**Chapter 7**

 **Respiration in Organisms**

1. Geeta was sleeping in her bed at 7 am her mother measured her breathing rate and she also measured Geeta’s breathing after running for 20 minutes. Suggest when the breathing rate Geeta was more and why?
2. Write an activity to show plants also respire.
3. Is respiration same as breathing or not?
4. Fill in the blanks
5. A process called \_\_\_\_\_\_\_\_ releases energy from food.
6. In plants \_\_\_\_\_\_\_\_\_\_ does not occur in absence of light.
7. \_\_\_\_\_\_\_\_\_\_\_ respiration takes place in absence of oxygen in living organism.
8. The presence of lactic acid in muscle causes \_\_\_\_\_\_\_\_\_ in muscle.
9. Insects have a network of branched tubes called \_\_\_\_\_\_\_\_\_ for respiration.
10. In earthworm and leech exchange of gas takes place through \_\_\_\_\_\_\_\_\_\_\_\_.
11. \_\_\_\_\_\_\_\_\_\_ in plants also helps the underlying cells to exchange gases during respiration
12. The \_\_\_\_\_\_\_\_\_\_ separates the chest cavity from the lower abdominal cavity.
13. Taking in of air, rich in oxygen is called \_\_\_\_\_\_\_\_.
14. High level of \_\_\_\_\_\_\_\_\_\_ in the body can be toxic.
15. State whether given statements are true or false
16. The small openings on the surface of leaves help in exchange of gases.
17. Release of energy from food in presence of oxygen is called anaerobic respiration.
18. The oxygen in the body is carried to different parts by the haemoglobin.
19. The process of taking in air is known as exhalation.
20. Anaerobic respiration occurs in muscle cells of human.
21. Define the following terms
22. Respiration
23. Aerobic respiration
24. Inhalation
25. Fermentation
26. Exhalation
27. Give reason for the following
28. An athlete has to breathe faster and deeper after a sprint to feel normal.
29. In dim light the rate of photosynthesis is equal to rate of respiration in plants.
30. We observe the movement of ribs in babies while they are sleeping.
31. A plant can die if over watered.
32. The skin of earthworm and leech is moist and richly supplied with blood.
33. Haemoglobin is a respiratory carrier.
34. How is aerobic respiration different from anaerobic respiration?
35. Why do we get muscle cramps after heavy physical exercise?
36. Name the following
37. 2 animals that exchange gases through simple diffusion
38. 2animals that respire through gills
39. 2 structures responsible for exchange of gases in plants
40. Part of the blood that carries oxygen and carbon dioxide.
41. What is one breath?
42. Complete the given table

|  |  |
| --- | --- |
|  |  |
|  |
| S.N | Conditions | Photosynthesis/Respiration | Overall result |
|  1 | Dark | Respiration, No photosynthesis |  |
|  2 | Dim light |  |  |
|  3 | Bright light |  | Carbon dioxide taken in and oxygen given out |

1. Fishes breathe by drinking water, justify
2. Write an equation to represent the process of cellular respiration.
3. a) What is the anaerobic respiration in yeast called? b) How the respiration in yeast is put to commercial use?
4. Plants utilise the process of diffusion for exchange of gases, explain how?
5. External respiration and breathing is same, justify.
6. Why do we yawn?
7. Draw a labelled diagram of human respiratory system.
8. Name the 2 phases of breathing. Differentiate between the 2 phases.
9. How does smoking affect the lungs of a person?
10. How is oxygen taken in is transported from lungs to other parts of the body?
11. Is rate of breathing in all animals same or not and also justify the answer with help of example.
12. Multiple choice questions
13. The exchange of gases takes place in Amoeba takes place through
14. Simple diffusion d) gills c) lungs d) lenticels
15. The process of taking in oxygen in animal is known as
16. Inhalation b) exhalation c) respiration d) none
17. Anaerobic respiration takes place in living organism takes place
18. In absence of oxygen b)in presence of oxygen c) in presence of carbon dioxide d) none
19. Name the end products of anaerobic respiration.

 **Chapter- 8**

 **Transportation in Plants &Animals**

1. **How** is transport of substance in unicellular organism different from that of multi cellular organism?
2. Complete the given table showing transportation of substance in plant

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Food** | **Prepared by** | **Leaves** | **Sent to** | **Other parts of plant** |
|  |  | **Roots** |  | **Other parts of plant** |
| **Carbon dioxide** | **from** |  | **Absorbed by** |  |
| **Oxygen** |  | **atmosphere** |  |  |

1. Write an activity which will show that water is absorbed by roots of plant and is transported by xylem to different parts of plant.
2. Fill in the blanks
3. All organism need food,\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_ for their survival.
4. \_\_\_\_\_\_\_\_\_\_\_ is the evaporation of water molecules in form of water vapours from the plant surface.
5. \_\_\_\_\_\_\_\_ and phloem make up the conducting tissues of a plant.
6. A muscular wall called \_\_\_\_\_\_\_\_ divides the heart lengthwise into its left and right sides.
7. \_\_\_\_\_\_\_\_\_\_\_\_ is straw coloured liquid component of blood.
8. Blood cells, especially the \_\_\_\_\_\_\_\_\_ help fight infection.
9. A \_\_\_\_\_\_\_\_\_\_\_ consists of a contraction and relaxation of its muscles.
10. The \_\_\_\_\_\_\_\_\_\_\_\_, is the undigested food eliminated organism through the anus.
11. The \_\_\_\_\_\_\_\_\_\_\_\_ offers a large surface area for losing body \_\_\_\_\_\_.
12. State whether given statements are true /false
13. Carbon dioxide produced in body is removed through lungs by exhalation.
14. Excretion in unicellular plants and animals takes place through specialised organs.
15. The contraction of heart is known as systole.
16. The capillaries come together and form arteries.
17. The phloem in the plant transports food.
18. Define the following terms
19. Transpiration
20. Excretion
21. Pulse
22. Diastole
23. Transportation
24. Give reason for the following
25. In unicellular organism the movement of substance takes place through diffusion and osmosis.
26. A plant needs xylem to take water to the leaves.
27. Transpiration lowers the plant body temperature.
28. There is network of blood vessel in human beings.
29. The waste in the body has to be removed.
30. Sweating from the skin leads to cooling of skin
31. Multiple choice questions
32. Water and minerals in plant are transported by
33. Phloem b) Xylem c) arteries d) roots
34. The human heart has \_\_\_\_\_\_\_\_ chambers
35. 4 b) 3 c) 2 d) 5
36. The part of blood that helps in clotting
37. WBC b)RBC c) platelets d) plasma
38. The relaxation of the heart is known as
39. Diastole b) Systole c) Pulse d) none
40. The waste urine is produced by
41. Heart b) Skin c) Kidney d) lungs
42. Draw a labelled diagram of human excretory system.
43. Differentiate between arteries and veins.
44. What is transpiration? How can we say that transpiration is beneficial?
45. Name the main components of the circulatory system.
46. Complete the table about the components of blood

|  |  |  |
| --- | --- | --- |
| S.N | Name of the component | Function of the component |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

1. What are the different substances transported by the circulatory system in the human beings?
2. Complete this Name Function

Vascular Tissue of plants

1. What is the function of root hair?
2. Why do the plants transpire?
3. State the various function of the blood and the circulatory system.
4. Where do we find the oxygenated and deoxygenated blood in the heart?
5. What is a pulse? How can it be counted?
6. In higher animals cell generate waste like urea when nutrients are broken within them, briefly outline the pathway of its excretion.
7. Other than the excretory system there are other excretory organs, justify
8. Where is the heart situated in our body and what is its function?
9. What special feature of red blood cells helps it to pass through the tiniest blood vessel?
10. With help of diagram explain what happens to arteries when they enter an organ of the human body.