

**Assignment
Class IX**

The Fundamental Unit of Life (INSTRUMENTS FOR STUDYING CELL, UNICELLULAR VS MULTICELLULAR ORGANISMS, SHAPE AND SIZE OF CELLS, BASIC UNIT, CELL MEMBRANE, CELL WALL)

VSA TYPE (1 MARK)

1. Who discovered cells in organisms?
2. Give an example of Unicellular organism.
3. Name the process in which diffusion takes place through a selectively permeable membrane.
4. Name the process through which Amoeba acquires its food from external environment.
5. In what way a prokaryotic cell is different from eukaryotic cell with respect to nuclear membrane?

SA TYPE (2 MARKS)

1. List two differences between prokaryotic and eukaryotic cells.
2. Differentiate between diffusion and osmosis.
3. Distinguish among hypotonic, isotonic and hypertonic solutions.
4. What happens to cell when it is placed in hypotonic, isotonic and hypertonic solutions respectively?
5. Write two differences between active and passive transport.

LA TYPE (5 MARKS)

1. Draw a neat and labelled diagram of a prokaryotic cell. Why organisms like bacteria are called prokaryotes?
2. Why is the cell called structural and functional unit of life? Explain the concept of division of labour in multicellular organisms giving an example.
3. Draw a neat and labelled diagram of plant and animal cells.