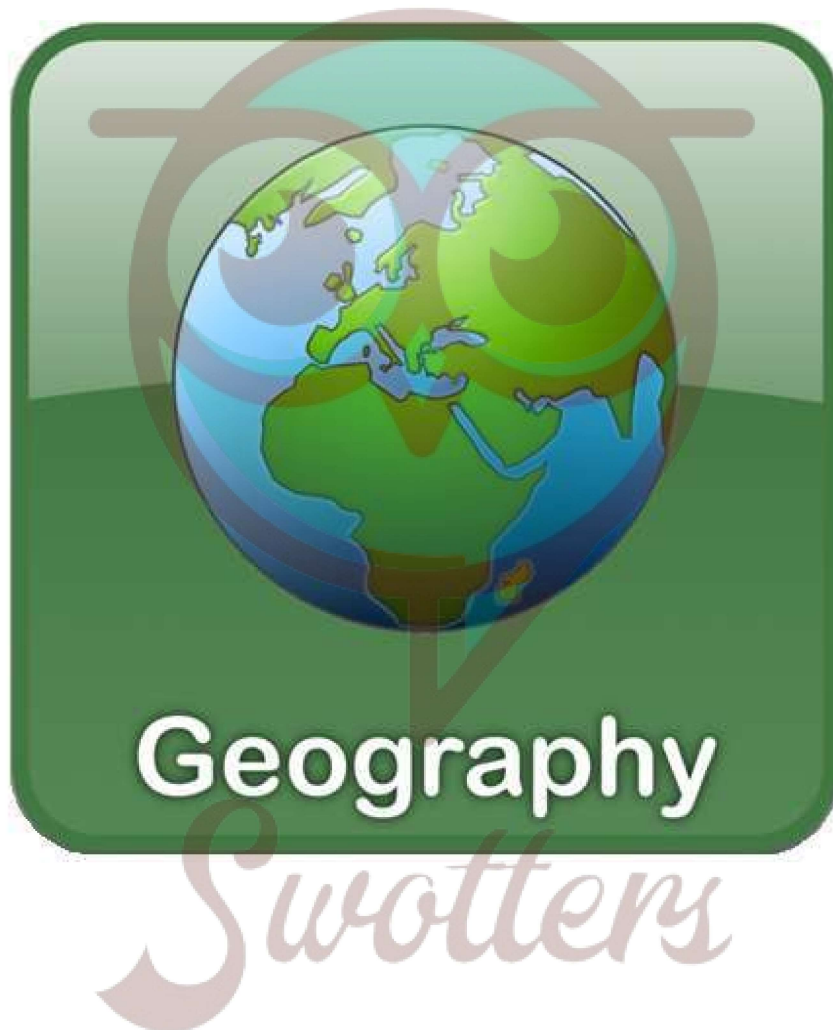


# GEOGRAPHY

## Chapter 2: AIR



## Important Questions

### ➤ Multiple Choice Questions :

Question 1. The quantity of oxygen in the air is:

- (a) 78%
- (b) 21%
- (c) 15%
- (d) 10%

Question 2. Ozone layer is found in:

- (a) Troposphere
- (b) Mesosphere
- (c) Thermosphere
- (d) Stratosphere

Question 3. Which gas creates a greenhouse effect?

- (a) Nitrogen
- (b) Oxygen
- (c) Argon
- (d) Carbon dioxide

Question 4. Ionosphere is a part of:

- (a) Troposphere
- (b) Mesosphere
- (c) Thermosphere
- (d) Stratosphere

Question 5. What was invented by Anders Celsius?

- (a) Barometer
- (b) Thermometer
- (c) Rain gauge
- (d) None of the above

Question 6. Which winds change their direction in different seasons?

- (a) Permanent winds
- (b) Seasonal winds



- (c) Local winds
- (d) None of the above

Question 7. Which layer is the upper most layer?

- (a) Troposphere
- (b) Mesosphere
- (c) Thermosphere
- (d) Exosphere

Question 8. Which gas is available most plentiful in the air?

- (a) Nitrogen
- (b) Oxygen
- (c) Argon
- (d) Carbon dioxide

Question 9. Degree of hotness and coldness of the air is called:

- (a) Humidity
- (b) Pressure
- (c) Temperature
- (d) Insolation

Question 10. Atmospheric pressure is measured by:

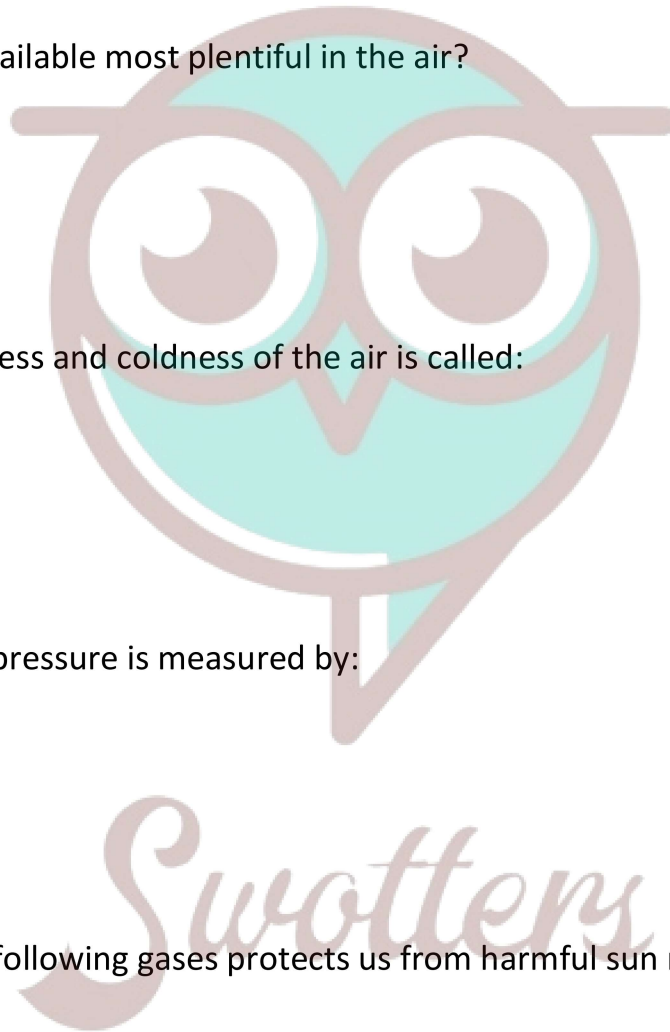
- (a) Barometre
- (b) Thermometer
- (c) Rain gauge
- (d) None of the above

Question 11. Which of the following gases protects us from harmful sun rays?

- (a) Carbon dioxide
- (b) Nitrogen
- (c) Ozone
- (d) All of these

Question 12. In which direction the wind blows constantly throughout the year in particular direction?

- (a) Permanent winds
- (b) Local winds



- (c) Seasonal winds
- (d) Both (a) and (b)

Question 13. In which layers all weather phenomenon occurs?

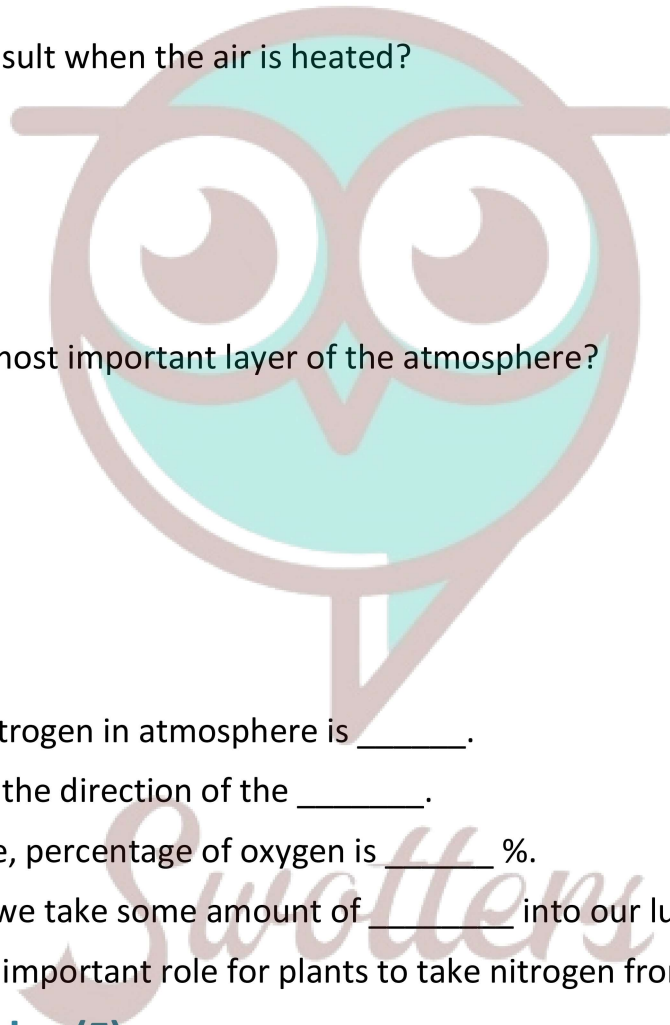
- (a) Troposphere
- (b) Stratosphere
- (c) Thermosphere
- (d) Mesosphere

Question 14. What is the result when the air is heated?

- (a) Heavier
- (b) Lighter
- (c) Colder
- (d) Warmer

Question 15. Which is the most important layer of the atmosphere?

- (a) Troposphere
- (b) Thermosphere
- (c) Mesosphere
- (d) None of these



➤ **Fill in the blanks :**

1. The quantity of nitrogen in atmosphere is \_\_\_\_\_.
2. Wind vane shows the direction of the \_\_\_\_\_.
3. In the atmosphere, percentage of oxygen is \_\_\_\_\_ %.
4. When we inhale, we take some amount of \_\_\_\_\_ into our lungs and exhale it.
5. \_\_\_\_\_ play an important role for plants to take nitrogen from air.

➤ **Write true (T) or false (F) :**

1. When air is heated, it expands, becomes lighter and goes up.
2. High pressure is associated with clear and sunny skies.
3. All living beings on this earth depend on the atmosphere for their survival.
4. Carbon dioxide is the most plentiful gas in the air.
5. Green plants produce oxygen during photosynthesis.

➤ **Very Short Questions :**

1. How does carbon dioxide create green house effect?
2. What is the significance of greenhouse gas?
3. What happens when air is heated?
4. What is the nature of cold air?
5. Why do green plants use carbon dioxide?
6. What is an important feature of Stratosphere?
7. How is ozone important for us?
8. What is temperature?
9. What is insolation?
10. Why is there no air pressure on the moon?

➤ **Short Questions :**

1. Explain the term dynamic environment.
2. Atmosphere plays a dynamic role how?
3. What is air circulation?
4. Define insolation.
5. Name the instrument which measures temperature?

➤ **Long Questions :**

1. Describe the composition of atmosphere.
2. Give an account of the composition of the atmosphere.
3. How do Bacteria help plants use nitrogen?
4. How does nature balance our life? What is the result if this balance is disturbed?
5. Why is temperature in cities much higher than that of villages?

**ANSWER KEY –**

➤ **Multiple Choice Answer :**

1. (b) 21%
2. (d) Stratosphere
3. (d) Carbon dioxide
4. (c) Thermosphere
5. (b) Thermometer

6. (b) Seasonal winds
7. (d) Exosphere
8. (a) Nitrogen
9. (c) Temperature
10. (a) Barometre
11. (c) Ozone
12. (a) Permanent winds
13. (a) Troposphere
14. (b) Lighter
15. (a) Troposphere

➤ **Fill in the blanks :**

1. 78%
2. Wind
3. 21
4. Nitrogen
5. Bacteria

➤ **Write true (T) or false (F) :**

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

➤ **Very Short Answer :**

1. Carbon dioxide creates greenhouse effect by trapping the heat radiated from the earth.
2. Without the greenhouse gas the earth would have been too cold to live in.
3. When air is heated, it expands, becomes lighter and goes up.
4. It has tendency to go down.
5. Green plants use carbon dioxide to make their food and release oxygen.
6. Stratosphere contains a layer of ozone gas.
7. It protects us from the harmful effect of the sunrays.



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8. The degree of hotness and coldness of the air is known as temperature.
9. Insolation is the incoming solar energy intercepted by the earth.
10. There is no air on the moon and therefore no air pressure.

### ➤ Short Answer :

1. The physical and biological elements in the environment are dynamic in nature changes take place slowly and suddenly in the nature of landforms. The circulation air and water brings about changes in the climatic conditions in different seasons.
2. Among the four major elements of environment, the atmosphere is most dynamic as changes take place in it not only from one season to another but also over shorter periods of few hours.
3. When air is heated it becomes lighter and goes up. Cold air is denser and heavy that is why it tends to sink down. When hot air rises, cold air from surrounding area rushes there to fill the gap. This is how air circulation takes place.
4. Insolation is the incoming solar energy intercepted by the earth. The amount of insolation decreases from the equator towards poles.
5. Temperature is measured with the help of thermometer. Outdoor temperature is measured with the help of mercury thermometer.

### ➤ Long Answer :

1. The atmosphere consists of mixture of gases having a relatively uniform composition in the lower layer. An average sample of pure dry air consist of nitrogen (78 %), oxygen (21%) and argon (0.9 %), other gases such as carbon dioxide, hydrogen helium and ozone are present in minute quantities. The lower layer of atmosphere also contains water vapour in variable quantities.
2. Our atmosphere is composed of mainly two gases—nitrogen (78%) and oxygen (21%). Other gases like carbon dioxide, helium, ozone, orgon and hydrogen are found in lesser quantities. Apart from these gases, tiny dust particles are also present in the air.
3. Nitrogen is essential for the survival of plant. But plants cannot take nitrogen directly from the air. Bacteria, that live in the soil and roots of some plants, take nitrogen from the air and change its form so that plants can use it.
4. Green plants use carbon dioxide to make their food and release oxygen. Humans or animals release carbon dioxide. The amount of carbon dioxide released by humans or animals seems to be equal to the amount used by the plants which make a perfect balance. But this balance is disturbed by burning of fuels, which add billions of tons of carbon dioxide in the atmosphere. As a result, the increased volume of carbon dioxide is affecting the earth's weather and climate.

5. In cities we find high rise buildings. The concrete and metals in these buildings and the asphalt of roads get heated up during the day. This heat is released during the night.  
Another reason is that the crowded high rise buildings of the cities trap the warm air and thus raise the temperature of the cities.



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