

1. The Earth in the Solar System

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. The Universe began with a Big Bang.
2. 150 million km.
3. Mercury.
4. The Crescent phase.

Written Assignment

B. 1. b 2. c 3. b 4. c 5. a

C. 1. celestial 2. bulges 3. American; 1969 4. gases 5. dirty

D. 1. (d) 2. (a) 3. (e) 4. (c) 5. (b)

E. 1. A star is a self-luminous body, which has its own heat and light.

Planets (meaning 'wanderer') are those heavenly bodies which revolve around the Sun and rotate around their axes. They do not have their own heat and light.

2. When a meteoroid comes close to the Earth and falls through the atmosphere, it is called a meteor.

Some members of the Solar System make a brief but flashy appearance in the night sky. They are known as shooting stars. The shooting stars are actually meteoroids.

3. Asteroids are rocky objects of irregular shapes and sizes that revolve around the Sun, mostly between the orbits of Mars and Jupiter.

A comet is a mass of rocks and frozen fluids revolving in an orbit around the Sun.

4. A galaxy is a large system of stars and may have hundreds of billions of stars.

Asteroids are rocky objects of irregular shapes and sizes that revolve around the Sun.

F. 1. The family of the Sun is called the Solar System. It has the Sun, 8 planets and about 100 known satellites, asteroids, comets and meteors.

2. A galaxy is a large system of stars. It may have hundreds of billions of stars.

3. Light travels at a speed of 300,000 km per second and covers about 9460 billion km in one year. This distance is treated as one unit and called a Light Year.

4. Mercury, Mars, Venus, Earth, Neptune, Uranus, Saturn and Jupiter

5. The planets according to their distance from the Sun are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

6. The Earth is a unique planet in the Solar System because it supports life. The Earth is at a suitable distance from the Sun. Thus, it is neither too hot nor too cold. The rotation of the Earth around the axis keeps the maximum and minimum temperatures within tolerable limits that support life. Moreover, the presence of adequate water on the

Earth supports life on this planet. The presence of oxygen in the atmosphere is helpful for the survival of human beings and other forms of life on the Earth. The atmosphere also protects us from the harmful ultraviolet rays coming from the Sun. It is the only planet in the Solar System, which has suitable environment for the origin and growth of various life forms. Therefore, the Earth is a unique planet in the entire Solar System.

7. The Sun is a sphere of very hot gases. It is the largest member in the Solar System. The Sun is at the centre of the Solar System and thus, its gravitational pull keeps all the members of the Solar System together. The Sun is the main source of heat, light and energy on the Earth. All living beings need light, heat and energy to survive on the Earth. Therefore, the Sun is the source and preserver of all living things on the Earth.
8. The Moon is the only natural satellite of the Earth. It can be seen from the Earth because sunlight is reflected off its surface. Half of the Moon is always in light and the other half is in darkness. The appearance of the Moon changes, as it moves around the Earth. The changes in the visible shape of the Moon are known as the phases of the Moon.

The New Moon phase occurs when the Moon is between the Earth and the Sun. At this time, the dark side of the Moon faces the Earth. As the Moon revolves around the Earth, more of the lighted side becomes visible each evening. During this time, the Moon is said to be waxing.

The first visible phase of the Moon is the crescent phase. After about one week, half of the lighted side is visible. This phase is called the first quarter phase. Around the end of the second week, the Moon enters the full Moon phase. The gibbous phase is between the first quarter and the full Moon phases.

After the full Moon phase, the Moon begins to wane, or grow smaller. By the end of about three weeks, the Moon has gone through another gibbous phase and has reached the last quarter phase. During the last week, it goes through another crescent phase. Then it becomes a new Moon again. [Please refer to the picture, 'The Phases of the Moon' on Page No. 6.]

9. Life on the Moon is not possible because of several reasons. The Moon experiences extremes of temperature due to the absence of atmosphere. The Moon does not have water, wind, clouds and rain and thus, no weather. In the absence of air, there is no sound on the Moon. Thus, the existence of life in any form is not possible on the Moon.

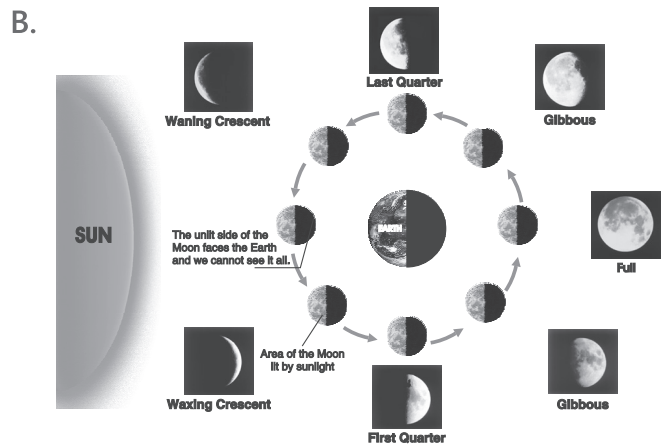
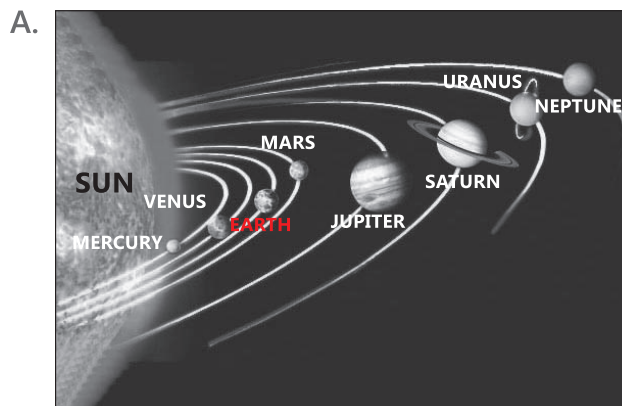
Think Tank

- G. 1. Pluto is very small and it has only a few characteristics of a planet, but not all the characteristic features. Therefore, Pluto is called a dwarf planet.
 2. The Moon, like the Earth, has two types of movements—spinning on its own axis and rotation. Moreover, the shape of the Moon is round. Due to all these, the Moon sometimes appears in parts (partial views) which are called phases. Due to these phases, the Moon appears in different shapes, every night.
 3. Meteors wander in the space. They have no fixed orbit. While wandering, they sometimes come close to the Earth and are pulled by the Earth's gravitational pull. Most of them get burnt in the atmosphere, but only a few are able to reach the surface, intact.
- H. 1. GALAXY 2. EARTH 3. URANUS 4. ASTEROIDS 5. COMETS

ANSWERS TO WORKSHEET 1

- A. 1. A large system of billions of stars seen in the sky is called a galaxy.
2. Light travelling 9460 billion km in one year, at a speed of 300,000 km per second, is one unit called a Light Year.
3. The outer layer of the sun is called the photosphere.
4. Titan is the second biggest moon of Saturn and has an atmosphere made up mainly of nitrogen.
- B. 1. asteroids; planetoids; asteroid belt 2. meteoroids 3. elliptical 4. Neptune; Uranus; twin
- C. 1. (e) 2. (d) 3. (b) 4. (c) 5. (a)

ANSWERS TO WORKSHEET 2



2. Latitudes and Longitudes

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. Latitude 2. Equator 3. 90°S 4. 111 km 5. 82½°E 6. Just below the Equator
7. 1883

Written Assignment

- B. 1. a 2. b 3. a 4. b 5. b 6. b

- C. 1. 23½°N 2. Prime Meridian 3. Antarctic Circle 4. Poles 5. world

- D. 1. The local time of a place is determined when the Sun is highest in the sky and the shadows are the shortest. This is treated as noon time or twelve o'clock for that place. Big countries felt the need of maintaining a single time for the whole country. This will be helpful in keeping simple timetable for the railways, airways, etc. So, the local time of a meridian that passes through the middle of the country is considered the Standard Time.

2. The circles on both the sides of the Equator are called the parallels of latitudes.

The semi-circles from the North Pole to the South Pole are called the Meridians of longitudes.

3. India has selected 82½°E as its Standard Meridian. The local time of this meridian is now treated as the Indian Standard Time (IST), which is 5½ hours ahead of the Greenwich Mean Time (GMT).

According to an international agreement, the meridian which passes through the Greenwich Observatory near London, was taken as the starting point and was marked as 0° meridian. This meridian is also called the Prime Meridian or Greenwich Meridian.

- E. 1. The circles on both the sides of the Equator are called the parallels or latitudes marked in degrees.

2. The semi-circles from the North Pole to the South Pole are called the meridians or longitudes.

3. A Heat Zone is the division of the Earth based on the important parallels that annually receive an amount of heat from the Sun. [Please refer to the picture 'Heat Zones of the Earth' on Page No. 12 of Srijan Social Sciences 6.]

4. All nations have agreed to change the date at 180° meridian of longitude. This meridian is called the International Date Line.

- F. 1. On the 21st of June.

2. Importance of International Date Line: The Earth rotates on its axis from west to east and takes about 24 hours for completing one rotation. Thus, the Earth moves through 360° in about 24 hours or 15° in one hour, or 1° in 4 minutes. This helps to calculate time on the Earth. While calculating the time, there appears different times for different

places in a country and from one country to another country. The difference appears 24 hours between the first and the last Time Zone. It also means a difference of one calendar date. To avoid such confusion, all the nations have agreed to change the date at 180° meridian of longitude. This meridian is called the International Date Line. The International Date Line is the place where one calendar day ends and the next begins. When a traveller crosses the International Date Line, the time remains the same but the date changes. When one goes west across the line, the date changes to the next day. When one goes east across the line, the date changes to the previous day.

3. While we cross one meridian towards the east, from 0° meridian, we add 4 (four) minutes. India has selected 82½°E as its Standard Meridian (Indian Standard Time). Therefore, $82 \times 4 = 328$ minutes + 2 minutes = $330 \div 60 = 5\frac{1}{2}$ hours. Since India is on the east of 0° meridian (Greenwich Mean Time), the Indian Standard Time is 5½ hours ahead of the Greenwich Mean Time (GMT).
4. Heat Zones on the Earth: The rays of the Sun do not fall vertically on all places on the surface of the Earth at a time. According to the amount of heat received and the divisions of the Earth based on the important parallels, the Earth can be roughly divided into the following three Heat Zones:
 - (i) The Tropical Zone or the Torrid Zone
 - (ii) The Temperate Zone
 - (iii) The Frigid Zone

The Tropical Zone or the Torrid Zone: The region lying between the Tropic of Cancer and the Tropic of Capricorn is called the Tropical Zone. Climatically this region is hot or torrid. Thus, it is also called the Torrid Zone. The Sun can be seen overhead at noon only in this region, twice a year.

The Temperate Zone: In between the hot Tropical and the cold Frigid Zones in both the hemispheres; two more heat zones are located, called the North Temperate Zone and the South Temperate Zone. These two together are called the Temperate Zones. These regions are neither too hot nor too cold, and enjoy a mild temperature.

The Frigid Zone: The region lying between the Arctic Circle and the North Pole in the Northern Hemisphere and between the Antarctic Circle and the South Pole in the Southern Hemisphere is called the Frigid Zone. The Sun rays are very oblique, when they strike this part of the world. Thus, this region is very cold. [Please refer to the picture, 'Heat Zones of the Earth' on Page No. 12 of Srijan Social Sciences 6.]

5. We can locate places on the Earth's surface by using the latitudes and longitudes of the place, or by calculating the difference between the GMT and the local time of that particular place.
6. **Time Zones:** The countries, such as USA or Russia, with a very large east-west extent, find it difficult to have one Standard Time. It becomes meaningless, as there is a difference of several hours between the local time of the Central Meridian and that of the easternmost or the westernmost meridians. To solve this problem, in 1883, an international system was set up to standardise the measurements of time. According to this system, the Earth is divided into 24 equal segments, called the Time Zones. The centres of bordering time zones are 15° of longitude apart. Clocks in a time zone are set to the local time at the centre of the zone. To accommodate the convenience of different countries, the exact boundaries of the time zones are somewhat modified according to the political boundaries of the countries concerned. Russia has as many as 9 Time Zones.

7. Since the Earth is almost a sphere, it has neither a beginning, nor an end line; neither has it a corner the nor a natural point from where we can measure relative positions of other points. Like a ball, the Earth does not have a top, bottom or sides that can be used as a 'landmark' to find the direction or location. However, the Earth turns around or rotates on its axis. The axis is an imaginary line passing through the Earth. The end points of axis are fixed and these points can be used as the starting or reference points on the Earth or a globe. A reference point is a fixed place from which directions or locations can be described. The ends of the Earth's axis are called the North Pole and the South Pole.

A globe shows a line drawn midway between the North Pole and the South Pole. This line is called the Equator. The Equator is an imaginary line that circles the Earth halfway between the North Pole and the South Pole. The Equator and the smaller circles drawn parallel to the Equator in the Northern and the Southern Hemispheres are called the Parallel of Latitude or the Parallels.

The semicircles which join the North Pole and the South Pole and also cut the parallels of latitude at right angles are called the Meridians of Longitude or the Meridians. [Please refer to the picture, 'The Equator and the axis of the Earth' on Page No. 10.]

Think Tank

- G. 1. The globe is too vast to learn at a time; therefore, a fixed reference is needed to locate a place. The reference points are the parallels and the meridians.
2. The Earth takes 24 hours to rotate on its axis. Therefore, the Earth is divided into 24 equal time segments, called the Time Zones. The centres of bordering time zones are 15° of longitude apart ($15^\circ \times 4$ minutes = 60 minutes = 1 hour). So, 24 time zones around the world mean a difference of 24 hours between the first and the last Time Zone.
3. Time in a (big) country varies from one part to other which may cause serious problems for the railways, air services, etc. To overcome this, the country needs a fixed time call the Standard Time.
4. Dhaka is situated towards the East of the GMT (London), therefore, time increases from the GMT. So, when it is noon at London, Dhaka is 6 hours ahead (6 pm) due to its position and standard time (90° E).
- H. 1. 6,353 km 2. Robert Peary 3. Reverse proportion
4. To study the heavenly bodies, i.e., the Sun, the stars, the planets, etc.

ANSWERS TO WORKSHEET I



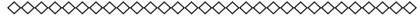
- A. 1. Latitudes 2. Meridians 3. Equator 4. Geoid 5. Torrid Zone 6. Prime Meridian
- B. 1. A perfect sphere is round, but a geoid is slightly flattened at the poles and bulges at the Equator.
2. The Earth's axis, which is an imaginary line, provides a reference point for the North and South Poles, fixing the points from which directions or locations can be described.
3. The three major heat zones on Earth are the following:
- (i) The Frigid Zones near the Poles, up to the Arctic and Antarctic Circles in the two hemispheres.
- (ii) The Tropical Zone, extending North and South of the Equator upto the Tropic of

Cancer in the North and the Tropic of Capricorn in the South.

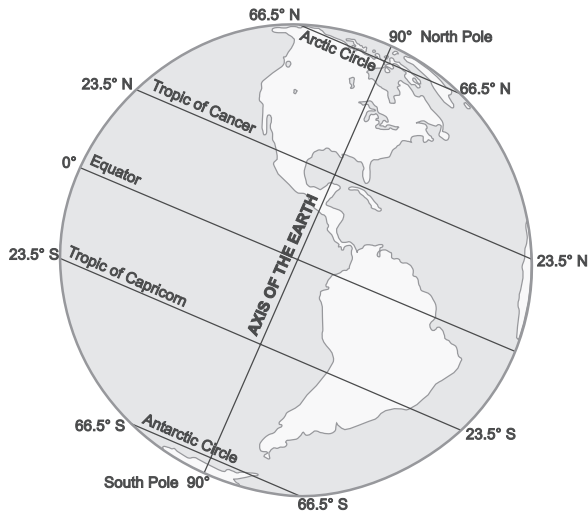
(iii) The Temperate Zones, lying between the Tropical and the Frigid Zones in the Northern and the Southern hemispheres.

C. 1. $23\frac{1}{2}^{\circ}$ N 2. $66\frac{1}{2}^{\circ}$ S 3. 0° 4. 90° N 5. $23\frac{1}{2}^{\circ}$ S

ANSWERS TO WORKSHEET 2



A.



B. On a map of the world mark only Greenwich Meridian; International Date Line; –5.5 hours Indian Standard Time [See map given on page 15.]

Students can consult an atlas to answer the questions.

3. Movements of the Earth

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. True 2. False 3. True 4. False 5. False

Written Assignment

- B. 1. b 2. d 3. a 4. c 5. c 6. c

- C. 1. elliptical 2. 0 km/hr 3. east; west 4. day and night 5. 21st March

- D. 1. The spinning of the Earth around its imaginary axis from west to east is called **rotation**. The Earth takes 24 hours (1 day) to complete one full rotation. The Earth takes $365\frac{1}{4}$ days to complete one full revolution.

The movement of the Earth around the Sun is called **revolution**.

2. The **Spring Equinox** occurs on the 21st of March. On this day, the Sun rays at noon time fall vertically on the Equator. The North Pole and the South Pole lie at an equal distance from the Sun on this day.

The **Autumn Equinox** occurs on the 23rd of September. On this day, it is Autumn or Autumnal Equinox for the Northern Hemisphere and **Spring Equinox** for the Southern Hemisphere. The days and nights are equal throughout the world.

3. The **Summer Solstice** occurs on the 21st of June, when the North Pole is inclined towards the Sun. The midday Sun is overhead on the Tropic of Cancer.

The **Winter Solstice** occurs on the 22nd of December, when the South Pole is inclined towards the Sun. The midday Sun is overhead on the Tropic of Capricorn.

4. The time when the Sun appears to rise is known as the morning time.

The time when the Sun appears to set is known as the evening time.

- E. 1. Axis 2. Noon 3. Morning 4. Rotation

- F. 1. The time taken by the Earth to complete one revolution around the Sun is about 365 days, 5 hours, 48 minutes and 45 seconds or about $365\frac{1}{4}$ days. This is known as a year. For convenience, we consider that a year has 365 days.

To accommodate the additional one-fourth day of each year, every fourth year (divisible by the number 4) is taken as a leap year of 366 days, instead of a normal year of 365 days. In a leap year, the month of February has 29 days, instead of the usual 28 days.

2. The phenomenon of seasons is the combined result of the following four factors:

- (i) Rotation of the Earth on its axis
- (ii) Revolution of the Earth around the Sun
- (iii) Inclination of the Earth's axis
- (iv) Variations in the length of day and night

The Earth is closest to the Sun when the Northern Hemisphere is experiencing the winter season. It is farthest from the Sun when the Northern Hemisphere is experiencing the summer season. Thus, the Earth's distance from the Sun is not the cause of seasons. The variations in the length of day and night are the direct result of the inclination

of Earth's axis. The Earth's axis is perpendicular to the plane of the Earth's orbit that affects the length of days and nights on the Earth. This is one of the reasons for the phenomenon of seasons also. [Please refer to the pictures of 'Summer Solstice', on Page No. 21 and 'Winter Solstice', 'Spring Equinox' and 'Autumn Equinox' on Page No. 22 of Srijan Social Sciences 6.]

3. The following are some effects of the rotation of the Earth:

- (i) The rotation of the Earth is from west to east. Thus, we observe that all other heavenly bodies move from east to west. We notice that the Sun rises in the east and sets in the west. We also experience the same phenomenon, while travelling in a train. We do not notice the train moving forward, but the nearby things like trees, houses, electric poles, etc., appear to move backward, or in the opposite direction.
- (ii) The occurrence of day and night on every place on the Earth is also due to the rotation of the Earth. Only half of the Earth can face the Sun at a time. The part of the Earth facing the Sun experiences day, while the remaining part has night. This also explains the rising of the Sun in the east and its setting in the west.
- (iii) The rotation of the Earth gives rise to the concept of time. The time when the Sun appears to rise is the morning time; and the time when the Sun is overhead, is the noon time. The time when the Sun appears to set is known as the evening time.
- (iv) The rotation of the Earth has also caused the bulging of the Earth near the Equator and flattening near the Poles. Thus, the Equatorial diameter is longer than the Polar diameter by about 44 km. This is due to the speed of the Earth's rotation, which is the highest along the Equator and the lowest on the Poles.
- (v) The regular occurrence of high tides and low tides, twice a day is also due to the rotation of the Earth. The progressive westward movement of the tides can be explained by the rotation of the Earth.
- (vi) We notice that a moving body, or wind or the ocean current is deflected towards its right in the Northern Hemisphere and towards its left in the Southern Hemisphere. This is also due to the rotation of the Earth on its axis.

4. The revolution of the Earth around the Sun causes variations in the length of the day and night and the distribution of heat over the Earth's surface. The occurrence of different seasons is the most significant effect of the revolution of the Earth around the Sun.

5. The phenomenon of seasons is the combined result of the rotation of the Earth on its axis, the revolution of the Earth around the Sun, and the inclination of the Earth's axis and the variations in the length of the day and night.

The Earth is closest to the Sun when the Northern Hemisphere is having the winter season. It is farthest from the Sun when the Northern Hemisphere is having the summer season. Thus, the Earth's distance from the Sun is not the cause of seasons. The variations in the length of day and night are the direct result of the inclination of the Earth's axis. The main reason for the phenomenon of seasons is the inclination of the Earth's axis.

Four positions of the Earth during its revolution around the Sun are known by specific names and are in two pairs:

- (i) The Summer Solstice
- (ii) The Winter Solstice
- (iii) The Spring Equinox
- (iv) The Autumn or Autumnal Equinox

[Please refer to the pictures of the 'Summer Solstice', Page No. 21 and 'Winter Solstice', 'Spring Equinox' and the 'Autumn Equinox' on Page No. 22 of Srijan Social Sciences 6.]

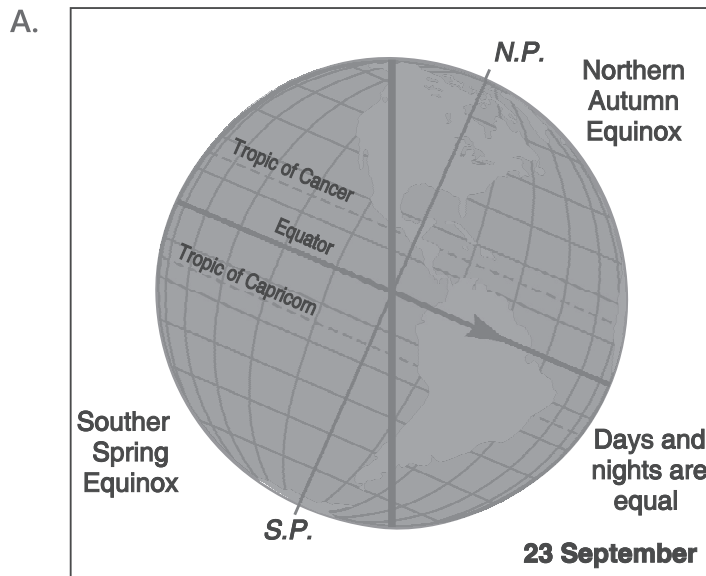
Think Tank

- G. 1. The poles of the Earth are two points and they are flattened. Therefore, the speed decreases from the equator towards the poles.
2. The Earth moves from west to east on its orbit.
3. The Earth is inclined on its axis making an angle of $23\frac{1}{2}^\circ$. Therefore, the time is not the same all over the Earth.
4. Refer to the Answer of F-5.
- H. 1. MORNING 2. AXIS 3. ORBIT 4. SPRING

ANSWERS TO WORKSHEET 1

- A. 1. True 2. False 3. True 4. False 5. False
B. 1. (b) 2. (a) 3. (b) 4. (b) 5. (a)
C. 1. 366 days 2. 3rd January 3. 24 hours 4. Rotation

ANSWERS TO WORKSHEET 2



- B. [A diagram showing the Sun in the centre with an elliptical orbit around it; the Earth tilted on its axis, and two arrows—one showing the movement of rotation near the Earth from west to east—label 'rotation'; the second showing the Earth moving along the ellipsis in orbit—label 'revolution']
- C. Students may refer to Srijan Social Sciences 6 and an atlas to find the diagrams.

4. Globes and Maps

ANSWERS TO ASSESSMENT CORNER



Oral Assignment

- A. 1. False 2. False 3. True 4. True

Written Assignment

- B. 1. d 2. d 3. c 4. b 5. a

- C. 1. top 2. universally 3. topographical

- D. 1. To show the details of the Earth's surface, we use maps. Maps are drawings of the Earth on a flat surface.

2. A globe is the most appropriate model of the Earth. It is round like the Earth and shows all the continents and oceans in their true shapes and sizes.

3. Maps are smaller than the region they represent. To establish the relationship between the distance on a map and the distance on the Earth, a map maker or cartographer draws a map to scale. Scale is the ratio between the map distance and the ground distance. On a map, the scale can be expressed in many ways. Some of them are the Verbal Scale or Verbal Statement, Representative Fraction (RF) and the Linear Scale.

- E. 1. Physical Map 2. Cartography 3. Linear Scale

- F. 1. A globe is the most appropriate model of the Earth. It is round like the Earth and shows all the continents and oceans in their true shapes and sizes. Therefore, it is called the replica of the Earth.

2. Physical maps show the physical features, such as mountains, plateaus, peaks, rivers, volcanoes, plains, seas, oceans, etc., of the Earth. These are also called the relief features.

3. A thematic map is also called a distribution map.

4. All maps should show direction, with an upright arrow mark in the upper right hand corner. The tip of the arrow is marked with 'N' which indicates the 'North' direction. Some maps also show direction with the help of a 'compass'. The four main directions are the north, south, east and west. These are also called the four cardinal points of the compass. We can also mark the intermediate directions such as the North-East, the South-East, the North-West and the South-West. If nothing is given, then the North is usually the top of the map.

5. It is practically impossible to show all the physical features, climatic conditions, distribution of natural resources, etc., on maps, which are generally small in size. For this reason, map makers use symbols or signs on the maps. These are given in the form of a Legend or Key.

6. Political maps are usually small-scale maps and show the international or provincial boundaries. These are important maps, as they are widely used for representing

economic, cultural and historical information. Capital cities or other large cities are always marked on a political map.

- On a map, the scale can be expressed in many ways. Some of them are the Verbal Scale or Verbal Statement, the Representative Fraction (RF) and the Linear Scale.

Verbal Scale or Verbal Statement: In this type of scale, the units of measurement are given. Suppose, the given scale on a map is 1 cm: 10 km. This means a distance of 1 cm between any two points on a map is equal to a distance of 10 km on the ground between the same two points. The process is very simple.

Representative Fraction (RF): In this type of scale, the units of measurement are not given and the ratio is given in the form of a fraction. Suppose, the RF is 1/10000. Here, the numerator, 1 is the map distance while the denominator, 10,000 is the corresponding ground distance. The map distance is always 1. We can give some units for measurement of map distance and ground distance. This type of scale can be used universally. The process is comparatively tougher than the Verbal Statement. It needs calculation to determine the distance.

Linear Scale: In this type of scale, a straight line is used for showing the map distance and the length of line also shows the ground distance. The main line is divided into a number of parts for its convenient use. This scale shows the map distance directly and the corresponding value of the ground distance. This process is also simple.

- The basic or the essential elements or components of a map which provide certain vital information are the title, directions, scale, legend and the grid system.
- A map is easy to carry and it also shows the very minute details of a particular place, while globes cannot do so.

10.	Sketch	Plan	Map
	A sketch is a rough drawing of an area.	A plan is a drawing of a very small area, say a house or a school building.	A map represents the Earth as a whole, or a part of it on a flat surface.
	A sketch generally has no scale.	A plan is always drawn according to the chosen scale.	A map is always drawn according to a chosen scale.
	Signs and symbols are not used.	Plans are drawn on a large scale.	A map shows a large area on a small scale.
	It is actually a rough representation of an area.	A plan shows a small area with almost every detail.	To show different features, different maps are used.

Think Tank

- Geography is the study of the Earth. The Earth is too vast to study practically in a short while. In this case, a map or a globe represents the whole, or a part of the Earth in a detailed manner and in a very easy way.
 - The legend of a map is its title. It says what the map is all about. In other words, a legend tells the 'story of a map'.

3. Since the Earth is very big, we cannot handle it so easily. Therefore, we need a model of the Earth called a globe.

H. 1. SCALE 2. VERBAL SCALE 3. PLAN 4. POLITICAL MAP

ANSWERS TO WORKSHEET 1



- A. 1. A globe is bulky and does not show the Earth's surface in detail.
- 2. An accurate map needs to show directions clearly, the correct shape of the landmasses and water bodies and the relative sizes of each of the areas.
- 3. A Verbal Scale gives the unit of measurement, for instance in centimetres and kilometres; whereas Representative Fraction or RF does not give such units.
- 4. Large-scale maps show a small area in great detail whereas small-scale maps cover a large area with fewer details.
- 5. Topographical sheets are very large-scale physical maps used for finding suitable sites for settlements, construction of roads and railways, development of multi-purpose projects and economic planning.

ANSWERS TO WORKSHEET 2



A. Do it yourself.

5. Realms of the Earth

ANSWERS TO ASSESSMENT CORNER



Oral Assignment

- A. 1. Asia 2. Africa 3. Antarctica 4. Africa 5. Nitrogen

Written Assignment

- B. 1. a 2. c 3. c 4. a 5. a 6. b 7. a 8. b

- C. 1. hydrosphere 2. plateau 3. third 4. Europeans; Negroes 5. reduces

- D. 1. c 2. a 3. e 4. b 5. d

- E. 1. Asia, Africa, North America, South America, Antarctica, Europe and Australia
2. Pacific Ocean, Atlantic Ocean, Indian Ocean and Arctic Ocean
3. India, Pakistan, Afghanistan, Nepal, Bhutan, Bangladesh, Sri Lanka and Maldives
4. Troposphere, Stratosphere, Mesosphere, Thermosphere and Exosphere
5. Himalayas, Mt Kilimanjaro, Rockies, Andes Mountains, Elbrus or Elbruz and the Great Dividing Range
6. Nitrogen, oxygen, argon, carbon dioxide, hydrogen, helium, neon and ozone
- F. 1. Europe is located in the centre of the Northern Hemisphere. It lies between 36°N to 72°N latitudes and from about 10°W to 60°E longitudes. Europe is surrounded by the Arctic Ocean in the north, the Atlantic Ocean in the west, and the Mediterranean Sea in the south. In the east, it is separated from Asia by the Ural Mountains, the Caucasus Mountains and the Caspian Sea.
2. Africa was once called the Dark Continent, as a major part of its interior remained unknown to the outside world.
3. Almost the entire continent of Africa appears to be one huge plateau, which is higher in the south and the east. The highest mountain peak of Africa, Mt Kilimanjaro is located near the Equator. One of the special features of Africa is its Great Rift Valley. About one-third of Africa is the desert land. Sahara is the largest desert in the world and Nile is the longest river in the world.
4. Since the ancient times, there has been a close relationship between man and oceans. Thousands of years ago, man learnt to turn the sea from an obstacle into a vast resource. Some uses of the oceans are as under:
(i) Oceans provide large amounts of freshwater through evaporation.
(ii) Oceans have a moderating influence on the climate of the coastal regions.
(iii) They help to transport bulky goods at low cost.
(iv) Oceans contain minerals and chemicals.
(v) Oceans are the main source of food through marine life.
(vi) The tidal waves can be used to generate electricity.
(vii) Common salt can be extracted in large quantities from sea water.
5. The atmosphere protects the Earth from the Sun's radiation. It acts as a huge filter for

the harmful ultraviolet radiation. It also prevents the Earth from becoming too hot during the day. It reduces the strong glare of the Sun, which is injurious to our eyes. Carbon dioxide and water vapour in the lower layers of the atmosphere absorb the heat radiated from the Earth and thus keep the atmosphere warm, even at night. The weight of the air exerts pressure. Any change in atmospheric pressure causes winds, which helps in the condensation of moisture in the air. Sound waves are transmitted through the air. That is why living beings are able to hear sound because sound requires a medium for transmission, such as air, water, etc.

6. The atmosphere is a mixture of gases. It also has water vapour, dust particles, salt particles and smoke. Nitrogen is the most dominant element, and it alone accounts for about 78 per cent of our atmosphere by volume. Oxygen comes next, forming about 21 per cent of the atmosphere by volume. These two gases alone account for about 99 per cent of the air or the atmosphere by volume and about 98 per cent by weight. They are confined to the lower layers only.

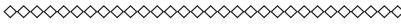
The other gases like argon, carbon dioxide, hydrogen, helium, neon, ozone, etc., form about one per cent by volume. The quality and quantity of dust particles, salt particles and water vapour vary not only from place to place, but also from time to time. On a wet, rainy day, there could be two or three times more water vapour in the air than there is on a dry day. Salt particles are found in the air mostly along the seashore. Among the main impurities in the air are carbon monoxide, smoke, chemicals, dust and micro-organisms.

7. The biosphere is the sphere of living organisms penetrating the lithosphere, hydrosphere and the atmosphere. The term 'biosphere' is always used in the joint context of the living organisms and the surface of the Earth. The biosphere, however, is a sphere of living organisms where the lithosphere, hydrosphere and the atmosphere meet and interact. It extends a little above and below the surface of the land and in water and air. The total thickness of the biosphere is about 24 kilometres. The living organisms in the biosphere vary in size from very small bacteria to huge trees, or very large mammals such as elephants and whales. It is because of the biosphere that these organisms are surviving on the Earth.

Think Tank

- G. 1. About 70% of the Earth is filled with water, which appears blue from space. Therefore, it is also called the Blue Planet.
 2. Antarctica is a continent of thick ice. Almost no vegetation grows there, though some animals and birds live there. Scientists carry out environment related research in Antarctica. No other human activities are carried out there.
 3. Imbalance in nature affects the flora and fauna which disturbs the ecosystem and gradually, it harms the environment.
 4. The word, 'aborigines' means 'original' or 'native' inhabitants. Scientists believe that modern men originated in Africa.
- H. 1. Russia 2. Kenya 3. Cairo 4. Arctic Ocean

ANSWERS TO WORKSHEET 1



- A. The four spheres making up the Earth are: (i) The Lithosphere, which is the crust of the Earth, the land mass or continents; (ii) The Hydrosphere, which consists of all the water bodies on the Earth, primarily the oceans; (iii) The Atmosphere, which is composed of layers of gases surrounding the Earth, protecting it and enabling life; (iv) The Biosphere, which forms the intersection of the other three spheres and supports living organisms.
- B. Asia: It is the largest continent, covering about one-third of the Earth's surface. It is surrounded by the Arctic Ocean in the north, the Pacific Ocean in the east and the Indian Ocean in the south. The Ural Mountains separate it from Europe. [This is illustrative and the students can write about any continent.]
- C. 1. biosphere 2. Bering Sea 3. Africa 4. Nile 5. Rockies; Appalachians 6. Pampas
7. Antarctica 8. Temperate Zone 9. Great Barrier Reef 10. largest; deepest
11. ridge 12. Indian 13. troposphere 14. ultraviolet radiation
15. greenhouse effect

ANSWERS TO WORKSHEET 2



A–B. Teacher may ask students to take help of an atlas as well as Srijan Social Sciences 6.

C. Draw the diagram given on page 44 of Srijan Social Sciences 6.

6. Major Landforms

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. The Himalayas 2. The Etna 3. The Deccan Plateau 4. Lowlands
5. North America
- B. 1. a 2. c 3. b 4. a 5. b
- C. 1. 600 2. Fold 3. block 4. plateau 5. erosional
- D. 1. Internal forces are natural and they work deep inside the Earth. Examples of such forces are earthquakes and volcanoes.
External forces are the forces that work on the Earth. Examples of such forces are rain, wind, etc.
2. Fold Mountains are generally made up of sedimentary rock layers folded due to compression.
Block Mountains have been formed due to horizontal tensional forces pulling in two different directions. The tensional forces cause blocks of crustal rocks to move along the faults. The movement can be upward or downward. Block mountains have steep slopes and nearly flat tops.
3. Erosional Plains are formed due to the denudation work on the mountains or plateau regions. These plains can be formed by rivers, glaciers, winds and sea waves. Such plain areas are never smooth.
Depositional Plains are formed by the filling of lakes and other depressions by the sediments, brought down by rivers, glaciers, winds, etc.
4. Piedmont Plateaus are those which are located at the foot of mountains or mountain ranges. These are generally not very high.
Continental Plateaus are generally very large and mostly surrounded by water bodies or vast plains.
- E. 1. Mountains are very important for us. Some of the salient features of the mountains are as follows:
(i) When mountains come in the way of moist winds, heavy rainfall can occur.
(ii) They do not permit hot or cold winds to enter.
(iii) The slopes of mountains have thick forests and rich grasslands.
(iv) Rivers originating, especially those from the snow-clad mountains, provide water almost throughout the year.
(v) Waterfalls in the hilly regions can be developed to generate hydroelectricity.
(vi) In the tropical areas, many health and tourist resorts have developed in the mountains, particularly in the valleys.
(vii) Many valuable minerals are often found in the mountains.
2. Fold mountains are generally made up of the sedimentary rock. They are formed when sedimentary rock layers get folded due to compression. Examples of fold mountains

are the Himalayas in Asia, the Alps in Europe, the Rockies in North America and the Andes in South America.

Block mountains have formed due to horizontal tensional forces pulling in two different directions. The tensional forces cause blocks of crystal rocks to move along faults. The movement can be upward or downward. Block mountains have steep slopes and nearly flat tops. Examples of block mountains include the Vosges in Europe, the Sierra Nevada in North America, the Salt Range in Asia.

3. As far as human civilisation is concerned, the plains are far more important than the mountains or the plateaus. Due to the levelled relief of the plains, almost all economic activities, such as agriculture, irrigation, industries, means of transport, etc., can be carried out smoothly in the plains. The soils are generally fertile. This makes agriculture easier and more profitable. Thus, more than 80 per cent of the world's population live in the plain areas.
4. Volcanic mountains are formed due to the accumulation of lava and other volcanic materials around the crater. Generally, the shape of volcanic mountains resembles a cone. The slope can be steep or gentle depending upon the composition of the lava. Examples of volcanic mountains are the Fujiyama in Japan, the Etna in Italy, the Kilimanjaro in Central Africa, the Cotopaxi in the Andes and the Rainier in North America.
5. Residual mountains are formed due to the wearing down of the surrounding land by external agents, such as rivers, glaciers and wind. The Nilgiri Hills in Tamil Nadu, the Catskill Mountains near New York and the Scottish Highlands in the United Kingdom are typical examples.
6. Depositional plains are formed by the filling of lakes and other depressions by sediments, brought down by the rivers, glaciers, wind, etc. The plains formed by river deposits are called alluvial plains, such as the Gangetic Plains in India. When the plains are formed by the glacial deposits, like in Canada, they are called the Drift Plains. When wind is the main agent of deposition, they are called the Loess Plains, as in north-western China.
Erosional plains are formed due to the denudation work on the mountains or plateau regions. These plains can be formed by rivers, glaciers, wind and sea waves. Such plain areas are never smooth. The Canadian Shield and the Siberian Plains are good examples of erosional plains.
7. Plateaus are very important for human beings. Here are a few significant points:
 - (i) Many minerals like iron, copper, silver, gold, mica and various types of precious stones are found in them.
 - (ii) Some plateau regions, particularly in the tropical areas are good for farming and the climate is also comfortable.
 - (iii) Many waterfalls are found in plateau regions, which provide suitable sites for the generation of hydroelectricity.
 - (iv) Some plateau regions, such as the Colorado Plateau in USA, attract millions of tourists from all over the world, every year.
8. Continental plateaus are generally very large and are mostly surrounded by water bodies or vast plains. They probably represent the original landforms, when the crust of the Earth was formed. The Deccan Plateau of India, the Australian Plateau and the

Southern Africa are good examples of the continental plateaus.

Lava plateaus are built by volcanic activity, especially by fissure flows. Lava plateaus are vast and they cover a huge area. Their thickness depends on the volcanic materials. The Malwa Plateau of India and the Columbia Plateau in USA are some examples this type of plateau.

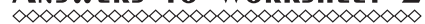
- F. 1. Depositional plains are formed by river deposits, and hence they are very fertile. Alluvial soil brought by rivers make the soil rich in minerals, for the growth of crops. Hence, this region has a thick population.
2. Mountains (below the snowline) are full of wild forests and animals. These forests are a valuable natural resource.
3. It is tough to build houses, bridges, roads, etc., on the hilly areas. Moreover, the hilly areas are not very fertile. Therefore, they are sparsely populated.
4. Plateaus are made up of lava which contain minerals.
5. The internal and external forces of the Earth constantly work here.
- G. 1. VOSGES 2. COLUMBIA 3. OCEANS 4. PIEDMONT 5. COLUMBIA

ANSWERS TO WORKSHEET 1



- A. 1. (f) 2. (h) 3. (g) 4. (j) 5. (i) 6. (e) 7. (b) 8. (c) 9. (d) 10. (a)
B. 1. (b) 2. (a) 3. (b) 4. (a) 5. (b)

ANSWERS TO WORKSHEET 2

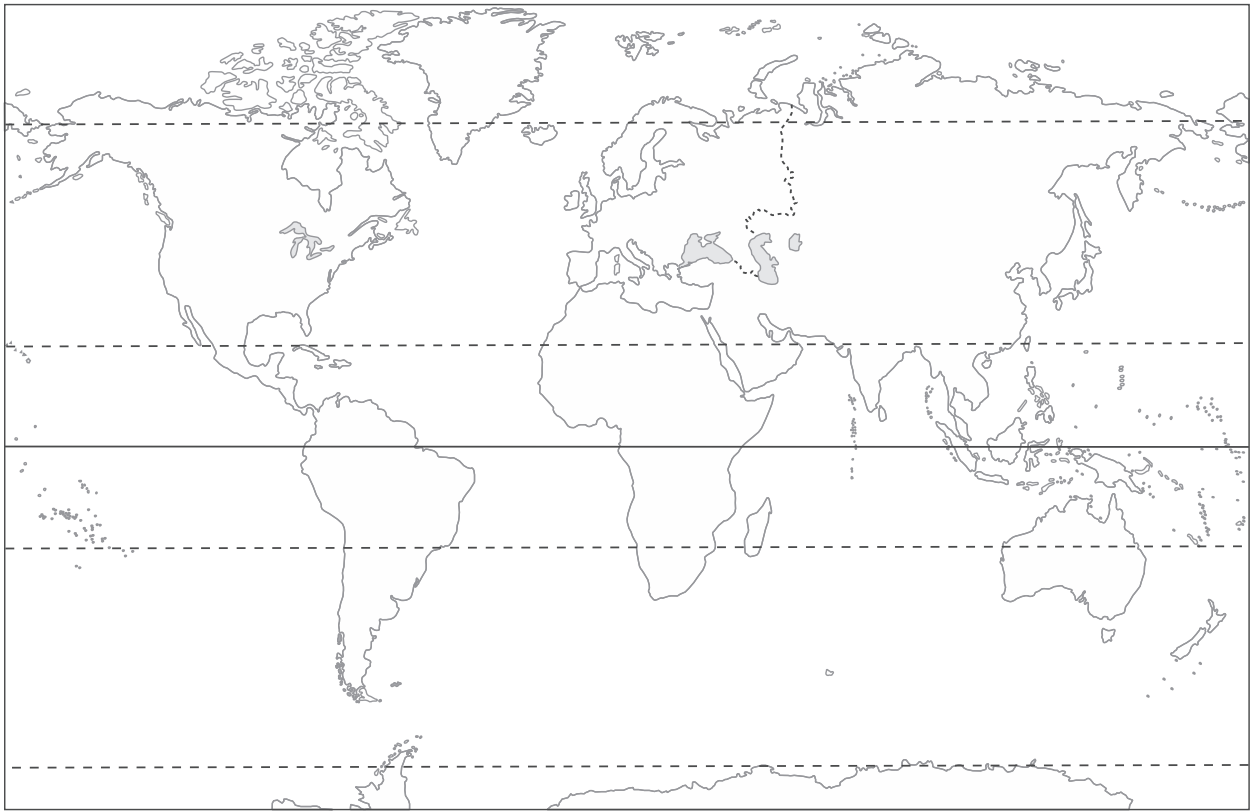


A.



Students may draw the mountains based on the pictures on pages 49 and 50 of Srijan Social Sciences 6.

B.



Students may locate the landforms in their atlas or Srijan Social Sciences 6 and mark them on the map.

7. India – Location and Physical Features

ANSWERS TO ASSESSMENT CORNER



Oral Assignment

A. 1. True 2. False 3. False 4. True 5. True 6. True

B. 1. d 2. d 3. c 4. a 5. d 6. b 7. c 8. c

C. 1. 15,200 2. 7000 3. Tibet 4. Kerala 5. Aravalli 6. lake

D. 1. States are governed by the State Governments elected by the people of those states.

Union Territories are governed by the Central Government.

2. **The Himadri:** The Himadri is in the extreme northern part of the Himalayas. The Himadri remains covered with snow almost throughout the year. This part is the highest and has many mountain peaks which are more than 8,000 metres above the sea level. Mt Everest, 8,848 metres high, is the highest peak in the world. Mt Kanchenjunga, 8,598 metres high, is the highest mountain peak in the Indian Himalayas.

The Himachal: The Himachal is towards the south of the Himadri. The Himachal is separated by deep river valleys. It is lower in height, but it receives regular snowfall in the winter season. The main mountain ranges in the Himachal are the Pir Panjal, Dhaola Dhar, Nag Tibba, Mahabharat Lekh, etc.

3. **Western Ghats:** Towards the west of the Deccan Plateau are the Western Ghats, which are known by different local names, such as the Sahyadri in Maharashtra and Karnataka, and the Nilgiris in Tamil Nadu. They are also called the Anaimalai and the Cardamom Hills in Kerala. The Western Ghats gently slope towards the east.

Eastern Ghats: Towards the east of the Deccan Plateau are the Eastern Ghats, which are discontinuous hill ranges with low heights. The Western and the Eastern Ghats meet at the Nilgiri Hills in Tamil Nadu.

4. **The Western Coastal Plain:** The Western Coastal Plain stretches from Gujarat to Kerala. It is about 65 km wide. It is quite narrow in the middle. In the northern part, it is called the Konkan Coast, while in the southern part (south of Goa), it is called the Malabar Coast. Most of the rivers are short and swift, except the Narmada and the Tapi rivers. The rivers make estuaries, which provide ideal sites for the development of ports and fishing. The Western Coastal Plain has many good natural harbours, such as Mumbai, Marmagao, etc. The coast along Kerala is well known for lagoons, backwaters, etc.

The Eastern Coastal Plain: The Eastern Coastal Plain is located between the Eastern Ghats and the Bay of Bengal. It extends from the southern tip of India to West Bengal in the north. The Eastern Coastal Plain is wider than the Western Coastal Plain. It has been formed by the alluvial deposits brought by the Mahanadi, the Godavari, the Krishna, the Kaveri and their numerous tributaries. The northern part along West Bengal and Odisha is called the Northern Circars, while the southern part along Andhra Pradesh and Tamil Nadu is called the Coromandel Coast. The main rivers have formed their

deltas, along the Eastern Coastal Plain, which are very fertile.

- E.
1. Chambal, Satluj, Yamuna and Betwa
 2. Mahanadi, Godavari, Ganga and Brahmaputra
 3. Himadri, Himachal, Himalayas and Shivalik
 4. Daman and Diu, Puducherry, Chandigarh and Lakshadweep
 5. Chhattisgarh, Jharkhand, Uttar Pradesh and Madhya Pradesh
 6. Makalu, Dhaulagiri, Mt Everest and Mt Kanchenjunga
 7. Haridwar, Allahabad (Prayagraj), Kanpur and Kolkata
 8. West Bengal, Odisha, Tamil Nadu and Kerala
- F.
1. India is located in the southern part of Asia and occupies the south-central peninsula of Asia. It consists of the mainland and two groups of islands. These are the Lakshadweep in the Arabian Sea and the Andaman and Nicobar Islands in the Bay of Bengal. The mainland of India extends from about 8°N to 37°N latitudes and from about 68°E to 97°E longitudes. The latitudinal and longitudinal extent of India is roughly about 30° each. The north-south extent of the mainland is about 3200 km, whereas the east-west extent is about 2900 km.
 2. The Government of India reorganises the states on the basis of the language spoken by the people. Today, India is divided into 29 States and 7 Union Territories including the National Capital Region (NCR). These are called the administrative units.
 3. The Central Government governs all the Union Territories of India.
 4. India is a big country and has a great diversity of physical or relief features. It has the high young fold mountains, extensive and fertile flat plains and one of the oldest plateaus in the world. For a detailed study of the relief features, we can divide India into the following four physical divisions:
 - (i) The Northern Mountains
 - (ii) The Northern Plains
 - (iii) The Peninsular Plateaus
 - (iv) The Coastal Plains and Island groups
 5. Many rivers have originated in the Himalayas. The Northern Plains of India are a gift of the Himalayas. Thick forests have grown on the Shivalik mountain ranges. Many hill stations have developed on these mountain ranges.
 6. The rivers of North India are perennial, while the rivers of the South India are seasonal. The rivers of North India do not develop falls and rapids and they are navigable. The rivers of South India develop rapids and falls and are generally not navigable.
 7. The Northern Plains are located towards the south of the Northern Mountains and towards the north of the peninsular India. This region is called the Ganga-Brahmaputra Basin. It stretches from the Punjab Plain in the west to the Brahmaputra Valley in the east for a distance of about 2500 km. It's broader in the west and the width decreases towards the east.

The Northern Plains of India have been formed by the deposition of the alluvium

brought down by a large number of rivers from the mountains. The main rivers flowing through this region are the Satluj, Yamuna, Ganga, Brahmaputra and thousands of their tributaries. The Northern Plains can be divided into the Rajasthan Plains, the Punjab-Haryana Plains, the Ganga Plains and the Brahmaputra Plains.

The Rajasthan Plain is in the western part of Rajasthan and is also known as the Great Indian Desert. It is located towards the west of Aravalli Range. The land is generally rocky and sandy. It is a semi-arid plain. The Punjab-Haryana Plains are towards the east and north-east of the Great Indian Desert. Its eastern boundary is formed by the river, Yamuna in Haryana. The Punjab Plain has been formed by the deposits of the Satluj, the Beas, the Ravi, the Chenab and the Jhelum rivers. This is a very fertile region.

The Ganga Plain occupies the largest part of the Northern Plains. The Ganga along with its innumerable tributaries have formed this plain tract. The rivers coming from the south, such as the Chambal, the Betwa, the Son, etc., have also deposited the rich alluvium soil in this region. The general slope of the entire Ganga Plain is towards the east and the south-east. This plain is a very fertile.

The Brahmaputra Plain is in the extreme eastern part of India. It has been formed by the depositional work of the Brahmaputra and its tributaries. The Brahmaputra originates from Tibet and enters India from the east. It enters Bangladesh and joins the Ganga. The Ganga and the Brahmaputra rivers and their numerous tributaries together form the largest delta in the world, known as the Sunderbans.

8. The Eastern Coastal Plain is located between the Eastern Ghats and the Bay of Bengal. It extends from the southern tip of India to West Bengal in the north. The Eastern Coastal Plain is wider than the Western Coastal Plain. The Eastern Coastal Plain has been formed by the alluvial deposits brought by the Mahanadi, the Godavari, the Krishna, the Kaveri rivers and their numerous tributaries. The northern part along West Bengal and Odisha is called the Northern Circars, while the southern part along Andhra Pradesh and Tamil Nadu is called the Coromandel Coast. The main rivers have formed their deltas, along the Eastern Coastal Plain, which are very fertile.

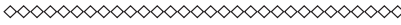
G. 1. A subcontinent is a large area which stands out distinctly from the rest of the continent. India along with its neighbouring countries like Pakistan, Nepal, Bhutan, Myanmar, Bangladesh and parts of China, form a distinct geographical and cultural unit. This is known as the Indian Subcontinent. The Indian Subcontinent is separated from the rest of Asia by a continuous chain of young-fold mountains.

2. The opening of the Suez Canal in 1869 reduced the distance between India and Europe by about 7000 km. This has placed India in a comfortable position on the international waterway of trade and commerce.

3. The Himalayas are located in the north of India. The Himalayan mountain ranges are very high and function as a wall that guards and blocks the cold wind from Central Asia and also the enemies coming from the north.

H. 1. SRI LANKA 2. INDIA 3. EVEREST 4. NEPAL 5. JHELUM 6. PAMIR 7. ATOLLS

ANSWERS TO WORKSHEET 1



- A. 1. Indira Point; Kanniyakumari 2. Five and a half; ahead 3. Himadri; Himachal; Shivalik
4. inland drainage 5. Arabian Sea 6. Minicoy
- B. Select from the following or any from the text: (i) Ganga, Yamuna, Ghaghra, Satluj, Chenab, Jhelum, Ravi, Beas (ii) Mahanadi, Godavari, Krishna, Kaveri (iii) Everest, Kanchenjunga, Dhaulagiri, Nanda Devi, Nanga Parbat, Annapurna (iv) Garo, Khasi, Jaintia, Naga, Mizo, Patkai (v) Eastern Ghats, Western Ghats, Sahyadri, Nilgiris, Anamalai, Cardamom (vi) Satpura, Vindhyas, Aravallis
- C. 1. Afghanistan and Pakistan [North west]; Nepal, Bhutan and China [North]; Bangladesh and Myanmar [East]; Sri Lanka [South]

ANSWERS TO WORKSHEET 2



A-B.



C.



Students may use an atlas or Srijan Social Sciences 6 to find the places and landforms in order to place them on the maps.

8. India – Climatic Conditions

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

A. 1. Tropical monsoon 2. 1°C 3. Warm weather and humidity 4. Khasi Hills

B. 1. d 2. b 3. a 4. b 5. a 6. a 7. b

C. 1. Himalaya 2. winter 3. winter 4. mango showers 5. monsoon winds

D. 1. **Advancing Monsoon:** These monsoons begin with the onset of south-west monsoons in the month of June, and it continues till the end of September. The south-west monsoons bring about a total change in the weather conditions in India. This is also called the rainy season. The south-west monsoon winds come with thunder, lightning and heavy rainfall.

Retreating Monsoon: Retreating monsoons begin at the end of the rainy season and continues upto the month of November. By the beginning of October, the south-west monsoon winds withdraw from the Northern Plains. The process of withdrawal is slow and gradual. This brings a change in the season from hot-wet to cool-dry. It is usually marked by clear skies and rise in temperature. The days are warm, while the nights are cool and pleasant.

2. Towards the close of the hot weather season, pre-monsoon showers occur in many parts of India, especially in Kerala and Karnataka. They help in the early ripening of mangoes and hence are locally called the mango showers. The strong winds with heavy rains are known as Kalbaisakhi in West Bengal and Assam, which means 'Calamity in Baisakh'.

3. **Tropical Cyclones:** The eastern coast of India experiences cyclones that originate in the Bay of Bengal. These cyclones usually cause loss of life and property in the thickly populated coastal areas. The bulk of rainfall in the coastal areas of Tamil Nadu comes from such cyclones.

Western Disturbances: During the winter season, the western disturbances enter India and move eastwards. These western disturbances originate in the Mediterranean Sea. They cause light rains in the plains and snowfall in the Himalayas.

4. **Windward side:** The face of the mountain which receives the incoming winds is called the windward side.

Leeward side: The face of the mountain where the winds descend after crossing the top is called the leeward side.

E. 1. **The main elements of climate are:**

- (i) Location
- (ii) Altitude
- (iii) Distance from the sea
- (iv) Direction of winds
- (v) Ocean currents

2. The temperature of the air decreases with the increase in altitude above the sea level. The average rate of decrease in temperature is 1°C for every 165 metres of height. The rate of decrease changes with time of the day and season of a place.
3. Water bodies modify the climatic conditions of nearby areas. The places along the coasts of India generally enjoy an equable climate throughout the year, i.e., the summer season is less hot and the winter season is less cold. The places which are located away from the water bodies experience extreme type of climate, i.e., the summers are very hot and the winters are very cold, as in Delhi.
4. The presence of the Himalayas, the Aravalli ranges, the Arabian Sea, the Indian Ocean and the Bay of Bengal, as well as the Thar Desert are some of the salient factors which influence the climatic conditions in India.
5. The Tropical Monsoon type of climate has the following features:
 - The Cold-Weather Season:** The Tropical Monsoon type of climate has cold weather or winter season. Regions far away from the seas and oceans have an extreme type of climate.
 - The Hot Summer Season:** The Tropical Monsoon type of climate has a hot summer season. The weather is hot and dry.
 - The Monsoons:** The Tropical Monsoon type of climate also has a monsoon season called the rainy season.
 - The Season of Retreating Monsoons:** This season begins at the end of the rainy season and continues upto the beginning of the winter season.
6. The winds bring the characteristics of the areas from which they are blowing. For example, if the winds are coming from the hot deserts, they will increase the temperature, while those coming from the snow-covered mountains will decrease the temperature. The winds coming from the sea bring rain, while the offshore winds are generally dry.
7. The physical features and the direction of winds largely control the distribution of rainfall in India. The average annual rainfall in India is about 125 cm, but the general distribution is highly uneven. It decreases from the south to the north and from the east to the west. The coastal areas receive more rainfall than the interior parts of India.
 - The western coast, Meghalaya and the Brahmaputra valley receive heavy rainfall from the monsoon winds. The average annual rainfall in these areas is about 200 cm.
 - The major parts of the Ganga Valley, Odisha and the central parts of India receive about 100 cm to 200 cm of annual rainfall. The upper Ganga valley, eastern Rajasthan, Punjab, Haryana and parts of Deccan Plateau receive 50 to 100 cm of rainfall annually.
 - Major parts of western Rajasthan, Ladakh, Jammu and Kashmir and Lahaul-Spiti in Himachal Pradesh receive scanty rainfall, about less than 50 cm annually.
8. The summer season is experienced from the middle of March to June. Almost every part of India experiences a rise in temperature. Many parts of India, especially in the Northern Plains, have extremely hot weather. During these months, hot, dry and dust-laden winds blow over the Northern Plains. These are locally called the Loo.
9. The climate of Mumbai is affected by the Arabian Sea, and the climate of Amritsar is

ANSWERS TO WORKSHEET 2



A–B. Students may use their atlas and the maps given on pages 66 and 68 of Srijan Social Sciences 6 to guide them. Use arrows to show the flow of winds.

9. India – Natural Vegetation and Wildlife

ANSWERS TO ASSESSMENT CORNER



Oral Assignment

- A. 1. Forests, wildlife, water, air, minerals, etc. 2. Soil and rainfall 3. More than 33%
4. Sal 5. Tropical Deciduous Forest
- B. 1. b 2. c 3. d 4. d 5. d 6. b
- C. 1. 45,000 2. 200 3. evergreen 4. snowline 5. Assam
- D. 1. Oak, Chestnut and Chir
2. Shisham, Sandalwood and Mahua
3. Ebony, Mahogany and Rosewood
4. Sunderbans (West Bengal)
5. Chilika (Odisha)
6. Hazaribagh (Bihar)
- E. 1. c 2. b 3. e 4. a 5. d
- F. 1. Tropical Rainforests are found in hot and humid areas, where the average annual rainfall is more than 200 cm. The main regions are the rainy parts of the Western Ghats; the island groups of Andaman and Nicobar Islands; and the wetter parts of Assam, Meghalaya, West Bengal and Odisha. In these forests, most of the trees are either evergreen or semi-evergreen. The trees may reach a height of more than 50 metres. The forests are dense and have a thick undergrowth. The main species of trees are ebony, mahogany and rosewood. These are hardwood trees.
2. Tropical Deciduous Forests are found in those areas where the annual average rainfall ranges between 100 cm and 200 cm. These forests are also known as Monsoon Forests. Such forests are found in the north-eastern states, along the foothills of the Himalayas, along the eastern slopes of the Western Ghats, parts of Jharkhand, Madhya Pradesh, Odisha and Chhattisgarh. These areas experience a long dry season. Thus, most of the trees shed their leaves in the summer season for about 6 to 8 weeks. All trees do not shed their leaves at the same time. Thus, Deciduous Forests do not appear barren at anytime of the year. Most of the forests have been cut to provide land for farming. The trees have a high commercial value, especially Teak and Sal. Other commercially important trees are Bamboo, Shisham, Sandalwood, Mahua, Khair, Semul and Rosewood. Nowadays, efforts are being made to increase the land under Monsoon Forests in India.
3. Thorn Forests are found in those regions where the average annual rainfall is less than 75 cm. In areas of low humidity and high temperature, there is not much scope for the thick forests. The trees are generally low and widely scattered. Trees here have long roots which can penetrate deep to find water. The main species are Acacia, Palm, Kikar,

Babul, etc. Thorn Forests are found mostly in Rajasthan, Gujarat, Punjab and Haryana. Some are also found in the Malwa Plateau, parts of Uttar Pradesh in Bundelkhand, Maharashtra, Karnataka and Andhra Pradesh.

4. Tidal Forests are also known as Littoral Forests. These forests are mostly found in estuaries and deltas along the east coast of India. The main areas are the deltas of the Ganga-Brahmaputra, the Mahanadi, the Krishna and the Godavari rivers. The deltas of the Ganga and Brahmaputra rivers have the largest concentration of mangrove forests. Mangroves are those trees that grow in areas submerged in water during high tides. In West Bengal, these forests are called the Sunderbans. These trees can survive both in salt water and fresh water. The wood of the Sundari tree, grown in the Sunderbans, is hard, strong and durable. The wood is used for building boats and boxes.
 5. The temperature is very low in the higher altitudes. This influences the distribution of vegetation in the mountainous regions. In the Himalayan mountain ranges, a large variety of trees grows ranging from the tropical to the alpine. Tropical Deciduous Forests are found in the foothills of the Himalayas, which is similar to that found in the neighbouring plains. Sal is the most important commercial tree in this belt. Above the foothills or in the Shivaliks, Temperate Deciduous Forests are found. The main species are Oak, Chestnut, Chir and Pine. These are softwood trees. Coniferous trees, such as Pine, Cedar, Fir and Spruce, are found at higher altitudes. Beyond 3000 metres above the sea level, Alpine Vegetation, which consists of flowering plants and grasses, is found. The upper limit of Alpine Vegetation is the permanent snowline, where no plants can grow.
 6. India has a large variety of wildlife due to the great diversity of relief and climate. There are about 75,000 species of animals in India. The elephant is the largest Indian mammal which prefers to live in the wet equatorial forests. It is mostly found in Assam, Kerala and Karnataka. The Indian elephant has smaller ears as compared to the African elephant. Camels are found mostly in the hot and arid parts of Rajasthan. Wild asses roam in the dry areas of the Rann of Kachchh. One the horned rhinoceros lives in swamps and marshlands of Assam and West Bengal. There are many varieties of deer, out of which the Kashmir stag, swamp deer, spotted deer, musk deer and mouse deer are common. Other mammals include neelgai, four the horned antelope, black buck (Indian antelope) and gazelle. Among the animals of prey, the Indian lion is the most remarkable outside Africa. Its natural habitat is in the Gir Forests in Gujarat. Tiger, the national animal of India, is the most powerful animal in our forests. The famous Bengal Tiger has its natural habitat in the Sunderbans. The other animals in this group are leopards and snow leopards. In the Himalaya mountains, there are many outstanding species, including wild sheep, mountain goats, ibex and the tapir. They are found at lower altitudes. The snow leopard is found in the upper reaches. Indian forests are a home to a large variety of monkeys. The most famous is the Langur.
- G. 1. The growth and development of natural vegetation in any part of the world depend mainly on two elements of the climate, temperature and rainfall. The amount and distribution of rainfall have a great bearing on the type of natural vegetation in a particular region. In hilly areas, temperature plays an important role in the quality and quantity of plant life. Soil is also important, as it provides the base for the growth of natural vegetation.

2. The natural vegetation in India varies greatly from one region to another, which includes forests, grasslands and shrubs. It varies from one found in the tropics to that in the Arctic or the Tundra region. India has more than 45,000 species of plants. Based on the variations of the amount and distribution of rainfall in India, the plant cover can be broadly classified into the following five main types:
 - (i) The Tropical Rainforests
 - (ii) The Tropical Deciduous Forests
 - (iii) The Desert Vegetation or the Thorn Forests
 - (iv) The Tidal Forests or the Mangrove Forests
 - (v) The Mountain Forests or the Alpine Forests
3. In the Himalayan mountain ranges, a large variety of trees grow ranging from the tropical to the alpine. Tropical Deciduous Forests are found in the foothills of the Himalayas, which is similar to that found in the neighbouring plains. Sal is the most important commercial tree in this belt. Above the foothills, or in the Shivaliks, Temperate Deciduous Forests are found. The main species are Oak, Chestnut, Chir and the Pine. These are softwood trees. Coniferous trees, such as the Pine, Cedar, Fir and Spruce, are found at higher altitudes. Beyond 3000 metres above the sea level, Alpine Vegetation, which consists of flowering plants and grasses, is found.
4. Forests are an important part of the environmental ecosystem. They regulate the weather and climate. Trees supply oxygen and absorb carbon dioxide from the air. They help in increasing rainfall and reduce the speed of wind over land. Tribal people in the forests depend on them for their survival. Thus, we must protect and conserve the forests.
5. Early humans gathered food and hunted animals in the forests. They used the branches of the trees for shelter. The wood from the forests is used as fuel. We still depend on forests for thousands of products, such as fuel wood, timber, lac, resin, gum, cellulose, fodder, tendu leaves and a variety of medicinal herbs. The products from the forests are used for making furniture, paper, paints, plastics, rayon, etc. Tribal people in the forests depend on them for their survival.
6. Wildlife in India has suffered a lot due to indiscriminate hunting, poaching, deforestation and drainage of swamps. Due to this, many species have become extinct and many more are endangered. Hence, urgent steps are being taken and are required for wildlife conservation. Some of the steps taken are as under:
 - (i) A large number of national parks and wildlife sanctuaries have been set up in different parts of India to provide a natural habitat for wildlife.
 - (ii) Biosphere reserves are being established, which are multi-purpose protected areas.
 - (iii) Efforts are being made to preserve the endangered species. Periodic census are being undertaken.
 - (iv) Numerous campaigns, such as, 'Project Tiger', 'Project Rhinoceros', etc., have been launched.
 - (v) Hunting and poaching of wild animals have been banned.
 - (vi) Zoological parks are being set up in different parts of the country.

At present, there are about 83 national parks and 447 wildlife sanctuaries in India.

They cover about 5 per cent of the total area of our country. Preserving and protecting the wildlife is our responsibility and we should accept it willingly. The 'Wildlife Week' is observed in the month of October, every year. The number of tigers in India has increased by 30% since 2010 (1,706 in 2010) to 2,226 in 2014, according to the tiger census.

7. The term, 'Wildlife' include plants, animals, birds, reptiles, etc., living in the forested areas. Wildlife is an important component of our environment, without which many human activities are not possible. The wildlife maintains the ecosystem and the food chain of an area.
8. The term, 'Wildlife' includes plants, animals, birds, reptiles, etc., living in the forested areas. Wildlife is an important component of our environment, without which many human activities are not possible. India has a large variety of wildlife due to a great diversity of relief features and climate. There are about 75,000 species of animals in India. This is due to the existence of a wide range of habitats provided by the forests in India.

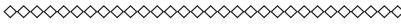
The elephant is the largest Indian mammal which prefers to live in the wet equatorial forests. It is mostly found in Assam, Kerala and Karnataka. The Indian elephant has smaller ears, as compared to the African elephant. Camels are found mostly in the hot and arid parts of Rajasthan. Wild asses roam in the dry areas of the Rann of Kachchh. One-horned rhinoceros live in swampy and marshlands of Assam and West Bengal. There are many varieties of deer, out of which Kashmir stag, swamp deer, spotted deer, musk deer and mouse deer are popular. The other wild animals include neelgai, the four-horned antelope, the black buck (Indian antelope) and the gazelle.

Among the animals of prey, the Indian lion is the most remarkable outside Africa. Its natural habitat is in the Gir Forests of Gujarat. Tiger, the national animal of India, is the most powerful animal in our forests. The famous Bengal tiger has its natural habitat in the Sunderbans. The other animals in this group are the leopards and the snow leopards. In the Himalaya mountains, there are many outstanding species, including wild sheep, mountain goats, ibex and the tapir. They are found at lower altitudes. The snow leopard are found in the upper reaches. The Indian forests are a home to a large variety of monkeys. The most famous is the Langur.

Nature has gifted our country with a rich variety of beautiful and colourful birds. Peacock, the national bird of India, is perhaps, the most beautiful among the Indian birds. It is famous for its colourful plumage and rain dance. Other birds include pheasants, geese, ducks, mynahs, parakeets, pigeons, cranes, hornbills and Sun-birds. Some have their natural habitats in swamps and wetlands.

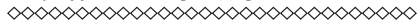
- H. 1. India has a rich physical diversity and good annual rainfall. Therefore, India is rich in flora and fauna.
 2. The Tidal Forests are watered by the saline water of the seas and oceans. Only a few varieties of plants can grow in the saline water, therefore, the tidal forests have less variety.
 3. Many kinds of wildlife have disappeared from the Indian forests. This is due to deforestation, hunting and poaching of animals.
- I. 1. Bangladesh 2. Willow 3. Deserts 4. Sunderbans

ANSWERS TO WORKSHEET 1



- A. 1. natural resources 2. Temperature; rainfall 3. 4500 4. Mangrove Forests
5. Tropical Deciduous 6. Rajasthan, Gujarat, Punjab, Haryana
7. Elephant, Assam, Kerala, Karnataka 8. Sundarbans 9. Biosphere 10. October
- B. 1. Tropical Rainforests are found in hot and humid areas where the average rainfall is more than 200 cm.
2. The most widespread forests are the Tropical Deciduous forests found in parts of Jharkhand, Madhya Pradesh, Chhattisgarh and Odisha, and also in the north-eastern states, the foothills of the Himalayas, and along the eastern slopes of the Western Ghats.
3. Kikar, acacia, palm and babul are found in Desert forests.
4. Fuel wood, timber, lac, resin, gum, fodder, medicinal herbs [any five]
- C. 1. Rajasthan 2. Rann of Kutch 3. Himalayas 4. Assam, West Bengal
5. Himalayas 6. Gir forest

ANSWERS TO WORKSHEET 2



- A. 1. lion 2. neelgai 3. gaur 4. langur 5. tapir 6. snow leopard 7. peacock
- B. Students may consult the map on page 74 of Srijan Social Sciences 6 to make the map.

4. First Civilisation in India

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. False 2. False 3. False 4. True 5. False 6. False 7. True

Written Assignment

- B. 1. c 2. b 3. a 4. c 5. d 6. a

- C. 1. Lothal 2. amulets 3. pictographic 4. clay spindles 5. 3000 bc; 1500 bc

- D. 1. e 2. d 3. a 4. c 5. b

- E. 1. The only religious structure discovered in the Harappan Civilisation, is the Great Bath. No temples have been found in the excavation. Clay figurines of Mother Goddess have been found in the city which suggests that she was worshipped. A male God on a seal has also been discovered. He is surrounded by the tiger, a rhinoceros, a buffalo and an elephant. Historians are of the opinion that this was the representation of Lord Shiva or Pashupati. Many seals depict the peepal tree which tells that it was sacred. The discovery of amulets suggests that people believed in ghosts and wore the amulets to ward off spirits. The excavated graves contained articles like jewellery, pots, etc., which prove that the Harappans believed in life after death.

2. In the Harappan cities, there was a very good sewage or drainage system. The streets had many drains covered with large brick slabs. There were holes at regular intervals for cleaning. Drains from the bathrooms flowed into the sewers under the main street.

3. A large oblong structure was excavated and archaeologists called it the Great Bath. It was a masterpiece of engineering skill. The Great Bath was made of bricks and was covered with natural tar called the bitumen. There were steps on either side that led to the bath. It is believed that people used it for religious purposes.

4. Most of the earliest cities or civilisations came up on the banks of rivers. The rivers gave abundant water supply to support the people. The lands near the rivers were fertile and suitable for cultivation. Rivers were also used as a means of transport.

Some of the early river valley civilisations were the Egyptian Civilisation that flourished on the bank of the river, Nile in Africa. The Chinese Civilisation came up around the Hwang-Ho River. The Sumerians, the Assyrians and the Babylonians flourished on the fertile plains near the Tigris and the Euphrates. The Indian subcontinent grew along the Indus. It is interesting to note that all the earliest farming communities to later cities and settlements arose along the banks of rivers.

5. The interesting fact about the cities of Harappan Civilisation was that they were well planned. The streets cut at right angles and divided the city into large blocks with each block having narrow lanes. The houses were constructed in an orderly fashion. They were built of burnt bricks. Houses were built on both sides of the roads. There were covered drains into which the sewage from all the houses flowed. Houses had several

rooms with doors opening to the side alleys. The rooms were built around a central courtyard. Each house had a bathroom and wells that supplied water.

The cities at Harappa and Mohenjodaro were divided into two parts. The upper part was built on a raised ground and was called the citadel or the acropolis. The citadel had high walls. It contained public buildings, granaries and religious structures as well as a town hall. The lower part was called the lower town which was bigger. It had houses and workplace for common people. These were built with baked bricks and had thick walls.

6. The cities of the Harappan Civilisation were probably administered by a group of people consisting of merchants and priests. They undertook tasks like regulating trade, collection of taxes and maintenance of law and order.

There were three classes of people. The ruling class consisting of rich merchants and priests who lived in the citadel. The second group consisted of petty merchants, artisans and craftsmen, who lived in the lower town. The workers and labourers lived in huts outside the city. The Harappan people engaged in different occupations. There were farmers, weavers, potters, jewellers, metal workers, toy-makers, stonemasons and seal-makers.

7. The Harappan culture ended around 1500 bc. The decay of civilisation could have taken place due to natural disasters, such as earthquakes, floods, diseases or changes in the course of the river Indus. Invasions of Aryans or other tribes might have led to the decline and downfall of the Harappans. The fractured skull in the excavation also indicates a possibility of a mass massacre which could have brought the end of the Indus Valley Civilisation. In some sites, such as the Nal and Dabarkot, a layer of ash has been found which people believe that could have been due to the large-scale of burning down of settlements. Large-scale grazing might have led to the drying up of the land which could have lost its fertility.

8. The cities at Harappa were divided into two parts. The upper part was built on a raised ground and was called the citadel or the acropolis. The citadel had high walls. It contained public buildings, granaries and religious structures along with a town hall. The lower part was called the lower town which was bigger. It had houses and workplace for the common people. These were built with baked bricks and had thick walls.

9. The cities of the Harappan Civilisation were probably administered by a group of people consisting of merchants and priests. They undertook tasks like regulating trade, collection of taxes and maintenance of law and order.

10. A large number of seals have been found in the Indus Valley Civilisation. Seals were flat and rectangular in shape and they were made of terracotta. Seals have animal figures on them. The seals are the source of information of the Indus Valley Civilisation. They inform us about the artistic skills, trade contacts, dress, ornaments, religious beliefs and the script of Harappan people.

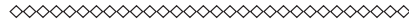
- F. 1. There is no historical evidence of any other human civilisation which flourished before the Indus Valley Civilisation. Therefore, the Indus Valley Civilisation is the earliest human civilisation on the Indian soil.

2. There was a good sewage system.
3. In the Indus Valley Civilisation, a male god on a seal has been discovered. He is surrounded by the tiger, a rhinoceros, a buffalo and an elephant. Historians are of the opinion that this was the representation of Lord Shiva or Lord Pashupati.

Think Tank

- G. 1. Iraq 2. Sind 3. The Great Bath

ANSWERS TO WORKSHEET I



- A. 1. (a) 2. (c) 3. (b) 4. (a) 5. (b) 6. (c)
- B. 1. The Great Bath was a masterpiece of engineering skill. It was made of bricks and covered with natural tar called bitumen. Steps on either side led to the bath. It is believed to have been used for religious purposes.
2. The seals were flat and rectangular and made of terracotta. They give us a lot of information about the artistic skills, trade contacts, dress, ornaments, religious beliefs and script of the Indus Valley Civilisation.
3. There are several causes that could have led to the end of the Indus Valley Civilisation. The Aryans or other tribes may have invaded and destroyed it. Fractured skulls from the sites indicate a large-scale massacre and the burning down of settlements. On the other hand, it is possible that the civilisation was destroyed by a natural disaster, such as a fire, earthquake, floods or disease.
4. Lothal, in Gujarat, appears to have been an important trading centre. It has the oldest known dockyard. The people there used a shell compass and divided the horizon into 8-12 parts, indicating that they could study stars and navigate ships. It was a well-planned city divided into a citadel and the lower town. Houses were built of thick mud and brick walls. The town was divided into the north and south sectors and was an important route for trade transport. Lothal was probably destroyed by floods.

1. Diversity

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. approximately 600 2. Kerala 3. 2002 4. St. Thomas 5. 1 November 1956

Written Assignment

- B. 1. a 2. c 3. a 4. a 5. a 6. d

- C. 1. southern 2. rice 3. Kathakali 4. Kochi 5. Pandit Jawaharlal Nehru

- D. 1. There are several differences among the people which we can make out at a glance. This state of being different or being unique is known as diversity.

Here, difference does not mean that every person does different things, it means doing the same things differently.

2. Diversities give a collective strength and must be used for sustainable development, as stated in the 'September Declaration' held at Johannesburg in September 2002.
3. The culture of the nation is facing three main challenges. These are: globalisation, illiteracy and terrorism.
4. Rice and fish
5. Pandit Jawaharlal Nehru
6. India has a strong unity in diversity. All regions celebrate the harvest festivals in their own style. In Punjab, it is called Baisakhi, in Kerala, Onam, in Bihar and Uttar Pradesh, Makarsankranti and in Tamil Nadu, Pongal. The most unique feature, in spite of having different languages, religions and food habits, is the unity we have in India. We also have an interdependence of communities, where each depends on the other for various needs. There are trade relations between the nations which bring economic development.

Think Tank

- E. 1. Illiterate people are easily motivated by separatists and other enemies of the nation. Therefore, illiteracy is a threat to the unity.
2. Imbalanced growth in the country gives birth to regionalism which is a threat to the unity in a diverse country like India.
- F. 1. Foreigner 2. Vasco-da-Gama 3. Thiruvananthapuram
4. Netaji Subhash International Airport

2. Discrimination and Equality

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. False 2. False 3. True 4. False 5. True

Written Assignment

- B. 1. d 2. c 3. c 4. b 5. a
- C. 1. Dr. B.R. Ambedkar 2. equally 3. stereotype 4. untouchability 5. secular
- D. 1. Prejudice 2. Stereotype view 3. Casteism 4. Fundamental Rights
- E. 1. PREJUDICE 2. STEREOTYPE 3. PREJUDICE 4. PREJUDICE 5. STEREOTYPE
- F. 1. c 2. d 3. b 4. e 5. a
- G. 1. The aim of Fundamental Rights, described in our Constitution, is to protect people against discrimination and inequality. Part III of the Constitution of our country contains provisions to fight all forms of discrimination including those which are based on race, caste or descent.
2. Through reservation.
 3. Not touching a person considering him/her a member of lower class people.
 4. Employing labourers without paying wages.
 5. The word, 'prejudice' means 'attitudes' or 'opinions' about a person, or a group belonging to a particular religion, race or nationality.
 6. A 'stereotype' is a fixed general image of a person. Stereotypes prevent us from looking at the qualities of each person as a unique individual.
 7. The citizens are ensured equality by the government using the Fundamental Rights.
 8. 'Discrimination' means not allowing people to participate in social activities and restricting their access to work due to their caste, creed and race.
 9. Poor people are often treated differently in offices, schools, hospitals, etc. Poor people are the worst exploited section in India.
 10. All the citizens can have admission into any educational institutions maintained by the state or receiving aid out of the state funds without being discriminated on the grounds of caste, race creed and religion.

Think Tank

- H. Education makes one rational and free from all prejudices.
- I. 1. Constitution 2. The State Government 3. The so-called lower class people

3. Discrimination and Equality

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. The Executive. 2. A court (judiciary). 3. A government. 4. The government

Written Assignment

- B. 1. a 2. b 3. c 4. c 5. c

- C. 1. Parliament 2. monarchy 3. 1954

- D. 1. d 2. a 3. c 4. b

- E. 1. The term 'government' refers to the 'political system by which the society consisting of a group of people is governed'.

2. A representative democracy is the democracy where people choose their representatives through elections.

3. The government's role is manifold. It looks after the welfare of the people by taking up projects for providing health services, education and security.

(i) It takes up projects like constructing roads, dams and provides clean drinking water and electricity.

(ii) It frames laws, maintains law and order and punishes those, who do not abide by the law.

(iii) It maintains peaceful relations with other countries.

It takes relief measures for the people affected by natural disasters, such as floods, earthquakes, etc.

4.	Monarchy	Democracy
	A king/queen is the head of the law – making body, the executive and the judiciary.	In a democracy, the law – making body, the executive and the judiciary enjoy freedom and are separated.
	All the powers of the nation lie with the king or the queen.	Power is divided and specifically distributed.
	The power to make decisions lies with the king/queen.	Respective heads of the departments make or take decisions.
	A monarch is above the law. The king/queen is not answerable to the people for any decision taken by him/her.	Nobody is above the law rather everybody is answerable.
	When the king/queen dies, the power automatically passes to his successor who becomes the king/queen.	The successor to the head of the government is decided through an election.
	Power is centralised.	Power is decentralised.
	There is no freedom of expressing opinions.	There is freedom of expressing opinions.

5. There are different types of government. These are as follows:

Democratic Government: In a democratic form of government, the representatives of the people run the government. Citizens exercise their rights to vote and thereby choose their representatives.

Monarchical Government: In the case of a monarchy, all the powers lie with the king or the queen, who is the head of the government and the power to make on lake decisions lie with the king, who is called Monarch. A monarch is above the law.

Dictatorial Government: In a dictatorial government, one person heads the government and rules it on the basis of his own wish, without paying any attention to the wishes of the people.

Parliamentary Government: In the parliamentary form of government, the executive emerges from the legislature which is called the union of power. The executive in the parliamentary form of government is based on the party support in the legislature.

Federal Government: In the federal form of government, power is divided into smaller units, each having its own government and also supervised by the central government.

6. Let us compare the three main types of government and decide which is the best and why.

Monarchy	Democracy	Dictatorial
A king/queen is the head of the law-making body, the executive and the judiciary.	In a democracy, the law-making body, the executive and the judiciary enjoy freedom and are separated.	A person is the head of the law-making body, the executive and the judiciary. His/Her word is the rule.
All the powers of the nation lie with the king or the queen.	Power is divided and specifically distributed.	All the powers of the nation lie with the head of the person.
The power to make or take decisions lie with the king or the queen.	Respective heads of the departments make or take decisions.	The power to make or take decisions lie with the same person.
A monarch is above the law. The king/queen is not answerable to the people for any decisions taken by him/her.	Nobody is above the law, rather everybody is answerable.	The head of the nation is above the law. He/She is not answerable to the people for any decision taken by him/her.
When the king/queen dies, the power automatically passes to his successor, who becomes the king/queen.	The successor to the head of the government is decided through an election.	When the person dies, the power passes to his successor or any other person nominated by him/her.
Power is centralised.	Power is decentralised.	Power is centralised.
There is no freedom of expressing opinions.	There is freedom of expressing opinions.	There is no freedom of expressing opinions.

From the above comparisons, it is clear that democracy is the best type of government, for it allows the election process and allows the right to express one's opinions.

7. Let us compare the three main types of governments and decide which is the worst and why.

Monarchy	Democracy	Dictatorial
A king/queen is the head of the law-making body, the executive and the judiciary.	In a democracy, the law-making body, the executive and the judiciary enjoy freedom and are separated.	A person is the head of the law-making body, the executive and the judiciary. His/Her word is the rule.
All the powers of the nation lie with the king or the queen.	Power is divided and specifically distributed.	All the powers of the nation lie with the head of the person.
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When the king/queen dies, the power automatically passes to his successor who becomes the king/queen.	The successor to the head of the government is decided through an election.	When the person dies, the power passes to his/her successor, or any other person nominated by him/her.
Power is centralised.	Power is decentralised.	Power is centralised.
There is no freedom of expressing opinions.	There is freedom of expressing opinions.	There is no freedom of expressing opinions.

From the above comparison, it is clear that both monarchy and dictatorship are the worst types of government, for both of them do not allow an election process and the right to express opinions.

Think Tank

- F. 1. In a direct democracy, all the people take part in decision-making which is possible in a village, where only a few hundred people live, but not possible in a country, where millions of people live.
2. India is full of diversities. Regional interests are brought into light by many regional political parties. Hence, a multiparty system is more suitable in India.
3. The success of democracy depends on the awareness of the people. People must have an eco-political sense to judge a government.
4. The prosperity of a nation depends upon both the government and the citizen. Any one of them alone cannot do any good.
- G. 1. CENTRAL 2. DEFENCE 3. ELECTION 4. PARLIAMENT 5. COURT

4. Elements of a Government

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. True 2. False 3. False 4. True 5. True 6. False

Written Assignment

- B. 1. b 2. d 3. b 4. d 5. a

- C. 1. representatives 2. governments 3. Central Government
4. Coalition 5. untouchability

- D. 1. South Africa is a country inhabited by various races. A few years ago, a policy of racial discrimination was followed which was called the Apartheid. It means separateness between the white-skinned people and the dark-skinned people.
2. The freedom of people is protected by giving them the right to elect and re-elect the government. The people can use the media for expressing their opinions. At times, they indulge in strikes, rallies and protests in order to express their views about the government. People can go to a court if their rights are violated.
3. Women, people of all the religions and people, who are economically weak are given equal rights to vote and participate in the policy making of the government. The reservation of seats in the parliament proves that women, SCs and STs are also given equal rights.
4. Through elections and public opinions.
5. Laws have been made to solve all conflicts and differences which are clearly spelt in the Constitution of India. If any conflict arises; the people, the government, any organisation, etc., may go to the court for a solution. All the parties are legally bound to abide by a court's verdict.
6. The following elements function against peaceful existence.
An intolerant majority can destroy the democratic structure based on freedom and equality.
The citizens should be disciplined and should respect the decisions of the majority.
Unorganised and indisciplined political parties can hinder the smooth formation and functioning of the government.
The existence of social or economic inequality on the basis of caste, gender, religion, etc., functions against peaceful existence.
7. The Constitution of India treats all its citizens equally without any discrimination based on caste, creed or sex. The Constitution of India has banned the practice of untouchability which is considered a social evil.
8. In India, we have equal justice. The Constitution of India treats all its citizens equally without any discrimination based on caste, creed or sex. The Constitution of India

has banned the practice of untouchability which is considered as a social evil. All the accused have the right to say his/her words before the court. There is a provision that a court can appoint a lawyer to represent a poor, who cannot appoint a lawyer at his/her own cost.

Women, SCs and STs are given equal rights to vote and participate in the policy making of the government. The reservation of seats in the Parliament proves that the women, the SCs and the STs also have equal rights.

Think Tank

- E. 1. Everyone and every institution in India is bound to obey the verdict of the Supreme Court because it is the highest court in India.
 - 2. A court is made to administer justice and to solve problems. So the people should accept the verdict of a court.
 - 3. Through regular elections, public opinion is reflected and people also get a scope to elect the government.
- F. 1. Media 2. Nelson Mandela 3. Raja Rammohan Roy and Dr. B.R. Ambedkar

5. Panchayati Raj

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. three 2. Zila Parishad 3. 5 years 4. Sarpanch

Written Assignment

- B. 1. d 2. c 3. b 4. d 5. a 6. b
- C. 1. Gram Pradhan/Sarpanch 2. Gram Panchayat 3. Nyaya Panchayat
4. State Government 5. Panchayat Samiti 6. fine
- D. 1. Panchayat Samiti 2. Gram Sabha 3. Panchayati Raj
- E. 1. The Panchayati Raj is a system of self-government in the rural areas. It aims at rural development by involving the rural community. A three-tier system of Panchayati Raj has been initiated at the village level. At the root, that is village level, there is the Gram Panchayat, at the block level, there is the Panchayat Samiti which is also called Janpad Panchayat and at the top level, there is the District Panchayat or the Zila Parishad. Together, they are called the Panchayati Raj.
2. Gram Sabha means an assembly of villagers. All the adults, who have attained the age of 18 years have the right to vote and are the members of the Gram Sabha. Each village has one Gram Sabha. Sometimes, two or three small villages are combined under one Gram Sabha. A Gram Sabha is the general body meeting at the village level.
3. The functions of the Gram Panchayat are as follows:
- (i) Maintaining water sources, roads, street lighting and drainage system
 - (ii) Development of agriculture, education, health and sanitation
 - (iii) To ensure welfare of children, social justice, settling disputes and creating employment opportunities
 - (iv) To charge and collect taxes, tolls and fees locally
 - (v) To organise sports, opening up of health centres and immunisation programmes
 - (vi) To maintain and issue the birth and death certificates
4. The function of the Nyaya Panchayat is to listen to the petty cases like thefts, family disputes and other small issues. It can impose a fine up to ₹100 but cannot send anyone to the prison. It helps in solving issues faster, with almost no cost and with simple ways. However, if a person is dissatisfied, he/she can go to the higher courts.
5. The Gram Panchayat gets its income through the following:
- (i) Taxes on houses, shops
 - (ii) Sale of properties

- (iii) Funds given by the state governments
 - (iv) Funds raised through donations given by the villages and the Nyaya Panchayats
6. The Secretary of the Gram Panchayat
 7. The Panchayati Raj aims to encourage the participation of the people. The Ministry of the Panchayati Raj offers awards for the best panchayat in the state. It grants funds and works for the growth, development and training of the panchayats.

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- F.
 1. The Gram Sabha checks the functions and activities of the Gram Panchayat.
 2. The Panchayat Secretary is a permanent post and he/she is a government officer.
- G.
 1. A civil service officer appointed by the State Government.
 2. The Zila Sabhadhipati
 3. Nyaya Panchayat can be challenged. It can be challenged in the Subdivisional/District Court
 4. The State Government

6. District Administration

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. District Collector 2. 2005 3. Superintendent of Police
4. The Register of Harvest Inspection

Written Assignment

- B. 1. c 2. c 3. c 4. d
- C. 1. Kanungo 2. SHO 3. District Magistrate 4. Chief Executive Engineer
5. police stations
- D. 1. Land record officer or the Patwari.
2. As the head of the district administration, the District Collector supervises all the functions of the district administration.
3. It is a usual practice of dividing the agricultural land among the sons excluding the daughter(s) in the family. Similarly, when it is a question of inheritance of property, it is generally the sons, who are benefited. In order to remove this discrimination, the government modified the inheritance law. It is called the Hindu Succession Amendment Act, 2005 which came into force on the 9th September, 2005. As per the law, the daughter(s) are made to inherit property at par with son(s). The act also gives the right to all the daughters to seek equal share in the family property.
4. Districts are divided and subdivided as Tehsils and Talukas, etc. They are taken care by the Tehsildars, Kanungos, Lekhpals or Patwaris.
5. It is important to maintain law and order in a country. The police force help to maintain law and order in the country. This is needed to prevent crimes.
6. A written complaint, lodged in a police station against any crime, is called an FIR. An FIR is an important document. It is only after the FIR is registered in the police station that the police will start the investigation of the crime or the case. The FIR stands for First Information Report.
7. The highest police officer in a district is the Superintendent of Police. All the police stations in the district work under the command of the Superintendent of Police.

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- E. 1. In India, the land is an important source of livelihood and revenue. Therefore, the government keeps its records.
2. Through this law (The Hindu Succession Amendment Act, 2005), Hindu women have got their rights in their properties of their parents.
- F. 1. Tehsil and Taluka 2. Lekhpal 3. The Circle Revenue Officer

4. Different officers in different charges, e.g., District Civil Surgeon and the Chief Medical Officer (CMO) in Government Hospitals.

7. District Administration

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. True 2. False 3. False 4. False 5. True

Written Assignment

- B. 1. c 2. c 3. a 4. c 5. c

- C. 1. more than twenty thousand 2. women 3. Municipal Corporation
4. Chairman 5. the people living in the towns

- D. 1. e 2. c 3. d 4. a 5. b

- E. 1. The main task of a local government in the cities and towns is to look after the welfare of the people. They look after the following:
- (i) Sanitation facilities
 - (ii) Water purification and supply
 - (iii) Garbage clearance and waste management
2. The Councillors are the elected representatives to a Municipality or a Municipal Corporation.
3. The members of the Municipal Corporation are elected through adult franchise for a term period of five years. The city is divided into different wards and from each ward one member is elected, who is called a Ward Councillor. The number of the elected members is usually between 50 and 100.
4. The main functions or tasks of a Municipal Corporation is to look after the welfare of the people in the cities and towns. They look after the following:
- (i) Sanitation facilities
 - (ii) Water purification and supply
 - (iii) Garbage clearance and waste management
 - (iv) Maintenance of roads, streets, streetlights, parks and stations
 - (v) Providing public utilities and health services
 - (vi) Registering births and deaths
- Apart from the above, they have to do garbage collections, undertake immunisations and vaccination programmes as well as maintain fire brigades.
5. A Deputy Mayor of a Municipal Corporation is elected by the elected councillors of the Municipal Corporation.
6. A Municipal Commissioner executes the works of preparing the annual budget.
7. A Municipal Corporation gets money from the following sources:

- (i) Tax on land called the property tax
- (ii) Taxes on goods coming in the cities called the Octroi duty and on the entry of vehicles in the cities called the toll tax
- (iii) Tax on business and occupations
- (iv) Tax on public lighting and hygiene facilities
- (v) Water tax, vehicle tax, education tax
- (vi) Rent collected from buildings owned by the Municipal Corporation
- (vii) Fees for issuing birth and death certificates

It also gets grants from the government. It charges on the sale of land and entertainments.

8. The citizens of a city or Municipal Corporation can protest against the insufficient services provided to them by the Municipal Corporation. People can protest and sign a petition and give it to the Councillor, who in turn can take the matter to the Municipal Corporation. If the demand is not met, they can even go to the city court for justice.

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- F. 1. A self-government is the essence of democracy in a town or a city. A self-government helps the people to participate in the governance of a town or a city.
2. A Municipality is a part of the State Government. A Municipality exercises many developmental projects of the State Government. Therefore, the State Government helps a Municipality financially.
- G. 1. Voters of the Ward 2. Five Years 3. House Tax or Property Tax

8. Rural Livelihood

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. Agriculture 2. In the hilly regions

Written Assignment

- B. 1. a 2. a 3. c 4. a 5. d
- C. 1. agricultural labourers 2. rain 3. rainy season 4. NGOs 5. coast
- D. 1. The word 'livelihood' refers to the work people do to earn their living. In the rural areas, agriculture is the main source of livelihood. There are other sources of livelihood which people take up, such as: fishing, poultry farming and animal husbandry.
2. The word 'productivity' refers to the produced goods and crops. Farmers produce foodgrains, dairy products and other things like eggs, meat, etc.
3. People in the rural areas depend on the moneylenders to borrow money. The moneylenders cheat the borrowers. They are often at the mercy of the moneylenders, who charge heavy interests at times. To help the rural people financially, the government provides rural credits through several regional rural banks and cooperative banks. These banks are headed by the National Bank for Agriculture and Rural Development (NABARD).
4. NGOs are the Non-governmental Organisations which are created legally by private organisations without any participation or regulation of any government body. Many NGOs have taken the responsibility of educating children in villages and slum areas by rendering free education and involving them in cultural activities.
- E. 1. The rural livelihood refers to the professions that are performed by the rural people. In the rural areas, agriculture is the main source of livelihood. Some other sources are fishing, poultry farming and animal husbandry.
2. The main profession of the farmers is farming that is producing food grains. A few farmers have rice mills, flour mills and brick mills, and also engage in moneylending and trading. Many farmers also practise animal husbandry and fishing.
3. Poverty is the worst problem of the village people. Many villages have neither primary schools nor health centres. Many villages have neither electricity nor safe drinking water.
4. A moneylender lends farmers money at very high interest during the lean seasons.
5. The government provides rural credits through several rural and cooperative banks. The government provides credit, training and equipment to the rural people to set up cottage industries, such as basket-making, wood work and weaving.

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- F. 1. India is an agricultural country where most of the people depend on agriculture for their livelihood due to the absence of permanent employment in industries and service

sectors.

2. Moneylenders charge high rate for the loans they give to the poor farmers and fishermen. The poor farmers and fishermen are illiterate, therefore, they are cheated easily.
 3. After the sowing of seeds and before the harvesting, demand for labour in agriculture falls which creates seasonal unemployment.
- G. 1. Harvester. 2. Trawler.
3. This is because the weather becomes foul and rains make it difficult for fishing.
 4. Making of cane furniture 5. Do it yourself.

9. Urban Livelihood

ANSWERS TO ASSESSMENT CORNER

Oral Assignment

- A. 1. True 2. True 3. False 4. True 5. False

Written Assignment

- B. 1. a 2. c 3. c 4. c 5. d
- C. 1. commuters 2. Landless 3. Casual 4. Safety
- D. 1. Owners 2. Government employees 3. Industrialists 4. Porters/Coolies
5. Professionals
- E. 1. High, Medium and Low income groups
2. Government offices, private offices, shops, and work on the roads.
3. A government office is an office where employees are mostly permanent and enjoy different facilities.
4. Hawkers sell goods on the roads.
5. In some work places, e.g., SEWA in Lucknow, only women are employed. SEWA is famous for chikankari embroidery. It gives jobs to the poor and needy women.
6. People from villages often migrate to the cities to look for work during the lean seasons.

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- F. Poor people living in cities cannot afford high rents for their houses, and therefore, they gather in small areas, mostly roadsides. A family lives in a single room and the houses are close to one another.
- G. 1. Teaching in schools 2. Domestic and International Call Centres 3. Building work