

M.Sc.(Microbiology) CBCS Pattern Semester-IV  
**PSMBT-16 - Paper-IV : Biostatistics and Bioinformatics**

P. Pages : 1

Time : Three Hours



**GUG/W/23/11411**

Max. Marks : 80

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1. Describe use of probability in solving biological problems in detail **16**

**OR**

a) Write a note on descriptive statistics. **8**

b) Write a note on presentation of biological data. **8**

2. What is correlation? Explain it's significance in biological studies in detail. **16**

**OR**

a) Write a note on Regression. **8**

b) Add a note on Analysis of variance. **8**

3. Write in details about Expressed Sequence Tag (EST) and Protein Data Bank (PDB). **16**

**OR**

a) Write a note on information networks. **8**

b) Add a note on Role of NCBI **8**

4. Describe in detail about prediction of protein structure and function from it's sequence. **16**

**OR**

a) Write a note on Biological databases. **8**

b) Write a note on DNA sequence Analysis **8**

5. Write a note on-

a) Chi-square test. **4**

b) ANOVA **4**

c) Chaperson sequence Analysis. **4**

d) FASTA **4**

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