

Reg No.: _____

Name: _____

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

Course Code: FT201

Course Name: FOOD MICROBIOLOGY

Max. Marks: 100

Duration: 3 Hours

PART A

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

Marks

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|---|---|------|
| 1 | a) Write about Koch's postulates | (3) |
| | b) Write about Germ theory of disease | (2) |
| | c) Explain Roll tube technique with neat and labelled diagram | (5) |
| 2 | a) Explain Lyophilization technique for preservation of cultures with neat and labelled diagram | (5) |
| | b) Differentiate between Gram Positive and Gram Negative Bacteria. | (5) |
| 3 | Write an essay on spoilage of heated canned foods | (10) |
| 4 | a) What are the intrinsic factors affecting spoilage of foods | (5) |
| | b) How do you classify microorganisms based on temperature requirements | (5) |

PART B

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

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| 5 | a) Write a short note on non-bacterial agents of food borne diseases | (5) |
| | b) Write about different types of toxins in <i>C.botulinum</i> | (5) |
| 6 | Write an essay on food borne diseases | (10) |
| 7 | a) What are the preliminary steps of HACCP and explain it in detail | (5) |
| | b) Differentiate between verification and validation in HACCP | (5) |
| 8 | Write an essay on codes of Good Manufacturing Practices (GMP) | (10) |

PART C

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

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| 9 | a) What are the possible modes of action of probiotics | (5) |
| | b) Write about different methods of immobilization of enzymes | (5) |
| 10 | Write an essay on fermented fish products | (10) |
| 11 | Write an essay on bread fermentation | (10) |
| 12 | a) What is PCR and explain the steps involved in it | (5) |
| | b) Write about rapid methods used for detection of microorganisms | (5) |

- 13 a) Explain the test used for detecting bacterial toxins in foods (5)
- b) Write in detail about dye reduction method with a special emphasis on Methylene Blue (5)
- 14 Write an essay on immunoassay methods in detail (10)
