Code: 15R00304

R15

B.Pharm II Year I Semester (R15) Supplementary Examinations June 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)

(a) Explain the discovery and contribution of Antony van Leeuwenhoek to microbiology.
(b) Describe germ theory of disease.
(c) Describe nutritional types of bacteria.
(d) What is synchronous growth and write its advantages.
(e) Differentiate between sterilization and disinfection with suitable examples.
(f) Write a note on decimal reduction time and generation time.
(g) Write a note on prevention and control of tuberculosis.
(h) Describe schick test.
(i) Write the microbial source and applications of antibiotics.
(j) Write the principle involved in microbiological assay of amino acids.

PART – B

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

UNIT – I

2 Discuss the theory of spontaneous generation versus Biogenesis.

OR

3 Explain the classification and identification of microorganisms.

UNIT – II

4 Discuss various techniques for the isolation of microorganisms in pure culture and mention advantages and disadvantages.

OR

5 Explain the methods for determining bacterial numbers, mass and cell constituents.

UNIT – III

6 Write the principle involved in moist heat sterilization and mention construction, operation and applications of an autoclave with a neat labeled diagram.

OR

7 Discuss the official methods of sterility testing of pharmaceutical products.

UNIT – IV

8 Write about etiology, pathogenesis and source of infection, diagnosis, prophylaxis and treatment of Typhoid.

OR

9 (a) What is Bacillary dysentery? Write the source of infection, mode of transmission, prevention & control of it.
(b) Discuss the diagnostic tests of malaria.

UNIT – V

10 Write the principle and method involved in assay of streptomycin antibiotic.

OR

11 (a) Discuss the principle and pharmaceutical applications of biosensors.
(b) Define genetic engineering and discuss a pharmaceutical product prepared by it.