

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
FOURTH SEMESTER B.TECH DEGREE EXAMINATION(R&S), MAY 2019

Course Code: FT206

Course Name: FOOD BIOTECHNOLOGY (FT)

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any three full questions, each question carries 10 marks.

Marks

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|---|--|------|
| 1 | Write an essay on prokaryotic DNA replication. | (10) |
| 2 | How does translation occur in prokaryotes? | (10) |
| 3 | a) Summarize the process of recombinant DNA technology. | (5) |
| | b) Write about restriction endonucleases. | (5) |
| 4 | Explain the gene regulation by Trp operon with relevant figures wherever applicable. | (10) |

PART B

Answer any three full questions, each question carries 10 marks.

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|---|---|------|
| 5 | What are bio preservatives? Explain in detail with one example. | (10) |
| 6 | a) What is Tempeh? How is it produced? | (5) |
| | b) What is the importance of food fermentations in nutritional enhancement? | (5) |
| 7 | Elaborate on the commercial production process of Citric Acid. | (10) |
| 8 | a) With the help of a neat flow chart give details of edible mushroom production. | (5) |
| | b) What are the components required for beer fermentation? | (5) |

PART C

Answer any four full questions, each question carries 10 marks.

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| 9 | a) Why is it required to label and trace genetically modified foods? | (5) |
| | b) How is golden rice developed? | (5) |
| 10 | What are functional foods? Give details with suitable examples. | (10) |
| 11 | a) What is IBSC? Why is it required? | (5) |
| | b) Discuss the ethical issues concerning genetically modified foods on human health and the environment. | (5) |
| 12 | How do endogenous enzymes affect the colour, texture of food? | (10) |
| 13 | Give details on immobilized enzymes in food processing. | (10) |
| 14 | What are the enzymes used in Meat and Baking Industry? Explain with examples. | (10) |