- VII. (a) Enlist the major groups of chemical agents which can be used for control of micro-organisms.
 - (b) Describe the major applications and mode of action of phenolic compounds and chlorine compounds as antimicrobial agents.

8

VIII. Explain the food borne infections (any two of following):

Salmonell sp, Staphylococcus sp, Hepatitis Virus. 2×11=22

SECTION—C

IX. Give a brief account of the following:

- (1) Features of Algae
- (2) Differences in cell wall of gram –ve and gram +ve bacteria
- (3) Microbial Phylogeny
- (4) Impact of O₂/CO₂ during maintenance of micro-organisms
- (5) Batch culture
- (6) Temperature based preservation of microbes
- (7) Generation time
- (8) Synchronous culture
- (9) Diauxic growth
- (10) Enlist four methods to measure the growth of micro-organisms
- (11) Fermentation
- (12) Tyndallization
- (13) Antibiotics
- (14) Coliform bacteria
- (15) Amoeba (features). $15\times2=30$

Roll No.

Total No. of Pages: 2

PC 11702-NH

BS/2111 GENERAL MICROBIOLOGY—BHB-13 Semester—III

Time Allowed : Three Hours]

[Maximum Marks : 74

Note: The candidates are required to attempt *two* questions each from Sections A and B. Section C will be compulsory. Each question in Sections A and B carries 11 marks and in Section C each questions is of 2 marks.

SECTION—A

- Discuss the major events in evolution of Medical Microbiology and Food Microbiology.
- II. Diversity in Microbial World: Comment by basis of criteria.
- III. Categorize bacteria by Nutritional requirement variations.
- IV. Which methods are employed to get pure cultures? Also give briefly how to check the purity of a culture. $2\times11=22$

SECTION—B

- V. Which factors affect the growth of micro-organisms?
- VI. Define "Transformation". Describe 'Griffth experiment' and its significance.