

2316

65

Class – B.Sc.–I (Medical)

Subject – Genetics

Paper – BOT-B

Time Allowed : 3 Hours

Maximum Marks : 35

Attempt any 5. Each carries 7 Marks. Q.1 is compulsory.

1. (i) Define cell cycle.
- (ii) What are homologous chromosomes & sister chromatids ?
- (iii) Describe pachytene stage.
- (iv) Differentiate between Genotype & phenotype.
- (v) Differentiate Test cross Vs Back cross.
- (vi) What is incomplete dominance & Multiple alleles.
- (vii) Define (a) Central dogma (b) Supplementary genes. 1x7=7
2. Write a detail note on structure of DNA. 7
3. (a) Describe in detail Mitosis cell division. 7
- (b) Differentiate between Mitosis & Meiosis.
4. (a) What are duplicate genes? Describe with help of suitable examples. 7
- (b) What are complementary genes? Give one example.
5. Describe in detail protein synthesis Mechanism in Eukaryotes. 7
6. Write a detail note on Lac operon. 7

7. Describe in detail (a) Split genes (b) Overlapping genes. 7
8. Describe in detail Mendal's law of Independent assortment in detail. 7
