**Class 8**

**Chapter 1**

**The cell-Its Structure and Functions**

1. Name the unit common to all living beings. Who was responsible for discovering it?
2. Is the shape and size of a cell dependent on the size of an organism, discuss.
3. Give an example of the largest cell and smallest cell.
4. Geeta scrapped the inner side of her cheek with tooth pick and got a frothy material on the tooth pick and mounted it on a slide. She observed the slide under the microscope.
5. Name the type of the cell she saw.
6. Draw a labelled diagram of the cell she saw.
7. Was the cell seen by her same as the cell seen in the onion peel.
8. Fill in the blanks in a flow chart showing the level of organisation in the living world.

1. Name the extensions of cell membrane that help in locomotion.
2. The large empty space that appears in the cytoplasm of the plant cell is known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. State its function also.
3. Complete the given statements
4. From microscopic bacteria to large organisms like whales or gigantic trees are all made up of \_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_ of all organism.
5. On the basis of their number of cells living organisms can be classified into two categories \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. \_\_\_\_\_\_\_\_\_\_\_\_ possess long fibre like structure.
7. The smallest cell \_\_\_\_\_\_\_\_\_\_\_\_also called \_\_\_\_\_\_\_\_\_\_ is about 0.1 micron in diameter.
8. The size of cell of green alga, Chara is \_\_\_\_\_\_\_\_.
9. The \_\_\_\_\_\_\_\_\_\_ consists of the cytoplasm and the \_\_\_\_\_\_\_\_\_\_.
10. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ are structures present within a cell that help it to perform its relevant functions.
11. The \_\_\_\_\_\_\_\_\_\_\_\_ controls the entry and exit of the substances of the substances as per the requirements of cell.
12. When the cell is ready to divide the \_\_\_\_\_\_\_\_\_\_ condenses to form thicker thread like structures called\_\_\_\_\_\_\_\_\_\_\_.
13. The \_\_\_\_\_\_\_\_\_\_\_\_ is plastid associated with different coloured parts of plants.
14. Define the following terms
15. Cell
16. Tissues
17. Organs
18. Protoplasm
19. a) \_\_\_\_\_\_\_\_\_\_\_: Cell:: Brain: Body

b) Cell membrane : \_\_\_\_\_\_\_\_\_\_:: Skin : Body

11. Differentiate plant cell from an animal cell on the basis of shape and organelles present in both the cells.

12. Identify me

1. I have double membrane around me and carry on respiration, who am I ? \_\_\_\_\_\_\_\_\_\_.
2. I appear as a large empty space in the cytoplasm of the plant cell, who am I?\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. I am present on the endoplasmic reticulum and I am responsible for protein synthesis, who am I ?\_\_\_\_\_\_\_\_\_\_\_\_\_
4. What are plastids? Name the different plastids found in plant cell and state their functions also.
5. How is cytoplasm different from nucleoplasm?
6. Where do you find the structures responsible for inheritance of characters from one generation to another?
7. State one main function of the following organelles
8. Endoplasmic reticulum
9. Golgi complex
10. Cell wall
11. Ribosomes
12. All the cells have common features, however they can appear different in different parts of the organism, justify.
13. How is tissue different from organs?
14. Both cilia and flagella are responsible for locomotion. Are they present together in a cell of any organism. Give example of an organism that uses them for locomotion.
15. Draw a labelled diagram of cross section of a hen’s egg.
16. What is life span of red blood cell?
17. What provides the unique living nature to protoplasm?
18. Give reasons for the following
19. The mitochondria is present in large numbers in cell engaged in different physiological activities
20. Leucoplasts are colourless.
21. Rose plants have red colour flower
22. Plant cell have fixed shape

**Chapter 2**

**Microorganisms- Friends and Foes**

1. If your mother makes curd from milk at home and leaves it at room temperature for a long time it turns sour.
2. Why the curd turns sour?
3. What brings about the formation of curd?
4. Micro organisms are found everywhere, justify.
5. ‘Virus is an enigma of biology’, justify.
6. A farmer visited his fields where he was growing wheat crop. On looking closely he observed that some of the plant parts had rust coloured orange coloured patches on them.
7. Name the disease by which wheat plants were infected.
8. Write the name of the causative organism.
9. Name two disease caused in animals by microorganisms that can infect human beings when they come in contact of infected animals.
10. Complete the given table

|  |  |  |
| --- | --- | --- |
| S.N | Methods of Prevention | Diseases that may be prevented |
| 1 | Vaccination |  |
| 2 |  | Malaria, dengue |
| 3 | Proper disposal of waste and using disinfected water |  |
| 4 |  | Ringworm and athlete’s foot |

1. Ravi had vegetable cutlets from a street vendor on Monday evening. On Tuesday morning when he got up he was getting cramps in his abdomen, was having nausea and was vomiting.
2. Name the possible disorder he was suffering from.
3. What could be the reason from showing these symptoms?
4. Name the organisms that could be responsible for causing this disorder.
5. Define the following terms
6. Bio augmentation
7. Immunity
8. Vaccine
9. Food preservation
10. Communicable disease
11. Complete the given statements
12. Diseases like \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ can spread through direct or indirect contact with a patient.
13. Disease causing microorganisms are known as\_\_\_\_\_\_\_\_\_\_\_.
14. Whenever microorganisms invade our body, they multiply inside our body and release \_\_\_\_\_\_\_\_\_\_\_ called \_\_\_\_\_\_\_\_\_\_ in our body.
15. \_\_\_\_\_\_\_\_\_\_ identify and destroy disease causing organisms.
16. A \_\_\_\_\_\_\_\_\_\_ produces immunity to a disease by stimulating the production of\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
17. Some bacteria and blue-green algae or cyano bacteria are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
18. Bacteria and fungi are common \_\_\_\_\_\_\_\_\_ which help in replenishing the nutrients back to the ecosystem.
19. \_\_\_\_\_\_\_\_\_\_\_\_ are extremely effective in treatment of various microbial infections
20. \_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_ are diseases caused by bacteria in cattle.
21. What is the principle on which all the food preservation methods are based on?
22. I bought a can of pineapple from a store and when I was about consume it I observed that can was puffed. Suggest should I consume the food present in the can? Give reason for your answer.
23. Many microbes cause different diseases in all living organism still we cannot afford delete them from the environment, justify.
24. Name the pandemic which has brought the whole world to stand still since the end of year 2019.
25. Name the causative organism responsible for it.
26. What are different modes by which this organism spreads?
27. What precautions should be taken by people to protect themselves from this pandemic?
28. Complete this Methods of Preservation Food preserved by the method

Drying

Food Preservation

Heat and cold treatment

Freezing

1. Give reasons
2. Vinegar is used in the manufacture of pickled products.
3. Jams and jellies are usually preserved by addition of sugars.
4. Cyano bacteria are added in the rice fields.
5. Micro organisms are important for maintaining human health, how?
6. How can microorganisms be used in agriculture?
7. Name the four groups bin which microorganism are divided on the basis of cell structure.
8. What are Cryophiles? Where do you find it?
9. How is alcoholic beverage made by microorganism?
10. What are the different modes of transmission of microbes that cause disease in human beings?
11. Complete the given table

|  |  |  |
| --- | --- | --- |
| S.N | Microorganisms | Diseases caused |
| 1 |  | Tuberculosis, diphtheria, Cholera, tetanus, typhoid |
| 2 | Viruses |  |
| 3 |  | Ringworm, athlete’s foot |
| 4 | Protozoans |  |

1. Name the disease that are transmitted by following animals
2. Anopheles mosquito
3. Aedes mosquito
4. Plague
5. How does pasteurisation helps in preservation of milk?
6. Give an examples of each
7. Disease caused by virus in plant
8. Disease caused by bacteria in plant
9. Disease caused by fungus in plants

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