

B.Pharm 2nd Year 1st Semester Examination – 2024

Subject- Pharmaceutical Microbiology

Time: 3 Hrs.

Full Marks: 75

A. Answer the following questions:

10x2=20

1. Define and differentiate between bacteria and virus.
2. What are bacterial Toxins? Define with classification.
3. What is generation time of bacteria?
4. What are the main cell wall components of Gram positive and Gram negative bacteria?
5. What are the properties of Pyrogen?
6. Define the Log Phase of bacterial growth.
7. Give at least two notable properties of a Prokaryotic Cell.
8. Differentiate between Tyndalisation and Pasteurization.
9. Define Plasmid.
10. 1nm = μm = mm

B. Answer **ANY FIVE** of the following questions:

5x11=55

1. Draw and describe the morphological characters of a bacterium. Define Flagella and its types with proper examples. 5+6 = 11
2. Write a short note on Filtration Sterilization. Mention the porosity of bacterial proof filter. Give the name of the smallest bacterium. Enlist atleast TWO examples of Gram positive & Gram negative bacteria with their pathogenicity. 5+1+1+4 = 11
3. Write a note on bacterial Nutrition. Differentiate between Peptone Water and Nutrient Broth. 6+5 = 11
4. Define Acid Fast Bacteria with examples. Diagrammatically elaborate and explain the Gram Staining procedure. 4+7 = 11
5. Define Antibiotic Assay. Write in brief the principle of Antibiotic Assay. 3+8 = 11
6. Define and differentiate Prokaryotes and Eukaryotes. Explain what are Probiotics with examples. 6+5 = 11
7. Enlist at least five beneficial microbes and their Pharmaceutical uses. Define blank incubation. 10+1 = 11