

DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Winter 2022

Date: 15.02.2023

Course:	B. Pharmacy	Sem: III	
Subject Name:	Pharmaceutical Microbiology	Subject Code BP303T	
Max Marks:	75	Duration:	3 Hr.

Instructions:

1. All questions are compulsory
2. Draw diagrams / figures wherever necessary
3. Figures to right indicate full marks

Q. 1. Objective Type Questions (Answer all the questions)

(10 x 2) = 20

- i) Differentiate between gram-positive and gram-negative bacteria.
- ii) Write about bacterial growth curve.
- iii) Classify bacterial staining.
- iv) Define i) Sterilization ii) D value
- v) List factors influencing disinfection
- vi) List general properties of viruses
- vii) Differentiate between optical and electron microscope
- viii) Classify clean area as per WHO.
- ix) List ideal characteristics required for preservatives used in pharmaceutical products
- x) Classify methods used for measurement of bacterial growth

Q. 2. Long Answers (Answer 2 out of 3)

(2 x 10) = 20

- i) Discuss main sources of contamination in aseptic area? How will you prevent it?
- ii) Classify methods of sterilization and explain in detail moist heat sterilization.
- iii) Define microbiology. Write about various branches of microbiology. Add a note its scope and importance in pharmacy

Q. 3. Short Answers (Answer 7 out of 9)

(7 x 5) = 35

- i) Explain ultra-structure of bacterial cell with suitable diagram.
- ii) Explain IMViC test.
- iii) Give the in-detail classification of disinfectants.
- iv) Explain Phenol coefficient test along with its advantages and disadvantages.
- v) Explain lytic cycle and lysogeny of viruses
- vi) Describe microbial assay of antibiotics.
- vii) Explain tests used for assessment of microbial spoilage
- viii) Write the detail about the applications of animal cell culture in pharmaceutical industry and research.
- ix) Enlist types of spoilage and give the factors affecting microbial spoilage.