

PARUL UNIVERSITY
FACULTY OF PHARMACY
Pharm.D , Examination May-2018

Year: 2**Date: 09/05/2018****Subject Code: 08207202****Time: 02:00PM TO 05:00PM****Subject Name: Pharmaceutical Microbiology****Total Marks: 70****Instructions**

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

Q.1 Essay Type Questions. (any 2 out of 3) (15 Marks Each) (30)

1. Define sterilization. List different methods used for sterilization with suitable examples. Explain any two physical methods in detail.
2. Explain in detail different factors influencing disinfectant action. Enlist methods used for evaluation of disinfectant and explain any two in detail.
3. Define and classify immunity. Explain principle and procedure of agglutination reaction, ELISA and RIA.

Q.2 Short Essay Type Questions. (any 4 out of 5) (5 Marks Each) (20)

1. Write in detail about bacterial growth rate curve.
2. Explain the various methods used for isolation of bacteria.
3. Discuss about the role of complement system in host defence mechanism.
4. Write a note on microbiological assay of cyanocobalamin.
5. Explain the causative organisms, pathogenicity, symptoms and treatment for Tuberculosis.

Q.3 Short Answers. (2 Marks Each) (20)

1. Define: Pharmaceutical microbiology and Prokaryotes.
2. Differentiate between viruses and bacteria.
3. Give the functions of pili and capsules.
4. Enlist the different techniques used for preservation of culture. Describe any one technique.
5. Differentiate between selective media and enrichment media.
6. Write principle of acid-fast staining.
7. Describe Voges-Proskauer test for identification of microorganisms.
8. Give principle of PCR.
9. Define microbiological assays. Mention the name of the test organism for the assay of Penicillin and Streptomycin.
10. What are the causative microorganisms for Syphilis and Malaria?