

Class-VII

Geography, Chapter -4

A. Choose the correct answer:-

1. What is the freezing point of a Fahrenheit thermometer?
 - a. 32°
2. What is the instrument used to measure air pressure?
 - a. Aneroid barometer
3. When can we say that the wind speed is strong?
 - b. above 40 km/hour
4. What is a rain gauge used to measure?
 - c. Rainfall
5. Millibar is the measuring unit for
 - a. atmospheric pressure

B. State whether the sentences are true or false:-

1. Whether is the atmospheric condition of a larger area over a longer period of time. **(False)**
2. Aneroid barometer is used to measure humidity. **(False)**
3. Temperature is measured by hygrometer. **(False)**
4. The maximum thermometer measures the highest temperature. **(True)**
5. The anemograph is used to measure wind speed. **(True)**

C. Fill in the blanks:-

1. Pluviograph is used to record the quantity and duration of rainfall on a graph paper.
2. Thermometer is used for measuring temperature.
3. Absolute humidity is the actual amount of water vapour present in the air.
4. Mercury expands when heated and contracts when cooled.
5. Wind is the horizontal movement of air over the Earth's surface.

D. Answer the following questions in 1-2 sentences:-

1. What is Absolute humidity?

Ans.1 Absolute humidity is the actual amount of water vapour present in the air.

2. How much time is needed to gauge the average climatic condition of a region?

Ans.2 The reading is generally taken every 24 hours to record the amount of rainfall in a day.

3. What is a barograph?

Ans.3 Barograph is self-recording aneroid barometer that continuously records the changes in the atmospheric pressure on a paper chart.

4. What is used to observe the direction of wind?

Ans.4 Wind vane is used to observe the direction of wind.

5. What is an anemograph?

Ans.5 Anemograph is self-recording instrument to measure wind speed.

E. Answer the following questions in 4-5 sentences:-

1. What is climate?

Ans.1 Climate is the average atmospheric conditions of a larger area over a longer period of time about 30-35years.

2. How is daily weather recorded?

Ans.2 Daily weather is recorded on the basis of temperature, rainfall, humidity, pressure and an observation of the wind speed and direction.

3. What does steady high pressure indicate?

Ans.3 Steady high pressure is an indication of clear weather.

4. When does air hold more water vapor?

Ans.4 Warm air expands and can thus hold more water vapour.

5. How is mean monthly temperature calculated?

Ans.5 The mean monthly temperature is calculated by adding the average temperature for a month and dividing the total by the number of days in that month.

F. Answer the following questions in 8-10 sentences.

1. Differentiate between weather and climate.

Ans.1

Weather	Climate
Weather is the day to day atmospheric condition of a particular place on the Earth's surface.	Climate is the average atmospheric condition of a larger area over a longer period of time (say 30-35 years).
Weather changes on a daily basis.	Climate is a stable pattern of weather condition of a region and it does not change easily.
Weather is determined for a small area.	Climate is determined for a large area i.e., for a region or a country.
Weather conditions include temperature, rainfall, humidity etc., of a particular place.	Climate includes average temperature, rainfall etc. which prevail in a region. This helps us to delineate Earth into different climatic zones.

2. How is an anemometer helpful in checking wind speed?

Ans.2 An anemometer is used to check the wind speed. On a high vertical spindle, semicircular cups are attached to the ends of the horizontal spokes that are mounted on the spindle. The concave sides of the cups offer resistance to the winds, making the spokes rotate and this in turn moves the rod in the middle. An instrument at the base records the number of rotations and the dial of this instrument tells us the speed of the wind in km per hour.

3. How can we determine the humidity level in the air?

Ans.3 The difference between the two separate readings in the wet and dry bulb thermometers tells us about the humidity level in the air. The dry-bulb thermometer has its bulb exposed to the air and records the temperature of the atmosphere. The wet thermometer has its bulb covered with a damp cloth. When the thermometer reading shows a big temperature difference, it means that the humidity level in the atmosphere is low.

4. Describe a rain gauge.

Ans.4 Rain gauge has a large metal cylinder on the outside, with a funnel on top that fits accurately. To prevent water from splashing out of the funnel, the cylinder extends about 12.5 cm above the level of the funnel. The rainwater falls into the funnel and is collected into a receiving vessel placed inside the cylinder. It is stored there without any loss through run-off or evaporation. The water is collected and poured into a measuring jar that is graduated in millimeters. The reading is generally taken every 24 hours to record the amount of rainfall in a day.

5. What is the purpose of a maximum and minimum thermometer?

Ans.5 In the maximum thermometer the mercury expands when heated and contracts when cooled. When it expands it pushes the indicator along the tube but when it contracts it remains behind at the highest reading. Thus, we get the maximum reading.

The minimum thermometer has alcohol. When the temperature falls, the alcohol contracts and the indicator is pulled down towards the tube. Even when the alcohol expands the index does not move up. Hence, we get the minimum reading.

I. Complete the table:-

Humidity is measured with the help of	hygrometer
Air is made up of gases that have weight and exert pressure on the Earth's surface called	Atmospheric pressure
A hygrograph	can automatically and continuously record variations of humidity in the air on a graph paper.

Weather conditions include	temperature, rainfall, humidity etc. of a particular place.
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J. Picture study:-

1. Rain gauge.
2. We use rain gauge to measure rainfall.