No. of Printed Pages: 03	Roll No
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# **CC-803**

# M. Tech. EXAMINATION, Dec. 2018

(Third Semester)

(B. Scheme) (Main & Re-appear)

(Food Technology)

FT605

## FOOD BIOTECHNOLOGY

Time: 3 Hours [Maximum Marks: 75]

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

**Note**: Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

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P.T.O.

#### Unit I

- Elaborate the role of genetic engineering in the production of plant foods with novel features and quality modifications.
- 2. Describe the following:  $5\times3=15$ 
  - (a) PCR
  - (b) Restriction endonucleases
  - (c) Safety of genetically modified food crops.

# **Unit II**

- 3. Discuss various types of flavours commonly used in food industry along with methodology involved in their production.15
- 4. What is protein engineering? Enumerate applications of protein engineering in food technology.

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#### Unit III

- 5. Narrate the mode of production and role of the following natural antimicrobials for food preservation:  $7\frac{1}{2} \times 2=15$ 
  - (a) Acetic acid
  - (b) Essential oils and their components.
- 6. Explain the following:  $7\frac{1}{2} \times 2 = 15$ 
  - (a) Biogums and Biocolours
  - (b) Pediocins.

### **Unit IV**

- 7. Discuss the role of biotechnology for attaining food security in India.15
- 8. Elaborate various aspects of safety required to be considered during the production of genetically modified foods.15

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