

**Exam. Code : 206603**

**Subject Code : 4662**

**M.Sc. Bio-Informatics 3<sup>rd</sup> 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 are transposable elements ? Discuss anatomy of eukaryotic genome. 15
2. What is genome mapping ? Discuss physical mapping techniques and their applications. 15

**SECTION—B**

3. What are comparative genomics databases ? Discuss any one such database. 15
4. What are genome alignment tools ? Compare MUMmer and BLAST2. 15

**SECTION—C**

5. What is pharmacogenomics ? Discuss comparative proteomics. 15
6. What is protein folding ? Discuss applications of bioinformatics in proteomics studies. 15

**SECTION—D**

7. What do you understand by protein-protein interaction network ? Discuss MINT database. 15
8. What do you understand by interactome ? Discuss GRID database and its significance. 15