

BS/2110

C6- GENERAL MICROBIOLOGY (BHB13)

S492/NH

Attempt two question from the each Section A and B and the section C is compulsory
Time 3 hrs MM : 74

Section A

1. What do you mean by microbiology? Discuss about the contribution of some pioneer of this field 11
2. a Give an illustrated account of morphology and structure of different types of virus 9
- b Why gram negative bacteria exhibit pink color? Comment 2
3. Discuss in detail the various nutritional requirements for the cultivation of microbes 11
4. Describes the various preservation methods for the maintenance microbes 11

Section B

5. a What is microbial growth? Discuss the mathematical expression of bacterial growth 8
- b Give a brief note on synchronous growth 3
6. What is batch and continuous culture system. Discuss the chemostat and turbidostat for the measurement of microbial growth 11
7. What is transduction? Describe in detail the types of transduction studied by you 11
8. a Write a detailed note on mechanism of integration and Hfr formation 7
- b Write a note on sporulation in bacteria 4

Section C

9. Explain the following (15x2) 30
 - i. Bacterial nomenclature
 - ii. Intuitive methods
 - iii. Microbial diversity
 - iv. Numerical taxonomy
 - v. Chemotaxis
 - vi. Lipopolysaccharides
 - vii. Flagella
 - viii. Mesosomes
 - ix. Plasmids
 - x. Bacteriophage
 - xi. Lyophilization
 - xii. Halophile bacteria
 - xiii. Diauxic growth
 - xiv. F factor
 - xv. Conjugation