

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm. Winter 2019-20 Examination

Semester: 4**Subject Code: 08101253****Subject Name: Pharmaceutical Microbiology****Date: 05/12/2019****Time: 02:00 pm to 05:00 pm****Total Marks: 75****Instructions:**

1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1. Essay type Questions. (Any 2 out of 3) (10 marks each) (20)

1. What is sterilization? Explain in detail sterilization with autoclave with diagram.
2. Give classification of bacteria and write a note on it.
3. Explain in detail – Isolation and cultivation techniques for bacteria.

Q.2. Short Essay type Questions. (Any 7 out of 9) (5 marks each) (35)

1. Explain in detail – Bacterial growth curve.
2. Define: Pharmaceutical Microbiology. Write its scopes and applications in detail.
3. Describe in detail – Dynamics of disinfection.
4. Explain evaluation tests of disinfectants.
5. Write a note on – Bacteriophages.
6. Explain in detail – Pasteurisation.
7. Explain in detail – Antigen-Antibody reactions.
8. What is microbial assay? Explain cylinder plate method for assay of antibiotics.
9. Describe methods for conducting sterility testing.

Q.3. Answer in short. (2 marks each) (20)

1. What is Spirochaetes?
2. Differentiate between – Bacteria and Virus.
3. Comment – The cells of microorganisms repel acidic dye.
4. Write a note on – Tyndallization.
5. Explain mode of action and properties of Ethylene Oxide as a disinfectant.
6. Write principle of coulter counter in total microbial count.
7. List out methods utilized in sterility testing of CATGUT.
8. Define: (A) Zone of inhibition (B) Zone of exhibition.
9. Comment – Carbon dioxide is one of the factors affecting growth of microbes.
10. Define: (A) D-value (B) Z-value