

Exam. Code : 206603

Subject Code : 8121

**M.Sc. Bio-Informatics 3rd Semester (Old Syll 2020-21)
GENOMICS & PROTEOMICS
Paper—BI-631**

Time Allowed—3 Hours] [Maximum Marks—75

Note :— Attempt **FIVE** questions in all, 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 are gene, pseudogenes and transposable elements ? Discuss a method used for analyzing gene expression in detail.
2. What are genome maps ? Discuss different types and application of physical genome map.

SECTION—B

3. Discuss how Gramene and PlantGDB help in comparative genomics study.
4. Discuss the principle and application of STS, SSCP and RAPD.

SECTION—C

5. What is protein folding ? Discuss any two tools used in plant proteomics research.
6. What is proteomics ? Explain application of bioinformatic tools in proteomics studies.

SECTION—D

7. What are protein-protein interaction network ? Discuss DIP and PPI and their significance.
8. What is interactome ? Discuss tools used for protein-protein interaction network studies.