

2124

B. Voc. (Food Processing and Preservation)
Third Semester
FPP-303: Introduction to Food Microbiology

Time allowed: 3 Hours

Max. Marks: 40

NOTE: Attempt five questions in all, including Question No. 1 which is compulsory and selecting one question from each Unit.

x-x-x

I. Answer the following:-

- a) Give two features of Gram negative bacteria.
- b) What is the significance of microbiological analysis of food?
- c) What is chemostat and turbidostat?
- d) What is colony forming unit?
- e) What is fed batch fermentation process?
- f) What are prebiotics and their significance?
- g) How moisture promotes food spoilage?
- h) Enlist microbes responsible for spoilage of canned foods. (8x1)

UNIT - I

- II.
 - a) Discuss sources of microbial introduction in food.
 - b) What is a culture medium? Enlist important ingredients in it. (2x4)
- III.
 - a) Discuss structure of a prokaryotic cell.
 - b) Write a note on cell wall of gram positive bacteria. (2x4)

UNIT - II

- IV.
 - a) What is pasteurization and its types?
 - b) Discuss major factors responsible for microbial growth in food. (2x4)
- V.
 - a) What is sporulation and germination?
 - b) Discuss phases of bacterial growth. (2x4)

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(2)

UNIT - III

- VI. a) What is surface and submerged fermentation?
b) Write notes on following fermented foods (i) beer (ii) meat (2x4)
- VII. What is a fermenter? Discuss its major parts and give their functions. (8)

UNIT - IV

- VIII. Discuss microbial spoilage of the following foods (i) soft drinks (ii) refrigerated foods. (8)
- IX. a) Discuss indicators of microbial food spoilage.
b) What leads to the spoilage of the fruit juices? (2x4)

x-x-x