

Chapter 5

THE FUNDAMENTAL UNIT OF LIFE

NUCLEUS:

Robert brown in 1883 Discovered and Named 'Nucleus'.

The nucleus consists of following three Structures:

1. Nuclear envelope:

- The Nuclear envelope is composed of two membranes and a particular space.
- The nuclear envelope separates the nucleoplasm from the - cytoplasm.
- The nuclear envelope contains many pore- like octagonal perforations through which to and from movement of chemical substances takes place.

2. Nucleoplasm & Chromosomes:

- The space between nuclear membrane and nucleolus - is filled by a watery substance is called Nucleoplasm or Karyolymph.
- The nucleoplasm contains certain thread like elongated. Structures called "chromosomes", chromosomes bear DNA on it.

3. Nucleolus:

- The nucleoplasm contains a spherical body called "Nucleolus". It is composed of large amount of ribosomal proteins and ribosomal RNA.

