15/10/25

TM2539477T

Reg. No :.....

Name :.....

MASTER'S DEGREE (C.S.S) EXAMINATION, OCTOBER 2025

2024 ADMISSIONS REGULAR

SEMESTER III - CORE COURSE Food Science And Nutrition

FN3C09TM20 - Advanced Food Science

Time : 3 Hours | **Maximum Weight : 30**

Part A

I. Answer any Eight questions. Each question carries 1 weight (8x1=8)

1. Differentiate between colloids and crystalloids
2. Bring out the relationship between water activity and shelf life of foods.
3. State the different levels of protein structure.
4. Discuss on the biological functions of proteins.
5. What are texturised proteins?
6. Write a note on the effect of cooking on fish.
7. What is quick freezing?
8. What are the objectives of sulphuring fruits?
9. What are non-intentional food additives?
10. Write a note on phytcestrogens. List out the sources and health benefits.

Part B

II. Answer any Six questions. Each question carries 2 weight (6x2=12)

11. Elaborate on the classification of colloidal systems. Give suitable examples.
12. Explain the types of the microbial polysaccharides and enlist their applications.
13. Write a note on the composition of pulses.
14. Give an outline of the composition of egg.
15. Write a note on the structure of cereals.
16. Write a note on the natural methods of drying and mention its merits and demerits.
17. Discuss the functions of antioxidants and chelating agents in processed foods.
18. How are flavouring agents classified?

Part C

III. Answer any Two questions. Each question carries 5 weight (2x5=10)

19. Elaborate on the auto oxidation in fats. Bring out the factors influencing it.
20. Discuss the anti-nutritional factors present in pulses .
21. Explain the modern methods of dehydration of foods.
22. Comment on the role of food additives in improving the quality of processed foods.