India Climate, Natural Vegetation, Forests and Wildlife

Exercises

A. Fill in the blanks

1. The state that first receives the monsoon rains : **Kerala.**
2. A place that receives the heaviest rainfall in India and the world: **Mawsynram**
3. Depression that causes winter rainfall in north-west India : **Western disturbance.**
4. In mixed deciduous forests : **Sal** and **Oak** trees are found.

B. Write true or false. Correct the false statements

1. Babool and kikar trees are mainly found in Rajasthan, Gujarat, and on the leeward side of the Western Ghats.
Answer. False.
Babool and kikar trees are mainly found in Rajasthan, Punjab, and on the leeward side of the Western Ghats.

2. Increase in height is responsible for the changing vegetation in the Himalayas.
Answer. True.

3. Thorn forests occupy the largest area in India.
Answer. False.
Tropical Monsoon deciduous forests occupy the largest area in India.

4. Hogla is mainly found in the tidal forests.
Answer. True.

C. Give geographical reasons for each of the following :

Question 1.
South India is warmer than north India.
Answer:
South India is warmer than North India as it is close to the equator. It has equable climate throughout the year neither very hot nor very cold as it is close to the coast. The north India is far from the equator and is hot in summer and cold in winter (extreme climate) because it is away from the coast.

Question 2.
The south-west monsoon is divided into two branches.
Answer:
The south-west monsoon is divided into two branches because of the peninsular shape of India. The Arabian Sea causes rainfall in the western part and the Bay of Bengal brings rainfall in north-eastern India.

D. Answer the following questions in brief

Question 1.
What type of climate does the Indian subcontinent have ?
Answer:
The Indian subcontinent has a tropical monsoon climate. The temperatures are high with monsoon laden summers. India has distinct wet and dry seasons.

Question 2.
State two ways in which the Himalayas act as a climate barrier.
Answer:
Two ways in which the Himalayas act as a climate barrier are:

1. Himalayas prevent the cold winds of Central Asia from entering India. This prevents India from experiencing very cold winters.
2. The Himalayas also prevent the rain-bearing monsoon winds from leaving the country, thus allowing the country to receive sufficient rainfall.

Question 3.
Why does India have a tropical monsoon climate ?
Answer:
India has a tropical monsoon climate due to the presence of the Himalayas which do not allow the cold winds of Asia to reach the temperate northern parts of India and trap the monsoon which bring rain to the whole of country.

Question 4.
Name two states of north India that receive rainfall in winter. What is the cause of winter rainfall in these states?
Answer:
States of North India that receive rainfall in winter are Punjab, Kashmir, Himacha Pradesh and western Uttar Pradesh. The western disturbances cause the winter rainfall in north-western parts of India. Western disturbances are cyclones or depressions originating from the Mediterranean
region.

Question 5.
Where would you find the following in India:
Asiatic lion, Royal Bengal tiger, one-horned rhinoceros, and red panda?
Answer:

- Asiatic lion is found only in the Gir forests of Gujarat.
- Royal Bengal tiger in mainly found in the forests and foothills of the Himalayas and Sunderbans of the Ganga Delta.
- One-horned rhinoceros is found in Assam and West Bengal.
- Red panda is found in the snow-covered mountains of the Himalayas.

Question 6.
Mention any three national parks in India.
Answer:
India's national parks play an important role in conserving the country's forests and wildlife. Some of the well-known national parks are mentioned below :

1. **Kaziranga National Park :** It is located in Assam and gives protection to the one homed-rhinocerous.
2. **Ranthambore National Park :** Located in Sawai Madhopur district of Rajasthan, this park is dotted with banyan, dhok and mango trees and also has evergreen belts. It plays in important role in tiger protection in the country.
3. **Sundarbans National Park :** It is located in West Bengal and is a major tiger reserve in the country.
4. **Bandhavgarh National Park :** Located in Madhya Pradesh, this park is another safe haven for tigers.
5. **Kanha National Park :** It is supposed to be the most well- maintained park in the country. It provided inspiration to Rudyard Kipling for his famous work, The Jungle Book.

Question 7.
Mention any five biosphere reserves in India.
Answer:
Some important biosphere reserves in India are :

1. Nilgiri Biosphere Reserve located in Western Ghats and Nilgiri Hills in South India.
2. Gulf of Mannar Bisophere Reserve located between India and Sri Lanka, forming part of the Laccadive Sea.
3. Sundarbans Biosphere Reserve in West Bengal.
4. Nanda Devi Biosphere in north-eastern Uttarakhand.
5. Nokrek Biosphere Reserve in the West Garo Hills in Meghalaya.
6. Pachmari Biosphere Reserve in the Satpura Range in Madhya Pradesh.
7. Similipal Biosphere Reserve in north-eastern Odisha.
8. Achanakmar-Amarkantak Biosphere Reserve located in Chhattisgarh and Madhya Pradesh.

9. Great Nicobar Biosphere Reserve located in Nicobar Islands.

E. Answer the following questions in one or two paragraphs.

Question 1.
Describe the seasons experienced in India and also state the months and their duration.
Answer:
The tropical monsoon climate of India has three main seasons

1. **The Hot Dry Season — March to May**
2. **The Hot Wet Season — June to October**
3. **The Cool Dry Season — November to February**

1. The Hot Dry Season: The temperature starts to rise by March, reaching the highest in May in the desert region going above 48°C. Northern Plains are at about 35° to 40°C. The places at higher altitudes and coastal regions have moderate temperatures. The high temperature leads to local storms accompanied by convectional showers at times like loo in Rajasthan, Mango showers in Kerala, Kalbaisakhi in Assam and West Bengal.

2. The Hot Wet Season Rainy Season : By June, the high temperature leads to the formation of a low pressure area and blowing of high pressure winds from the sea to the land occurs which brings rainfall to the land. These winds are called summer monsoons or the south-west monsoons that bring heavy rain along with thunder and lightning. Temperature decreases by 3°-6°C. Kerala is the first state to receive the rain. The south-west monsoons are divided into two branches—
(a) The Arabian Sea Branch — It is stronger and causes heavy rain in the western ghats, moving to Deccan Plateau and the interiors of peninsular which gets hardly 50-60 cm of rainfall.
(b) The Bay of Bengal Branch — It brings heavy rain in the north-eastern India, then all over the Northern Plains (by taking turn along the Himalayas). By the time they reach north-west India, the wind becomes dry and hence very low rainfall is experienced in this region.
By the end of September, India starts to cool again as the sun's direct rays move towards the equator and the Tropic of Capricon. The air above land is cool (at high pressure) and air above water bodies is warmer (low pressure), so the winds reverse the direction and blow from the land to the sea. These winds are called retreating monsoons. Tamil Nadu receives less rainfall in summer and more rainfall in winters from the north-east monsoon.

3. Cold Dry Season : The winter season begins from November and lasts till February. Temperatures are lower in north India and the interiors are dry. The average temperatures go below 10°C in north-west India and around 21°C in the plains. Some areas at high altitude as Shimla and Srinagar experience snowfall. South India remains warmer due to closeness to equator. Severe cold waves are common in Northern India.

Rainfall is scanty all over India as winds blow from land towards the sea and hence are dry. The north-west India and the Coromandel Coast receive winter rainfall due to north east monsoons. Hence, Tamil Naidu receives winter rainfall. Western disturbances also bring cyclonic rainfall in the north west India states like Punjab, Kashmir Himachal Pradesh and western Uttar Pradesh Winter rainfall is low but very important for rabi or winter crops such as wheat and barley.

Question 2.
Which winds bring rainfall to the Western Ghats ? Why is the Deccan Plateau relatively dry during the rainy season? Why do Punjab and Rajasthan get very little rainfall during the monsoons ?
Answer:
The moisture laden south-west monsoon winds from die Arabian Sea branch causes heavy rainfall to the windward side of the Western Ghats.
The Deccan Plateau which lies on the leward side receives very little rainfall and hence remains relatively dry during ;he rainy reason.
The Bay of Bengal Branch of the south-west monsoons brings heavy rainfall to the north-eastern region of India. The Himalayas prevent them from leaving India and divert these O west, through the Ganga Plains. The amount of rainfall received steadily decreases in the north- west direction and wind becomes dry. As a result, Punjab and Rajasthan get very little rainfall during monsoons. Punjab is the last state to receive the monsoon rains.

Question 3.
Explain the importance of monsoon.
Answer:
A good monsoon is important for the entire country for these reasons :

1. A good monsoon brings economic prosperity for the whole country and boosts the Indian economy as agriculture contributes around 16 per cent of its total Gross domestic product (GDP).
2. High temperature and heavy rainfall in the summer months are important for different types of kharif crops. The winter rain supplemented by irrigation is important for rabi crops.
3. A normal rainfall is important for adequate agricultural production in order to maintain food prices. Food prices depend upon the agricultural output. In the absence of a good monsoon, the entire nation may be destabilized because of food inflation.
4. Several dams, reservoirs, rivers and canals in India are rain- fed and depend upon the monsoon rains.
5. Other economic activities like forestry and fishing are also influenced directly by the amount of rainfall.
6. Monsoon rain gives us respite from the high and intolerable summer heat and brings back life to the living earth.

7. Monsoon also has a role to play in the social-cultural unity of India. People of India, particularly the farmers, eagerly wait tor the monsoon rains. We know that the monsoon winds provide water for the various agricultural activities. The agricultural calendar, and the social-cultural life of the people including their festivities, revolve around the monsoon phenomena and in a way binds the people of India together. Different harvest festivals in our country such as Bihu in Assam, Pongal in Tamil Nadu, Onam in Kerala and Lohri in Punjab are celebrated to mark a good harvest. If the rainfall is good, the entire country celebrates and if the monsoon fails, it brings famines and a year of sorrow for everyone.

Question 4.
List the different types of vegetation found in India. Describe any two.
Answer:
The different types of vegetation found in India are :

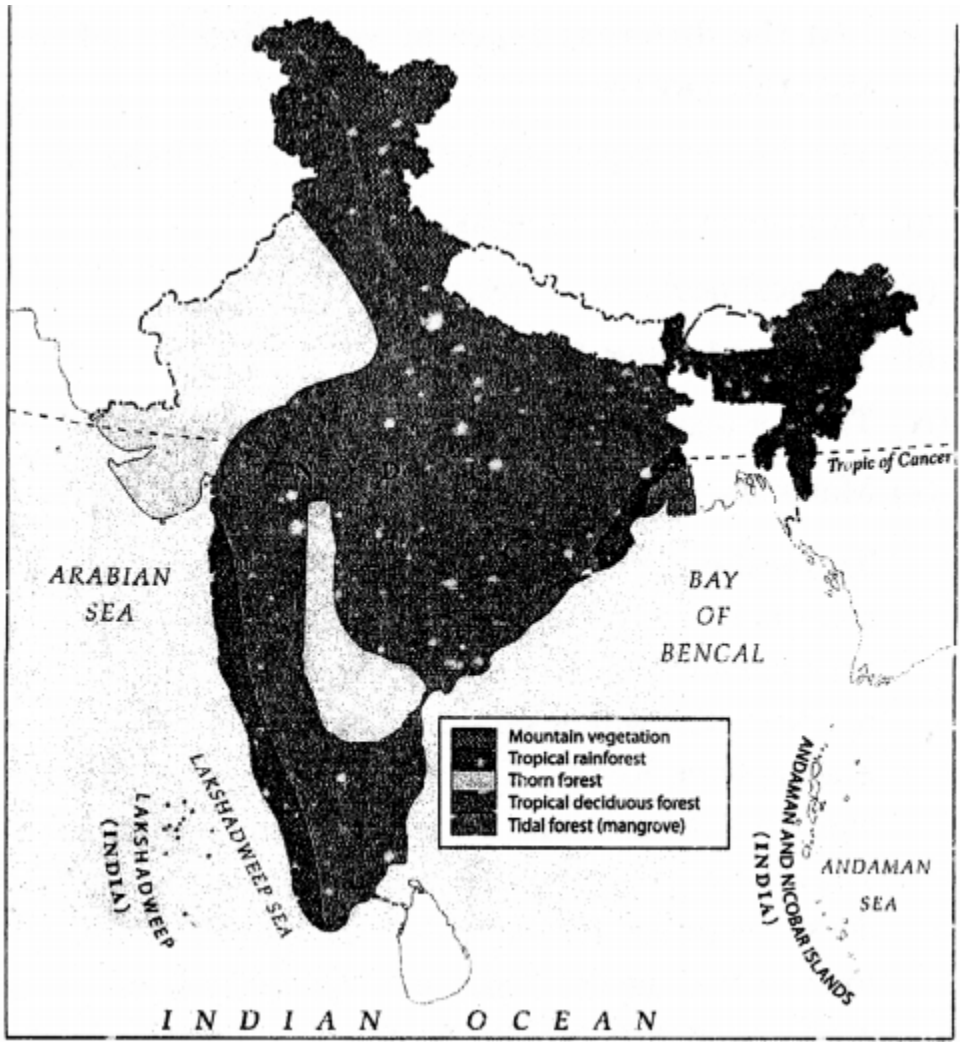
Based on variation of rainfall

- Tropical evergreen forests
- Tropical deciduous forests
- Thorn and desert forests

Based on variation of relief

- Tidal or mangrove forests
- Mountain or Alpine forests

Tropical evergreen rain forests : These forests are found in areas that receive an annual rainfall of over 300 cm and are very humid. The temperature varies between 25° and 27° C or above. The windward side of the Western Ghats in western Maharashtra, Kerala, Karnataka, hills of north-eastern India and the Andaman and Nicobar Islands have these forests. The forests have broad-leaved hardwood trees. These are dense evergreen forests with trees upto 60 m tall. The trees form distinct layers. Thick undergrowth makes commercial exploitation difficult Shisham, ebony, rosewood, telsar, tun or red cedar, teak gurjans, mahogany and bamboo are the common species of trees growing here.
Monsoon deciduous forests : These forests are found in areas that receive an annual rainfall between 100 and 200 cm, have distinct dry and wet seasons, and a low range of temperature. These forests arc found in large part of India- from the eastern slopes of the Western Ghats up to the Shivalik Range in the north, north-eastern region and the Deccan Plateau. The trees shed their leaves during the dry season to conserve water. The trees do not grow very close to each other, are not very tall and have long roots. The trees growing here are of great economic importance like teak, sal, mahua, Khair, sandalwood, jack fruit, semal, myrobalan and banyan.



Question 5.
How are the tropical evergreen forests different from the tropical deciduous froests ?
Answer:

Tropical evergreen forests	Tropical deciduous forests
(i) These are found in areas having an annual rainfall of over 300 cm.	These are found in areas having an annual rainfall of 100 – 200 cm.

(ii) There are no distinct seasons as they remain humid.	They have distinct dry and wet seasons.
(iii) The temperature varies between 25° – 27° or above.	They have lower range of temperature.
(iv) The trees grow up to 60 m.	The trees are shorter.
(v) These are dense forests.	They are not dense as trees don't grow close to each other.
(vi) They are evergreen forests, *i.e.*, do not shed their leaves.	These trees shed their leaves in dry season to conserve water.
(vii) They are difficult to use for commercial purposes as are impenetrable.	They are of great economic impotance.
(viii) Trees found here are Shisham, ebony, rosewood, telsar, tun (red cedar), mahogany and bamboo.	Trees found here are teak, sal, mahua, khair, sandalwood, jackfruit, semal, myrobala and banyan.
(ix) These forests are found in Kerala, Maharashtra, Karnataka, north-eastern hills and the Andaman and Nicobar Isalnds in India.	These forests are found in most of India from western ghats to shivalik range in the north and north-eastern region and the Deccan Plateau.

Question 6.
Where are the tidal forests found in India ? What are the characteristics of these forests ? Name a few trees found in. these forests.
Answer:
The tidal or mangrove forests are found in the deltas of all major rivers – Ganga – Brahmaputra Delta (the Sunderbans), the deltas of the Mahanadi, the Godavari, the

Krishna and the Kaveri. These areas receive more than 200 cm of annual rainfall. The forests developed in the lowlands that get flooded and submerged under salty sea water during high tide. The forests are dense and the trees have hardwood. The trees have stilt-like supporting roots that can take in oxygen. They have glossy aftd evergreen leaves. The vegetation found here is – Sundari trees, gorjan, lintal, casuarina, golpata, hogla (elephant grass), hetal and recdsr Thfcse forests are also called mangroves. They are a very impotant part of the coastal ecosystem.

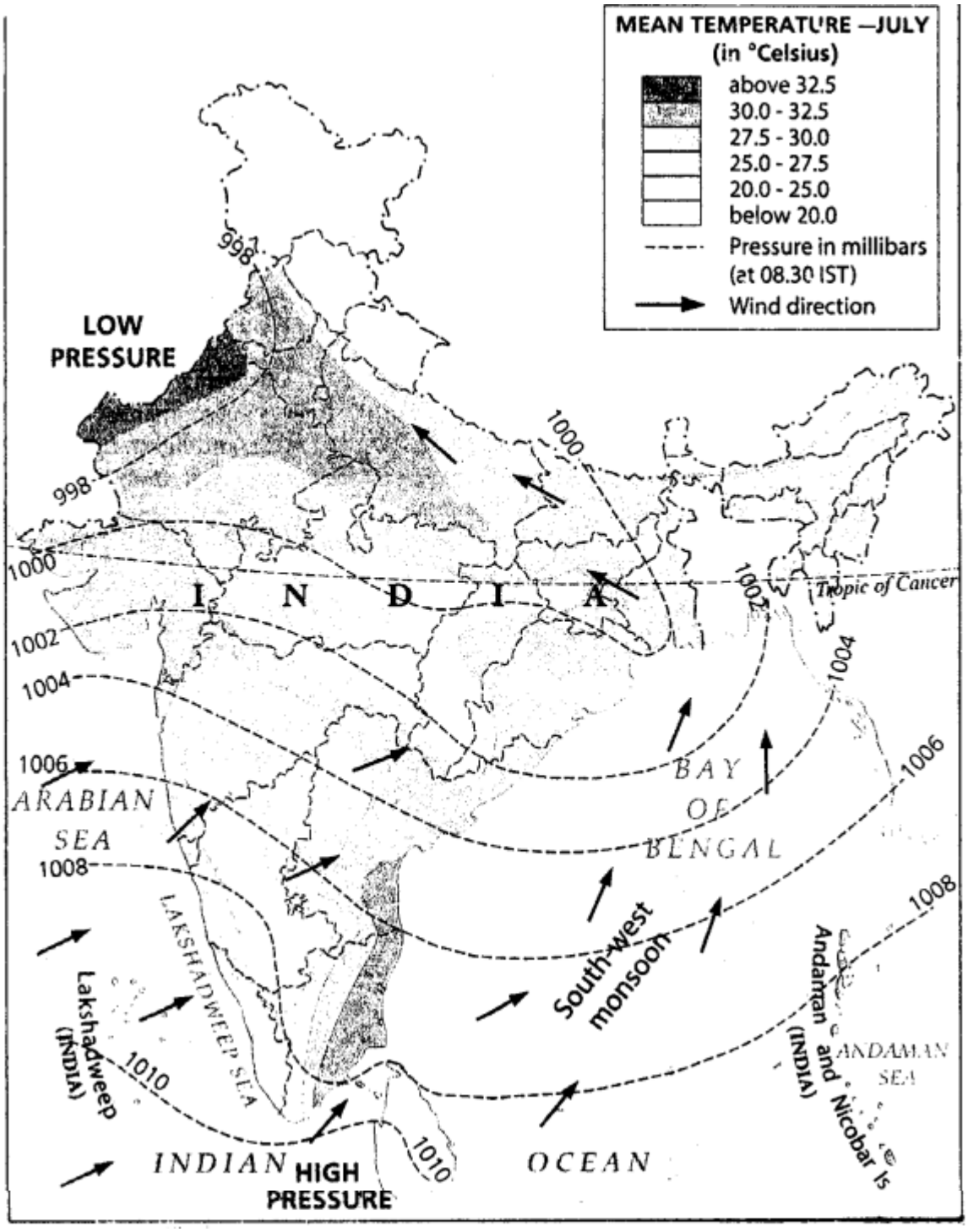
Question 7.
Give an account of the biosphere reserves in India.
Answer:
India biosphere reserves are large areas of natural habitat and often include one or two national parks and/or reserves that are open to some economic uses. In these reserves, protection is given not only to the flora and fauna of the region but also to the local communities and their way of life. Biosphere reserves are divided into three zones which have specific roles to play in the conservation of wildlife.
Core zone is the legally protected zone wherein land and water is not to be disturbed by human activity. The main function of this zone is to conserve biodiversity and allow scientific research that does not adversely affect the wildlife in the zone. Buffer zone is the area surrounding the core zone wherein activities like environmental research and recreation are allowed in a manner that does not affect the wildlife. Transition zone is the area wherein human activities such as farming, grazing and any other activities of the indigenous people are permitted.

F. Map work
On an outline map of India, do as directed :

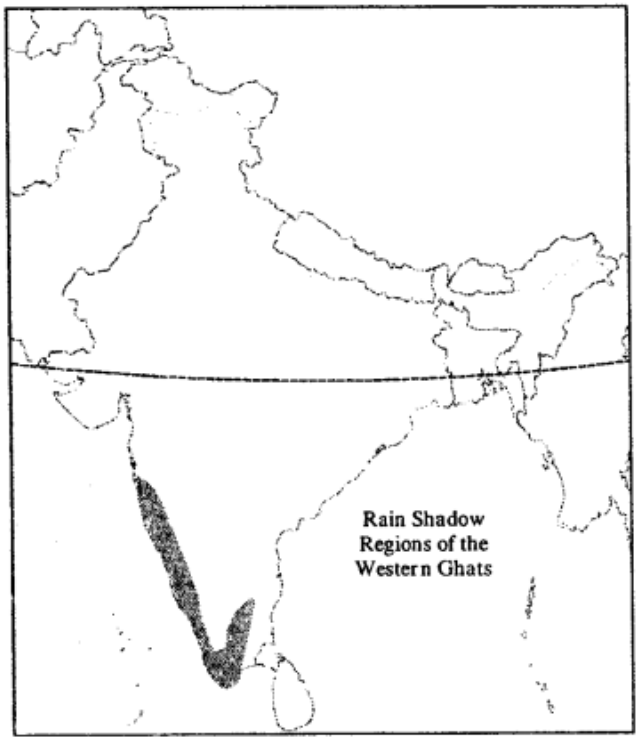
1. Mark with red arrows the paths of the Arabian Sea branch and the Bay of Bengal branch of the south-west monsoon.
2. Shade in yellow the rain shadow regions of the Western Ghats.
3. Colour with light green the areas of India that receive moderate rainfall between 100-200 cm annually.
4. Mark the Kaziranga and Kanha national parks, and the Nokrek biosphere reserve.

Answer:

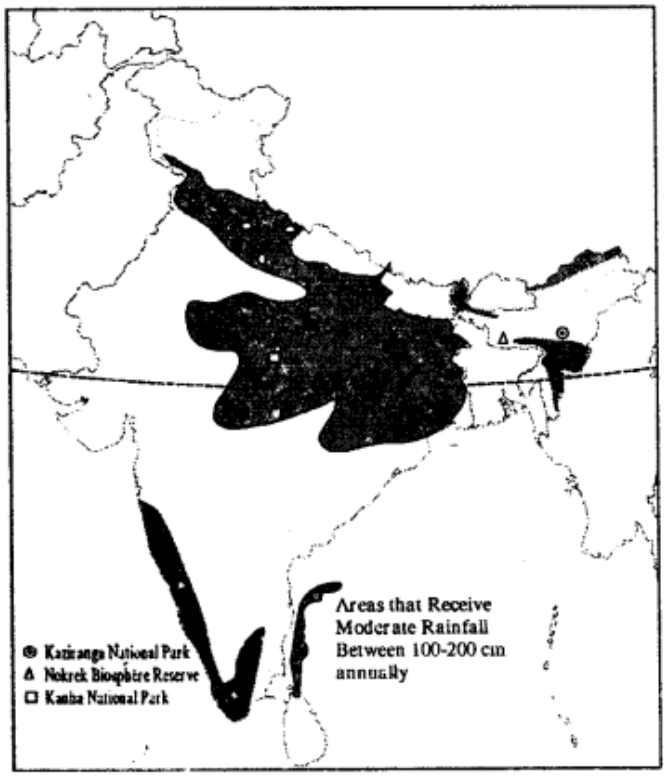
1.


MEAN TEMPERATURE —JULY
(in °Celsius)
above 32.5
30.0 - 32.5
27.5 - 30.0
25.0 - 27.5
20.0 - 25.0
below 20.0
Pressure in millibars
(at 08.30 IST)
Wind direction
LOW PRESSURE
998
1000
1002
1004
1006
1008
1010
INDIA
Tropic of Cancer
ARABIAN SEA
BAY OF BENGAL
INDIAN OCEAN
ANDAMAN SEA
LAKSHADWEEP SEA
Lakshadweep (INDIA)
Andaman and Nicobar Is (INDIA)
South-west monsoon
HIGH PRESSURE

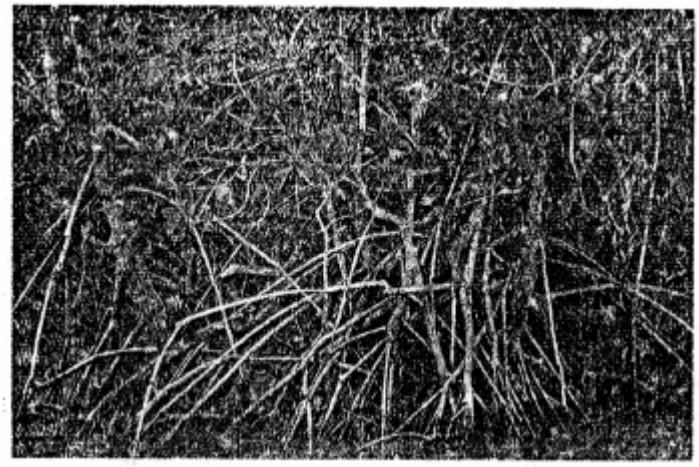
2.


Rain Shadow
Regions of the
Western Ghats

3. and 4.


Kaziranga National Park
Nokrek Biosphere Reserve
Kanha National Park
Areas that Receive
Moderate Rainfall
Between 100-200 cm
annually

G. Picture Study



Question 1.
Identify the type of forest shown in the photograph.
Answer:
Tidal or Mangrove forest.

Question 2.
Write two characteristics of this type of forest.
Answer:

1. The forests are dense and the trees have hardwood.
2. Trees have stilt type supporting roots to take in oxygen.
3. Leaves are glossy and evergreen.

Extra Questions

Question 1.
Which latitude divides India into two nearly equal parts ?
Answer:
The Tropic of Cancer at 23 1/2° N latitude divides India into two nearly equal parts the northern temperate zone and the southern tropical zone.

Question 2.
What are monsoons ?
Answer:
Monsoons are the seasonal winds that blow across the Indian subcontinent and bring rain to the whole of India.

Question 3.
What are the factors affecting the climate of India ?
Answer:
Factors affecting the climate of India are :

1. **Latitude —** The areas close to the equator, i.e. southern India, has warm and equable climate. The northern India which is away from the equator has extreme climate-hot in summer and cold in water.
2. **Height above sea level —** Temperature decreases with increase in height above sea level. Very low temperatures are recorded in high Himalayan regions and Udhagamandalam (Ooty) and Kodaikanal in the Western Ghats.
3. **Northern Mountains —** They prevent the cold winds of Central Asia from entering India and hence India is protected from severe winters. They also prevent the rain-bearing monsoon winds from leaving the country and thus allowing the country to receive sufficient rainfall.
4. **Distance from the Sea —** Places in the interior like Punjab, Haryana and Rajasthan have very hot summers and cold dry- winters as they are far from the influence of the sea. Places near the coast, such as Mumbai and Chennai, have moderate summers and winters.

Question 4.
Why do places at higher altitudes and the coastal regions have moderate temperatures in summers ?
Answer:
Places at high altitude have moderate temperatures due to their height above sea level (temperature decreases with increase in height above sea level).
Places at coastal regions have moderate temperatures due to their closeness to the sea.

Question 5.
Name :

1. **The hottest place in India**
2. **The coldest place in India.**
3. **The wettest place in India.**

Answer:

1. **Hottest place in India :** Briyawali in Bikaner, Rajasthan (56°C)
2. **Coldest place in India :** Dras in Jammu and Kashmir (-56°C)
3. **Wettest place in India :** Mawsynram in Meghalaya (average annual rainfall 1,187 cm)

Question 6.
What do you mean by western disturbances ?
Answer:
Western disturbances are cyclones originating in the Mediterranean region and arriving into India from the north- west. They bring winter rainfall in the north-west India.

Question 7.
How are evergreen and deciduous trees different ?
Answer:
Deciduous trees shed their leaves in the dry season to conserve water, eg. Teak, sal. sandalwood, banyan, etc. whereas evergreen trees remain green throughout the year and do not shed their leaves in any season, eg. shisham, ebony, rosewood, mahogany, bamboo, etc.

Question 8.
What do you mean by mangrove ?
Answer:
Mangrove is a forest that is found in the tropical and sub-tropical coastal areas which are subject to being submerged in salty sea water by high tides.

Question 9.
What is loo ?
Answer:
Loo is hot dusty wind blowing over northern India in summers.

Question 10.
Name the showers that help in the ripening of mangoes in Kerala ?
Answer:
Mango showers.

Question 11.
Why are storms in Assam and West Bengal called Kalbaisakhi ?
Answer:
Kalbaisakhi means ‘calamity of the month of Baisakh (April) as they sometimes damage trees and property.

Question 12.
Which is the first and the last state to receive monsoon in India ?
Answer:
Kerala is the first state and Punjab is the last state to receive monsoon in India.

Question 13.
Name few festivals of India which celebrate the arrival of monsoons, changes in seasons and the harvest season.

Answer:
Adi Perukku and Pongal in Tamil Nadu and Baisakhi in north India.

Question 14.
What do you understand by retreating monsoons ?
Answer:
By the end of September, the Indian subcontinent starts to. cool and monsoon winds become dry. Since the air above the land is cold and heavy, a high pressure region is created over land. The air above the surrounding water bodies are relatively warmer and have low pressure region. Now, the dry monsoon winds reverse their direction and start blowing from the land to the sea. These winds are called retreating monsoons.

Question 15.
Why does Tamil Nadu receive rainfall in winter ?
Answer:
Tamil Nadu receives less rainfall in summer from the south-west monsoon as it lies in the leeward side of the Western Ghats. During winters, the north-east winds are dry but as they blow over the Bay of Bengal they pick moisture and bring rainfall in Tamil Nadu as north-east monsoons.

Question 16.
Name two area in India which receive winter rainfall.
Answer:
The Coromandel Coast and north-west India.

Question 17.
On what factors does rainfall at a place depend on ?
Answer:
The amount of rainfall depends on the location of a place, i.e. whether it is located near the coast or in the interior and whether it is on the windward side (wet side) or the leeward side (dry side). The direction of the mountain ranges is also of great significance.

Question 18.
Write short notes on :

1. Thorn and Desert forest
2. Mountain or Alpine forest
3. Afforestation or Vana Mahotsava

Answer:

1. **Thorn and Desert forest —** These forests are found in the north-western part of India and on the leeward side of the Western Ghats as Rajasthan, Punjab, Haryana, Madhya Pradesh, Maharashtra, Andhra Pradesh and Gujarat. The average rainfall is less than 50 cm. The vegetation cover is not dense. Stunted, thorny trees and bushes grow here. The plants have long roots to tap the underground water and modified stems to store water. Trees found here are date, palms, acacia, palas, cacti, kikar and babool.
2. **Mountain or Alpine forest —** These forests are mainly found in Himalayas in Jammu and Kashmir, Himachal Pradesh, Uttrakhand and Arunachal Pradesh. Different types of vegetation occur at different altitudes. The lower foothills have deciduous forests and the middle slopes have mixed deciduous conifers. Grass grows on very high slopes. Coniferous forests have softwood evergreen trees like sal, oak, ash, beech, chir pine, silverfir, chestnut, cedar and deodar.
3. **Afforestation or Vana Mahotsava —** Growing of trees/forest (afforestation) has been taken up as Vana Mahotsava in India which is a tree planting ceremony started to maintain the ecological balance and prevent the depletion of the ozone layer. The following activities are undertaken on Vana Mahotsava :

(a) Tree planting to increase area under forests
(b) Care of trees already planted
(c) Protection of trees from insects and pests.
(d) Planting trees on hill slopes and wasteland.
(e) Preventing illegal felling of trees.
(f) Free distribution of saplings.

Question 19.
Name few important species of wildlife found in India.
Answer:
The variety of animals found in India are tiger, Royal Bengal tiger, Asiatic lion, panthers, cheetahs, snow leopards, elephants, Nilgai (blue bull), swamp deer, barasingha, hangul, bears, red panda, Himalayan Black bear, one-horned rhinoceros, crocodile, gharial (gangetic crocodile).
The variety of birds found in India are swallow, mynah, owl, kite, parrot, pigeon, dove, crow, sparrow, bulbul, goose, duck, kingfisher, crane and heron.

Question 20.
List some direct and indirect advantages from forests.
Answer:
Direct Advantages :

1. Forests provide timber for construction purposes, furniture, toys, railway sleepers, sports goods, and wood carving ; and softwood, bamboo, and grass for pulp, paper, and plywood.

2. Forests also provide products such as fruits, flowers, medicinal herbs and plants, beeswax, honey, turpentine oil, lac, and resin.
3. Forests provide fodder for cattle.
4. Forests are a shelter or natural habitat for wildlife.
5. Forests are major tourist attractions.

Indirect Advantages :

1. Forests moderate the temperature of a place.
2. Forests protect land from soil erosion by reducing the flow of flood waters.
3. Forests help in increasing soil fertility by providing humus.
4. Forests help in increasing water vapour in the atmosphere, thereby helping in cloud formation that causes rainfall.

Question 21.
Define with examples :

1. Sanctuary
2. National Park
3. Biosphere reserve.

Answer:

1. **Sanctuary —** A sanctuary is a protected area where wild animal can live in their natural surroundings. Hunting, entry with weapons, lighting a fire and using substances injurious to wildlife are prohibited while fishing and grazing of livestock may be allowed on a controlled basis. Entry or residence in it may be granted for the purpose of photography, Scientific research or tourism. For example – Sanjay Gandhi Bird Sanctuary, Sultanpur Bird Sanctuary, Periyar Bird Sanctuary, etc.
2. **National Park —** A national park is a protected area where animals live in their natural surroundings. Commercial exploitation of animals and natural resources is illegal. Cattle grazing is prohibited. Tourists can enter their with permission. For example – Jim Corbett National Park, Gir forest, Rajaji National Park, Sariska National Park, Kaziranga National Park, etc.
3. **Biosphere reserve —** They are protected areas that have been set up to preserve genetic diversity, promote research on ecological conservation and facilitate training to create an awareness of the biosphere. For example — Nanda Devi Biosphere Reserve, Sunderbans Biosphere Reserve, Manas Biosphere Reserve, etc.

Fill in the blanks

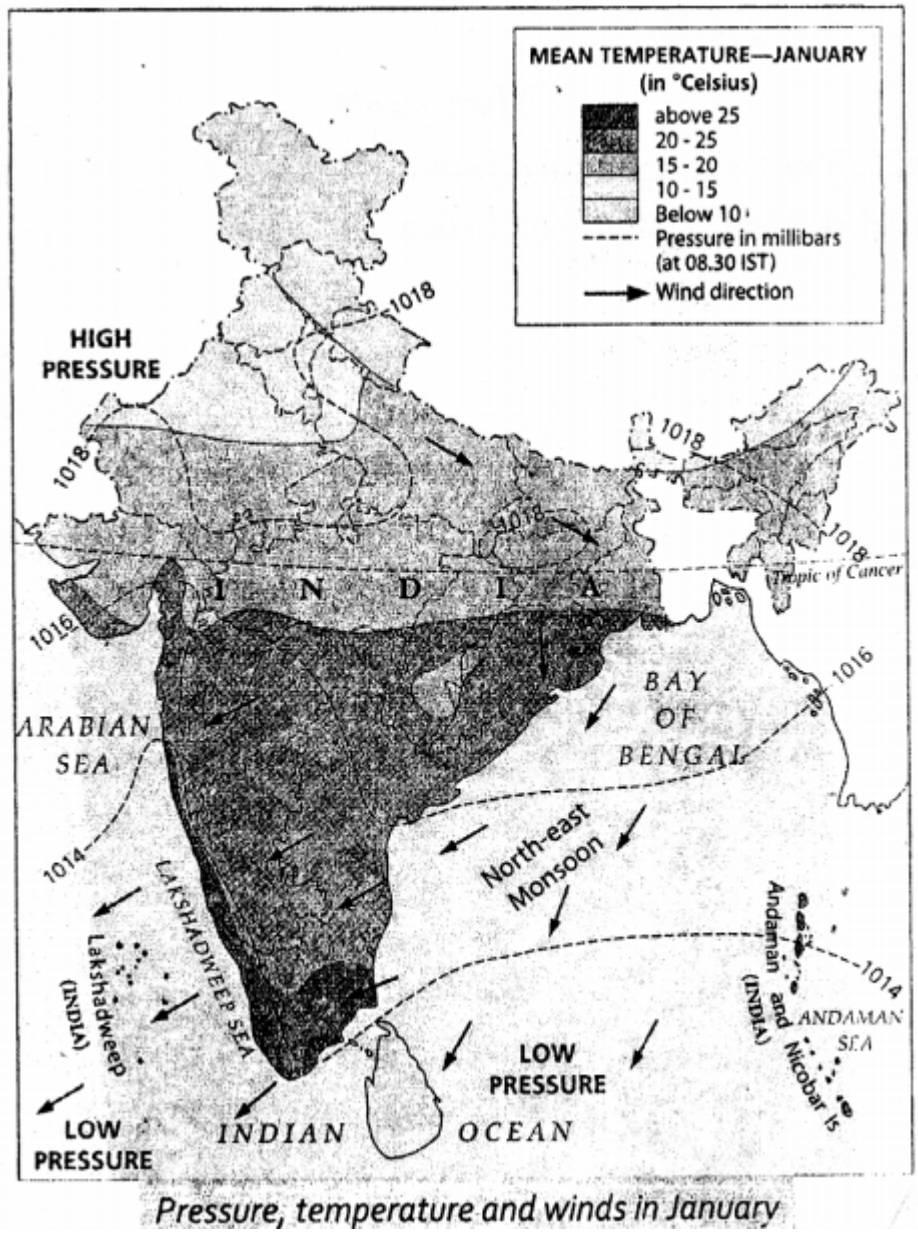
1. The areas away from the coast experience **extremes** of temperature while those near the coast have **equable** climate throughout the year.
2. The southern part of India is **warm** all year round.
3. Agriculture, forestry and fishing are directly influenced by the amount of **rainfall.**
4. Temperature **decreases** with increase in height above sea level.
5. The **Himalayas** protect our country from the cold winds of Central Asia.
6. The highest temperatures are recorded in the **desert** regions of north-west India.
7. The winter rainfall is very important for the cultivation of **rabi** crops such as wheat.
8. The **Arabian Sea** branch of south-west monsoon winds cause heavy rainfall to Western Ghats.
9. The **Bay of Bengal** branch of south-west monsoon bring heavy rainfall to the north-east India Ganga plains and north-west India.
10. There are about **5,000** species of plants and animals in India.
11. Mangrove forests are a very important part of the **coastal** ecosystem.
12. **Tiger** is the national animal and **peacock** is the national bird of India.
13. The total forest area in India was at **21.34** per cent in 2015.
14. There are **514** wildlife sanctuaries and **100** national parks in India.
15. India receives most of its rainfall from the **south-west** monsoons from June to October.
16. The **north-east** monsoons cause rainfall on the Coromandel Coast during winter months.
17. The **western disturbances** cause rainfall in the north-west India in winters.

Map Skills

Question 1.
Mark some important biosphere reserves, bird sanctuaries and national parks of India ?
Answer:

India: Biosphere reserves, bird sanctuaries and national parks

Question 2.
On an outline map of India, show the path of the north – east monsoons with arrows.
Answer:



Pressure, temperature and winds in January

Question 3.
On an outline map of India, show the annual distribution of rainfall.
Answer: