

It is surrounded by the nuclear envelope that separates DNA from the rest of the ~~etc~~ cells.

It protects the DNA and is an integral component of a plant's cell structure.

Review Questions

Short Answer Questions -

① Name the scientist who invented the first microscope.

Ans - Antonie van Leeuwenhoek.

② Who coined the term 'cell'?

Ans - The term 'cell' was coined by Robert Hooke.

③ Briefly describe the three essential parts of a cell.

Ans - The essential basic parts of a cell are:

(1) Cell Membrane -

→ It is a very thin, delicate and flexible membrane which surrounds each cell. It is also called plasma membrane.

- It consists of fine pores which allow only certain molecules to pass through it and prohibit the others.
- Therefore, due to its function, it is also called selectively permeable membrane.

(ii) Cytoplasm -

- This is the living portion of the cell which is a semi-liquid, translucent and colourless liquid.
- It is the portion of the cell where major functions of the cell are carried out through various finer parts of the cell.
- The finer structures which are contained in this are called the cell organelles.

(iii) Nucleus -

- The small spherical dark coloured body, usually located in the centre of the cell.
- It is the most important part of the cell which regulates and co-ordinates various life processes.
- Its major role is during cell division.
- It contains hereditary factors called the genes.

Long Answer Questions -

(2) Robert Hooke is the scientist who coined the term 'cell' in 1665.

He used two lenses in his microscope.

He examined a thin slice of dead cork under his microscope and observed a cluster of box-like cubicles piled up together and he called these small room-like structures as 'cells'.