

Question Paper

Exam Date & Time: 10-May-2024 (10:00 AM - 01:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

II Year Pharm D University Examination, May 2024

Pharmaceutical Microbiology [PBT 2.2T-S1]

Marks: 70

Duration: 180 mins.

A: Long Answer Questions

Answer all the questions.

Draw diagrams wherever necessary

- 1) Elaborate tyndallisation method of moist heat sterilization. (4)
 - a)
 - b) Draw a neat labeled diagram of large steam sterilizer and add a note on the role of check valve. (6)
- 2) Give an account on the mode of action and properties of metal based disinfectants. (4)
 - a)
 - b) Enlist the methods involved in assessment of bacteriostatic activity of a disinfectant. Write briefly on any two methods. (6)
- 3) Elaborate the physical growth requirements of bacteria. (10)

B: Short Answer Questions

Answer all the questions.

- 4) Explain any TWO methods for the laboratory cultivation of virus. (5)
- 5) Explain the stages of sterilization cycle with the help of a graph. (5)
- 6) Immunity and immunopathology are proverbial two edges of double-edged sword. Justify the given statement. (5)
- 7) With the help of a neat labeled graph, explain primary and secondary immune response. (5)
- 8) Explain the procedure involved in the separation and identification of protein samples. (5)
- 9) Write a note on pathogenesis, clinical manifestation, prevention and treatment of HIV-AIDS. (5)

C. Give Reasons for the Following

Answer all the questions.

- 10) Composition of cell wall is the criteria to classify bacteria as Gram positive and Gram negative. (2)
- 11) EMB agar is both selective and differential media. (2)
- 12) Viable count is more informative than total count. (2)
- 13) Microbiological assay of antibiotics follows methods A & B. (2)
- 14) Specific microorganisms are used for the assay of various B Vitamins. (2)

-----End-----