Exam. Code: 0091 Sub. Code: 1289

1125

B.Voc. Food Processing and Preservation 1st Semester

BFP-104: Food Microbiology

Time Allowed: 3 hours

Max. Marks: 60

Note: Attempt <u>five</u> questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question from each Unit I - IV.

UNIT-I

I. a) What is bacterial growth curve? Explain the factors responsible for the onset of each phase.

b) Discuss the benefits of bacteria in food sector.

(6,6)

II. Outline a procedure for enumeration, isolation and identification of bacteria and fungi involved in food spoilage. (12)

UNIT-II

- III. List down the different ways of food preservation. Describe the mechanisms of food preservation by different physical means. (12)
- IV. Discuss the thermal processes needed for total destruction of bacterial cells and their spores in foods. (12)

UNIT-III

V. a) Give an account of different organisms present in milk on the basis of biochemical activities.

b) Write a short note on Aflatoxins.

(8,4)

VI. What are coliforms? Discuss their importance in food industries. Describe the methods used for microbiological detection of coliforms. (12)

UNIT-IV

- VII. What is food intoxication? How does <u>Staphylococcus aureus</u> and <u>Bacillus</u> spp. cause food borne diseases? (12)
- VIII. Write short notes on:

a) Clostridium betulinum food poisoning.

b) Gasteroenteritis caused by Protozoa.

(5,7)

UNIT-V

- IX. a) Role of yeast in food industry.
 - b) What is Pascalization?
 - c) What is MPN method?
 - d) What do you mean by aseptic packaging?
 - e) Types of spoiled cans.

f) What do you understand by term 'Salmonelloris'?

(6x2)
