

Exam.Code:1502

Sub. Code: 9741

1057

B. Voc. (Food Processing and Preservation)

Fourth Semester

BFP-405: Food Engineering

Time allowed: 3 Hours

Max. Marks: 60

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

x-x-x

I. Explain the following:-

- a) Irradiation
- b) Electric field pulse
- c) Reverse osmosis
- d) Micro filtration

(4x3)

UNIT – I

II. Discuss the general principal and advantages of extrusion in details?

(12)

III. Describe the principle behind hydrostatic pressure technology and its application in the food industry?

(12)

UNIT – II

IV. Differentiate between the following:-

- a) Nano filtration and Micro filtration
- b) Reverse osmosis and Ultra filtration
- c) Heated foods and Chilled foods

(3x4)

V. a) Explain the applications of hurdle technology in dairy industry?

b) What do you understand by the term intermediate moisture foods?

(8,4)

UNIT – III

VI. Discuss the role and application of electric field pulses in bakery industry?

(12)

VII. Explain the following:-

- a) Ionizing radiation
- b) Irradiation

(2x6)

P.T.O.

(2)

UNIT - IV

VIII. Differentiate between the following:-

- a) Homogenization and Emulsification
- b) Mass transfer and Heat transfer
- c) Ultrasound and Immobilized enzyme technology

(3x4)

IX. Explain the methods of immobilization and use of immobilized enzymes in food processing industry in details? (12)

x-x-x