

Vidya Bhawan Balika Vidyapeeth Lakhisarai

Arun Kumar Gupta

Class 9th

Subject : Biology

Date:- 22.04.21

CHAPTER –1

THE FUNDAMENTAL UNIT OF LIFE

Nucleus:

Nucleus is dense and spherical organelle.

Nucleus is bounded by two membranes, both forming nuclear envelope. Nuclear envelope contains many pores known as nuclear pores.

The fluid which present inside the nucleus is called nucleoplasm.

Nucleus contains chromosomes and chromosomes contain genes which are the centres of genetic information.

Functions:

- Nucleus controls all the metabolic activities of the cell.
- It regulates the cell cycle.
- Nucleus is the storehouse of genes. It is concerned with the transmission of hereditary traits from the parent to offspring.

(iv) Cytoplasm:

It is a jelly-like, viscous, colourless semi-fluid substance that occurs between the plasma membrane and the nuclear membrane.

The aqueous ground substance of cytoplasm is called cytosol that contains a variety of cell organelles and other insoluble waste products and storage products, like starch, glycogen, lipid, etc.

Functions:

- Protoplasm acts as a store of vital chemicals like amino acids, proteins, sugars, vitamins, etc.
- It is the site of certain metabolic reactions, like glycolysis, synthesis of fatty acids, nucleotides, etc.

