

- 4) Cell wall makes the plant cell rigid.

Nucleus

- 1) It is the largest or most important cell organelle in an eukaryotic cell.

- 2) It is located at the center in the animal cell and at the periphery of the plant cell.

- 3) It controls all the metabolic and genetic activities of a cell.

It consists of following parts.

- 1) Nuclear membrane or nuclear envelope - It is double layer covering which act as a barrier and separates the cytoplasm of the cell from the nuclear content.

- 2) Nucleopores - These are small pores present in the nucleus which helps in the transfer of selective material from inside the nucleus to outside the cytoplasm.

- 3) Nucleoplasm - It is a clear, non-staining fluid material present in the nucleus also termed nucleoplasm.

4) Nucleolus - It is small spherical body present at 1 side in the nucleus. These are not bounded by any membrane and may be one or two in number. It is rich in proteins and RNA.

5) Chromatin material - They are thin thread like filaments, composed of DNA and proteins.

DNA is genetic material and have required information for growth, reproduction, metabolism and hereditary characters of an organism.

During cell division chromatin filaments condensed into chromosomes which contains segments of DNA called genes arranged in a linear order along the chromosomes.

Genes are the functional unit of chromosomes.

Structure of nucleus

