

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm. Summer 17-18 Examination

Semester: 4**Subject Code: 08101253****Subject Name: Pharmaceutical Microbiology****Date: 19/05/2018****Time: 02:00PM TO 05:00PM****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. Define sterilization. Enlist its various types. Explain Moist heat sterilization with diagram.
2. What is pure culture. Explain various methods for isolating pure culture.
3. Enlist different methods for Microbiological Assay as per IP. Explain cup plate method with diagram.

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

1. For which type of pharmaceutical products sterility test is needed. Give importance of sterility test.
2. Give the difference between microbiological assay and biological assay.
3. Define D value, Z value, F value, SAL and MIC.
4. Enlist five types of marketed disinfectants.
5. Describe growth of bacteria.
6. Define Immunity and explain its different types.
7. Explain different types of viruses.
8. Write the contribution of Robert Koch and Louis Pasteur in Pharmaceutical Microbiology.
9. Write a note on Rickettsia.

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

1. Define Actinomyces with examples.
2. Write a short note on Spirochetes.
3. Give types of Bacteriophage.
4. Give structural difference between yeast and moulds.
5. Name two culture media and their compositions.
6. Enlist two biological indicators used for validation of sterilization process.
7. Write scope of pharmaceutical microbiology.
8. Write short note on antigen antibody reaction.
9. Write a note on RIA.
10. Describe the structure of bacterial cell with diagram.