

Roll No.....

Total No. of Printed Pages: [01]

Total No. of Questions: [09]

B.Sc. (Food Tech.)/B.F.S.T (Hons.) (Semester – 7th)

FOOD BIOTECHNOLOGY

Subject Code: BFOTS1-702

Paper ID: 19131735

Time: 03 Hours

Maximum Marks: 60

Instruction for candidates:

1. Section A is compulsory. It consists of 10 parts of two marks each.
2. Section B consist of 5 questions of 5 marks each. The student has to attempt any 4 questions out of it.
3. Section C consist of 3 questions of 10 marks each. The student has to attempt any 2 questions.

Section – A

(2 marks each)

Q1. Attempt the following:

- a. Antimicrobial agents
- b. Cloning Vectors
- c. Transgenic plants
- d. PCR
- e. Golden rice
- f. Metabolic engineering
- g. Food safety
- h. Mycotoxins
- i. Bacteriocin
- j. Intellectual property rights (IPR)

Section – B

(5 marks each)

- Q2. What is recombinant biotechnology? Explain its role in food industry.
- Q3. Name the microorganism involved in aflatoxin production. How molecular strategy help to reduced aflatoxins impact?
- Q4. What are artificial sweeteners? Explain the biotechnological production of sweeteners and bio color.
- Q5. What do you mean by Bioethicsim? What are bioethical issues in food biotechnology?
- Q6. What are phytoalexins? Explain their mechanism of action in food preservation.

Section – C

(10 marks each)

- Q7. Describe the process of genetic engineering to produced genetically modified plants. Explain the role of genetically modified crops for food production.
- Q8. Explain the different types of Intellectual property rights (IPR) in food biotechnology.
- Q9. Name the bacteriocins produced by LAB. Explain their application in food industry.