



**QP CODE: 22002309**

**Reg No** : .....

**Name** : .....

**MSc DEGREE (CSS) EXAMINATION , NOVEMBER 2022**  
**Second Semester**  
**M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE**  
**CORE - FQ010203 - FOOD PRESERVATION TECHNOLOGY**

2019 Admission Onwards

D063891A

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. Define the terms Spolage Domain, Minimum Spoilage Level and Chemical Spoilage Index.
2. How does a Q10 factor or Rule of ten affects shelf life?
3. What are the physical methods of preservation?
4. Define and explain the significance of Z-value.
5. What is the importance of deaerators in pasteurisation?
6. Describe the changes caused in food during refrigeration or chilling.
7. Write a note on water thawing.
8. What is explosive puff drying?
9. Differentiate between freeze concentration and freeze drying.
10. What is ohmic heating?

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight **2** each.*

11. Give a brief account of biological spoilage in foods
12. Give an account of different types of pasteurisation.





13. With the help of a neat diagram explain the construction and working of continuous rotary pressure sterilisers?
14. Explain the thermal processing of cans and mechanism of heat transfer in foods.
15. With the help of a diagram explain freezing curve
16. Define drying. With the help of a neat diagram, explain drying curve
17. What are the changes caused by concentration of foods?
18. Describe hurdle technology. What are the major basic concepts of preservation targeted for advances in hurdle technology?

(6×2=12 weightage)

### **Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight **5** each.*

19. Describe drying curve and mechanism of drying process. Discuss the different low air environment drying methods used for removing moisture from foods. Add a note on various changes in foods during drying.
20. Explain the concept of osmotic dehydration and discuss the factors affecting osmotic dehydration. Add a note on advantages, limitations and applications of osmotic dehydration in food industry.
21. Explain how ionising radiations are used in the preservation of food. State its source, dose and applications in various foods.
22. Explain in detail the equipment and working of a microwave with the help of a neat diagram. Mention the factors affecting microwave heating and give its application in various foods.

(2×5=10 weightage)

