



**SRI DEVARAJ URS ACADEMY OF HIGHER EDUCATION AND REESEARCH
(A DEEMED TO BE UNIVERSITY)**

**B.Sc. Hons. - Food Science and Technology
First Year, Semester- I, April- 2026 Examination**

Time- 2.30 Hrs

[Max Marks: 80]

INTRODUCTION TO FOOD SCIENCE AND TECHNOLOGY

Q.P Code: FS1010

*Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary*

I. LONG ESSAY (ANY TWO)

2X10=20 Marks

1. Define food science and technology and explain the scope and importance
2. Explain the historical evolution of food processing from the prehistoric period to the modern era. List out the discoveries or contributions
3. Define cooking. Explain the any two different cooking methods and its advantages

II. SHORT ESSAY (ANY SIX)

6X5=30 Marks

4. Explain the parboiling process and mention its objectives
5. Explain the unit operations in pulse milling
6. Describe the process flow chart for fruit jam preparation
7. Explain the functions of oils and fats in foods
8. Explain the process of oil refining
9. Describe the clean milk production
10. Define meat. Explain the tenderization of meat
11. Mention the differences between broiler chicken and layer chicken

III. SHORT ANSWER (ANY TEN)

10X3=30 Marks

12. Mention fish spoilage
13. Define food dispersions. Give three examples
14. Name any three applications of foams in food
15. List any three pigments present in fruits and vegetables
16. Define emulsifiers. Mention any three emulsifiers
17. Mention the importance of egg shell
18. Mention types of fatty acids
19. Define full cream milk, toned milk and skimmed milk
20. Mention the importance of amla
21. Define food. Mention three functions of food
22. Define maillard reaction
23. Mention nutritive value of fresh eggs



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Fundamentals of Food Science

QP Code-FS1020

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I. LONG ESSAY (Answer any Two)

2X10=20 Marks

1. Explain the importance of food rheology and mention the advantages and disadvantages of viscometers
2. Explain the process flow chart for milk processing and briefly explain each step
3. Discuss the food spoilage and explain the role of enzymes in food spoilage

II. SHORT ESSAY (Answer any Six)

6X5=30 Marks

4. Discuss the classification of minerals and their role in health
5. Explain fats and oils and discuss its classification with examples
6. Explain the importance of egg protein in human diet and draw structure of egg with neatly labeled parts
7. Describe the process of decortication in pulses and explain impact of it on nutritive value of pulses
8. Explain the nutritive value of fish and discuss digestibility properties of fish proteins
9. Explain the steps involved in processing of nuts and seeds
10. Explain the classifications of fluids and discuss the importance and applications in food industry
11. Discuss the types of tissues in meat and explain their importance

III. SHORT ANSWER (Answer any Ten)

10X3=30 Marks

12. Define essential oils. Give an example
13. Define pigments. Give an example
14. Define artificial colors. Give an example
15. Define climacteric and non-climacteric fruits. Give an example
16. Define food additives.
17. Define pulses. Name limiting amino-acid in pulses
18. Define functional foods. Give an example
19. List wheat proteins
20. Define fermentation
21. Define specific gravity and mention unit to measure
22. Define P^H . Mention two applications in food industry
23. Define HTST process