

TM243446C

Reg. No :

Name :

MASTER'S DEGREE (C.S.S) EXAMINATION, NOVEMBER 2024
2023 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 solution and colloidal system.
2. Write a short note on types of emulsions with suitable examples.
3. Explain the factors affecting flavour reversion in fats.
4. State the different levels of protein structure.
5. Write a note on fats as a shortening agent.
6. Write a note on the effect of cooking on fish.
7. What is quick freezing?
8. What is aseptic packaging?
9. What are flavouring constituents?
10. Bring out the role of probiotics as functional foods.

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. What is meant by gelation? Discuss on the factors influencing it.
12. Discuss crystallization of sugar and the factors affecting it.
13. Write a note on the composition and structure of fish.
14. Discuss the structural and nutritional composition of milk.
15. Write a note on the functional properties of egg.
16. What are the pre-treatments commonly carried out on foods prior to preservation?
17. List out the sources and importance of isothiocyanates as functional foods.
18. Differentiate between probiotics and prebiotics. Give examples.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. What are sweeteners? Explain the different types of sweeteners.
20. Explain enzymatic and non-enzymatic browning in foods. Mention methods of preventing enzymatic browning.
21. Explain the use of natural preservatives in food preservation.
22. Describe the sources and health benefits of functional foods.