B. PHARM.

(SEM. IV) EXAMINATION. 2006-07

PHARMACEUTICAL MICROBIOLOGY

Time : 3 Hours] [Total Marks : 80

Note :
(1) Attempt all the questions.
(2) All questions carry equal marks.
(3) Be precise in your answer.

1 Answer any four of the following : 4x4=16
   (a) What is the contribution of Robert Koch to microbiology?
   (b) Classify viruses giving examples.
   (c) Draw a neat labelled diagram of a typical bacterial cell.
   (d) Write about the life-cycle of virus.
   (e) List eight diseases, caused by bacteria along with the causative organism.

2 Answer any four of the following : 4x4=16
   (a) What are the nutritional requirements of viruses?
   (b) Write about acid fast staining.
   (c) Write about total count of Bacteria.
   (d) How will you prepare and sterilize media for aerobic bacteria?
(e) Discuss the techniques for cultivating anaerobic bacteria?

3 Answer any two of the following: \(2 \times 8 = 16\)
   (a) Define sterilization. What are the different methods of sterilization? Discuss any one method in detail.
   (b) Write about the evaluation of disinfectants.
   (c) Discuss the dynamics of disinfection.

4 Answer any two of the following: \(2 \times 8 = 16\)
   (a) What factors must be taken into account while selecting an antimicrobial preservative?
   (b) Write about the media used in ‘Test for Sterility’ IP
   (c) Define the terms:
       (i) ‘Sterility’ and ‘Disinfection’
       (ii) Nosocomial infection
       (iii) Spread of microbes through man.

5 Answer any two of the following: \(2 \times 8 = 16\)
   (a) Write a note on ‘Clean Area’.
   (b) Discuss the methods used for assay of antibiotics.
   (c) Discuss Aquatic microbiology and its significance.