

Class : 9

Subject: Biology

Chapter: Cell- The unit of life

The cell is the structural and functional unit of life. All plants and animals are made up of cells. A cell consists of cell membrane, cytoplasm and nucleus. Cell organelles are embedded in cytoplasm. Prokaryotes have neither a distinct nucleus, nor the organelles like mitochondria and the chloroplast. They have only ribosomes.

(a) State one function of the following cell organelles:

- 1) Vacuoles: _____.
- 2) Mitochondria: _____.
- 3) Lysosomes: _____.
- 4) Golgi apparatus: _____.

(b) Give one point of difference between the following on the basis of words given in the bracket.

- 1) Chloroplast and chromoplast (pigments)
- 2) Plant cell and animal cell (size)
- 3) An organ and an organelle (define)

(c) Answer the following questions in brief.

- 1) What are genes? How many pair of chromosomes are found in human cells?
- 2) Why are lysosomes called intracellular digestive centres?
- 3) Plasma membrane is selectively permeable in nature. Explain.
- 4) Define protoplasm. Why is it impossible to make an accurate analysis of protoplasm?