

Q:- Describe the relationship between DNA, Genes, and Chromosome?

(Ans): Relationship between Chromosomes, DNA and Genes:-

The relationship between Chromosome, DNA and genes are as under.

* Chromosome:- Chromosome are thread like coloured bodies present in the nucleus.

→ Each chromosome is made up of DNA and a protein called Histone.

→ DNA is coiled many time around histone protein.

* DNA:- DNA is Hereditary material which carry all the information from parents to the offspring (child). Its made up of four types of nucleotides. (Adenine, Guanine, Thyamine, Cytosine)

* Genes:- A specific segment of a DNA is called genes

→ Gene is the basic structural and functional unit of heredity.

→ Genes occur in pair.

→ Each heredity character in an organism is control by pair of genes.

Diagram:-

See diagram on Page No 29
Figure 3.2.