

M.Sc.-I (Biotechnology) (CBCS Pattern) Semester - II
PSBIT-107 - Paper-III : Molecular Biology and Bioinformatics

P. Pages : 1

Time : Three Hours



GUG/S/23/11193

Max. Marks : 80

1. What is homologous recombination? Explain with the help of example. 16

OR

Write a note on

- a) Genetic map 8
- b) Fluorescence In situ-Hybridization. 8
2. Describe mechanism and biochemistry of antisense molecule. Add a note on hammerhead ribozyme. 16

OR

Explain in brief.

- a) Chromatin marking systems. 8
- b) Direct chemical modification of DNA. 8
3. Describe the positive factors affecting angiogenesis. 16

OR

Write a note on.

- a) Polyoma virus. 8
- b) Adeno virus 8
4. Describe the genetics of cancer with reference to ras, erb-B and suppressor genes. 16

OR

Explain

- a) BLAST, ENTREZ and PUBMED. 8
- b) Brief idea of data types and designing of data types. 8
5. Write a note on
- a) Molecular markers. 4
- b) Applications of antisense technology. 4
- c) Cancer stem cells 4
- d) Operating systems. 4
