

Roll no. \_\_\_\_\_

ID: 221914

Semester: 1<sup>st</sup>

Branch: DMLT

Subject Name: Basic Micro-Biology

Time Allowed: 3 Hrs.

MM: 60

**Note: Multiple Choice questions. All questions are compulsory.**

**6x1=6**

- Q.1 Chocolate agar is the examples of -----  
(a) Enriched Medium (b) Selective Medium  
(c) Differential Medium (d) Nutrient Medium
- Q.2 Rod shaped bacteria are termed as  
(a) Cocci (b) Bacilli  
(c) Spirochete (d) Spirillum
- Q.3 Autoclaving inactivates/kills bacteria by  
(a) Oxidation (b) Reduction  
(c) Denaturation (d) Hydrolysis
- Q.4 Maximum growth of bacteria can be observed in -----phase  
(a) Log (b) Lag  
(c) Stationary (d) Decline
- Q.5 Mycobacterium are best identified in  
(a) Giemsa stain (b) Gram stain  
(c) Fontana Stain (d) Acid fast stain
- Q.6 Klintex papers are used as  
(a) Bacteria proof filter papers (b) To check the efficiency of sterilizers  
(c) For aseptic monitoring (d) To check sterility testing

**Section-B**

**Note: Objective/Completion type questions. All questions are compulsory. 6x1=6**

- Q.7 Tell the functions of flagella in bacterial cell
- Q.8 Define the term Thermal Death Time
- Q.9 Tell why shorter exposures time are preferred in autoclave to achieve sterilization?
- Q.10 Distinguish between phototrophs and chemoheterotrophs
- Q.11 Give examples of chemical indicators used to evaluate efficiency of sterilizers
- Q.12 Distinguish enriched media from nutrient broth

**Section –C**

**Note: Short answer type Questions. Attempt any eight questions out of ten questions. 8x4= 32**

- Q.13 Review the nutritional requirements of bacteria for its growth and development.
- Q.14 Write the informative notes on streak plate method for isolation of pure cultures.
- Q.15 "*Radiation sterilization is also referred as cold sterilization*". Interpret the statement.
- Q.16 Draw and show the different phases of the typical bacterial growth curve.
- Q.17 Discuss the principle, working and limitations of Rideal Walker Co-efficient Test.
- Q.18 List the four desirable properties to be possessed by an ideal disinfectants.
- Q.19 Gram staining is also referred as differential staining. Interpret the statement.
- Q.20 Define and give example of each (a) Selective media (b) Enriched media.
- Q.21 Handling of Microscope is to be done with utmost care. Interpret the statement.
- Q.22 Discuss about the role of sterilization indicators

**Section-D**

**Note: Long answer questions. Attempt any two questions out of three questions.**

**2x8=16**

- Q.23 Discuss the working procedure of an autoclave with the help of labeled sketch.
- Q.24 Explain the different types of culture techniques to be utilized in microbiology along with their applications.
- Q.25 How do different chemicals are useful in disinfection procedures. Explain with suitable examples.