



QP CODE: 24018736



Reg No :

Name :

MSc DEGREE (CSS) EXAMINATION , APRIL 2024
Second Semester
M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE
CORE - FQ010203 - FOOD PRESERVATION TECHNOLOGY

2019 Admission Onwards

BBD230CD

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Explain the term Quorum Sensing.
2. Expand and explain EOSLs
3. What is In-package pasteurisation?
4. What is a flash 18 process?
5. List the factors responsible for heat penetration in cans.
6. What is a function of a refrigerant in refrigeration?
7. Explain the terms freezing time and freezing rate.
8. What are the changes caused during drying of foods?
9. What are thin film evaporators?
10. List the advantages of irradiation.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Write a short note on chemical spoilage in food.
12. Define food preservation. Enumerate the basic principles of preservation.
13. What is thermal death time? Explain in detail the concept of 12-D process and its application in sterilisation and canning of foods.





14. Explain in detail on different components of an HTST pasteuriser.
15. Give an account of changes caused in foods during freezing.
16. Give a brief account on classification of drying.
17. Write a short note on fluidised bed drying.
18. Describe ohmic heating process and give its applications in food industry.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. 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.
20. Make a detailed note on the following concentration methods
 - (1) Concentration by removal of heat
 - (2) Thermal concentration
 - (3) Concentration by using membranes
21. Write in detail on the following food preservation methods. State also how these methods are advantageous over conventional heating methods.
 - (1) Microwave heating
 - (2) Joule Heating
22. Define hurdle technology and state the mechanism by which it affects the microbial growth. With the help of hurdle diagrams explain the hurdle effects in food. Add a note on applications of hurdle technology.

(2×5=10 weightage)

