

1128

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. Define the following:-

- a) Sterilization
- b) Gram positive Bacteria
- c) Fermentation
- d) Probiotics
- e) Pasteurization
- f) Generation time
- g) Sporulation
- h) Chemostat

(8x1)

UNIT – I

II. a) Write a short note on sources of microbes present in food.

b) Explain the structure of prokaryotic cell.

(3,5)

III. a) Write the various characteristics of Bacteria and yeast of predominant microbes present in food).

b) Explain the concept of culture medium depending on constituents and ingredients.

(3,5)

UNIT – II

IV. a) Explain two methods to control the microorganisms.

b) Explain the various methods of measurement of microbial growth.

(3,5)

V. a) Write the various factors responsible for growth of microbes present in food.

b) Explain the importance of stress adapted microbes in food.

(3,5)

P.T.O.

(2)

UNIT - III

- VI. a) Write and explain any two types of fermentation.
b) Explain the preparation of wine. (3,5)
- VII. a) Write down the applications of prebiotics and probiotics.
b) Explain the various parts of fermenters and their functions. (3,5)

UNIT - IV

- VIII. a) Write the various spoilage bacteria present in raw and pasteurized foods.
b) Explain the various indicators of microbial food spoilage. (3,5)
- IX. a) What are the various factors responsible for food spoilage.
b) Write the various spoilage bacteria in canned and refrigerated foods. (5,3)

x-x-x