

Class IX Science Assignment

Chapter: The Fundamental Unit of Life

Topic: Plant Cell & Animal Cell

Section A – Multiple Choice Questions

- Which structure is present only in plant cells?
a) Nucleus b) Cell membrane c) Cell wall d) Cytoplasm
- The powerhouse of the cell is:
a) Golgi apparatus b) Mitochondria c) Ribosome d) Vacuole
- Which organelle contains chlorophyll?
a) Chloroplast b) Nucleus c) Lysosome d) Endoplasmic Reticulum
- The control centre of the cell is:
a) Vacuole b) Cytoplasm c) Nucleus d) Cell wall
- Which of the following is absent in animal cells?
a) Mitochondria b) Cell membrane c) Chloroplast d) Nucleus

Section B – Fill in the Blanks

- The jelly-like substance inside the cell is called _____.
- _____ is known as the kitchen of the plant cell.
- The selectively permeable membrane is the _____.
- _____ stores water and food in plant cells.
- The basic structural and functional unit of life is the _____.

Section C – Match the Following

Column A	Column B
1. Nucleus	a. Protein synthesis
2. Ribosome	b. Controls all activities
3. Chloroplast	c. Photosynthesis
4. Mitochondria	d. Energy production
5. Cell Wall	e. Protection and support

Section D – Very Short Answer Questions

- Write any two differences between plant and animal cells.
- What is the function of the cell membrane?
- Why is the nucleus called the control centre of the cell?

Section E – Short Answer Questions

1. Explain the functions of:

- (a) Mitochondria
- (b) Vacuole
- (c) Chloroplast

2. Differentiate between Plant Cell and Animal Cell. Write at least four differences.

Section F – Diagram Based Question

Draw and label:

- Plant Cell
- Animal Cell

(Label: Cell wall, Cell membrane, Nucleus, Cytoplasm, Vacuole, Chloroplast, Mitochondria)

Activity / HOTS (Optional)

If a plant cell loses its chloroplasts, what will happen to the plant? Explain your answer in 2–3 sentences.