

**CLASS –IX
BIOLOGY**

Q.1. Define the following terms : -

- a) Middle Lamella
- b) Primary wall.
- c) Secondary wall.
- d) Tertiary wall.

Q.2. Explain in details the following models of the cell membrane : -

- a) Robertson's model
- b) Fluid Mosaic model.

Q.3. Differentiate between active transport and passive transport?

Q.4. Write short notes on the following :

- a) Karyokinesis
- b) Cristae
- c) Cilia
- d) Flagella

Q.5. What is Sodium Potassium exchange pump? Explain the mechanism.

Q.6. What is Euchromatin and Heterochromatin.

Q.7. Explain the following terms :

- a) Chromatid
- b) Centromere or Primary Constriction.
- c) Nuclear Organiser Region.
- d) Telomere

Q.8. Write short notes on:

- a) Contractile vacuole
- b) Food vacuole

Q.9. What is the difference between 70S and 80S Ribosomes?

Q.10. What is F₀-F₁ complex?

Q.11. What are Histones? What are their functions?

Q.12. What is grana of the Chloroplastid? What are Quantasomes?

Q.13. Name the scientists who discovered :

- a) Mitochondria
- b) Nucleus
- c) Golgi complex
- d) Ribosomes

Q.14. Why nuclear envelope have pores while other membranes of a cell do not ?

Q.15.What is:

- a) Lignin
- b) Cutin
- c) Suberin
