

Exam. Code : 206603
Subject Code : 5015

M.Sc. Bio-Informatics 3rd Semester
GENOMICS & PROTEOMICS
Paper : BI-631

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Candidates are required to attempt **five** questions, selecting at least **one** question from each Section. The **fifth** question may be attempted from any Section. All questions carry equal marks.

SECTION—A

1. What is genome ? Discuss anatomy of prokaryotic genome.
2. What is DNA microarray ? Discuss design and analysis of DNA microarray data.

SECTION—B

3. Explain the significance of comparative genomics databases. Discuss COG.
4. What are genetic markers ? Discuss RFLP and RAPD.

SECTION—C

5. What are differential 2D gels ? Discuss comparative proteomics.
6. What is proteomics ? Discuss principle and applications of any two proteomics techniques.

SECTION—D

7. Explain the importance of protein-protein interaction network studies. Discuss DIP database.
8. Write a note on databases and software for protein-protein interaction studies.