

<1M>

1. A windmill can perform which of the following?

- (A) Generate electricity. (B) Draw water from tube well.
(C) Run a flourmill. (D) All of the above.

2. Gas in air that is essential for respiration is:

- (A) Oxygen. (B) Nitrogen. (C) Helium. (D) Can't be said.

3. The envelope of air that surrounds us is known as _____.

- (A) Troposphere. (B) Atmosphere. (C) Exosphere. (D) None of the above.

4. Burning can occur only in presence of:

- (A) Carbon-di-oxide. (B) Nitrogen. (C) Oxygen. (D) Sulphur.

5. Dust particles are:

- (A) Always present in air. (B) Never present in air. (C) Only present in water.
(D) All of the above.

6. Mountaineers carry oxygen cylinder with them because:

- (A) Oxygen is not present at high altitudes. (B) It is present but on small scale.
(C) Both (a) and (b) are correct. (D) They will fly away if they don't put some weight.

7. For water cycle to happen, which is the important constituent of water?

- (A) Nitrogen. (B) Oxygen. (C) Water Vapour. (D) All of the above.

8. Which of the following makes up four-fifth of the total air?

- (A) Nitrogen. (B) Oxygen. (C) Helium. (D) Carbon-di-oxide.

9. If there is some material in your room that is burning, you may feel suffocation after sometime due to the presence of _____ in excess.

- (A) Oxygen (B) Carbon-di-oxide (C) Nitrogen (D) All of the above.

10. During the process of respiration, plants and animals consume _____ and produce carbon-di-oxide.

- (A) Carbon-di-oxide (B) Oxygen (C) Nitrogen (D) Helium

11. Wind mill works because of flow of _____ in atmosphere.

(A) Water (B) Matter (C) Hydrogen (D) Air

12. In our outer space there is:

(A) Vacuum. (B) Hydrogen. (C) Oxygen. (D) Air.

13. Long chimneys are used in factories because:

(A) It provides passage to harmful gases. (B) It is just a formality for factory.
(C) Outer space needs these gases. (D) None of the above.

14. The most abundant gas on our planet is:

(A) Oxygen. (B) Hydrogen. (C) Carbon-di-oxide. (D) Nitrogen.

15. Fine hair with mucus in our nostrils, do which of the following functions?

(A) Prevent harmful gases to get respired. (B) Prevent dust particles to get respired.
(C) They have no function at all. (D) Simply present to make us respire better.

16. The animals living in water use _____ dissolved in water.

(A) Nitrogen (B) Helium (C) Both (a) and (b). (D) Oxygen

17. Policeman regulating traffic at a crowded crossing often wears a mask to:

(A) Protect himself from harmful gases. (B) Manage traffic better.
(C) Get rewarded. (D) None of the above.

18. Lump of cotton wool shrinks in water because lighter _____ is replaced by heavier _____.

(A) Water, Air (B) Air, Water (C) Air, Air (D) Water, Water

19. The process by which plants make their food is called _____.

(A) Transpiration. (B) Fermentation. (C) Photosynthesis. (D) None of the above.

20. Plants produce more _____ than they consume during photosynthesis.

(A) Nitrogen (B) Helium (C) Carbon-di-oxide (D) Oxygen

21. Air plays an important role for:

(A) Water cycle (B) Heat cycle (C) Matter cycle (D) All of the above.

22. Burning of fuel in automobiles produces:

- (A) Carbon-di-oxide. (B) Carbon-mono-oxide. (C) Sulphur-di-oxide. (D) All of the above.

23. Air in motion is called:

- (A) Wind. (B) Air. (C) Both (a) and (b). (D) None of the above.

24. Refer to the diagram given in the figure below-



What prevents the bottle from being filled with water?

- (A) Water. (B) Paper. (C) Air. (D) Mercury.

25. What is wind?

26. Which gas in the atmosphere is essential for respiration?

27. What is atmosphere?

28. Which component of air is used by green plants to make their food?

29. Which is the most abundant gas in our atmosphere?

30. Match the following:

- | | |
|-------------------------------|--|
| 1. Gas which supports burning | A. Layer of air surrounding the earth |
| 2. Weather cock | B. Produced by burning of fuel |
| 3. Atmosphere | C. Shows the direction in which the air is moving. |
| 4. Smoke | D. Oxygen |

(A) 1-C, 2-A, 3-D, 4-B

(B) 1-B, 2-D, 3-A, 4-C

(C) 1-D, 2-C, 3-A, 4-B

(D) 1-D, 2-C, 3-B, 4-A

31. What is the use of mucus and fine hair present inside our nostrils?

- (A) All animals have hair inside their nostrils.
 (B) They trap the dust particles we inhale while breathing.
 (C) Mucus keeps our nose moist.

(D) None of these.

32. Nitrogen and oxygen together make up nearly _____ % of air.

- (A) 100 (B) 99 (C) 98 (D) 50

33. Select the correct alternative:

1. Air occupies space. 2. Air is transparent.
3. Air is a mixture of gases. 4. Wind is useful in winnowing.
(A) 1 & 3 (B) 2 & 3 (C) All the above. (D) None of these.

34. The change of water vapours into water on cooling is called _____.

- (A) Evaporation (B) Condensation (C) Contraction
(D) Liquification

35. _____ is the method of separating husk and wheat grains by the action of wind.

- (A) Handpicking (B) Sieving (C) Winnowing (D) Threshing

36. When a burning candle is covered with a glass tumbler, we observe that:

- (A) It continues to burn. (B) It burns more brightly.
(C) It goes off after sometime. (D) It burns with a faint flame.

37. When water is heated, bubbles are seen. This shows that _____ is dissolved in water.

- (A) Air (B) Salt (C) Mineral (D) Sugar

38. What happens when air comes in contact with a cooler surface?

- (A) It gets cooled. (B) It gets solidified.
(C) Water droplets are seen. (D) Nothing happens.

39. Why do mountaineers carry oxygen cylinders with them?

- (A) The air at high mountains becomes less.
(B) Amount of carbon dioxide is more on high mountains.
(C) The cylinders help them to balance their weight.
(D) None of these.

40. The process by which plants make their own food and produce oxygen is known as:

- (A) Respiration (B) Combustion (C) Photosynthesis
(D) Oxidation

41. Plants consume _____ gas for respiration.

- (A) Carbon dioxide (B) Oxygen (C) Water vapours (D) Hydrogen

42. The presence of _____ in air is important for water cycle in nature.

- (A) Carbon dioxide (B) Water (C) Oxygen (D) Water vapours

43. Factories have long chimneys so that:

- (A) The smoke can be carried away from us. (B) They look more beautiful.
(C) Smoke can not come out of small chimneys. (D) All of the above.

44. The gas which does not support burning and occupies four fifth of the space of air is:

- (A) Hydrogen (B) Oxygen (C) Carbon dioxide (D) Nitrogen

45. The layer of air surrounding the earth is called:

- (A) Atmosphere (B) Hydrogen (C) Oxygen (D) None of these.

46. The component of air that supports burning is:

- (A) Nitrogen (B) Carbon (C) Oxygen (D) Water vapours

47. When the open end of an empty bottle is pushed inside the water :-

1. Water rushes into the bottle.
2. The water enters the bottle when it is tilted slightly.
3. Bubbles are seen coming out of the bottle when the bottle is tilted.
4. The bottle remains empty.

- (A) 1 only (B) 2 and 3 (C) 3 and 4 (D) All the above.

48. Why do we feel suffocated in a closed room?

1. Due to lack of oxygen.
 2. Carbon dioxide gets accumulated in the room.
 3. Due to the dust particles.
 4. Due to presence of nitrogen.
- (A) 1 & 2 (B) 3 & 4 (C) 1 and 4 (D) 2 and 3

49. How do the burrowing animals breathe?

- (A) They come out of the burrows to breathe. (B) They take in the air present in the spaces in soil.
(C) They do not breathe. (D) None of these.

50. Why do earthworms come out from their burrows during rainy season?

- (A) Due to heat. (B) Due to cold.
(C) Because water fills their burrows and they come out for breathing. (D) None of these.

51. Plants use _____ gas for respiration and _____ gas for making food.

- (A) Oxygen, Carbon dioxide (B) Carbon dioxide, Oxygen
(C) Oxygen, Oxygen (D) Carbon dioxide, Carbon dioxide

52. Select the correct alternatives:

- (i) Air plays an important role in water cycle.
(ii) Nitrogen and oxygen gases together make up 99% of the air.
(iii) Chimneys of factories should not be long.
(iv) Oxygen supports burning.

- (A) 1 & 2 (B) 1 & 4
(C) 1, 2 and 4 (D) All of the above.

53. The balance of oxygen and carbon dioxide is maintained in the atmosphere due to:

- (A) Plants only. (B) Animals only.
(C) Animals and plants both. (D) They have fixed amount of air.

54. The windmill used to draw water from tube wells and to run flour mills is rotated due to:

- (A) Water (B) Wind (C) Oxygen (D) All of these.

<2M>

55. How do aquatic animals take oxygen for respiration?

56. Mention two uses of air?

57. What is the composition of air?

58. Why do mountaineers carry oxygen cylinder with them?

59. Explain why air is considered a mixture?

60. Is winnowing possible inside a closed room? Give reasons along with your answer.

61. How can you say that air contains dust particles?

62. How is carbon dioxide put into air?

63. Why is it harmful to breathe through our mouth?

64. How are plants and animals inter dependent on each other?

65. How do organisms living in the soil respire?

66. What is the composition of air?

<3M>

67. What are the uses of wind mill?

68. Write three properties of air

69. Give reasons why _____

- a) The transparent glass of windows, if not wiped regularly, appears hazy?
- b) During fire accident, one is advised to wrap a woolen blanket over a burning object.
- c) A lump of cotton wool shrinks in water?

<5M>

70. List five activities that are possible due to presence of air.

71. Give an experiment to show that oxygen supports burning.