

## Chapter – 4

### Atmosphere

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#### Evaluation

#### I. Choose the best answer.

##### Question 1.

The atmosphere is divided \_\_\_\_\_ into layers.

- (a) four
- (b) five
- (c) six
- (d) seven

**Answer:**

- (b) five

##### Question 2.

The Earth receives heat energy from the \_\_\_\_\_ .

- (a) Moon
- (b) Mars
- (c) Sun
- (d) Venus

**Answer:**

- (c) Sun

##### Question 3.

World Meteorological Day

- (a) March – 20
- (b) March – 21
- (c) March – 22
- (d) March – 23

**Answer:**

- (d) March – 23

**Question 4.**

The study of weather is called \_\_\_\_\_ .

- (a) Meteorology
- (b) Ecology
- (c) Archaeology
- (d) Sociology

**Answer:**

- (a) Meteorology

**Question 5.**

Zone located in between Tropic cancer and Tropic of Capricorn is \_\_\_\_\_ zone.

- (a) Temperate
- (b) Subtropical
- (c) Cold
- (d) Torrid

**Answer:**

- (d) Torrid

**Question 6.**

\_\_\_\_\_ is used to measure pressure in the air.

- (a) Barometer
- (b) Thermometer
- (c) Anemometer
- (d) Wind vane

**Answer:**

- (a) Barometer

**Question 7.**

Monsoon is derived from the \_\_\_\_\_ word.

- (a) Greek
- (b) Arabian
- (c) English
- (d) Latin

**Answer:**

- (b) Arabian

**Question 8.**

Vertical cloud is called \_\_\_\_\_ .

- (a) Cirrus cloud
- (b) Stratus clouds
- (c) Cumulus clouds
- (d) Nimbus clouds

**Answer:**

- (d) Nimbus clouds

**Question 9.**

\_\_\_\_\_ clouds give convectional rainfall.

- (a) Cirrus
- b) Stratus
- (c) Cumulus
- (d) Nimbus

**Answer:**

- (c) Cumulus

**Question 10.**

Statement I – The instrument used to measure wind direction is wind vane.

Statement II – Light travels faster than sound.

- (a) Statement I is True, II is False
- (b) Statement I, II are True
- (c) Statement I, II are False
- (d) Statement I is False, II is True

**Answer:**

- (b) Statement I, II are True

**II. Fill in the blanks.**

**Question 1.**

The instrument used to measure heat \_\_\_\_\_ .

**Answer:**

Calorimeter

**Question 2.**

The imaginary lines drawn parallel to the surface of the earth is \_\_\_\_\_ .

**Answer:**

Latitudes

**Question 3.**

Sea breeze blows from \_\_\_\_\_ in the evening.

**Answer:**

sea to land

**Question 4.**

\_\_\_\_\_ are rain clouds.

**Answer:**

Nimbus

**III. Match the following**

- |                   |                                     |
|-------------------|-------------------------------------|
| 1. Cirrus clouds  | - (a) Grey sheet                    |
| 2. Stratus clouds | - (b) Storm cloud                   |
| 3. Cumulus clouds | - (c) do not give rain              |
| 4. Nimbus clouds  | - (d) Looks like Puffy White cotton |

**Answer:**

1. (c)
2. (a)
3. (d)
4. (b)

**IV. State True/ False.**

**Question 1.**

All weather changes occur in the Troposphere.

**Answer:**

True

**Question 2.**

Latitudes and Longitudes help us to locate a country.

**Answer:**

True

**Question 3.**

Atmosphere gets heated by conduction than solar radiation.

**Answer:**

True

**Question 4.**

The main reason for the change of wind direction is to Earth's rotation.

**Answer:**

True

**Question 5.**

Cyclone moves in anti-clockwise direction.

**Answer:**

True

**V. Answer the following.**

**Question 1.**

What is climate?

**Answer:**

The word climate is derived from the Greek word called climate. Climate is the average weather condition of a vast area over more than 30 years.

**Question 2.**

Name the atmospheric layers.

**Answer:**

- Troposphere
- Stratosphere
- Mesosphere
- Thermosphere
- Exosphere.

**Question 3.**

Write a short note on the Nimbus clouds.

**Answer:**

Nimbus clouds appears as dark or grey in color. It gives heavy rainfall. It's called vertical or rain clouds.

**Question 4.**

Write a short note on the orographic rainfall.

**Answer:**

When the moisture laden winds from the sea rises as it moves over a mountain range, it becomes cool and causes heavy rainfall. The opposite side of the mountain is called Leeward side. It receives very little rainfall.

## **VI. Answer in detail:**

**Question 1.**

Write about Jet Streams.

**Answer:**

- Air currents in the upper layers of atmosphere is known as Jet streams.
- It could determine the arrival and departure of monsoon winds in India.

**Question 2.**

Explain the types of winds.

**Answer:**

**Wind:**

The air moves horizontally from high pressure to low pressure area is called

wind.

### **Different types of wind**

**Planetary winds:** These winds move in the same direction throughout the year with the rotation of the earth.

**Monsoon winds:** They are seasonal winds.

Types:

- South west monsoon winds.
- North east monsoon winds.
- Monsoon rains.

**Sea breeze:** Wind blows from sea to land during the evening.

**Land breeze:** Wind blows from land to sea in the morning.