

Code: 15R00304

R15

B.Pharm II Year I Semester (R15) Regular & Supplementary Examinations November 2017

PHARMACEUTICAL MICROBIOLOGY

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- What are prokaryotes? Give examples.
 - Write the contribution of Joseph Lister.
 - What is 'population doubling time'?
 - Write the composition and role of each ingredient used in nutrient agar media.
 - List merits of cold sterilization.
 - List the ideal properties of disinfectants.
 - Write the prevention and control methods of food poisoning.
 - Name four virus and diseases caused by them.
 - List genetic engineered products with their uses.
 - Give the microbial source to produce penicillins and riboflavin.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 List various media used for cultivation of fungi. Describe its methods of reproduction in detail.

OR

- 3 Define and classify the types of virus. Explain the various types of cultivation of virus.

UNIT – II

- 4 Classify types of culture media. Mention the salient features of each media along with examples.

OR

- 5 What is total and viable counting of bacteria? Explain any two methods of each in detail.

UNIT – III

- 6 Explain the various methods of evaluation of bacteriostatic activity of disinfectants.

OR

- 7 With neat diagram, explain the principle, procedure, merits and demerits of hot air oven.

UNIT – IV

- 8 Explain the diagnostic method to detect typhoid and malarial parasite in human blood.

OR

- 9 Write the causative agent, mode of transmission, and immunization methods to prevent diphtheria and cholera.

UNIT – V

- 10 Explain the principle involved in microbial assay of:

- Tetracyclines.
- Vitamin B₂.

OR

- 11 Add a note on:

- Genetic engineered products.
- Bio-sensors in analysis.
