

04/16

B. Pharms / Sem - IV CBSGS / Microbiology.

Q.P. Code : 420608

(3 Hours)

[Total Marks : 70

- N.B. : (1) All questions are compulsory.
(2) Draw neat labelled diagrams wherever necessary.

1. Answer the following:

- (a) Name any two methods used in neutralisation of antimicrobial agents in sterility testing. 2
- (b) What is the scope of microbiology in pharmaceutical industry and give the contribution of Joseph Lister. 2
- (c) Enlist chemical indicators used in dry heat and moist heat sterilisation methods. 2
- (d) Name 2 Chlamydial infections with the causative agents. 2
- (e) Name 2 infections caused by Escherichia coli. 2
- (f) Write the causative agent and diagnostic test for leprosy. 2
- (g) Define bacterial flagella 1
- (h) Explain angular aperture 1
- (i) Define sterilization 1
2. (a) Discuss fluorescent microscopy with its applications. 4
- (b) Write a note on gram negative cell wall. 4
- (c) Explain the principle and method of any one special staining. 3
3. (a) Explain different methods of preservation of bacteria. 4
- (b) Describe lysogenic cycle of bacteriophage with suitable diagram. 4
- (c) Explain selective media with suitable examples. 3
4. (a) Explain basic morphological details and sexual reproduction in fungi. 4
- (b) Write a note on Rickettsial infections. 4
- (c) Explain any one direct method of counting bacteria. 3

TURN OVER

Q.P. Code : 426208

2

5. (a) Discuss filtration sterilization with respect to method mode of action and practical applications. 4

OR

- (a) Discuss radiation sterilization with respect to method mode of action and practical applications. 4
- (b) Differentiate between bacteria and viruses. 4
- (c) Explain in brief biological and economical importance of algae. 3
6. (a) Write a note on mode of action and applications of 4
- (i) quaternary ammonium compounds
- (ii) heavy metals and their salts.
- (b) Write in detail the morphological characteristics for identification and classification of bacteria. 4
- (c) Describe the life cycle of malarial parasite. 3