

Reg No.: _____

Name: _____

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

Course Code: FT206

Course Name: FOOD BIOTECHNOLOGY

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any threefull questions, each question carries 10 marks.

Marks

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|---|----|--|------|
| 1 | a) | With the help of a neat diagram, write about Watson and Crick model of DNA | (5) |
| | b) | What is transcription? What are the different steps involved in it | (5) |
| 2 | | Write an essay on DNA replication in prokaryotes with the help of diagrams | (10) |
| 3 | a) | Give details on the gene regulation by lactose operon | (5) |
| | b) | Write about any two methods of gene transfer | (5) |
| 4 | | Write an essay on plant tissue culture with diagram if any | (10) |

PART B

Answer any threefull questions, each question carries 10 marks.

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|---|----|--|------|
| 5 | | Write an essay on fermentation of alcoholic beverages with special emphasis on Beer fermentation | (10) |
| 6 | a) | What is Miso? How does it produced? | (5) |
| | b) | Write about the importance of food fermentation in food preservation | (5) |
| 7 | a) | What is SCP? Write about the process for SCP production | (5) |
| | b) | Write about Bacteriocins with special emphasis on Nisin | (5) |
| 8 | | Write an essay on probiotic foods with a detailed description on possible mode of action and two examples of probiotic foods | (10) |

PART C

Answer any fourfull questions, each question carries 10 marks.

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| 9 | a) | How does plant genetic engineering has made improvement in crop yield and quality? | (5) |
| | b) | Define Nutrigenomics and write about its five principles | (5) |
| 10 | a) | What is RCGM? What are its functions? | (5) |
| | b) | Write about the manner of marking or labelling of GM foods as per GM food regulations 2004 | (5) |
| 11 | | Write an essay on ethical issues concerning GM foods | (10) |
| 12 | | Write an essay on application of enzymes in Bakery industry with five examples | (10) |
| 13 | a) | Write about different methods of enzyme immobilization | (4) |

- b) What are the applications of immobilized Protease, Amino acylase, Glucose Isomerase? (6)
- 14 Write an essay on the effects of endogenous enzymes in the colour and texture of the food (10)
