

Reg No.: _____

Name: _____

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

Course Code: FT303

Course Name: UNIT OPERATIONS IN FOOD PROCESSING

Max. Marks: 100

Duration: 3 Hours

PART A

Answer any two full questions, each carries 15 marks.

Marks

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|---|--|-------|
| 1 | a) Define mixing index | (5) |
| | b) With neat sketch explain different types of mixers used for pastes and plastics | (10) |
| 2 | a) What is the function of filter aid | (5) |
| | b) Compare the time required for constant rate and constant pressure filtration | (10) |
| 3 | a) Explain fluidization | (7.5) |
| | b) Explain working of plate and frame filter press | (7.5) |

PART B

Answer any two full questions, each carries 15 marks.

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|---|--|-------|
| 4 | a) Write short note on Reverse osmosis ,pervaporisation and electro dialysis | (15) |
| 5 | a) Classify multiple effect evaporator according to the feed supply | (15) |
| 6 | a) What are the factors affecting reverse osmosis | (7.5) |
| | b) Draw a neat sketch of vapour recompression evaporator and explain its working | (7.5) |

PART C

Answer any two full questions, each carries 20 marks.

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| 7 | a) Explain the extractors mixer settler and perforated tray tower | (15) |
| | b) Explain breakthrough curve in adsorption | (5) |
| 8 | a) Write short note on saturation ,super saturation ,solubility curve and methods of super saturation | (20) |
| 9 | a) Write briefly about adsorption isotherm | (10) |
| | b) Discuss different types of crystals | (10) |
