

Class 7

Air

NCERT Question and Answer

Date : 12.01.2021

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)

- Convectional rainfall
- Orographic rainfall Cyclonic
- rainfall.

(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:

(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 | (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.

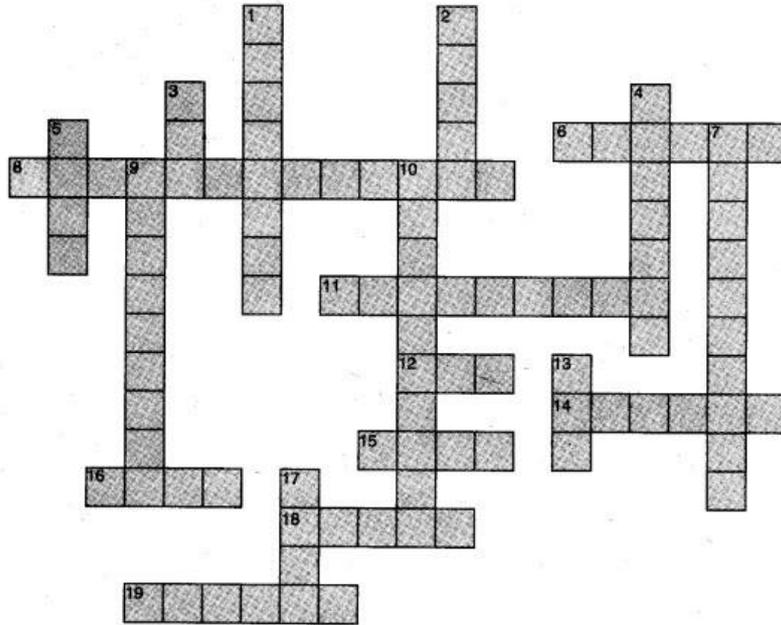
(ii) Amount of insolation decreases from equator towards poles?

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.

9. 5. For Fun

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



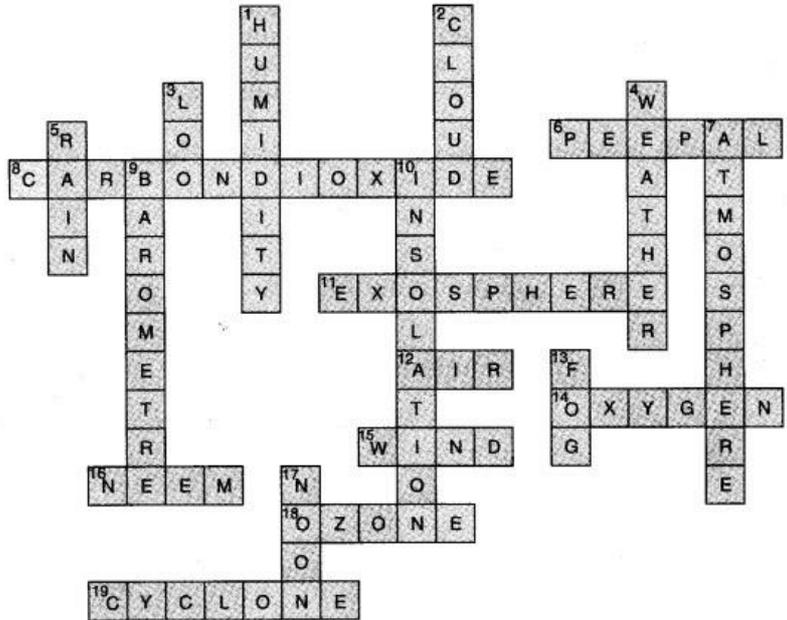
Across

- 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

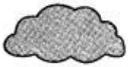
Ans.



(ii) Make a weather calender for one week. Use pictures on symbols to show different types of weather. You can use more than one symbol in a day, if the weather changes. For example the sun comes out when .rain stops. An exmample is given below:

Day	Weather
1. 	Sunny day
2.	
3.	
4.	
5.	
6.	
7.	

Ans.

Day	Weather
1. 	Sunny day
2. 	Cloudy day
3. 	Rainy day

4. 	Stormy day
5. 	Calm day