

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

**PHARMACEUTICAL MICROBIOLOGY**

Time: 3 hours

Max. Marks: 70

**PART – A**

(Compulsory Question)

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- 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 B<sub>2</sub>.

**OR**

- 11 Add a note on:

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

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