

## **Heredity Important Points to Remember**

- ❖ Variations are quite apparent among closely related groups of organisms.
- ❖ Mendel had chosen seven pairs of distinguishing traits: flower colour, position, seed colour, shape, pod colour, pod shape, stem length.
- ❖ Every pea plant has two 'factors' which are responsible for producing a particular character or trait is called allele.
- ❖ The process of acquiring characters or traits from parents is called 'Heredity'.
- ❖ Each human cell contains 23 pairs of chromosomes. Out of these 22 pairs are called autosomes and one pair is called allosomes.
- ❖ A chromosome consists of the regions: primary constriction, centromere, secondary constriction, telomere and satellite.
- ❖ Based on the position of the centromere, the chromosomes are classified as telocentric, acrocentric, sub metacentric and metacentric chromosomes.
- ❖ Each nucleotide of DNA consists of a deoxyribose sugar, a nitrogenous base and a phosphate group. Pairing is always between a purine and a pyrimidine.
- ❖ The sperm, produced by the father, determines the sex of the child. The mother is not responsible in determining the sex of the child.
- ❖ Mutation is an inheritable change in the genetic material of an organism.