

1127

B. Voc. (Food Processing and Preservation)

Third Semester

BFP-304: Food Fermentation and Beverage Technology (old)

Time allowed: 3 Hours

Max. Marks: 60

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

x-x-x

I. Explain the following briefly :-

- a) What is 'decline phase'?
- b) Explain 'vinegar fermentation'.
- c) What are 'electrochemical biosensors'?
- d) What is ace-K?
- e) What is Distillation?
- f) Write a Short note on Blending. (6x2)

**UNIT – I**

II. a) What are the various types of fermenters?

b) What is fermentor design? Discuss its operation measurement. (2x6)

III. a) Discuss rate of microbial growth and death.

b) Discuss the principle and use of biosensor. (2x6)

**UNIT – II**

IV. Explain the following:-

a) Lactic acid fermentation of cereals and vegetables.

b) Fermented soya and other legume based foods. (2x6)

V. Explain the following:-

a) Role of fermentation in processing of tea, cocoa and coffee

b) Explain the process of baking and leavening in detail. (2x6)

**UNIT – III**

VI. Discuss the importance of beverages in our diet. Explain treatment of water for food industry in detail. (12)

P.T.O.

(2)

- VII. What is the brewing technology of wine, toddy and Perry? Explain the brewing process in detail.

**UNIT – IV**

- VIII. a) Discuss the use of low calorie sweeteners in beverage industry. Also explain various types of sweeteners used.
- b) What are whey beverages? Explain the role of whey in development of fortified drinks. (2x6)
- IX. a) What are 'soft drinks'? Explain their method of preparation.
- b) Differentiate between carbonated and non-carbonated beverages. (2x6)

x-x-x