

RAN-2203230201040001**P.G.D.M.L.T. (Sem. I) Examination March - 2026****P.G.D.M.L.T. 1004 A: Basics of Microbiology****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) Draw neat and labelled diagrams wherever necessary. (3) Figures to the right indicate full marks of the question.	Seat No.: Student's Signature
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- Q.1. Answer in Short: (Any Seven) 14**
- State the use of MSA agar. Name the dye which is used as an indicator in its preparation.
 - Which condenser is used in Dark Field Microscopy?
 - Define: Antiseptic and Disinfectant.
 - Give the full form on CLED agar and state its use.
 - Define: a) Mordants b) Intensifiers.
 - What is hyphae? Its wall is made up of which component?
 - Give the use of membrane filters.
 - Describe in brief bacterial flagella..
- Q.2. Attempt any TWO of the following: 14**
- Define a parasite and a host. Also explain host parasite relationship.
 - Discuss morphology of virus and explain the types of symmetry giving suitable examples.
 - Give the contribution of Louis Pasteur in the Field of Microbiology.
- Q.3. Attempt any TWO of the following: 14**
- Fluorescence Microscopy: Working principle and components.
 - Write a short note on: Phase Contrast Microscopy.
 - How are samples prepared for TEM?
- Q.4. Write short notes on any TWO of the following: 14**
- Moist heat sterilization.
 - Ionizing radiations.
 - Gaseous Chemical sterilants.
- Q.5. Answer any TWO of the following: 14**
- Write a detail note on Eosin Methylene Blue agar medium.
 - Enlist the method for microbial cultivation. Explain any two in detail.
 - How can enrichment culture technique and use of selective & differential media be employed for isolation of bacteria?