

B.Sc.- III (CBCS Pattern) Sem-VI  
**USCZOT15 - DSE - Core Paper-XV - Zoology Paper-III**  
**Microtechnique, Bioinformatics and Biostatistics**

P. Pages : 1

Time : Three Hours



GUG/W/22/13372

Max. Marks : 50

- Notes :
1. All question are compulsory.
  2. All question carry equal marks.
  3. Draw well labelled diagram wherever necessary.

1. Write an account of scanning electron microscope. 10

**OR**

Write notes on

- a) Staining technique for EM. 5
- b) Transmission electron microscope. 5

2. Describe in Detail Process of Fixation and Dehydration of tissue. 10

**OR**

Write notes on

- a) Working of microtome. 5
- b) Histochemical staining technique for carbohydrates. 5

3. Explain objective, properties & classification of biological database. 10

**OR**

Write notes on

- a) Structure of protein sequence database. 5
- b) Application of Bioinformatics. 5

4. Write in detailed on presentation and tabulation of data. 10

**OR**

Write notes on

- a) Standard deviation. 5
- b) Probability distribution. 5

5. Write four to five lines on following **any ten**. 10

- i) SEM
- ii) Course focus
- iii) Freeze Fracture
- iv) Clearing.
- v) Fixative
- vi) Periodic acid Schiff
- vii) BLAST
- viii) PIR
- ix) Uniport
- x) Mode
- xi) Probability
- xii) Chi-square test.

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