

Bachelor of Pharmacy (B. Pharm) Third Semester
BP304 - Pharmaceutical Microbiology and Immunology-I

P. Pages : 1

GUG/W/18/1161

Time : Three Hours



Max. Marks : 80

- Notes :
1. All questions carry equal marks.
 2. Question No. **1** is compulsory Solve **any four** remaining.
 3. Illustrate your answers wherever necessary with the help of neat sketches.

1. Solve **any four** of the following. 16
 - a) Write scope and applications of microbiology.
 - b) Write a note on Whittaker's five kingdom concept.
 - c) Write a note on Replica-Plate technique.
 - d) Define the growth of bacteria. Describe the typical bacterial growth curve.
 - e) Write a note on symmetry of viruses.
 - f) Differentiate between gram-positive and gram-negative bacteria.
2. Give the etiology, pathophysiology prevention and treatment of following diseases. 16
 - a) AIDS.
 - b) Malaria.
 - c) Typhoid.
 - d) Tuberculosis.
3. Describe the morphology, nutrition requirement and reproduction of fungi. 16
4. Discuss in detail different types of recombination techniques. 16
5.
 - a) Give the general properties of viruses. 6
 - b) Describe the lytic growth cycle and lysogeny viruses. 10
6.
 - a) Write a note on identification and preservation of microbial cultures. 6
 - b) Discuss the different methods of cultivation of viruses. 10
7. Write a short note on **any four** of the following. 16
 - a) Compound microscope.
 - b) Principles and applications of fluorescence microscope.
 - c) Culture media for bacteria.
 - d) Types of mutation.
 - e) SEM and TEM.
 - f) Contribution of Louis Pasteur in the field of microbiology.
