

B.Pharm III Year I Semester (R15) Regular Examinations November 2017

PHARMACEUTICAL MICROBIOLOGY

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) What is germ theory of disease?
 - (b) Write the contribution of Louis Pasteur.
 - (c) What is 'generation time'?
 - (d) Mention the phases of bacterial growth curve.
 - (e) List merits of gamma radiation sterilization.
 - (f) Why is negative control used in sterility test?
 - (g) Write the prevention and control methods of food poisoning.
 - (h) Name any four viruses and diseases caused by them.
 - (i) Write the significance of engineered products.
 - (j) Give the microbial source to produce penicillin and riboflavin.

PART – B

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

UNIT – I

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

OR

- 3 List various media used for cultivation of fungi. Describe its method of reproduction in detail.

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 autoclave.

UNIT – IV

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

OR

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

UNIT – V

- 10 Explain the principle involved in microbial assay of tetracyclines and vitamin B₁₂.

OR

- 11 Explain:
- (a) Genetic engineered products.
 - (b) Bio-sensors in analysis.
