Code: 13R00502 **R13**

B.Pharm III Year I Semester (R13) 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)

(a) Write the concept of spontaneous generation.
(b) State Koch's postulates.
(c) Differentiate enriched and enrichment media with suitable examples.
(d) Write the significance of synchronous growth.
(e) What is pasteurization? Write its applications.
(f) Why is positive control used in sterility test?
(g) Write the causative agent and treatment of hepatitis.
(h) Name and write the modes of transmission of any two bacterial diseases.
(i) List commercial uses of any four enzymes.
(j) Define 'Antibiotics'. Give the microbial source to produce streptomycin sulphate.

PART – B

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

UNIT – I

2 Describe in detail steps involved in replication of virus.

OR

3 Define and classify fungi. Describe its methods of reproduction in detail.

UNIT – II

4 Explain in detail any four efficient methods of cultivations of anaerobic bacteria.

OR

5 Enlist and explain any four methods of isolation of pure culture. Write its significance in bacteriology.

UNIT – III

6 Describe in detail how disinfectants are evaluated.

OR

7 Explain the mode of action, procedure, apparatus and applications of sterilization by ethylene oxide.

UNIT – IV

8 Briefly explain the diagnostic tests for typhoid and malaria.

OR

9 Write the causative agent, mode of transmission, control and prevention of tuberculosis and syphilis.

UNIT – V

10 Explain the principle, procedure and interpretation of microbial assay of penicillin G.

OR

11 What is genetic engineering? Explain in detail the production of any one genetic engineered product.

*****