

Exam. Code : 103202

Subject Code : 1293

B.A/B.Sc. Semester—II

BOTANY

Paper—II B (Genetics)

Time Allowed—3 Hours] [Maximum Marks—35

Note :— Attempt FIVE questions. Question No. 1 is compulsory

1. Define/Explain in 3-4 lines :
 - (a) Differentiate purine from pyrimidine
 - (b) Satellite DNA
 - (c) Crossing Over
 - (d) Nucleosome
 - (e) Gene expression
 - (f) Law of Segregation
 - (g) tRNA. 1×7=7
2. Give a detailed account on structure of DNA. 7
3. Describe various stages of meiosis. 7
4. Give a detailed account on structure of gene. 7
5. Describe Mendel's law of independent assortment in detail. 7

6. Give a detailed account on gene regulation in eukaryotes. 7
7. Define protein. Describe primary and secondary structure of protein. 7
8. Give an illustrated account on induced mutation. 7
9. Write a detailed note on :
 - (a) Transcription
 - (b) Genetic code. $3.5 \times 2 = 7$