

M.Sc. (Part-I) (Zoology) (NEP Pattern) Semester-I  
**NEP-84-4 / 01MSCZO04-4 - Major Elective : Medical Laboratory Techniques**

P. Pages : 1

Time : Three Hours



**GUG/W/23/15149**

Max. Marks : 80

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- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Illustrate your answers with well labelled diagrams wherever necessary.

1. Describe in detailed about organization and Functioning of Clinical Laboratory.

**OR**

- a) Safety Measures.
- b) Code of Conduct of Medical Laboratory Personnel.

2. Describe in detailed about Polymerase Chain Reaction Machine.

**OR**

- a) Ultra-centrifuge.
- b) Process of PCR.

3. Describe in detailed Sources of Biological Variations and Pre-Analytical Variables.

**OR**

- a) Preparation of Blood Smears.
- b) Preservation of Blood.

4. Describe in detailed Modern Laboratory Set Up-Quality Control: Accuracy, Precision, and Reference Values.

**OR**

- a) Laboratory Safety Protocols.
- b) Disposal of Biomedical Waste.

5. Attempt the following.

- a) Waste Disposal.
- b) UV-Trans-Illuminator.
- c) Analytical Techniques.
- d) Methods of Measuring Liquids.

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