



Department of Food Technology
School of Interdisciplinary Sciences and Technology
Jamia Hamdard, New Delhi-110062

END SEMESTER EXAMINATION (December, 2025).
MSc. Food Science and Technology (III Sem)

Paper Title: Engineered Textured & Fabricated Foods
Paper Code: MFSC- 302

Time allotted: 2Hrs 30Min

Max Marks: 60

*Important: At the END, mention how many questions from each section you have attempted.
Note: Write to the point. Do not insert margins in the answer sheet. Before answering make sure you have mentioned the Question No. & Section. No continuation sheets will be provided.*

Section-A (2 Marks each, Attempt All)

Questions

Mapping

- | | |
|---|-------------|
| Q1. List the important factors to keep in mind while designing an extruder. | PO1: /CO:1 |
| Q2. Mention the usual operating pressure and temperature applied during roasting of Coffee beans. | PO4: /CO:3 |
| Q3. Expand the following processing abbreviations used in Fabricated Foods:
a) RUTF
b) SAM
c) RTC
d) TPP | PO3: /CO: 3 |
| Q4. In-order to to manufacture a Cold Coffee Beverage, calculate the price per litre of cow's milk with 5% SNF content, using a payment rate of ₹500 per kilogram of fat. | PO1: /CO:2 |
| Q5. What are Geriatric Foods. | PO4: /CO:3 |

Section- B (Attempt any 6) (5 Marks Each)

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| Q6. Discuss the role of 3D printing in the formulation of dysphagia diets. | PO:4 /CO: 4 |
| Q7. What are Ready-to-Use Therapeutic Foods, and how are they administered to patients suffering from Severe Acute Malnutrition? | PO:3/CO:3 |
| Q8. Illustrate supply chain of Spray Dried, Instant Coffee powder. | PO:4 /CO:4 |
| Q9. Justify the need for Engineered Foods. Discuss technology and manufacturing of Pasta Processing. | PO:1 /CO:2 |
| Q10. What are Textured modified Foods? Mention its types. | PO:3 /CO:4 |
| Q11. What is imitation milk? Discuss its current availability in the Indian market. | PO:4 /CO:3 |
| Q12. Write the unit operations involved in the manufacture of MAGGI noodles. | PO:2 /CO: 3 |

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Section C (Attempt any 2) (10 Marks Each)

Q13. Describe briefly the working of extruders, their types, and basic design (labelled diagram). Explain key changes during extrusion, including glass transition. Also list the unit operations for producing any RTE extruded product.

PO:1 /CO:1

Q14. Illustrate and comprehensively explain the processing methods of Fabricated Ready to Serve Beverages.

PO:3/CO: 2

Q15. Explain in detail Textured Vegetable Protein and Plant Based Mock Meat.

PO:2 /CO:3

Q16. Discuss in detail the following Engineered Foods

- a) 3-D Printed Foods
- b) Therapeutic Foods
- c) Weaning Foods

PO:4 /CO:4