

Bachelor of Science (B.Sc.) Semester—VI Examination

APPLIED ZOOLOGY—II

Optional Paper—2

(Zoology)

(Biotechniques, Microtechnique, Biotechnology, Bioinformatics and Biostatistics)

Time : Three Hours]

[Maximum Marks : 50

- N.B. :—** (1) All questions are compulsory.
 (2) All questions carry equal marks.
 (3) Illustrate your answer with suitable diagrams.

1. Give an account on methods of sterilization. 10

OR

Write notes on :

(A) SDS-PAGE 5
 (B) Colorimeter. 5
2. Describe the process of block making. 10

OR

Write notes on :

(A) PAS Staining 5
 (B) Difficulties encountered during section cutting. 5
3. Give an account of DNA manipulating enzymes in recombinant DNA technology. 10

OR

Write notes on :

(A) Cloning vectors 5
 (B) Vaccine production by recombinant DNA technology. 5
4. Give an account of Protein databases. 10

OR

Write notes on :

(A) Graphical representation of data 5
 (B) Role of bioinformatics in life sciences. 5
5. Write **four** or **five** lines on the following (any **TEN**) :
 (i) Application of TLC
 (ii) Retention factor
 (iii) Agarose gel Electrophoresis
 (iv) Clearing
 (v) Haematoxyline
 (vi) Fixation of tissue.
 (vii) EcoRI
 (viii) Insulin
 (ix) Genomic library
 (x) Genbank
 (xi) Standard error
 (xii) Mode. 10