

Class 7 Geography

Social Science

Chapter 4 Air

Question 1. Answer the following questions briefly.

(i) What is atmosphere?

(ii) Which two gases make the bulk of the atmosphere?

(iii) Which gas creates greenhouse effect in the atmosphere?

(iv) What is weather?

(v) Name three types of rainfall

(vi) What is air pressure?

Answer:

(i) Atmosphere is a thin blanket of air that surrounds the earth. It protects us from the harmful rays of the sun. It consists of several gases in which nitrogen and oxygen occupy the major portion.

(ii) Nitrogen (78%) and oxygen (21%) make the bulk of the atmosphere.

(iii) Carbon dioxide creates greenhouse effect in the atmosphere.

(iv) Weather is hour-to-hour, day-to-day condition of the atmosphere.

(v)

- Convictional rainfall
- Orographic rainfall
- Cyclonic rainfall.

(vi) The pressure exerted by the weight of air on the earth's surface is known as air pressure.

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Question 2. Tick the correct answer:

(i) Which of the following gases protects us from harmful sun rays?

(a) Carbon dioxide

(b) Nitrogen

(c) Ozone.

(ii) The most important layer of the atmosphere is

(a) Troposphere

(b) Thermosphere

(c) Mesosphere.

(iii) Which of the following layers of the atmosphere is free from clouds?

(a) Troposphere

(b)

Stratosphere

(c) Mesosphere.

(iv) As we go up the layers of the atmosphere, the pressure

(a) Increases (b) Decreases

(c) Remains the same.

(v) When precipitation comes down to the earth in the liquid form, it is called

(a) Cloud (b) Rain

(c) Snow.

Answer: (i)–(c), (ii)–(a), (iii)–(b), (iv)–(b), (v)–(b).

9. 3. Match the skill:

(i) Trade winds

(ii) Loo

(iii) Monsoon

(iv) Wind

(a) Incoming solar energy

(b) Seasonal wind

(c) Horizontal movement of air.

(d) Layer of ozone gas

(e) Permanent wind

(f) Local wind

Ans. (i)–(e), (ii)–(f), (iii)–(b), (iv)–(c).

Question 4 Give reasons:

(i) Wet clothes take longer time to dry on a humid day.

(ii) Amount of insolation decreases from equator towards poles?

Answer: (i) On a humid day the air is full of water vapour. Hence, evaporation is very slow. This is the reason why wet clothes take longer time to dry on a humid day.

(ii) Insolation comes through vertical rays on equator. Thus, it covers up less space but we feel more heat there when it goes up from equator towards poles, the sun rays become slanting. Needless to say that slanting rays come on the earth covering longer distance. Although these slanting rays heat up more space, the degree of hotness is felt less. This is the reason why amount of insolation decreases from equator towards poles.

Very Short Type Questions

Question 1. How does carbon dioxide create green house effect? [V. Imp.]

Answer: Carbon dioxide creates greenhouse effect by trapping the heat radiated from the earth.

Question 2. What is the significance of greenhouse gas?

Answer: Without the greenhouse gas the earth would have been too cold to live in.

Question 3. What happens when air is heated?

Answer: When air is heated, it expands, becomes lighter and goes up.



Question 4. What is the nature of cold air?

Ans. It has tendency to go down.

Question 5. Why do green plants use carbon dioxide? [Imp.]

Answer: Green plants use carbon dioxide to make their food and release **oxygen**.

Question 6. What is an important feature of Stratosphere?

Answer: Stratosphere contains a layer of ozone gas.

Question 7. How is ozone important for us?

[Imp.]

Answer: It protects us from the harmful effect of the sunrays.

Question 8. What is temperature?

Answer: The degree of hotness and coldness of the air is known as temperature.

Question 9. What is insolation?

Answer: Insolation is the incoming solar energy intercepted by the earth.

Question 10. Why is there no air pressure on the moon?

Answer: There is no air on the moon and therefore no air pressure.