

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

**APPLIED ZOOLOGY—II**

**(Zoology)**

**Paper—2**

**(Biotechniques, Microtechnique, Biotechnology, Bioinformatics and Biostatistics)**

Time : Three Hours]

[Maximum Marks : 50

1. What is sterilization ? Give detail account of different types of sterilization techniques. 10

**OR**

Write notes on :—

- (A) Density gradient centrifugation. 5  
(B) Principle of spectrophotometer. 5  
2. Describe in detail problems and remedies during section cutting. 10

**OR**

Write notes on :—

- (A) Embedding. 5  
(B) Sudan Black-B method for Lipids. 5  
3. Describe in detail the production of vaccines with the help of recombinant DNA technology. 10

**OR**

Write notes on :—

- (A) Nucleases. 5  
(B) Cosmids. 5  
4. Describe in detail the various types of nucleotide sequence databases. 10

**OR**

Write notes on :—

- (A) Types of databases. 5  
(B) Probability. 5

5. Write four to **FIVE** lines on the following (any **TEN**) :—

10

- (i) Chromatography.
- (ii) Electrophoresis.
- (iii) Beer's Law.
- (iv) Xylene.
- (v) Haematoxylin.
- (vi) PAS.
- (vii) Genomic Library.
- (viii) DNA Polymerase.
- (ix) pBR 322.
- (x) NCBI.
- (xi) SWISS-PROT.
- (xii) Standard Error.