

Code: 15R00304

R15

B.Pharm II Year I Semester (R15) Regular Examinations November 2016
PHARMACEUTICAL MICROBIOLOGY

Time: 3 hours

Max. Marks: 70

PART – A
(Compulsory Question)

- 1 Answer the following: (10 x 02 = 20 Marks)
- (a) Explain the discovery of immunity by Pasteur.
 - (b) Write the pharmaceutical significance of fungi and bacteria.
 - (c) Discuss various phases of bacterial cell growth curve.
 - (d) Describe continuous culture of bacteria by turbidostat.
 - (e) Write the pharmaceutical applications of radiation sterilization.
 - (f) Write the validation process of moist heat sterilization.
 - (g) Describe tuberculin test.
 - (h) Write etiology and immunization of tetanus.
 - (i) Write applications of biosensors.
 - (j) Write the principle involved in microbiological assay of antibiotics.

PART – B
(Answer all five units, 5 x 10 = 50 Marks)

UNIT - I

- 2 (a) Explain in detail about discovery and contributions of Antonie Van Leeuwenhoek and Robert Koch to microbiology.
(b) Add a note on characterization of microorganisms.

OR

- 3 (a) Discuss about three domains of life.
(b) Describe the structure and arrangement of flagella. Explain how it operates.

UNIT - II

- 4 Discuss the isolation and cultivation of anaerobic microorganisms.

OR

- 5 (a) Mention growth conditions of bacteria.
(b) Add a note on nutrient media used for bacterial cultures.

UNIT - III

- 6 Define disinfection and mention different types of disinfectants with the suitable example.

OR

- 7 Define antimicrobial agent and mention different methods to evaluate antimicrobial activity.

UNIT - IV

- 8 Explain the etiology, pathogenicity, mode of transmission, diagnosis, prevention and control methods of cholera.

OR

- 9 Give a note on etiology, pathogenesis, source of infection, mode of transmission, diagnosis, prevention and control of syphilis and hepatitis.

UNIT - V

- 10 Discuss the principle & procedure involved in microbiological assay of cyanocobalamin.

OR

- 11 Write the principle and method involved in assay of penicillin.