

Board –CBSE

Class –8th

Topic – Topic – Cell: Structure and Function

1. Name the person who first coined the term “Cell”

Ans. Robert Hooke in 1665 first coined the term Cell.

2. Define Cell

Ans. The cell is defined as the basic structural and functional unit of living organisms.

3. What will happen to a cell if its nucleus is removed?

Ans. With the passage of time, the cell will die as the nucleus which controls and coordinates all the functions of the cell is absent.

4. Give 5 examples of single-celled organisms.

Ans. Paramecium, Amoeba, Chlamydomonas, Bacteria, Malaria Parasite

5. What are multicellular organisms? Give an example.

Ans. The organisms consisting of more than one (multiple) cell, where each cell performs a specialized function are known as Multicellular Organism. Example: - Animals, Plants, Fungi

6. Name the cell organelle which is commonly referred to as the suicidal bags of the cell.

Ans. Lysosomes is commonly referred to as the suicidal bags of the cell.

7. Name the process through which an amoeba acquires its food from the external surroundings.

Ans. The process through which an amoeba acquires its food from the external environment is called Endocytosis.

8. State the functions of chromosomes in a cell.

Ans. A chromosome is the carrier of genetic information.

9. Who proposed the Cell theory?

Ans. Schielden and Schwann proposed the cell theory (i.e. all organisms have cells and cell is the basic unit of life), it was further expanded by Virchow (by suggesting that all cells arise from pre-existing cells).

10. What is Nucleoid?

Ans. The undefined nuclear region of the Prokaryotic cell (Bacteria, Blue-Green Algae) is known as Nucleoid.

11. Define diffusion.

Ans. Diffusion is defined as the movement of particles from a region of High Concentration to a region of low concentration.

12. What is a plasma membrane formed of?

Ans. Plasma Membrane is formed of Proteins and Lipids.

13. Name the kind of plastid which is important for photosynthesis in the leaves of the plants.

Ans. Chloroplast.

14. Name the two components of chromosomes.

Ans. Proteins and DNA.

15. When does the chromatin network separate out to form chromosomes?

Ans. The network of Chromatin fibres separates out to form chromosomes when a cell is at the dividing stage (dividing/about to divide).

16. Name the cell organelle that detoxifies poisons and drugs.

Ans. Smooth Endoplasmic Reticulum (SER).

17. Name the cell organelle that is associated with protein synthesis.

Ans. Ribosomes.

18. State the primary functions of the plasma membrane.

Ans. It regulates the exchange of materials between the cytoplasm and extracellular fluids.

19. Name a cell that does not have a nucleus, what are they called?

Ans. The cells that do not have a nucleus are called Enucleate Cells, Red Blood Cells (RBC) is an enucleated cell.

20. What is Membrane Biogenesis?

Ans. The production of proteins and lipids for producing membrane by the SER is known as Biogenesis.