

RAN-2203230201010001**P.G.D.M.L.T. (Sem. I) Examination November - 2025****PGDMLT-1001: Medical Laboratory****Technology Fundamentals****Time: 3 Hours]****[Total Marks: 70****સૂચના : / Instructions**

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book
- (2) All questions are compulsory.
- (3) Draw diagrams wherever necessary

Seat No.:

--	--	--	--	--	--

Student's Signature

Q-1. Answer in short (Any seven) (14)

1. Write any 4 tests commonly requested in India?
2. Enlist types of disease agent.
3. Write steps of Biomedical waste management?
4. Enlist physical hazards in a laboratory.
5. What is AR and GR?
6. Define - Solute, solvent and solution
7. Why is QC important in laboratory?
8. What is SD? Give the formula to calculate SD.

Q-2. Attempt any TWO of the following [14]

1. Explain type of clinical laboratories on basis of the complexity of tests carried out.
2. Define ethics. Discuss ethics of medical laboratory technologist.
3. Give full form of NABL & NABH. Explain its aims, objectives and benefits of laboratory accreditation.

Q-3. Attempt any TWO of the following (14)

1. Enlist physical hazards in a medical laboratory. Explain electricity and fire hazard in detail.
2. Discuss first-aid measures with acid and alkali burns (splashes).
3. What is Biomedical waste management? Explain in detail.

Q-4. Attempt any TWO of the following (14)

1. What is Reagent grade water? Discuss its specifications and use.
2. What is chromic acid? Why and how is it used for cleaning laboratory glassware?
3. Discuss the various types of solutions used in a laboratory? Explain preparation of normal and percent solution in detail.

Q-5. Attempt any TWO of the following (14)

1. Define: Quality control. What is the role of QC in clinical laboratories?
2. Define: Error. What are sources of variation in analytical tests of laboratories?
3. What is LJ chart? Explain preparation of it.