

GEOGRAPHY

2nd TERM

CHAPTER 3 – WEATHER AND CLIMATE

Tick the correct options:-

1. Wind vane is used to find out Direction.
2. The unit of pressure is Mb.
3. Relative humidity is measured by Wet and Dry Bulb Thermometer.
4. Wind speed is measured in knots.

Fill in the blanks:-

1. Meteorological station is a place where weather conditions are recorded with the help of instruments.
2. Rain Gauge is used to measure rainfall.
3. Laboratory thermometer can record the highest and the lowest temperature of a given period.
4. Horizontal movement of air near the surface of the earth is called Wind.

Answer the following questions briefly :-

Q.1 Write the difference between Weather and Climate.

Ans. Weather:-

- *Weather refers to a short-term condition of the atmosphere.
- *It is not static but keeps changing from time to time. It cannot be generalised.
- *Study of weather is called meteorology.

Climate:-

- *Climate is the average weather conditions over a long period of time.
- *Since climate refers to average conditions, it can be generalised.
- *Study of climate is called climatology.

Q.2 Name the important elements of weather?

Ans: Temperature, Wind, Atmospheric pressure, Humidity, Precipitation, Cloud cover.

Q.3 What is the difference between diurnal range of temperature and annual range of temperature?

Ans: *Diurnal temperature* – The difference between the maximum and minimum temperature of a day.

Annual temperature – It is the difference between hottest and coldest month of a year.

Q.4 What are the instruments used for measurement of the following;

a) Pressure b) Wind speed c) Rainfall d) Humidity e) Temperature

Ans. a) Pressure—Barometer

b) Wind speed—Anemometer

- c) Rainfall –Rain Gauge
- d) Humidity – Hygrometer
- e) Temperature – Thermometer

Q.5 State the use of Wet and Dry Bulb Thermometer.

Ans: The relative humidity of the atmosphere at a particular place can be measured with the help of a Wet and Dry bulb thermometer.

Q.6 What is the purpose of the meteorological station ?

Ans: We often hear these weather forecasts on radio and television. Their reports are based on the data collected by weather bureaus or meteorological stations.

Q.7 What is the purpose of Anemometer?

Ans: It is used to measure the wind speed.

Q.8 What are weather maps used for?

Ans: Weather maps are used to show various meteorological features like Isotherms, Isohyets, etc.

CHAPTER 5 – INDUSTRIES

Tick the correct option:-

1. The port nearest to the Tata steel Company is Kolkata.
2. Detroit is located in the state of Michigan.
3. Which is the leading shipbuilding yard in the S.E Asia? South Korea.
4. The main raw material of iron & steel industry Dolomite.
5. Bhilai Steel plant was set up with collaboration of Russia.

Fill in the blanks:-

1. Cuba is a major producer of Sugar.
2. Bengaluru is the chief centre of IT industry.
3. UK is known as birthplace of modern textile industry.
4. Osaka is known as Manchester of Japan.
5. The first successful textile mill was set up in England in Europe

Match the following:-

1. IBM ---- Information and Technology
2. Ahmedabad ---- Textile Industry.
3. Durgapur ---- Iron and steel industry.
4. Sugar Industry ---- Cuba.
5. USA ---- Silicon valley.

Write True or False for the following:-

1. Osaka is situated in South Asia. – False

2. The Tata steel is situated in Mumbai – False
3. Detroit is famous for Automobile industry. – True
4. The IT industry is situated in Jharkhand – False
5. Bengaluru is called as IT capital of India – True

Answer the following in brief:-

1. State any three raw materials required for iron and steel industry.

Ans: The basic requirements for the development of iron and steel industry are raw materials like iron ore, limestone, dolomite, manganese.

2. How industries pollute our water resources? State any one preventive measures.

Ans: i) Industrial waste is a major source of water pollution. Various industries like chemicals, paper, tanning, dyeing, textiles, sugar, jute, steel, oil refineries, etc. produce millions of tons of industrial waste, both in solid and liquid form. The entire waste is thrown into the water bodies. This waste affects the surface water as well as groundwater.

ii) The industries should be provided waste treatment facilities.

3. Name any two largest producers of cotton textile.

Ans: U.K and U.S.A

4. Why is cotton textile concentrated in Maharashtra and Gujarat?

Ans: The ideal geographical factors such as black soil, plenty of freshwater, transport facility and rich hinterland are some of the factors for the development of the textile industry in this region.

5. What are the key elements of Information technology?

Ans: The key elements of the Information Technology are:-

- i) Computer Hardware
- ii) Computer Software
- iii) Tele-communication
- iv) Data base and data warehouse.
- v) Human Process and procedures

6. What is the difference between information technology and software industry?

Ans: *Information technology* – The study or use of electronics equipment, especially computers for collecting storing and sending out information.

Software industry – It is a set of instructions, data or program used to operate computer and execute specific tasks.

7. State any three advantages of industrialization.

Ans: Higher economic growth, improved national income and Higher standard of living.

8. What is the difference between agro-based and mineral based industry? Give one example of each.

Ans: *Agro based industries* – Industries that depend on agricultural products for their raw materials are known as Agro based industries. Ex-Sugar Industry/cotton industries.

Mineral based industries – Industries that depend on minerals for their raw materials are known as mineral based industries. Ex- Iron and steel industry.

9. Where is the famous ship-building yard located? Where is shipbuilding industry located in India?

Ans: South Korea. Vishakhapatnam, Kolkata and Mumbai.

1. Define mini steel plant.

Ans: Steel plants that do not do all the processes under one complex are known as mini steel plants. They use scrap iron and sponge iron which is easily available. They are decentralized secondary units. They are electric furnaces instead of blast furnaces.

2. State any three problems of sugar industries.

Ans: i) Lack of transport facilities.

ii) Perishable goods so the sucrose contains decreases if it is not reaching to the mills within 24 hrs.

iii) Old machines and unskilled labours.

3. Name the by products of sugar industry with one use each.

Ans: Molasses – for the DDT, pesticides and alcohol. Pressmud – Shoe polish, wax, card board.

CHAPTER 6 – ENERGY AND POWER RESOURCES

Tick the correct option:-

1. Fossils fuels are found in Sedimentary rocks.
2. Most of the minerals of India are found in the Chottanagpur plateau
3. Hydel power is Conventional energy.
4. Mumbai High is located in Arabian Sea.
5. Bituminous coal is used for Industrial purpose, Domestic purpose and electricity generation.

Fill in the blanks:-

1. Fossil fuels are found in Sedimentary rocks.
2. Coal is a Conventional power resource.
3. Wind energy is used for producing mechanical energy.
4. Solar energy is Renewable source of energy.
5. Coal is a non- renewable source of energy.

Answer in Brief:-

1. Give three ways to save energy.

Ans: i) Energy can be conserved by reducing wastage and losses, improving efficiency through technological upgrades and improved operation and maintenance.

ii) At home, simple actions such as turning off lights and unplugging computers or turning off television can help us reduce our daily consumption of energy.

iii) Carpooling must be encouraged to save fuel. It will also help in reducing pollution.

2. State any three advantages of solar power.

Ans: i) Solar energy is a resource that is not only sustainable for energy consumption, it is indefinitely renewable.

ii) Solar power does not cause any pollution.

iii) Solar panels require little maintenance.

3. State any three uses of biogas.

Ans: Domestic fuel, Lighting streets and homes and bio fertilizer.

4. Why should we conserve coal and petroleum?

Ans: i) Important source of energy as they provide more heat and energy than the renewable sources of energy.

ii) They are non-renewable energy resources so they may exhaust.

5. Why do we grow trees around the industries?

Ans: To prevent air pollution by taking on the carbon dioxide from industries and by giving out oxygen.

6. What is the significance of Bhakra Nangal Project?

Ans: * It provides electricity for industrial, agricultural and domestic use.

*This project has helped in controlling floods in the river Sutlej downstream.

*The other benefits are soil conservation, afforestation, development of fish culture and increase in the production of food crops and cash crops.

7. Write a note on the advantages and disadvantages of multipurpose projects.

Ans: Advantages –i) It is a renewable source of energy.

ii) Dams store excess rainwater, thereby lessen the risk of flooding.

iii) Lakes and land behind the dam are used for boating and other recreation facilities, such as wildlife sanctuaries.

iv) It generates electricity.

v) There is little pollution.

Disadvantages:

i) Dams are expensive to build.

ii) They are risky as heavy pressure of water may result in bursting of dam.

iii) Their construction may render people living around rivers homeless.

CHAPTER 8 – AFRICA- LOCATION, POLITICAL DIVISIONS AND PHYSICAL FEATURES

Tick the correct one:-

1. River Nile originates in Victoria.
2. The northern part of Africa is a Plateau.
3. Mount Rwenzori is a Block mountain.
4. The most prominent physical feature of Africa is Rift Valley.
5. The longest river in the world is Nile.

Answer in One word:-

1. A narrow strip of land separating two seas. Isthmus
2. A sudden fall of water from a certain height. Water fall
3. A narrow stretch of water connecting two seas. Strait
4. A region of tall and coarse grass in tropical Africa. Savannah
5. Temperate grasslands of South Africa. Veld
6. A narrow steep sided valley formed between two parallel faults.

Gorge

Match the following:-

- i) Ghana ---- Accra
- ii) Kenya ---- Nairobi
- iii) Ethiopia ---- Addis ababa
- iv) Sudan ---- Khartoum
- v) Zambia ---- Lusaka

Fill in the blanks:-

1. The White Nile is the tributary of river Nile.
2. River Nile is 6670 km long.
3. The Nile delta is 250 km wide.
4. Fold mountains are remnants of ancient old fold mountains.
5. Africa is called a Dark Continent because it could not be explored by the Europeans.
6. Himalayas is the highest mountain in the world.

Answer in brief:-

1. Name the three important parallels of latitudes which pass through Africa.

Ans. Tropic of Cancer, Tropic of Capricorn and Equator.

2. State the latitudinal and longitudinal extent of Africa.

Ans. Latitude - 370 N to 350 S ; Longitude- 170 W to 510 E

3. Name the water bodies surrounding the continent of Africa.

Ans. It is surrounded by many water bodies – in the north by the Mediterranean Sea, in the northeast by the Red Sea, in the east by the Indian Ocean and in the west by the Atlantic Ocean.

4. Why is Africa called the dark continent? State any two reasons.

Ans. It is called as dark continents because of its Dense Forests, Marshes, swamps and vast deserts.

5. State the four physiographic divisions of Africa.

Ans. a) Sahara and Kalahari desert

b) Rift Valleys

c) The Basins – Congo Basins, Orange basin and Chad basin.

d) The mountains – Fold mountains, Block mountains and Volcanic mountain.

6. Name any three basins of Africa.

Ans. Congo basin, Orange basin and Chad basin.

7. What is extent of the Great Rift Valley of Africa? Name any two lakes situated within the area of Rift Valley.

Ans. The great Rift Valley of Africa is about 6440 km long extends from Red Sea to River Zambezi in the south. Lake Tanganyika and Lake Malawi.

8. Why is Egypt known as the Gift of Nile?

Ans. As Egypt lies in Sahara Desert and River Nile is the only source of water for drinking and cultivation. It is also a perennial river.

9. Why is River Zaire not fit for navigation? Name its tributaries.

Ans. It has many falls and rapids hence, it is not fit for navigation. Ubangi and Kasai are its tributaries.

10. From where does river Nile originate? Name its main tributaries.

Ans. River Nile originates in Lake Victoria. White Nile and Blue Nile are its main tributaries.

CHAPTER 9 – ANTARCTICA

Fill in the Blanks:-

1. The first Norwegian expedition to Antarctica was led by Captain Carl Anton Larsen in 1892.

2. Antarctica Treaty was signed in 1959.

3. The Waddell and Ross seas deeply penetrate the continent from opposite directions.
4. The highest mountain of the continent is the Vinson Massif in Ellsworth land.
5. The Adelle and Penguins are the most common flightless birds.

Answer the following in one word:-

1. The continent of Antarctica covered with thick ice sheets Permafrost.
2. Large floating and drifting blocks of ice in the ocean Iceberg.
3. Indian scientific research station in Antarctica in 2013 Bharati.

Match the following:-

1. Iceberg ---- Antarctica
2. Bharati ---- 2013
3. Vinson Massif ---- Highest point
4. Adelie Penguin ---- Flightless birds
5. Mosses and Lichens ---- Vegetation.

State whether the following statements are True or False:-

1. The Antarctica is the coldest of all the continents. True
2. The Antarctica Treaty was signed in 1959. True
3. The vegetation in Antarctica consists of coniferous forests. False
4. Maitri Station is an Unmanned Indian station on Antarctica. False
5. The Antarctica is a temperate desert. True

Answer the following in brief :-

1. Why is Antarctica called White Continent?

Ans: A Thick ice Cap covers over 98 % of the continent permanently.

2. Describe the climate conditions of Antarctica.

Ans: i) The Antarctica climate is the severest of all the continents. It experiences extreme cold, frost, howling snow storms and winds.

ii) The temperature in Antarctica interior are -280C in summer in January and -500C in Winter (July).

iii) Humidity in Antarctica is very low as the moisture in air freezes.

3. State the main purpose of the Antarctica Treaty.

Ans: The Antarctica Treaty was signed in 1959 by 12 countries. The treaty prohibits military activities, mineral mining, nuclear explosions and nuclear waste disposal. This treaty supports scientific research and protects the continent's ecozone.

4. Why is the climate of Antarctica not suitable for vegetation and cultivation?

Ans: Antarctica is a cold desert. Therefore entire Antarctica flora is represented by mosses, lichens and small flowering plants. The permanent severe frosts and very cold winds prevent any distribution of plant species.

5. Why is continent of Antarctica known as continent of science?

Ans: Antarctica provides an excellent opportunity for the conduct of scientific researches for the benefits of mankind. Projects on the origin of continents, climate change, meteorology, Earth science, oceanography, biodiversity and environment physiology, medical science, mapping, pollution, etc. are the main areas of research here. Thus Antarctica is often called as Continent of Science.

6. State the future prospects of the continent of Antarctica.

Ans: Antarctica is fully protected from mineral exploitation and conflict under the Antarctica Treaty. It is a continent dedicated to peace and science. The Environmental Protocol (1991) has ensured comprehensive protection of Antarctica. However, as energy/mineral reserves and fishing resources are exhausted or depleted and tourist numbers on Antarctica continue to escalate, the pressure to exploit Antarctica's natural resources on land and in the ocean is likely to increase in the future.

7. Describe the location and extent of Antarctica.

Ans: It is the fifth largest continent. It is situated in the Antarctica region of Southern Hemisphere, almost entirely south of the Antarctic circle and is surrounded by the Southern Ocean having area approximately 14,000,000 sq.km.

8. Describe the physical features of the continent of Antarctica.

Ans: There are no coastal plains. The Transantarctic mountains divide the continent into two parts. The smaller and narrower western part is called Lesser Antarctica and the larger eastern part is called Greater Antarctica. Mount Erebus on Ross Island is Antarctica's second highest active volcano. Mt. Sidley is the highest volcano on Antarctica. A plateau called Queen Maud land is located along the coastal area on the eastern side of the continent. Recently over 70 lakes have been discovered and among the largest ones is Lake Vostok.

9. Write a short note on the discovery of Antarctica.

Ans: In 1773, James Cook crossed the latitude of 67°15'S along the Antarctica circle for the first time but although he discovered nearby islands, he did not catch sight of Antarctica itself. In 1820, several expeditions claimed to have been the first to have sighted Antarctica, with the very first being the Russian expedition led by Fabian Gottlieb von Bellingshausen and Mikhail Lazarev. The first Norwegian expedition to Antarctica was led by Captain Carl Anton Larsen in 1892. Finally a Norwegian explorer, Roald Amundsen with his team reached the South Pole on December 14, 1911 following a dramatic race with the Englishman Robert Falcon Scott.

10. Why is Antarctica uninhabitable for human beings?

Ans: Antarctica's freezing climate, barren glacial coasts, with not a drop of freshwater to drink, isolated from the world, makes it impossible for normal life to survive.