

1127

B.Voc. (Food Processing and Preservation)
First Semester
BFP-103: Food Biochemistry (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.

x-x-x

I. Explain the following:-

- a) Water activity
- b) Sorption isotherms
- c) Cyclodextrins
- d) Rancidity of fats
- e) Secondary structure of protein
- f) Micro and macro nutrients

(6x2)

UNIT – I

II. Write short note on:-

- a) Importance of water in foods
- b) Classification of carbohydrates with example
- c) Structure of Glucose

(3,6,3)

III. Describe four chemical properties of carbohydrates with example.

(12)

UNIT – II

IV. a) Give structure of starch and cellulose.

b) Write short note on malto-dextrins.

(8,4)

V. a) Explain properties of pectin gums.

b) What are dietary fiber? Explain with example.

(7,5)

UNIT – III

VI. a) What are saturated and unsaturated fatty acids? Explain with examples.

b) Give structure and function of phospholipids.

(7,5)

(2)

VII. Write short notes on:-

- a) Auto oxidation of fatty acids
- b) Antioxidants
- c) Confectionary Fats

(3x4)

UNIT – IV

VIII. a) Explain in detail structure and chemistry of amino acid.

b) Give significance of proteins in food.

(9,3)

IX. What are enzymes? Explain their classification and role in food industry.

(12)

x-x-x