

VINAYAKA MISSION'S RESEARCH FOUNDATION
(Deemed to be University) , SALEM

B.PHARM. DEGREE EXAMINATION – October 2021
Third Semester

PHARMACEUTICAL MICROBIOLOGY

Time : Three hours

Maximum: 75 marks

I. Write essays on any **TWO** questions: (2 x 10 = 20)

1. Classify different methods of Sterilization. Explain merits and demerits of physical methods of Sterilization. Add a note of Sterilization by filtration.
2. Describe in detail about the test for Sterility and explain the Autoclaving process.
3. Give the different methods of isolation and identification of bacterial with special emphasis to Gram's Staining technique.

II. Write short answers on any **SEVEN** questions: (7 x 5 = 35)

4. Elaborate study about growth and reproduction of bacteria.
5. Describe Microbiological Assay of Antibiotics by disc-diffusion method.
6. Describe classification of bacteria based on shape and size.
7. Explain any two methods of evaluation of disinfectants.
8. Differentiate between gram positive and gram negative bacteria.
9. Types of culture media.
10. Discuss radiation sterilization.
11. Maintenance of Lab culture.
12. Media for Animal cell culture.

III. Write short notes on : (10 x 2 = 20)

13. Lytic and Lysogenic cycle.
14. Primary culture.
15. Bacterial Flagella.
16. Biological indicator.
17. Tyndallization.
18. Classification of micro organism based on temperature.
19. Examples of gram-positive bacteria.
20. Common staining techniques.
21. Define Phototrophs and Chemotrophs.
22. Define Endotoxin.