

1127

B.Voc. (Food Processing and Preservation)

Fifth Semester

BFP-503: Food Biotechnology

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. Write short notes on:-

- a) Food biotechnology
- b) Role of Bacteriocins in food systems
- c) Single cell protein
- d) Food colors
- e) Organic foods
- f) Bio-management of food industry wastes

(6x2)

UNIT – I

- II. What is genetic engineering? Explain in detail its principle and applications in food industries. (12)
- III. Define transgenic plants and their role in food production enhancement. (12)

UNIT – II

- IV. Describe immobilization of microbial cultured plant cells. What are different molecular cloning methods? (6,6)
- V. Explain in detail the methods of inoculum and media preparation. (6,6)

UNIT – III

- VI. What are aflatoxins? Give its production, control and reduction using molecular engineering. (12)
- VII. What do you understand by the term protein engineering? Give the method of production and applications of protein engineering. (12)

P.T.O.

(2)

UNIT - IV

- VIII. What are fermented foods? Explain in detail the production of cheese. (4,8)
- IX. What are the applications of nanotechnology in food industries. Explain in detail the concept and importance of golden rice in food processing? (4,8)

x-x-x