

EXERCISE

GENERAL TERMS

1. **Atmosphere** : The vast blanket of air which surrounds the earth on all sides.
2. **Greenhouse gas** : The gas which can trap heat radiated from the earth in the atmosphere.
3. **Global warming** : Excessive warming on the earth due to the greenhouse effect.
4. **Tropopause** : A very narrow layer between the troposphere and stratosphere.
5. **Stratopause** : A very narrow layer between the stratosphere and mesosphere.

Q.1 STATE TRUE OR FALSE

1. The atmosphere is held close to the earth by the force of gravity.
2. The upper limit of the atmosphere is at about 1,600 km from the earth's surface.
3. The air is a compound of many gases like oxygen, nitrogen, carbon dioxide, etc.
4. The plants cannot use nitrogen directly, but get it from the soil
5. The ozone layer in stratosphere reflects radio waves back to the earth's surface.

Q.2 FILL IN THE BLANKS

1. The total weight of the atmosphere is about million metric tons.
2. The density of the air as one goes into the higher altitudes.

3. The atmosphere protects us from rays coming from the sun.
4. Nitrogen and oxygen account for about per cent of the atmosphere.
5. Carbon dioxide is needed by the their survival.

Q.3 CHOOSE THE CORRECT ANSWER

1. The most important layer of the atmosphere is -
(A) Ionosphere (B) Troposphere
(C) Thermosphere
2. The percentage of oxygen in the clean dry air is about –
(A) 21 per cent (B) 29 per cent
(C) 71 per cent
3. Which layer of the atmosphere is ideal for flying jet aircrafts ?
(A) Mesosphere (B) Ionosphere
(C) Stratosphere
4. Which layer of the atmosphere experiences all the weather phenomena ?
(A) Troposphere (B) Stratosphere
(C) Mesosphere
5. The average height of the atmosphere above the earth's surface is –
(A) 1400 km (B) 1500 km
(C) 1600 km
6. Which gas is essential for existence of life on the earth ?
(A) Nitrogen (B) Oxygen

- (C) Helium
7. Which layer of the earth's atmosphere absorbs ultraviolet rays of the sun –
 (A) ozonosphere (B) Ionosphere
 (C) Stratosphere (D) Troposphere
8. The atmosphere gets heated mainly by –
 (A) Insolation
 (B) Terrestrial radiation
 (C) Solar radiation
 (D) All the above
9. Which of the following layer of the atmosphere acts like a green house –
 (A) Troposphere
 (B) Stratosphere
 (C) Ionosphere
 (D) Exosphere
10. A layer of atmosphere called Troposphere is characterized by –
 (A) Maximum impurities like dust particles etc
 (B) Weather changes
 (C) Blanket effect
 (D) All the above
11. A layer of atmosphere Ionosphere accounts for –
 (A) All weather changes
 (B) Wireless communication
 (C) Jet flying
 (D) All the above
12. Water vapour changes into minute droplets of water by the process of –
 (A) Condensation
 (B) Convection
 (C) Evaporation
 (D) Precipitation

13. The return of water through leaves of plants into atmosphere is called –
 (A) Perspiration
 (B) Transpiration
 (C) Evaporation
 (D) Condensation

14. Match the following :

Gases	Percentage In Atmosphere
1. Oxygen	i. 0.03
2. Carbon dioxide	ii. 21
3. Argon	iii. 78
4. Nitrogen	iv. 0.93
5. Other gas	v. 0.04

Answer Code :

- (a) 1-i, 2-ii, 3-iii, 4-iv, 5-v
 (B) 1-ii, 2-i, 3-iv, 4-iii, 5-v
 (C) 1-v, 2-iv, 3-iii, 4-ii, 5-i
 (D) 1-i, 2-ii, 3-iv, 4-iii, 5-iv
15. Which layer of the atmosphere protect us from harmful effects of ultraviolet rays ?
 (A) Thermosphere
 (B) Ionosphere
 (C) Ozonosphere
 (D) Troposphere
16. The most important layer of the atmosphere is -
 (A) Troposphere (B) Thermosphere
 (C) Mesosphere (D) Ionosphere

Q.4 DISTINGUISH BETWEEN THE FOLLOWING

1. Tropopause and Stratopause
2. Greenhouse effect and Global warming
3. Ionosphere and Exosphere
4. Stratosphere and Mesosphere

Q.5 GIVE REASONS FOR THE FOLLOWING

1. The earth is a unique planet in the solar system.
2. The thermosphere is also called the ionosphere.
3. Ozone provides the most protective layer in the atmosphere.
4. 90 per cent of the total mass of atmosphere lies within 20 km from the earth's surface.

Q.6 WRITE SHORT NOTES ON EACH OF THE

1. Green house effect.
2. Global warming
3. Dust particles in the atmosphere
4. Water vapour in the atmosphere

Q.7 ANSWER THE FOLLOWING QUESTION

1. Name the layers of the atmosphere and the basis on which these layers are recognized ?
2. What is the significance of nitrogen in the atmosphere ?
3. Why is carbon dioxide called the greenhouse gas ?
4. What is the importance of atmosphere for the earth ?
5. Describe the composition of atmosphere ?
6. Why are troposphere and stratosphere more important for us than the other layers ?
7. Explain the significance of the ozone layer ?
8. Why air temperature decreases with increasing height in the troposphere ?
9. Discuss the characteristics of the different layers of the atmosphere with the help of a labelled diagram ?