

AU-336

M.Sc. (Part—I) Semester—II (CBCS) Examination
BIOCHEMISTRY
(Bioinformatics, Biostatistics and Research Methodology)
Paper—VIII

Time : Three Hours]

[Maximum Marks : 80

Note :— All questions are compulsory and carry equal marks.

1. (a) Describe Basic Components of Computer 5
- (b) Hardware 5
- (c) Output Devices. 6

OR

- (p) Write about programming languages 5
- (q) Software 5
- (r) Input Devices. 6
2. (a) What is internet ? Give its uses. 5
- (b) Write about Data Management. 5
- (c) Protein Structure Analysis. 6

OR

- (p) What is BLAST ? 5
- (q) Describe Multiple Sequence Alignment. 5
- (r) Genomics and Proteomics. 6
3. (a) Probability Theory 5
- (b) Calculate mean for the given data :
10, 11, 11, 15, 17, 19, 21. 6
- (c) Describe Chi Square (χ^2) Test. 5

OR

- (p) What is Random Variable and Distribution Function ? 5
- (q) Describe F test. 5
- (r) Calculate Mode of the given data :
7, 9, 9, 10, 12, 14, 17, 21. 6

4. (a) What is Design of Experiments in Biochemistry? 8
(b) Describe the Methodology of Scientific Research. 8

OR

- (p) Write about nature of scientific methods. 8
(q) What are sampling techniques? 8
5. (a) Give the preparation of scientific report. 8
(b) Write about order of paragraph writing. 8

OR

- (p) Give the proper use of nouns, pronouns and articles in research methodology. 16