Ref. No.: Ex/BP303T/2023

B. Pharm 2nd Year 1st Semester Examination - 2023

Subject: Pharmaceutical Microbiology

Time: 3 hrs. Full Marks: 75

(Answer any five questions)

- 1. Define and differentiate:
 - (a) Prokaryotes and Eukaryotes
 - (b) Bacterial Exotoxin and Endotoxin
 - (c) Tyndalisation and Pasteurization

5X3=15

- 2. (a) Write a note on Bacterial nutrition.
 - (b) Define log phase of Bacterial growth.

10+5=15

- 3. (a) Define sterilization. Write a note on filtration sterilization.
 - (b) Define biological indicators. Mention the name of indicator used in filtration sterilization.

(2+6)+(4+3)=15

- 4. (a) Classify antimicrobial agents according to the sources with example.
 - (b) Write a note on Penicillin. What is strain improvement?
 - (c) Why Clavulanic acid is used along with Amoxycilin?

5X3=15

- 5. (a) Define probiotics along with examples.
 - (b) Enlist at least five beneficial microbes and their uses in the field of therapy.

5+10=15

- 6. Answer the followings:
 - (a) Define immunity and susceptibility.
 - (b) Differentiate Gram positive and Gram negative bacteria.
 - (c) Differentiate vaccine and sera.
 - (d) What is poliomyelitis?
 - (e) Differentiate between Chemotherapy and Immunotherapy.

3X5 = 15

7. Define antibiotic assay. Write in brief the principle of antibiotic assay.

5+10=15

8. Define synergism with example. Write the importance of multi drug therapy.

8+7=15