B.Pharm 2nd Year, 1st Semester (Supplementary) Examination – 2024 Sub: Pharmaceutical Microbiology

Time: 3Hrs. Full Marks:75

Answer any FIVE questions

- 1. Define and differentiate:
 - (a) Exotoxin and Endotoxin
 - (b) Bacteria and Virus
 - (c) Log phase and Lag phase of bacterial growth.

 $3 \times 5 = 15$

- 2. (a) Write the difference between flagella and fimbriae.
 - (b) Define dye and stain point out the basic differences.
 - (c) Define antibiotics with examples.

 $3 \times 5 = 15$

- 3. Define biological indicators; Write the name of the stain used as biological indicator in filtration sterilization. Briefly discuss the bacteria proof filter. 5+5+5=15
- 4. Write a note on bacterial nutrition. Why distilled water is used in the preparation of bacteriological culture media. Define blank incubation. 10+3+2=15
- 5. Write in brief the beneficial role of microbes and their pharmaceutical applications. What is plasmid? 12+3=15
- 6. Define Gram Staining. Explain the Gram Staining procedure in brief. What is mordant?

3+10+2=15

- 7. (a) Define sterilization, Explain -why three successive days are required for tyndallization sterilization?
- (b) Define Probiotics?

4+6+5=15