Exam. Code : 206603
Subject Code : 4769

M.Sc. Bio-Informatics 3rd Semester (Batch 2020-22)

ADVANCED ALGORITHMS FOR COMPUTATIONAL BIOLOGY

Paper-BI-632

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 do you understand by interval graphs ? Discuss circular maps.

2. Explain simulated annealing. Explain its one application.

SECTION—B

3. What is profile HMM ? Explain its application.

4. Discuss algorithm used for libraries of partial digestion.

SECTION—C

5. What are multilayer perceptron ? Discuss application of artificial neural network in bio-informatics.

6. What is support vector machine ? Discuss its application in bio-informatics.

SECTION—D

7. Explain deep learning. Discuss its application in computational biology.

8. What is principle component analysis ? Discuss its application.