

(13)

3hrs

Total Marks-80

- (1) Question No.1 is Compulsory.
 (2) Solve any three question out of remaining questions.
 (3) Draw suitable diagram wherever necessary.

- Q.1 Attempt any Four out of Six(Short Notes):- 5X4=20M
- (1) Cell Wall of gram -ve bacteria
 - (2) Aerobic Microorganism
 - (3) Thermal Death Point
 - (4) MPN Test
 - (5) Turbidostat
 - (6) Koch's Postulates
- Q.2 a) Discuss about the various types of medias which are used for culturing microorganisms. 10M
 b) Discuss the effect of solutes, temperature and ion concentration on microbial growth. 10M
- Q.3 a) Describe the various physical methods of sterilization? 10M
 b) What are the different chemical methods for controlling growth of microorganisms 10M
- Q.4 a) Draw a typical bacterial cell , identify all parts and write function of each part 10M
 b) Write various differences between a prokaryote and an eukaryote? 10M
- Q.5 a) List the four phyla found in the kingdom fungi and list the characteristics of the fungi that place them in each phylum - such as: reproduction, morphological complexity, and habitat. 10M
 b) Explain endotoxin and exotoxin with suitable examples? 10M
- Q.6 a) Describe various methods for preserving the microbial culture? 10M
 b) Write a note on antimicrobial sensitivity test? 10M

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