari's register also changed. Ria's father got worried. He knew very well that the Patwari had played mischief. He rushed to the village. He met the Patwari and other people. There seemed to be no solution to the problem. He met the local head of the police and lodged a complaint. He told Patwari not to tamper with the land records, otherwise he would go to the court to appeal for justice.

It was a typical case of land dispute in the village. In every village, land disputes are very common. These disputes also arise within the family and in the neighbourhood.

India is a country where about seventy per cent of the population lives in villages. There are more than six lakh villages in India. The main occupation of the villagers is agriculture. Besides farmers, other people like carpenters, weavers, potters, blacksmiths and barbers also live in the villages. Almost all the families keep cattle for milk and ploughing. The life in a village is simple.

RURAL ADMINISTRATION

Rural administration involves two types of work: (i) maintaining law and order in the village (ii) maintaining land records. In the first case, the role of police is important. In the second case, it is the



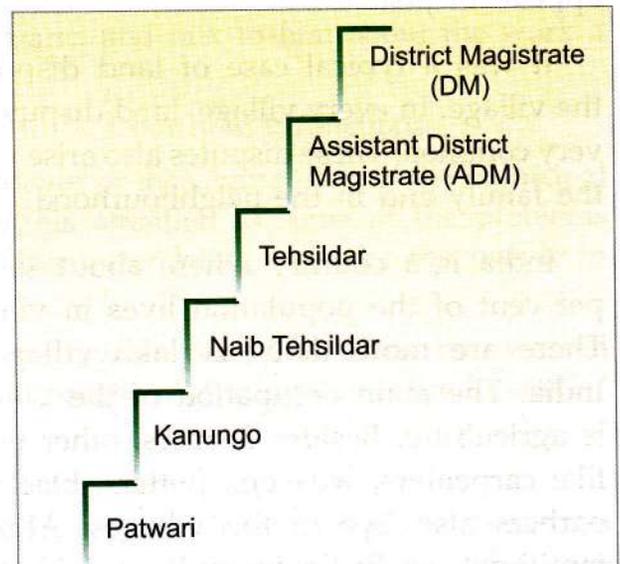
Patwari who keeps record of all the fields and collects land revenue from the farmers. Local police are under the control of a Police Inspector. The Superintendent of Police is the highest police officer in the district. The work of the Patwari is supervised by the Kanungo and Tehsildar and then finally by the District Collector.

The district is the most important unit of administration in India. It is under the control of the District Magistrate or Collector who belongs to the Indian Administrative Service (IAS). The duty of the Collector is to ensure proper functioning of the local bodies. He is assisted in his work by a number of officials.

All the States in India are divided into several districts. The districts are divided into sub-divisions called *Tehsils* or *Taluquas*. The District Magistrate has to play many roles. He is the highest executive officer of the district. As Collector he supervises the collection of land revenue. The head of a *Tehsil* is called *Tehsildar*. He is under the control of the District Magistrate. The Patwari, the Kanungo and other local officers are under the control of the *Tehsildar*. It is their duty to help the farmers obtain a copy of records of the farmers' cultivable land.

LAND DISPUTES

With the technological revolution, the villagers have had a little prosperity and development. But quarrels are also a common sight in the villages. There are more land disputes now. Normally, the disputes are resolved by the village panchayats. The Patwari is an important person in the village. He keeps records of all the land in the village. Besides the Panchayat and Patwari, the Kanungo and the local police are also there to resolve the matters. The ladder of the revenue officers is like this — Patwari at the lowest level and all these officials in an ascending order: Kanungo, Naib Tehsildar, Tehsildar, Assistant District Magistrate and District Magistrate. They find ways of resolving dispute. When the dispute takes an ugly turn, the local police authorities have to intervene.



Hierarchy of rural administration

ROLE OF PATWARI — LAND RECORDS

In any land dispute, the role of Patwari or Lekhpal becomes important. He has all the land records with him. Measuring the land and keeping the records are his main

duties. In any dispute over land his records matter much with the court of law. We can realise that the Patwari can offer a great service to the villagers by maintaining the correct land records.

The Patwari is also responsible for collecting the land revenue from the farmers. He provides information to the government about the crops grown in the area. Farmers may change the cycle of their crops. They can also make alterations in the use of their land. Patwari has to keep an updated record of all this in his books. Whenever there is some natural calamity like flood or drought, the Patwari has to inform the government (his seniors) about it. If the government decides to exempt the villagers from paying revenue, the Patwari should see that such concessions are given to them. He is the most obvious link between the government and the farmers.

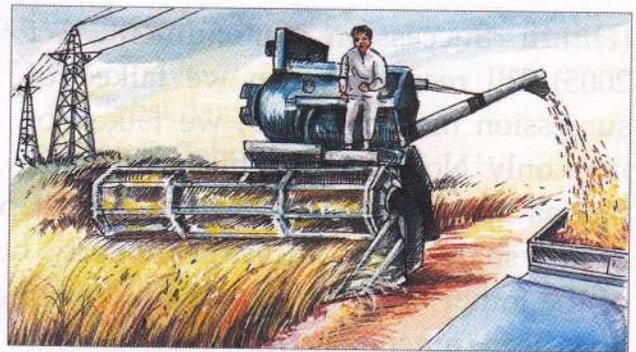
LAND REFORMS

Land reforms were introduced soon after India attained independence. An important step in this direction was the abolition of the zamindari system. The consolidation of land was another landmark event. The land was distributed among the landless farmers. These farmers worked hard to improve the quality of the land because they had now become the owners of the land.

ABOLITION OF BONDED LABOUR

Practice of bonded labour was very much prevalent in the Indian villages. A bonded labourer was the person who had borrowed either money, wheat or rice from the landlord or a big farmer. In return the person served the landlord or the farmer till he had paid back the borrowed money or foodgrains. Usually, these poor persons were unable to pay back the sum in full to the landlord. As

a result, they and their children were compelled to work for an indefinite period without payment or for very low wages. The bonded labour system was abolished by the government. It was a great boon to the bonded people.



Technical advances improved productivity

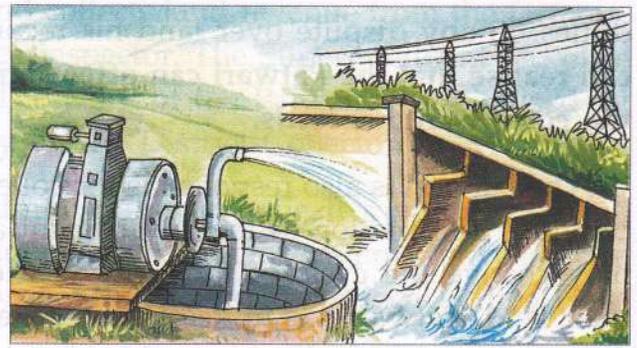
NEW DEVELOPMENTS

Before independence the villages were neglected and there was little development in the villages. After independence the face of villages changed a lot. Development has taken place speedily. The villages now make use of improved technology that increase the productivity of land. With improved varieties of seeds and fertilizers and

improvements brought in ploughing and irrigation, the production has increased tremendously.

The **White Revolution** or **Milk Revolution** has been beneficial to both the common man and the farmer.

Many new dams have been constructed. A network of canals has been developed. Loans are available to the farmers on low interest rates. Agricultural scientists sent by the agricultural universities and government departments advise the farmers. Changes in agricultural technology have reached the villages. Almost every farmer is now equipped with modern agricultural machines, such as threshers, tractors and harvesters. The television, a mobile phone and car are within his reach now.



Improved irrigation facilities



Changing scenario of villages—progress in health, education and communications

NEW INHERITANCE LAW

(Hindu Succession Amendment Act 2005) Till recently when we talked of succession or inheritance, we talked of men only. Nobody thought that women had as much right as a man to inherit property. The Hindu women were deprived of any share in the ancestral property, both movable or immovable. After the death of the father the land was divided among the sons of the deceased. But this law has now been amended. Under the new law the sons, the daughters and the widow will get equal shares in the land and property left by a person. This law is applicable to all States and Union Territories. This law has come as a great boon to the women of this country.

SOME MORE FACTS ABOUT DISTRICT ADMINISTRATION

1. There are about 600 districts in the country. The District Magistrate is the highest executive officer in the district.
2. District Administration performs many functions: maintaining law and order, collecting land revenue and other taxes from the people.

3. The District Administration sees how the functioning of Panchayati Raj Institutions could be made more efficient.
4. The Superintendent of Police is the senior most police officer of the district. The District Magistrate and the Police Superintendent both work hand in hand to maintain law and order in the district.
5. District Medical Officer is known as the Civil Surgeon. He is the chief of all the medical departments of the district. He supervises the working of all the government hospitals and dispensaries in his area.
6. The District Education Officer or Inspector of Schools is concerned mainly with elementary and secondary education.
7. The Court of the District Judge is the highest Civil Court in a District. The highest court in a State is the High Court.

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. The person who keeps record of all lands and fields in a village is known as
 - (a) Police Inspector.
 - (b) Patwari.
 - (c) Tehsildar.
 - (d) District Magistrate.
2. Among Revenue Officers in a district the person who is placed at the highest level is known as
 - (a) Kanungo.
 - (b) Tehsildar.
 - (c) District Magistrate.
 - (d) Naib Tehsildar.
3. The White Revolution in the country is also known as
 - (a) Green Revolution.
 - (b) Milk Revolution
 - (c) Industrial Revolution.
 - (d) Fish Revolution
4. The new Inheritance Law, 2005, brought benefit especially to
 - (a) sons of the dead.
 - (b) brothers of the dead.
 - (c) widow and Daughters of the dead.
 - (d) sisters of the dead.

II. Write true or false.

1. A district is divided into several tehsils.
2. The Chief Medical Officer of the district is also known as Civil Surgeon.
3. The Collector heads the police department.
4. Head of the education department in a district is called Inspector of Schools or the District Education Officer.
5. The Court of the District Judge is the highest criminal court in a district.

III. Match the columns.

Column A

1. Collector
2. Abolition of zamindari system
3. Bonded labour
4. Agricultural technology

Column B

- (a) Compelled to work without payment
- (b) Improved seeds and fertilizers
- (c) Land reforms
- (d) Highest revenue officer in the district

IV. Give short answers for the following questions.

1. Mention any two functions of the Patwari in a village.
2. What is the role of the Tehsildar?
3. Mention any two steps that have been taken to promote agriculture.
4. How does new Inheritance Law benefit women?

V. Answer the following questions.

1. List the main functions of the district administration.
2. Why is maintenance of land records by Patwari important?
3. What are the land reforms undertaken by the government after independence?
4. Write a note on the abolition of bonded labour.

VI. Who am I?

1. I take care of the land records at the village level.
2. I am the highest executive officer of the district.
3. I am the head of the Tehsil.

VII. Projects and Activities.

1. Meet the head of Police Station in your area and try to understand the problems that the police face and the public opinion about the local police.
2. If you live in an urban area and have never seen a village, just go to a village and try to know about the new implements of agriculture being used, especially the tractors and threshers.
3. Request your teacher to prepare a script on the practice of Bonded Labour prevalent before independence. Enact a play on this theme with the help of your teacher and classmates.

VALUE-BASED QUESTION

Do you share everything equally with your siblings?

HOTS: THINK BEYOND

Which competitive examination do you need to clear to become a District Magistrate or Collector?



PROJECT WORK

(Based on Chapters 7–8)

I. Picture Study

Given below are pictures that describe the important functions of a Municipal Corporation. Mention the function each picture best depicts. Choose words from the box given below.

Sanitation Recreation Education Health Transport



II. Flow Chart

Make a flow chart of the organisational structure of a municipality or any local government.

III. Project Work

Make a project report on the history of bonded labour in India. Compare this practice with that followed in the USA as regards the Black people. Using Internet, search pictures to make your project interesting and appealing.

IV. Poster Making

Water pollution is the biggest problem faced by city dwellers. Through posters suggest some ways to make people aware of this problem.

9

Rural Livelihoods

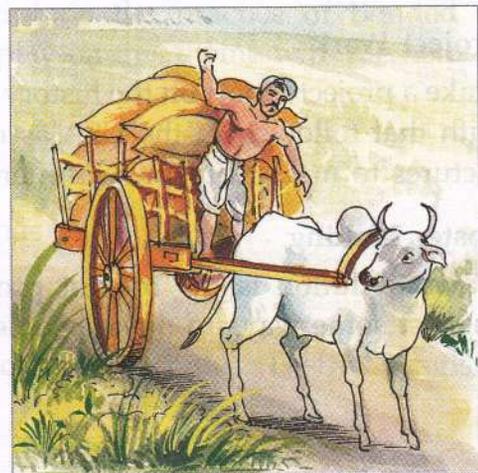
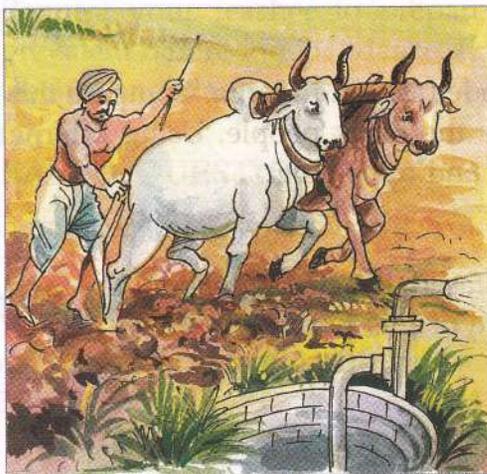
Man in primitive times was a nomad, who was constantly on the move in search of food and shelter. With the coming of the Neolithic Age, man learnt the art of growing crops which was the beginning of agriculture. Man now led a settled life and pursued other occupations as he now lived in a community. This led to the formation of villages and later towns and cities.

People who live in villages are called rural people. They practise primary occupations like agriculture, fishing, dairy products and cattle farming. However, their main occupation is agriculture. Seventy per cent of our population lives in the villages.

According to the size of their landholdings, the farmers can be classified as big, small and landless farmers. Big farmers usually have large areas of land under cultivation. They have better irrigational facilities. They use modern methods of cultivation like high quality seeds, manure and modern machinery. They grow crops for sale in the market.

Small farmers have smaller areas under cultivation. They grow crops mainly for local consumption. They do not have much savings.

Landless farmers are those who have no land but work for bigger farmers on wages. Most of them are living in poverty. It is the state of being extremely poor. A farmer is very busy during the sowing and harvesting seasons. Before he sows, the fields have to be prepared by ploughing the soil, watering the dry land and adding



manure and fertilizer to it. Different crops grow in different areas depending on the soil and climatic conditions of these regions.

Most farmers grow crops for their own requirement and for local consumption. When farmers grow crops mostly for themselves, it is called **subsistence agriculture**. Some small farmers have to sell their produce to moneylenders in order to repay their debts. Since farming is a seasonal occupation, the small farmers and landless labourers are forced to borrow money at high interest rates when they have very little or no work to do.

COMMUNITY DEVELOPMENT PROJECTS

1. Our government launched the Community Development Programme in 1952 with the aim to develop the villages and improve agricultural production.
2. The farmers were provided with the latest technology.
3. Bank branches have been opened in villages to provide loans on easy terms to the farmers and other residents of the village.
4. In certain backward areas, our government gave land to landless labourers to make them self-reliant.

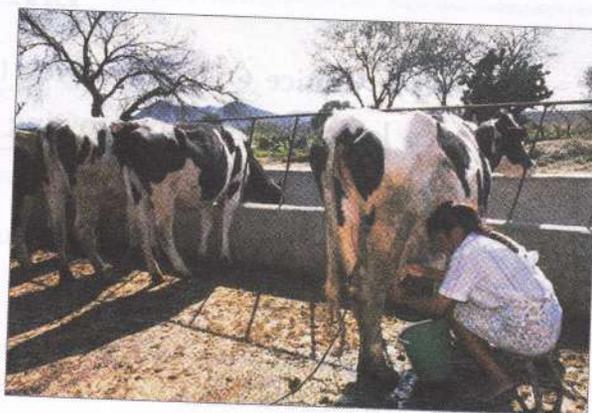


A bank in rural area

DAIRY PRODUCTS

Another occupation that is commonly found in rural India is cattle farming and dairy farming. Buffaloes and cows not only provide milk but are also used by smaller farmers to plough their fields. Goats and camels are also domesticated for their commercial value.

The villages are centres of dairy products like milk, butter, cheese, cream, ghee, etc. Villagers of Gujarat have formed large dairy cooperatives. The most famous of these is in **Anand**, which is the biggest supplier of dairy products in India.



Cattle rearing

FISHING BUSINESS

Fishing is another important occupation. A very large number of people living in coastal areas have fish in their diet. Fishing is also carried out in big rivers, lakes, canals and ponds.



Fishing business

OTHER OCCUPATIONS

Other occupations include basket weaving, pottery making and collecting things such as *mahua*, honey, tendu leaves from the forests. The handloom industry involves cotton and silk weaving and embroidery which is done in many parts of rural India. Pochampally sarees, (Andhra Pradesh), Paithani sarees (Maharashtra) and Banarsi sarees (Uttar Pradesh) are some of the fine examples of how these jobs have become source of income of our people.

The rural people also excel in metal works and designing statues from wood, stone and metal. To encourage the rural crafts the government provides loans and grants to craftsmen. They now have a chance to live their lives decently.



Rural occupations

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. Man learned the art of growing crops in the
 - (a) Palaeolithic Age.
 - (b) Mesolithic Age.
 - (c) Neolithic Age.
 - (d) Bronze Age.
2. Dairy products included
 - (a) wheat and rice.
 - (b) milk and butter.
 - (c) fruit and vegetables.
 - (d) animal meat.

3. Handloom industry involves

- (a) cotton and silk weaving.
- (c) woodwork.

(b) making tools from metal.

(d) baskets made of strips of wood.

II. Write true or false.

1. Seventy per cent of our people live in villages.
2. Profit-making is the main aim of the big farmers.
3. Nomads led a settled life.
4. Forest products include teak wood, *mahua* and tendu leaves.
5. Different products grow in different areas according to soil and climatic conditions of the area.

III. Match the columns.

Column A

1. Fishing business
2. Tendu leaves
3. Banarsi sarees
4. Andhra pradesh
5. Irrigational facilities
6. Ploughing the soil

Column B

- (a) Forest produce
- (b) Pochampally sarees
- (c) Coastal areas
- (d) Supply of water for crops to grow
- (e) To turn the soil over for planting of seeds
- (f) Uttar Pradesh

IV. Give short answers for the following questions.

1. Name any two primary occupations of the rural people.
2. When and why was the Community Development Programme launched?
3. Classify farmers on the basis of their landholdings?
4. Who are landless farmers?
5. Other than agriculture, name the two other occupations pursued by our village folks.
6. Name any three handicrafts in which rural people are engaged.

V. Answer the following questions.

1. Why do farmers need to borrow money?
2. Mention non-agricultural activities such as dairy products and fishing business undertaken by rural people for their livelihood.
3. Write a brief note on Anand, the famous dairy co-operative launched in Gujarat.

VI. Projects and Activities.

1. In your scrapbook paste or draw pictures that show the life style of village people.
2. Why the small farmers are poor? Make a few suggestions about how we could improve their living conditions.

3. Give a case study on the life of an Indian farmer. Include the following points to develop your story.

- Name of the farmer
- Number of children he has
- The main source of his livelihood
- Education of his children
- Condition of farming
- Agricultural implements he uses
- Any loan he has taken from the bank
- Does he think of migrating to urban areas?

VALUE-BASED QUESTION

What do you want to become when you grow up? What would you do for the betterment of society you live in?

HOTS: THINK BEYOND

How do people living in rural areas contribute to the growth of our country?

Urban Livelihoods

Urban livelihood greatly differs from the rural livelihood as the urban surroundings are different. Moreover, the urban society is heterogeneous because urban people come from many different parts of India. People are either self-employed or employed in government offices, companies, banks, hospitals, educational institutions, and trading and business concerns.

Someone who is self-employed organises his own business rather than being employed by another person. He may be a businessman, a trader, a builder or a decorator. He may not be compared with workers who have a job which they are paid to do. A vendor sells goods from a small stall or cart. A hawker is a person who travels from place to place selling household things. The hawkers and vendors have no security of job. There are certain areas in the city which they are not allowed to enter because they may obstruct a road, so that people or vehicles cannot get past. However, the government is planning to modify the rules and allow vendors to move around freely.

Many businessmen manage their own shops. These are permanent shops. Their owners get licence or permission from the government to do business. There are others who run a travel agency or render courier services or run the chemist's shop. There are many people employed as workers in these concerns.

FACTORY WORKERS

There are big factories and industries which give employment to thousands of workers, supervisors and officers. Their services cannot be terminated easily. A permanent worker is entitled to certain benefits like pension, medical facilities, paid annual leaves, other than on Sundays and national holidays.



People working in an office



A green grocer



People working in a factory

GOVERNMENT JOBS

The government gives jobs to a large number of people who help in the running of the day-to-day administration. The Central government employees are appointed either by the Union Public Service Commission (UPSC) or other central authorities. The State Public Service Commission conducts examinations for recruitment of State civil servants. They are also entitled to permanent job with all benefits like government accommodation, earned leaves, medical facilities and pension.

CASUAL WORKERS AND OTHER JOBS

Then there are casual workers who are employed on a temporary basis, i.e., they get work as and when required by the employer. There is no job security for them and their services can be terminated at the will of the employer. They are made to work for very long hours, sometimes 12 to 14 hours a day. There are also people working as daily wagers and domestic servants. Rickshaws are used in all parts of the country. They are driven by men.



Rickshaw puller

CALL CENTRES

A new form of employment currently very popular in big cities is that of call centres. Persons working at the call centres must be well versed in English. A call centre is well equipped with computers and telephones and is linked with both the Indian and foreign companies. It helps to sort out or deal with problems faced by customers and consumers the world over.

MIGRATION

Migration of people from rural to urban areas leads to rapid increase in population of cities. People from rural areas come in large numbers to cities in search of better jobs and to improve their standard of living.



Call centre

Other factors that prompt them to migrate are:

- (i) Lack of educational and medical facilities in villages
- (ii) Poor conditions of pay and employment
- (iii) Feelings of insecurity

Many landless labourers migrate to the cities for a short time when they have no work to do in villages. They are employed as casual workers. They live on the outskirts of the cities in unhygienic conditions, without safe drinking water and electricity. They make a sizeable number of the urban poor.

In order to stop such migrations, the government has introduced several self-employment schemes so as to train and educate the rural youth in various skills. These skills would help them to set up their own business and make them self-reliant.



People living in unhygienic conditions

EXERCISES

I. Multiple Choice Questions: Tick (✓) the correct answer.

1. People from rural areas come in large numbers to cities
 - (a) for a religious journey.
 - (b) in order to visit places of interest.
 - (c) in search of better jobs.
 - (d) because of greenery.
2. Someone who is self-employed
 - (a) works in a factory.
 - (b) has his own business or trade.
 - (c) is a Government employee.
 - (d) is a landless labourer.
3. Rickshaws are usually driven by
 - (a) men.
 - (b) women.
 - (c) goats.
 - (d) donkeys.

II. Write true or false.

1. Vendors sell their goods from a small stall or cart.
2. A daily wagger earns his wages on day to day basis.
3. Call centres have become popular in rural India.
4. The Union Public Service Commission (UPSC) has its headquarters in New Delhi.
5. There is full job security for the casual workers in cities.

III. Match the columns.

Column A	Column B
1. Factories	(a) Work of clerical or administrative kind
2. Government offices	(b) Linked with both the Indian and foreign companies
3. Call centres	(c) Use of machines for making of goods
4. Casual workers	(d) Ability to do things by yourself
5. Self-reliant	(e) Employed on a temporary basis

IV. Give short answers for the following questions.

1. Who is a hawker?
2. Who are casual workers?
3. What is a call centre?
4. Why do rural people migrate to cities?

V. Answer the following questions.

1. What are the advantages of being in a permanent job?
2. Should the government relax the rules for the benefit of hawkers and vendors? Give any two reasons.
3. What steps have been taken by the government to stop migration?
4. Give any two examples of daily wage labourers or casual workers.

VI. Projects and Activities.

1. The urban poor live in unhygienic conditions. Can you suggest a few ways to improve their living conditions? Write an article for a daily newspaper.
2. Imagine yourself to be a casual worker working in a factory in an urban area. Write a diary entry describing a day in your life.

VALUE-BASED QUESTION

What can you do for the children living on the streets? Can you help them with your old textbooks or clothes which are not in use now?

HOTS: THINK BEYOND

Why people usually do not migrate from a city to a village?



1. What is his name?

2. When did he learn to make pots?

3. How much money does he earn daily?

4. How does he make pots?

5. From where does he bring clay for his pots?

6. How do people treat him when they come to buy his pots?

II. Diary Entry

Request your teacher to take you to a farmer who lives in a nearby village. Spend some time with him and notice his daily routine. Ask the problems he faces in his life. Make a diary page on 'A Day in a Farmer's Life' and read it out in the class.



PROJECT WORK

(Based on Chapters 9–10)

I. Interview

Go to a potter and ask him about his work and livelihood. Ask him the following questions and make a report.



1. What is his name?
2. When did he learn to make pots?
3. How much money does he earn daily?
4. How does he make pots?
5. From where does he bring clay for his pots?
6. How do people treat him when they come to buy his pots?

II. Diary Entry

Request your teacher to take you to a farmer who lives in a nearby village. Spend some time with him and notice his daily routine. Ask the problems he faces in his life. Make a diary page on 'A Day in a Farmer's Life' and read it out in the class.

III. Project Work

Make a project report on migration of people from rural to urban areas. Include case studies describing the problems and compulsions people have to face. Interview five different people from different walks of life and include their stories in your project report. Take their photographs with their permission to make the report more realistic.

IV. Watch Movie

Watch the movie *Do Beegha Jameen*. Narrate the story of the film in your class.



TEST PAPER

(Based on Chapters 6–10)

Total Marks: 50

Time: 2 Hours

A. Tick (✓) the correct answer.

(1 × 8 = 8)

1. An important link between the Gram Panchayat and the Zila Parishad is the
 - (a) Gram Sabha.
 - (b) Lok Sabha.
 - (c) Block Samiti.
 - (d) Nyay Panchayat.

2. At least one-third of the seats are reserved for in municipality.
 - (a) poor
 - (b) rich
 - (c) women
 - (d) farmers

3. Which are the small zones into which large cities are divided?
 - (a) Districts
 - (b) Villages
 - (c) Seats
 - (d) Wards

4. The district courts function under the supervision of
 - (a) Supreme Court.
 - (b) High Court.
 - (c) Session Court.
 - (d) Additional District Judge.

5. Land records at the village level are maintained by the
 - (a) Kanungo.
 - (b) Patwari.
 - (c) District Collector.
 - (d) Chaukidars.

6. Who is the highest Executive Officer of the district?
- (a) District Magistrate
 - (b) Tehsildar
 - (c) Kanungo
 - (d) Deputy Collector
7. The density of population in urban area is
- (a) high.
 - (b) low.
 - (c) medium.
 - (d) zero.
8. Which Revolution is associated with milk?
- (a) Green Revolution
 - (b) Red Revolution
 - (c) White Revolution
 - (d) Blue Revolution

B. Fill in the blanks.

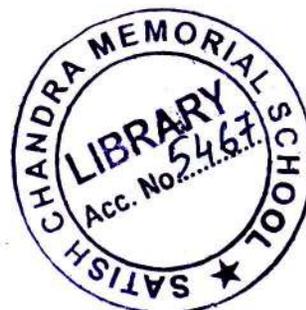
1 × 6 = 6

1. make clothes for people.
2. is the chief occupation of the villagers.
3. In Uttar Pradesh Panchayat Samitis are known as
4. is the highest body under the Panchayati Raj.
5. Zila Parishad coordinates the activities of
6. Municipal Corporations are established in cities.

C. Define the following.

2 × 3 = 6

1. Kanungo
2. Casual workers
3. Migration



D. Write short answers in about 30 words each. $2 \times 5 = 10$

1. What is the function of Block Development Officer?
2. Name the different types of taxes raised by Municipalities.
3. What are the main functions of a Tehsildar?
4. What is subsistence agriculture (farming)?
5. What is a Call Centre?

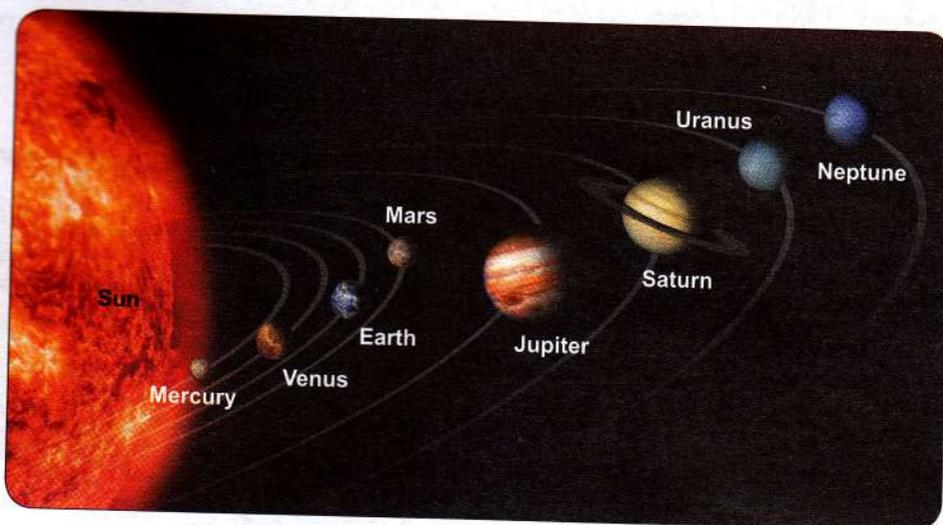
E. Give long answers in about 60 words. $4 \times 5 = 20$

1. Why do people migrate from rural to urban areas?
2. How does the government help the farmers through local banks?
3. Mention the various responsibilities of a Patwari.
4. Write a short note on the composition of Municipal Corporation.
5. Describe any four functions of a Zila Parishad.



APPENDIX

KNOW YOUR EARTH MORE



- In the ancient Greek mythology, Earth is personified as the deity Gaea, the mother of all life, and the sky is deified as Uranus. The union of the sky and the Earth created Oceanus, and other primordial sea gods. In Roman mythology, Earth is deified as Goddess Terra.
- Between 6th century BCE and the modern era, many people thought the Earth to be a sphere. However, modern astronomy and space travels have helped scientists to discover that the Earth is actually shaped like an orange, flattened at the two poles.
- Our Earth was formed approximately 4.5 billion years ago. Researchers have estimated the age of the Earth by studying the oldest rocks and meteorites that have been discovered on the surface.
- The magnetic field of the Earth is very powerful. It protects the Earth from the effects of solar winds. The nickel-iron core of the planet combined with its rapid rotation is believed to be the reason for this powerful field.
- Earth is also known as the 'Blue Planet'. This term was given by the astronauts who travelled into space and witnessed Earth's magnificent landscape from above. 70% of our Earth is water and only 30% is land.
- The oceans on Earth don't just house sharks and coral reefs, they have mountains as well. In fact, about 90% of the longest mountain range on the planet called the mid-ocean ridge, is found under the ocean. It's way longer than the Andes Mountains.



HAVE FUN AND LEARN

EVER WONDERED ABOUT THE NEW 7 WONDERS OF THE WORLD?

Take the quiz given below to check your knowledge.

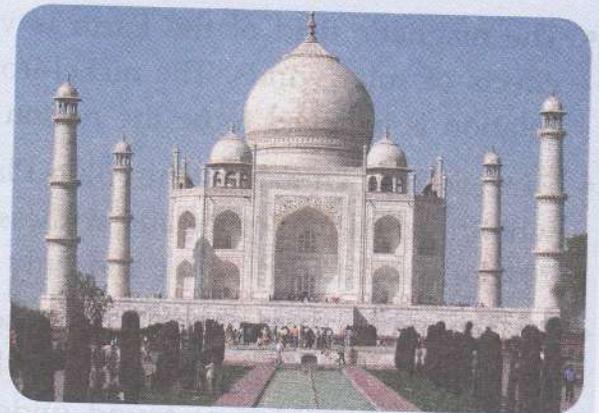
1. This Incan city in Peru, built in the mid 1400s was discovered in 1911 and has been a sacred archaeological site ever since.
-



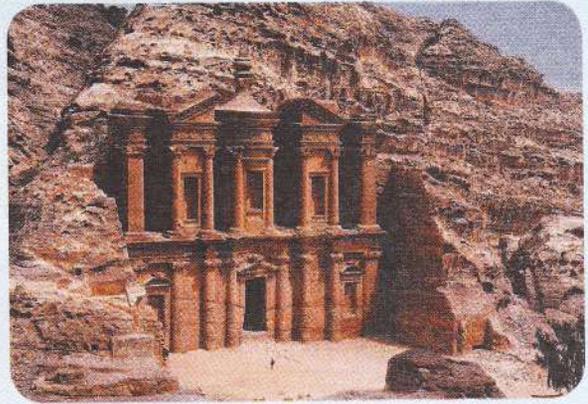
2. In use for around 500 years, this elliptical structure could hold more than 50,000 spectators who gathered to watch events such as battle re-enactments, animal hunts and public executions.
-



3. A spectacular white marbled mausoleum built by Mughal emperor Shah Jahan for his wife.
-



4. The capital of the Nabataean empire of King Aretas IV, which houses a number of incredible structures carved into stone.
-



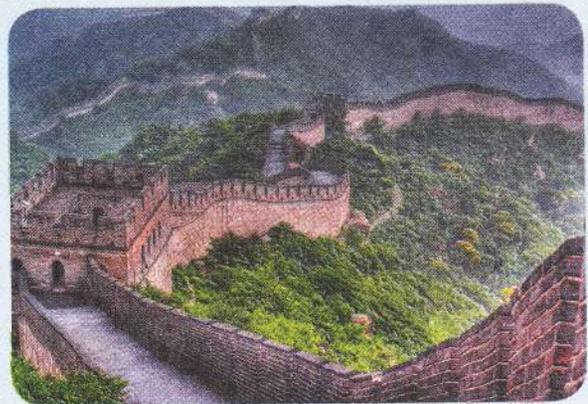
5. This powerful city flourished as a political and economic hub of the Mayan Civilisation from approximately 800 to 1200 CE.
-



6. Erected upon the Corcovado mountain in 1931, this reinforced concrete and soapstone statue of Jesus Christ has become a cultural icon of Rio de Janeiro, Brazil.
-



7. This wall spanning approximately 4000 miles was built to protect the border of Chinese empire from the Mongols. It is the world's longest man-made structure.
-

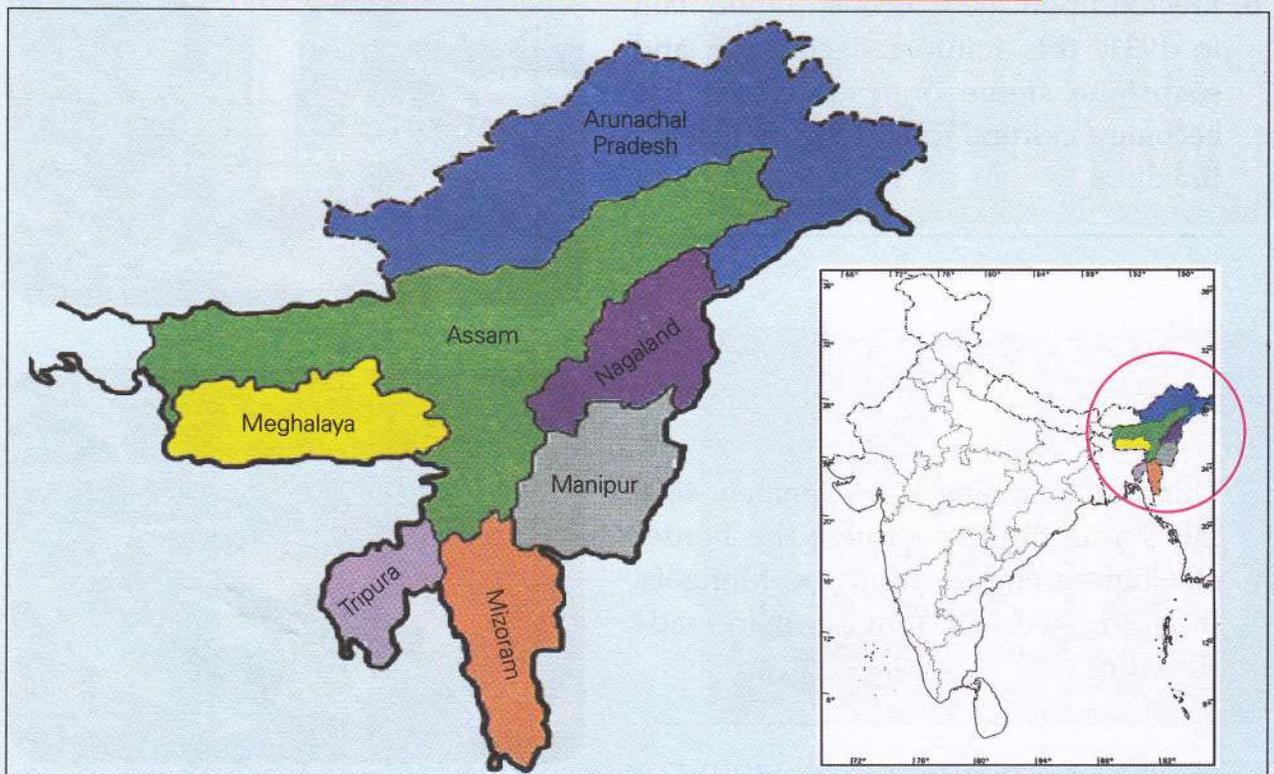


HAVE FUN AND LEARN

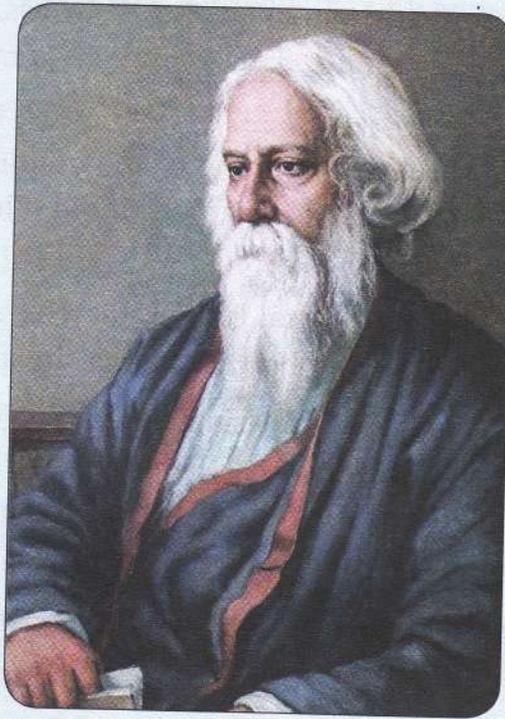
The seven states located in the easternmost region of Northeast India are collectively called as the **Seven Sisters of India**.

Find out the names of the seven sisters of India from the grid given below.

M	E	A	M	A	N	I	P	U	R
E	V	R	T	I	C	O	R	F	M
G	H	U	A	B	Z	K	Q	B	X
H	U	N	P	U	W	O	Y	K	L
A	C	A	S	S	A	M	R	J	Z
L	X	C	E	Y	Z	H	B	A	W
A	H	H	C	X	T	Q	F	R	M
Y	N	A	G	A	L	A	N	D	B
A	J	L	A	P	L	B	Z	X	N
Z	T	R	I	P	U	R	A	R	I



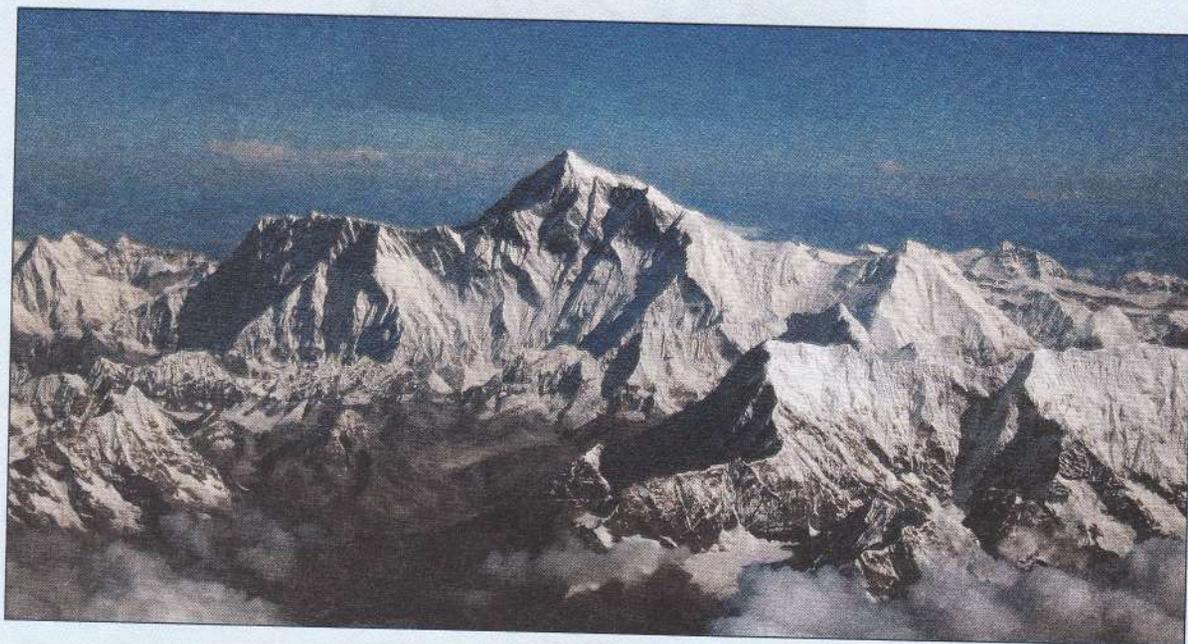
OUR FIRST NOBEL LAUREATE



- Rabindranath Tagore wrote the national anthem of two countries, i.e., India's *Jana Gana Mana* and Bangladesh's *Amar Shonar Bangla*.
- A multi-talented personality, Tagore was a philosopher, poet, dramatist, painter, novelist, educationist, and a composer.
- He was the first Asian to receive the Noble Prize for Literature in the year 1913, for his acclaimed poetical work *Gitanjali*.
- In the year 1915, he was awarded Knighthood by the British Government. However, he renounced the Knighthood after the Jallianwala Bagh massacre in 1919.
- Tagore founded the Vishwa Bharati University at Shantiniketan in the year 1921. This organisation challenged the conventional methods of classroom education and established many new methods that were beyond traditional standards.
- It was Rabindranath Tagore who gave the title of 'Mahatama' to Mohandas Karamchand Gandhi.

THE MAJESTIC HIMALAYAS

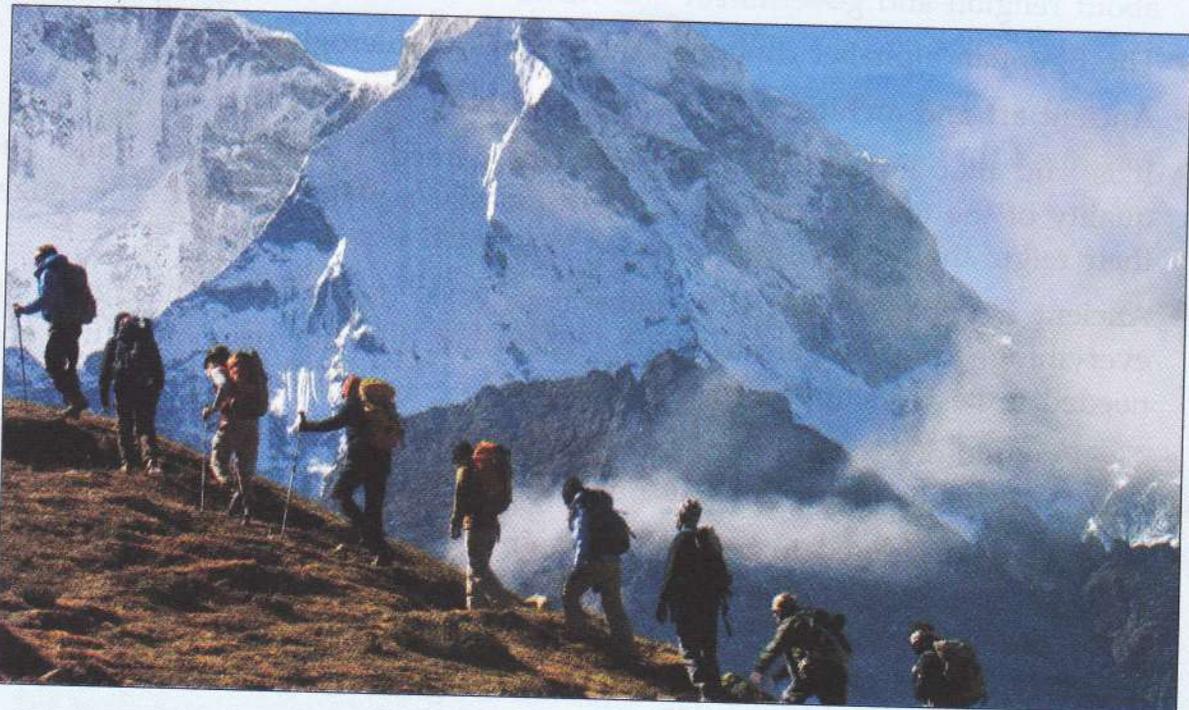
- The word 'Himalaya' is derived from two Sanskrit words, i.e., 'Hima' meaning snow and 'Alaya' meaning abode. Thus, Himalaya means the 'Abode of Snow'.
- The Himalayan range is believed to be one of the youngest mountain ranges stretching across six different countries, namely, India, Bhutan, Tibet, Pakistan, Nepal and Afghanistan.
- The mountain range serves as a natural barrier, thereby restricting cold winds from the East as well as a strategic barrier against invasion by enemies.
- The Himalayan range forms an arc that runs over a length of 2,400 kilometers or 1,500 miles from northwest to southeast. On the west, the maximum width of the arc is 400 kilometers or 250 miles. On the eastern side, the width of the arc is 150 kilometers or 93 miles.



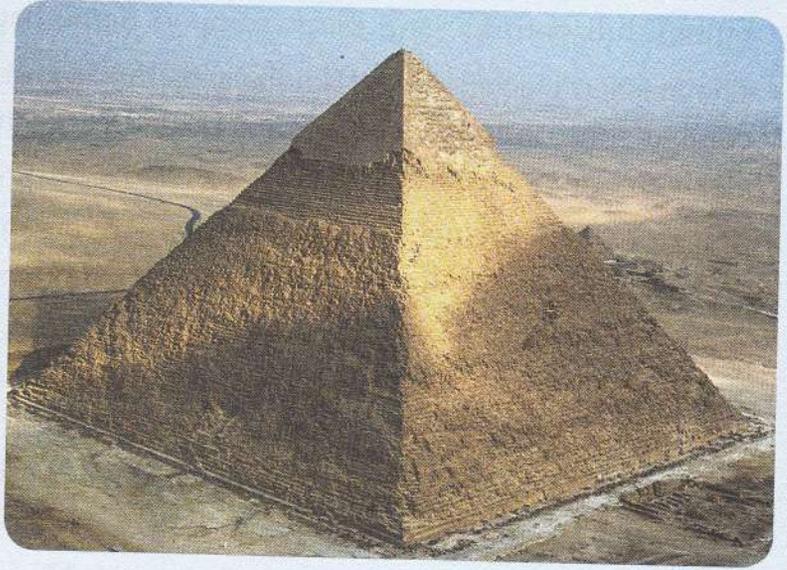
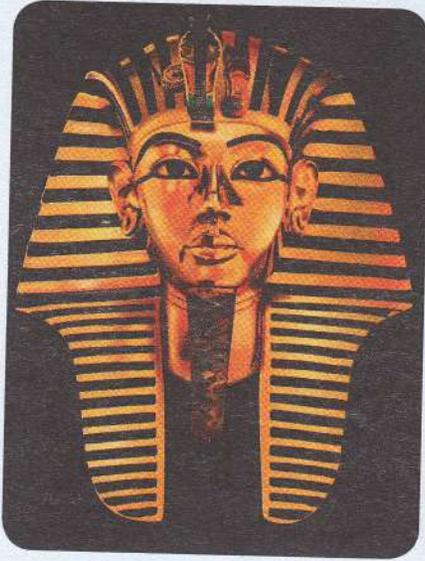
- River Sutlej and River Indus flow to the West of the Himalayan range while, River Brahmaputra flows to its East.
- Himalayas is home to several high peaks. In fact, among the 14 highest peaks in the world, 9 are in the Himalayas. Mount Everest, located in the Himalayas, is the highest peak in the world above sea level.
- The Himalayas is the home to world's some of the most exotic wildlife. Most notable of them being snow leopard, musk deer, Tibetan sheep, wild goat,

red panda, etc. Technically, the giant pandas also live in the Himalayas. Some exotic birds also call the Himalayas as their homes. Some of the most notable exotic birds are graybushchat, brown rock chat, verditer flycatcher, *Himalayan bulbul*, *hill partridge* and *black rumped flame back woodpecker*.

- The Siachen glacier in the Himalayas is the largest glacier. It is also the highest combat zone on the globe. Soldiers posted in Siachen have to survive in minus 60 degree temperature and very low levels of oxygen.
- The Himalayas are the birthplace of many rivers in India. The major Himalayan rivers are the Indus, Jhelum, Chenab, Beas, Ravi, Sutlej, Ganga (or the Ganges), Yamuna, and Brahmaputra.
- Some of the major rivers of the world, namely the Indus river, the Ganges and Brahmaputra, and river Yangtze originate from the Himalayan range. It is also believed that these Himalayan rivers are older than the Himalayan peaks itself.
- Most of the top tourist places in India like Manali, Almora, Tawang, Shimla, Nainital, etc. are bordered by the foothills of the Himalayas in India.
- For many of us, Himalayas are the path to adventure, trek, peace and glory.



ANCIENT EGYPT



- Ancient Egyptians had a complex social hierarchy that divided each family into social classes that they were given birth into.
- They believed that it was important to communicate and record information about religion and government and hence they invented scripts.
- The Egyptian alphabet contained more than 700 hieroglyphs.
- Ancient art and architecture of Egypt was built by stone.
- It is said that as soon as a pharaoh was named, his tomb was built. The quality of the tomb depended on the time that a pharaoh ruled. The longer their reign, the fancier their tomb.
- Ancient Egyptians believed in more than 2,000 deities! They had gods for everything, from dangers to chores! Each had different responsibilities and needed to be worshipped so that life could be kept in balance.
- The Pyramid of Khufu at Giza is the largest Egyptian pyramid. This incredible structure weighs as much as 16 Empire State buildings.
- Cats were considered to be a sacred animal by the Ancient Egyptians. It is thought that most families kept a cat as a pet, which they believed would bring the household good luck.
- The Ancient Egyptians invented lots of things we still use today, such as paper, pens, locks and keys, etc.



PRACTICE PAPER-I

(Based on Complete Syllabus)

Total Marks: 80

Time: 2 Hours

I. Choose the correct option to answer the following questions: (1 × 10)

- Who were Indo-Aryans?
(a) Indian natives (b) Aryans who settled in India
(c) Americans who settled in India (d) Indians who settled abroad
- What are Archaeological sources?
(a) Inscriptions and monuments (b) Books and coins
(c) Ornaments (d) Both (a) and (b)
- In which hemisphere Antarctica lies completely?
(a) Northern (b) Western (c) Eastern (d) Southern
- Who gives help and support to block samiti and gram panchayat?
(a) Zila parishad (b) State Govt
(c) Central Govt (d) Municipality
- What is the path of a planet around the sun called?
(a) Rotation (b) Orbit (c) Spin (d) Axis
- Bindusara was the son of
(a) Chandragupta (b) Ashoka (c) Brihadratha (d) Kautilya
- What is the meaning of community?
(a) A group of people living together
(b) A person who lives alone
(c) A group of people who work in the same place
(d) People of same religions
- In which state Kaziranga National Park has been set up?
(a) Sikkim (b) Assam (c) West Bengal (d) Andhra Pradesh
- What is the role of rural administration?
(a) Providing education (b) Maintaining law and order
(c) Maintaining land records (d) Both (b) and (c)
- Brahmacharya, Grihastha, Vanaprastha and Sanyasa are the different stages of life which are also known as:
(a) Varnas (b) Religions
(c) Ashramas (d) None of the above

II. State True or False.

(1 × 10)

1. The moving air is called oxygen.
2. Charaka was expert in Medicine.
3. Egyptian Civilisation came up on the banks of river Ganga.
4. Women's Day is observed on 7th July every year.
5. The phrase 'Unity in Diversity' was coined by Pandit Nehru.
6. Europe and Asia together are called Romania.
7. Sage Valmiki composed the epic the 'Ramayana'.
8. Yajur Veda is the earliest veda.
9. Sandalwood trees are found in Sunderbans.
10. Zila Parishad is the body of district level.

III. Fill in the blanks by choosing the correct option.

(1 × 10)

1. The gram panchayat is elected every
(a) 5 years (b) 3 years (c) 6 years (d) 4 years
2. Two books that tell us about the Mauryan dynasty are and
(a) Mahabharata and Ramayana (b) Rig Veda and Sam Veda
(c) Arthashastra and Indika (d) Mahabharata and Bhagavad Gita
3. Buddha's main teachings cover noble truths.
(a) four (b) five (c) six (d) eight
4. A line of mountains is called a
(a) Plateau (b) Layer (c) Range (d) Peak
5. The local self-government in urban areas like Delhi, Kolkata, and Mumbai are known as
(a) Nagar Panchayat (b) Municipality
(c) Panchayat (d) Block
6. The western part of the central highlands is known as
(a) Malwa plateau (b) Deccan plateau (c) Anai Mudi (d) Eastern Ghats
7. The two great cities of the Indus valley culture to be excavated were that of and Mohenjodaro.
(a) Rangpur (b) Lothal (c) Harappa (d) Citadel
8. The prehistoric age is known as
(a) Copper age (b) Stone age (c) Bronze age (d) Metal age

9. The southern part of Asia is surrounded by
 (a) Indian Ocean (b) Pacific Ocean (c) Arctic Ocean (d) Atlantic ocean
10. Elections are held every years in our country for both the central and state legislatures.
 (a) five (b) three (c) seven (d) six

IV. Answer the following questions in 20-30 words.

(2 × 5)

1. Write two main characteristics of plains.
2. What is meant by the term 'Upanishads'?
3. List two functions of Gram Panchayat.
4. State the meaning of the term Equinox.
5. What are the different types of Government?

V. Answer the following questions in 50-60 words.

(4 × 5)

1. Write a short note on the temperate zones.
2. How is a Municipal Corporation different from a Municipality?
3. Discuss about the administration and art and architecture during the Satavahana Dynasty.
4. Write a short note on the social life of the Aryans.
5. How does revolution affect changes in the length of days and nights?

VI. Match the words written under column A with column B.

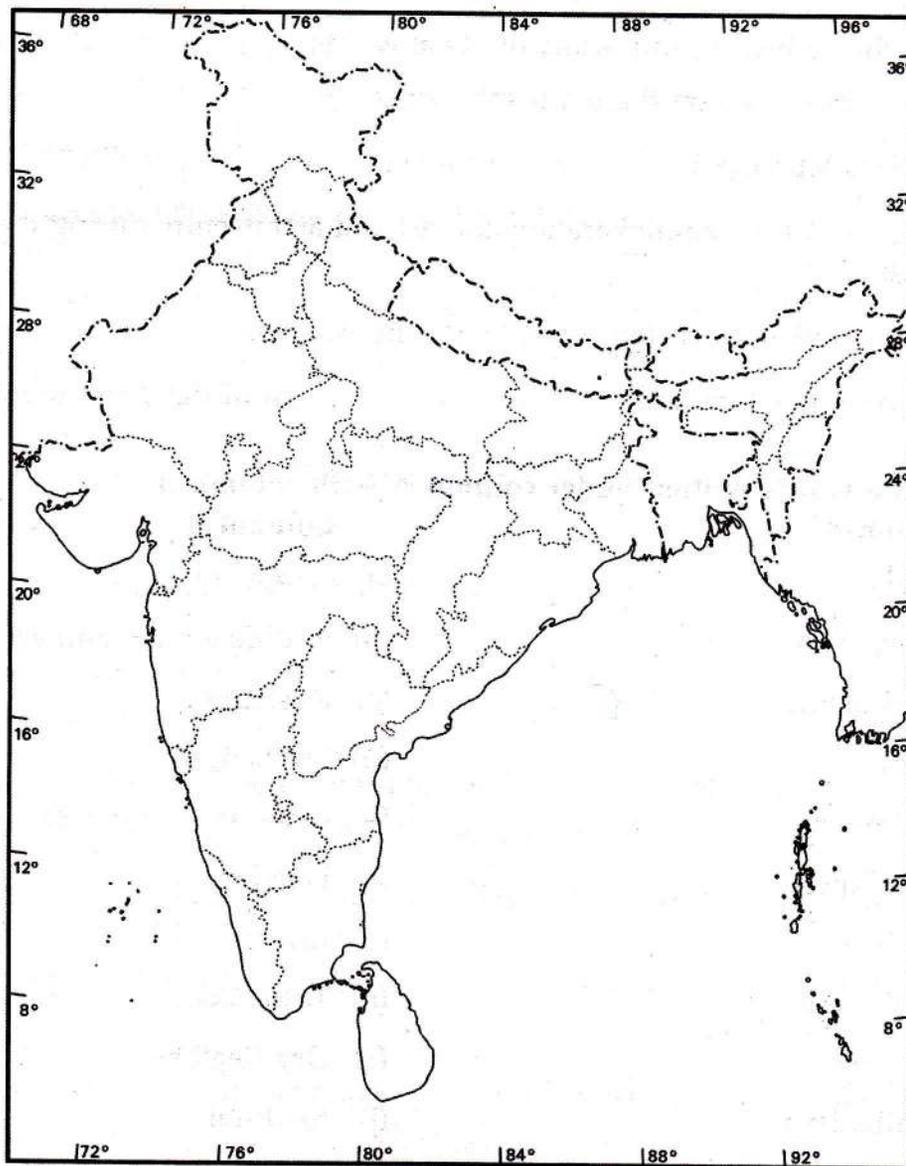
(1 × 10)

- | Column A | Column B |
|---------------------|--|
| 1. Tsangpo | (a) Gandhara |
| 2. Meenakshi Temple | (b) to differentiate and act adversely |
| 3. School of Art | (c) Kusharas |
| 4. Liberty | (d) Priviledge |
| 5. Discriminate | (e) Laws and Principles |
| 6. Thorn Forest | (f) Freedom |
| 7. Kanishka | (g) River |
| 8. Constitution | (h) Tirthankara |
| 9. Monopoly | (i) Dry Regions |
| 10. Rishathadeva | (j) Madurai |

VII. On the given map of India, mark the following:

(1 × 10)

1. Magadha
2. Vaishali
3. Nilgiri Hills
4. Delta of Ganga – Brahmaputra
5. Areas of Tidal Forests
6. Capital of Kanishka's empire
7. City where the Great Stupa is located
8. State which experiences maximum rainfall
9. National capital of India
10. Roof of the world





PRACTICE PAPER-II

(Based on Complete Syllabus)

Total Marks: 80

Time: 2 Hours

I. Choose the correct option to answer the following questions: (1 × 10)

- How does representative democracy form the government?
 - by a small group of educated people
 - by the elected representatives of the people
 - by a king advised by his minister
 - by a military ruler
- By which mountains Europe and Asia are separated?
 - Alps
 - Ural
 - Andes
 - Himalayas
- Why does snow fall in north mountains during winter season?
 - due to eastern disturbance
 - due to western disturbances
 - due to climatic change
 - due to cold breeze
- Religious teachers of Jainism who preached before Mahavira were known as
 - Svetambaras
 - Digambaras
 - Tirthankaras
 - Both (a) and (b)
- What does the term "soma" mean?
 - A drink prepared from milk
 - A drink prepared from fruits
 - A drink prepared from sugarcane
 - Alcohol
- What is the full form of UNESCO?
 - Union Nations Education and Socio-Cultural Organisation
 - United Nations Education and School-Cultural Organisation
 - United Nations Educational, Scientific and Cultural Organisation
 - United Nations Educational and School-Cultural Output
- What is the significance of constitution to the citizen?
 - fundamental duties
 - fundamental rights
 - directive principles
 - All of the above
- How can we find the north direction?
 - with the help of Sun
 - with the help of Pole Star
 - with the help of Moon
 - with the help of Asteroids

9. Why did earliest cities come up on the banks of rivers?
 (a) The land near the river was fertile (b) People could swim in the river
 (c) People could worship in river (d) None of the above
10. Who was a powerful ruler of Magadha?
 (a) Ajatashatru (b) Anga
 (c) Bimbisara (d) Mahendravarman

II. State True or False.

(1 × 10)

1. Anga, Magadha and Kashi are some of the Mahajanapadas.
2. Kautilya was also known as Chandragupta.
3. Tides are caused due to regular movement of water.
4. The industry is the administrative organ of the state.
5. Ebony tree is found in the tropical rainforest of India.
6. In democracy there should be tolerance for others.
7. Karikala was the most famous king of Cheras.
8. Local time of a place is based on the latitude of the place.
9. Chairperson presides the periodical meetings of the Municipalities.
10. Man became the producer of food during Mesolithic period.

III. Fill in the blanks by choosing the correct option.

(1 × 10)

1. About percent of the population of our country lives in towns and cities.
 (a) 35 (b) 25 (c) 45 (d) 55
2. The temperature of the ocean water generally from the equator.
 (a) increases (b) decreases (c) regulates (d) none of these
3. lies between the Tropic of Cancer and the Arctic Circle.
 (a) South Temperate Zone (b) North Temperate Zone
 (c) Torrid Zone (d) Frigid zone
4. has established the first ever empire in the history of India.
 (a) Shakyas (b) Buddha (c) Guptas (d) Mauryans
5. When people act on the basis of their prejudices they are
 (a) denying (b) discriminating (c) restricting (d) accepting
6. The society was divided into the of merchants and the labourers.
 (a) slaves class (b) executive class
 (c) ruling class (d) administrative class
7. The period before the invention of writing is known as
 (a) history (b) pre-history (c) post-history (d) mid-history

8. Revolution is called the of the earth.
 (a) monthly motion (b) daily motion
 (c) annual motion (d) weekly motion
9. The role of the citizen becomes extremely in a democracy.
 (a) useless (b) redundant (c) important (d) unimportant
10. Our National Song was written by
 (a) Sharat Chandra (b) Bankim Chandra Chattopadhyay
 (c) Sarojini Naidu (d) Rabindra Nath Tagore

IV. Answer the following questions in 20-30 words. (2 × 5)

1. What tools and ornaments were used during Chaleolithic age?
2. What are the various occupations of rural people, besides agriculture?
3. List two features of Nyaya Panchayat.
4. State the importance of plateau.
5. State any two principles of dhamma.

V. Answer the following questions in 50-60 words. (4 × 5)

1. Why is participation of women important in the local government?
2. Give a brief account on Chandragupta I.
3. How does rotation of earth affect formation of days and night?
4. Write a short note on sketch.
5. How did Fa-Hien depict the people of India in his book?

VI. Match the words written under column A with column B. (1 × 10)

- | Column A | Column B |
|--------------------|----------------------------------|
| 1. Navratnas | (a) Fa Hien |
| 2. Globe | (b) Mahabalipuram |
| 3. Ratha temple | (c) Ooty |
| 4. Udagamandalam | (d) Kalidas |
| 5. Chinese pilgrim | (e) Stories |
| 6. Biosphere | (f) A model of the Earth |
| 7. Franchise | (g) Party with majority of seats |
| 8. Jataka tales | (h) Sandy and rocky |
| 9. Ruling Party | (i) Right to vote |
| 10. Thar Desert | (j) Sphere of living organisms |

VII. On the given map of India, mark the following:

(1 × 10)

1. Aravalli Hills
2. Area under the control of Kushana Empire
3. A very hot and dry state
4. Kalinga
5. Areas of Thorn Forests
6. Kapilavastu
7. Sunderbans
8. Tropic of cancer
9. Bodhgaya
10. Nalanda

