

B.Pharmacy 2nd Year 1st Semester Examination 2025

Jadavpur University

Sub: Pharmaceutical Microbiology

Time: 3 Hrs.

Full Marks: 75

Answer any **FIVE** questions

1. A. Define the followings:
a) Plasmid b) Probiotics c) Endospore d) Pyrogen e) Generation Time
f) Obligate Parasites. 6x2 = 12
B. What is Dextran? 3
2. Define and Differentiate: 5x3 = 15
a) Prokaryotes and Eukaryotes
b) Bacterial Conjugation and Transformation
c) Exotoxin and Endotoxin
d) Flagella and Fimbriae
e) Gram positive and Gram negative Bacteria
3. Define Stain and Dye. Briefly describe the principles of Gram Staining. What is Negative Staining? 4+8+3 = 15
4. Write in brief the Bacterial Growth Phase. What is incubation period? Define blank incubation. 10+3+2 = 15
5. a) Briefly describe the beneficial role of microbes.
b) Write a note on filtration sterilisation. 10+5 = 15
6. Discuss on the following:
a) Antiseptic and Disinfectants
b) Ideal characteristics of an antiseptic
c) Factors influencing the disinfectant activity
d) Iodophore 4+4+4+3 = 15
7. Define antibiotic assay. Write in brief the procedure of antibiotic assay. What is bacterial resistance? 2+10+3 = 15