Exam Code: 1321 Sub. Code: 9261

2021

B. Voc. (Food Processing and Preservation) Third Semester

FPP-303: Introduction to Food Microbiology

Time allowed: 3 Hours

Max. Marks: 40

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting one question from each Unit.

x-x-x

- I. Answer the following:
 - a) Enlist important microbes in soil.
 - b) Give two important features of yeasts.
 - c) What is chemostat?
 - d) What is specific growth rate?
 - e) What are applications of prebiotics?
 - f) Give examples of surface fermentation.
 - g) How canned foods get spoiled?
 - h) Enlist spoilage organisms in refrigerated foods.

(8x1)

UNIT - I

- II. a) Discuss structure of a prokaryotic cell.
 - b) What are a culture medium and its use? Enlist types of medium used in microbiology. (2x4)
- III. a) Give structure of cell wall of Gram negative bacteria.
 - b) Discuss predominant microorganisms present in various types of food. (2x4)

UNIT - II

- IV. a) What is pasteurization and its types?
 - b) Discuss factors responsible of microbial growth in food.

(2x4)

- V. a) What is sporulation and germination?
 - b) Which chemical agents can be used to control microbial growth in food? (2x4)

P.T.O.

<u>UNIT – III</u>

a) What is batch and fed batch fermentation? VI. b) Discuss fermented dairy products. (2x4)VII. a) Discuss basic parts of fermenters. b) Discuss fermentation of beer and wine. (2x4)<u>UNIT - IV</u> a) What are indicators of microbial spoilage? Explain with suitable example VIII. b) What is food spoilage and important reactions involved in it? IX. a) Discuss spoilage of pasteurized foods. b) What are various factors involved in spoilage of raw foods?

(2x4)