

QP Code: 323006

Reg. No.....

**Third Semester B. Pharm Degree Supplementary Examinations
May 2023**

Pharmaceutical Microbiology

(2017 Scheme)

Time: 3 Hours

Max. Marks: 75

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Essays

(2x10=20)

1. Explain the principle and procedure involved in acid fast staining technique. Give two examples each for acidic, basic and negative stains.
2. List the bacteriostatic and bactericidal methods for evaluation of disinfectants and explain phenol co-efficient method.

Short Notes

(7x5=35)

3. Nutritional requirements of bacteria
4. Classify preservatives with example.
5. With a neat-labeled diagram, explain the structure of bacterial flagella.
6. Explain the principle and procedure involved in sterility testing of sterile products
7. Physical and chemical indicators used for evaluation of sterilizers.
8. The contributions of Louis Pasteur and Robert Koch to the field of microbiology.
9. Enlist the factors affecting disinfectant activity and explain any three factors in detail.

Answer Briefly

(10x2=20)

10. What are primary and transformed cell cultures
11. List any four factors affecting microbial spoilage of pharmaceuticals.
12. Morphological classification of fungi
13. Expand the following CFU and IMViC.
14. Sterilization method for eye drops and surgical blades.
15. Enumerate the methods of cultivation of virus.
16. Lyophilization and cryopreservation.
17. Streak plate technique
18. List any two applications each of UV and gamma radiation sterilization.
19. Define and classify clean area.
