

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**  
**B.Pharm. Summer 2018-19 Examination**

**Semester: 4**  
**Subject Code: 08101253**  
**Subject Name: Pharmaceutical Microbiology**

**Date: 05/04/2019**  
**Time: 2:00 PM to 5:00 PM**  
**Total Marks: 75**

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**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: Disinfection. Describe various factors affecting selection of disinfection. Classify disinfectant and explain in detail disinfection with ethylene oxide.
2. Define: Sterility test. Write principle of sterility test and describe in detail total count.
3. Define: Immunity. Describe types of immunity and explain in detail antigen-antibody reaction with its application.

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

1. Write a note on virus with its classification.
2. Describe factors affecting on sterilization.
3. Write a note on microbial taxonomy of spirochetes.
4. Define: Microbiology. Write its scope and application in pharmacy.
5. Describe in detail sterility tests for oil and oily solutions.
6. Describe in detail: Gram staining.
7. Explain in detail Pasturisation method for sterilization.
8. Write a note on bacteria with its classification.
9. Describe in detail: Bacterial growth curve.

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

1. Define: 1) Mesophiles 2) Halophilic
2. Write a short note on hypersensitivity.
3. Comment:
  - 1) All pink colour bacteria are gram negative after gram staining.
  - 2) Acidic dye repels the cells of microorganism.
4. Differentiate: Capsule and Spore.
5. Explain vaccine bath sterilization.
6. Explain rideal walker test for evaluation of disinfection.
7. Give applications of glutaraldehyde for disinfection.
8. Define: 1) Zone of inhibition 2) Zone of exhibition
9. Describe organs of immune system.
10. Define: Bacteriophages. Give its structure.