

**QP Code: 323006**

**Reg. No.....**

**Third Semester B. Pharm Degree Regular/Supplementary**

**Examinations May 2025**

**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. Describe the various methods used for the isolation of pure culture. Write a note on total and viable count.
2. Discuss the various techniques used for the cultivation of viruses, and their applications.

**Short Notes**

**(7x5=35)**

3. Elaborate on the sexual reproduction of fungi.
4. Explain dark field microscopy and its application.
5. Write a note on principle and procedure of citrate utilization test.
6. Describe the design and working of laminar airflow with a neat diagram.
7. Explain the sources and types of microbial contaminants.
8. Describe the principle and procedure involved in sterilization using hot air oven.
9. Explain the factors affecting disinfectant action.

**Answer Briefly**

**(10x2=20)**

10. How do viruses replicate within a host cell.
11. Name and briefly describe three major branches of microbiology.
12. What is the primary purpose of simple staining in bacterial identification.
13. Write any two chemical indicators in monitoring sterilization processes.
14. What are the key steps involved in assessing the efficacy of a new antibiotic.
15. Describe the main types of antiseptics and their common uses.
16. List two raw materials commonly used in culture media for bacterial growth.
17. Differentiate Lag phase and Log Phase.
18. Explain about class 100 and class 1000 area.
19. What is Fluid Thioglycollate Media. Explain its application.

\*\*\*\*\*