

M.Sc.-Biotech.-IS-(1.4)

2015

(January)

Full Marks : **40**

Time : **2** Hours

*Answer any **five** questions
All questions carry equal marks*

(BIOINFORMATICS AND BIOSTATISTICS)

1. Describe the various functions and types of operating systems used in computer today.
 2. Write short notes on the following :
 - (a) Search Engine
 - (b) Type of Network
 3. Describe in detail the NCBI data model mentioning its salient features and significance in relation to bioinformatics applications.
 4. Write short notes on the following :
 - (a) Molecular Visualization tools
 - (b) Biomedical Literature databases.
 5. Describe in detail the different types of substitution matrices used during sequence alignments.
 6. Describe the commonly used measures of central tendency and dispersion in biological analysis with suitable examples.
 7. Write short notes on the following :
 - (a) Laws of probability
 - (b) Chi-square test of significance.
 8. Differentiate between :
 - (a) Ras Mol and Tas Top
 - (b) Local alignment and Global alignment.
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