



QP CODE: 25047261



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, NOVEMBER 2025

Third Semester

M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE

ELECTIVE - FQ800301 - FOOD BIOTECHNOLOGY

2019 ADMISSION ONWARDS

C7059049

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. Comment on Shine -Dalgarno sequence.
2. State the function of T4 DNA ligase.
3. Make a note on chemical methods of cellular disruption.
4. What is crystallisation? What are stages in crystallisation?
5. Name the microorganism involved in Natto formation and discuss its role in imparting a characteristic texture to Natto.
6. What is toddy?
7. What is baker's yeast?
8. What do you mean by vinification?
9. State the purpose of adding salt to the cheese.
10. What are fish protein hydrolysate?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Describe the screening of recombinants.
12. Explain the steps involved in polymerase chain reaction.
13. Write in detail on batch fermentation.
14. Explain the construction and working of a continuous stirred tank bioreactors with the help of a neat diagram.





15. Make a brief note on Cassava fermented foods-Chickwaungue and Kokote.
16. With the help of a process diagram explain the preparation of Oncom.
17. Narrate the process of mashing, malting and fermentation of beer.
18. Elucidate the manufacturing process of vinegar by submerged fermentation.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Make a detailed note of chemical and physical methods of gene transfer in rDNA technology.
20. What is an effluent? Give a detailed outline of effluent treatment plant in food industry.
21. Give a detailed account of preparation, microflora and nutritional and therapeutic properties of koumiss.
22. Explain in detail on the industrial production of any two amino acids by fermentation.

(2×5=10 weightage)

