Code No: PHR16214 (**R16**)

**SET** - 1

## II B. Pharmacy I Semester Supplementary Examinations, May - 2019 PHARMACEUTICAL MICROBIOLOGY

Time: 3 hours Max. Marks: 70

Note: 1. Question paper consists of two parts (Part-A and Part-B)

2. Answering the question in **Part-A** is Compulsory

3. Answer any FOUR Questions from Part-B

## PART -A

| 1.             | a) | What is pasteurization?   | (2M)  |
|----------------|----|---|-------|
|                | b) | Why virus is called as an obligatory parasite?  | (2M)  |
|                | c) | What are antiseptics? Give examples.  | (2M)  |
|                | d) | Write important biosafety measures to be used in microbiology lab.  | (2M)  |
|                | e) | How to prevent cholera?   | (2M)  |
|                | f) | What are biosensors? Give their applications.   | (2M)  |
|                | g) | Write in brief of BCG vaccine.  | (2M)  |
| <u>PART –B</u> |    |   |       |
| 2.             | a) | With a neat sketch describe fungal cell structure.  | (6M)  |
|                | b) | Write in detail on Gram staining methods.   | (8M)  |
| 3.             | a) | Explain the methods used for bacterial counting.  | (7M)  |
|                | b) | Explain how microbes adapt to the changes in nutrients and radiant energy.  | (7M)  |
| 4.             | a) | With a neat sketch explain the construction, working and uses of autoclave.   | (7M)  |
|                | b) | Write a note on methods used for testing microbial susceptibility to antibiotic.  | (7M)  |
| 5.             | a) | Write steps involved in the rDNA technology. Write its advantages and disadvantages.                                      | (10M) |
|                | b) | Write in brief on chemical mutagens.  | (4M)  |
| 6.             |    | ite the source of infection, diagnosis, prevention and control of (a) Tuberculosis (b) Tetanus (c) Hepatitis              | (14M) |
| 7.             |    | ite the procedure, applications and disadvantages of the following methods  (a) Cup-plate method  (b) Turbidimetric assay | (14M) |