

**2203230201010001**  
**EXAMINATION FEBRUARY-MARCH 2024**  
**POST GRADUATE DIPLOMA IN MEDICAL LABORATORY**  
**TECHNOLOGY (FIRST SEMESTER)**  
**MEDICAL LABORATORY TECHNOLOGY FUNDAMENTALS**  
**(THEORY) - LEVEL 1 (NEW COURSE)**

[Time: As Per Schedule]

[Max. Marks: 70]

**Instructions:**

1. **1. Fill up strictly the following details on your answer book**
  - a. Name of the Examination: **POST GRADUATE DIPLOMA IN MEDICAL LABORATORY TECHNOLOGY (FIRST SEMESTER)**
  - b. Name of the Subject: **MEDICAL LABORATORY TECHNOLOGY FUNDAMENTALS (THEORY) - LEVEL 1 (NEW COURSE)**
  - c. Subject Code No :**2203230201010001**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

**Q.1 Answer in short (Any seven)**

**14**

1. Enlist functional components of laboratories.
2. State any 4 role of medical lab technologist.
3. What is Biomedical waste? Write steps of its management?
4. Write causes of laboratory hazards. Enlist physical hazards in a laboratory.
5. Define - Normality and Molarity.
6. What are SI units?
7. Why is internal QC important in laboratory?
8. Give the formula to calculate SD.

**Q.2 Write Short note on any TWO of the following.**

**14**

1. Explain classification of laboratories on basis of complexities.
2. Define ethics. Discuss ethical principles of a medical laboratory technologists.

3. Give full form of NABL & NABH. Discuss with regards to its aims & objectives.

**Q.3 Write Short note on any TWO of the following. 14**

1. Discuss the chemical hazards in the laboratory. What are the preventive measures for chemical hazards?
2. Explain Biosafety level of medical laboratory.
3. Which are the usual causes of fire in a laboratory? Discuss first aid measures in case of burns.

**Q.4 Write Short note on any TWO of the following. 14**

1. What is Reagent grade water? Why is it required in laboratory? Write its characteristics and use
2. Define Solute, Solvent and Solution. Discuss Expression of Solution Concentration in detail.
3. Explain Sources of Error in Preparation of Solution.

**Q.5 Write Short note on any TWO of the following 14**

1. Accuracy and precision.
2. Name Quality control charts and explain any one in detail.
3. QC of Haematology and Biochemistry laboratory.

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