

Board – CBSE

Class – 11

Chapter – Cell: The Unit of Life

1. How the study of cells and its detailed structure was made possible?
2. List out the functions of a Cell.
3. Why is the cell the basic unit of life?
4. Cells show great variation in their shape and size. Explain.
5. Are organelles without membranes present? Comment.
6. Explain the ribosomes found in prokaryotic cells.
7. State the characteristics of prokaryotic cells.
8. Describe the cell theory in brief.
9. Write a short note on facilitated diffusion.
10. What is the importance of a vacuole in a plant cell?
11. Differentiate between Rough Endoplasmic Reticulum and Smooth Endoplasmic Reticulum.
12. Draw a well-labelled diagram of chloroplast.
13. Who gave the statement *Omnis cellula e cellula*? What does it mean?
14. What is a nucleoid?
15. What is the fluid mosaic model of the plasma membrane?
16. Explain the ribosomes found in prokaryotic cells.
17. Mention the two subunits of the ribosome of the eukaryotic cell.
18. How chromosomes are formed from chromatin?
19. Why are mitochondria known as the “powerhouse of the cell”?
20. What are plasmids? Where are they present?
21. Explain the terms related to a prokaryotic cell (a) Mesosomes (b) Chromatophores
22. Draw a well-labelled diagram of ER showing its types.
23. Write the chemical composition of cell wall of (a) Bacteria (b) Fungus (c) Alga
24. Give the specific terms for the following

- (a) Cluster of ribosomes found in cytoplasm
 - (b) Extensive in folding to the inner membrane of mitochondria.
 - (c) Stacks of closely packed thylakoids
 - (d) Stalked particles on the inner membrane of mitochondria.
25. Which cell organelles are non-membrane bound and found in both prokaryotes and eukaryotes?
26. (a) What is the composition of chromatin? (b) What is the function of histone proteins?
27. Mention the similarity and differences between mitochondria and chloroplasts?
28. What are nuclear pores? State their function.
29. Give the difference between cell wall and cell membrane.
30. Why are lysosomes called "suicidal bags"?