

B.Sc. Part-III Sem-VI
**B.Sc.4540 - Zoology : Applied Zoology Paper-II (Biotechniques,
Microtechniques, Immunology, Bioinformatics and Biostatistics)**

P. Pages : 1

Time : Three Hours



GUG/S/19/1362A

Max. Marks : 50

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

1. Describe the ion exchange chromatography and its application. 10
- OR**
- a) Fixation b) PAS method
2. Describe cell mediated immunity. 10
- OR**
- a) Importance of Bioinformatics. b) Presentation of data.
3. Attempt the followings. 10
- a) Hot air oven b) Clearing
c) Lymphnode d) Protein sequence database
- OR**
- e) Autoclave f) Embedding
g) Humoral immunity h) Gene Bank
4. Attempt the followings. 10
- a) Agarose gel electrophoresis. b) Trimming of block.
c) Innate immunity d) Probability.
- OR**
- e) Applications of spectrophotometer. f) Rotary microtome (No description)
g) IgM h) Measures of dispersion
5. Write 4 or 5 lines on the followings **any ten**. 10
- i) Pasteurization. ii) Ultracentrifugation.
iii) Colorimeter. iv) Trimming.
v) Sudan black vi) Haematoxylin
vii) HIV viii) Bone marrow
ix) Peyer's patches x) Uniport
xi) Pie chart xii) Standard error
