

Question 1. Answer the following questions briefly.

(i) What is atmosphere?

Answer: 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) Which two gases make the bulk of the atmosphere?

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

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

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

(iv) What is weather?

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

(v) Name three types of rainfall.

Answer:

- Convectional rainfall
- Orographic rainfall
- Cyclonic rainfall.

(vi) What is air pressure?

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

Question 2. Tick the correct answer (answer are highlighted)

(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) Trosphere **(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.

Question 3. Match the following:

9. 3. Match the skill:

- | | |
|-----------------|--------------------------------|
| (i) Trade winds | (a) Incoming solar energy |
| (ii) Loo | (b) Seasonal wind |
| (iii) Monsoon | (c) Horizontal movement of air |
| (iv) Wind | (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.

Answer: As the air gets warmer its capacity to hold moisture, increases. Therefore it becomes more and more humid. On such days water from clothes or sweat from our body does not evaporate easily. Thus wet clothes take a longer time to dry.

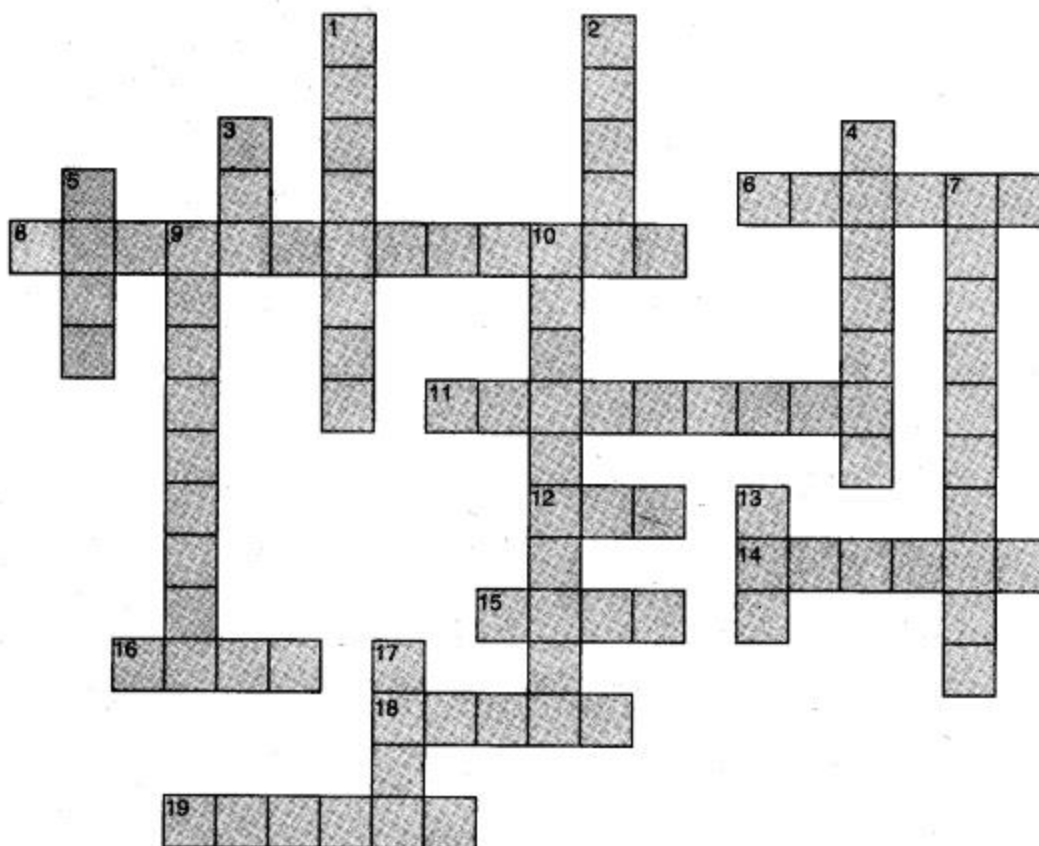
(ii)Amount of insolation decreases from equator towards poles?

Answer:

- On the equator, insolation comes through vertical rays.
- It covers up less space. Hence heat is felt more.
- From the equator, it goes on coming through slanting rays. Slanting rays come on the earth passing longer distances through the atmosphere. They heat up more space. Hence there is less heat on a point of space.

Question no 5:

(1) Solve this crossword puzzle with the help of given clues:



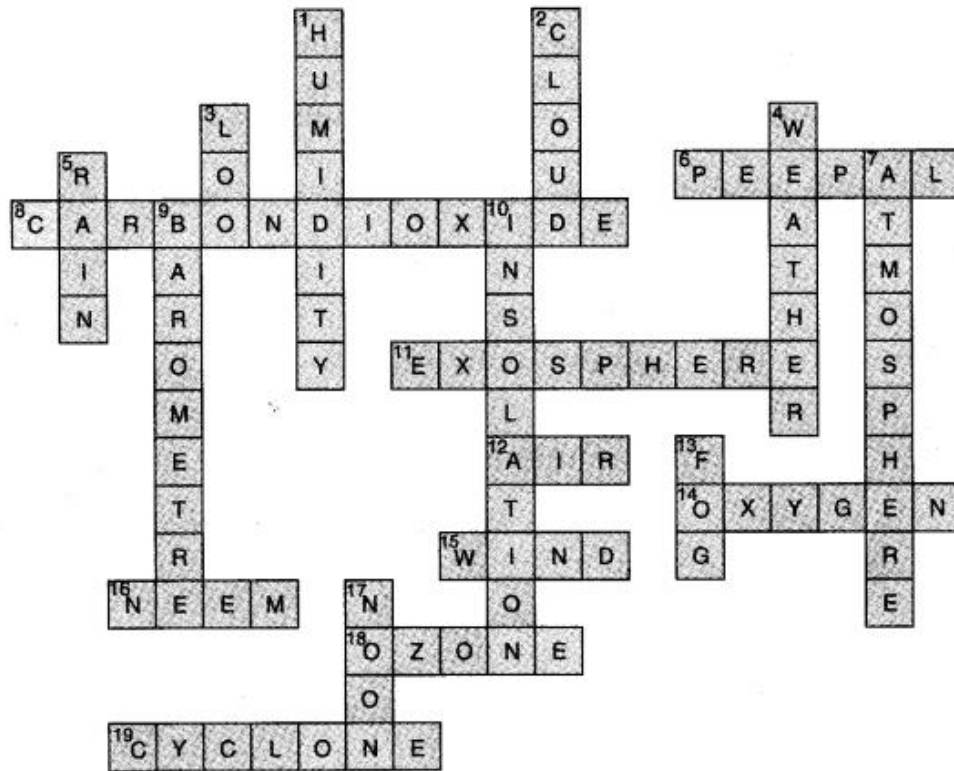
Across

- 6. An Indian tree having extraordinary quality of providing oxygen round the clock
- 8. Gas present in atmosphere occupying only 0.03% by volume
- 11. Outermost layer of atmosphere
- 12. Mixture of many gases
- 14. Life giving gas
- 15. Air in motion
- 16. An indian tree valued highly for medicinal properties
- 18. Gas protecting us from harmful sunrays
- 19. Low pressure area

Down

- 1. Amount of water vapour in air
- 2. Condensation of water vapour around dust particles in atmosphere
- 3. Example of local wind blowing in summer in northern India
- 4. Short term changes in atmosphere
- 5. Precipitation in liquid form
- 7. Blanket of air around the earth
- 9. Instrument of measure pressure
- 10. Incoming solar radiation
- 13. Reduces visibility in winters
- 17. It is time when sun is overhead

Ans.



Extra Questions

Q.1 Why do astronauts wear special protective suits when they go to the moon?

Ans. Astronauts wear special protective space suits filled with air when they go to the moon. If they did not wear these space suits, the counter pressure exerted by the body of the astronauts would make the blood vessels burst. The astronauts would bleed.

Q.2 What is insolation?

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

Q.3 How does carbon dioxide create green house effect?

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

Q.4 Why is there no air pressure on the moon?

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

Q.5 What is called humidity?

Ans. Moisture in the air at any time is called humidity.

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