Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 11

M.Sc. (BT)Elective (2018 Batch) (Sem.-3)

FOOD BIOTECHNOLOGY

Subject Code : MBT 312

M.Code : 76734

Time : 3 Hrs. **Max. Marks : 70**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SEVEN questions carrying SIX marks each and students have to attempt any FIVE questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

(a) Biogums

(b) Bioflavours

(c) Biocolours

(d) Protein engineering

(e) Peptide antibiotics

(f) Nutraceuticals

(g) Transporter gene polymorphism

(h) Gene-diet interactions

(i) Complex foods

(j) β-Galactosidase

SECTION-B

2. What are food additives? Describe the applications of citric, fumaric and malic acid in food.

3. Describe the methods and limitations of protein engineering.

4. Describe the applications of protein engineering with special reference to β-galactosidase.

5. Describe the scope and future perspectives of nutraceuticals.

6. What are functional foods? Discuss their classification with suitable examples.

7. What are nutrigenomics? Highlight their scope and importance to human health and industry.

8. What is food biotechnology? Give a brief account of various food ingredients.

SECTION-C

9. Describe nutrigenomics approaches to unravelling effects of complex foods.

10. What is functional food science? Discuss the impact of food technology on functional food development.

11. What is a biosensor? Describe its principle, types and applications in food processing.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.