



QP CODE: 26019212



26019212

Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026

Fourth Semester

M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE

ELECTIVE - FQ820403 - BYPRODUCT UTILIZATION AND WASTE MANAGEMENT

2019 Admission Onwards

9EC64F71

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What do you mean by hydraulic load of waste water?
2. What do you mean by the term by-product?
3. Give a brief account of chemical characteristics of waste.
4. What is total organic content?
5. What are coagulation and flocculation?
6. What are coagulants? List some common coagulants used in waste water treatment.
7. What is hominy feed?
8. Give the important uses of animal blood and plasma.
9. What is fish liver oil? Give its composition.
10. Give the composition of animal bone.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. What are the different waste disposal methods used in food processing industry?
12. Explain the process of electrodialysis in the removal of heavy metal from waste water effluent
13. Narrate the principle and procedure of a 5 day BOD test.
14. Describe the germicidal action of chlorine and its compounds in chlorination.
15. Describe reverse osmosis process applied for the tertiary treatment of waste water.
16. Write in detail on flocculation.
17. Discuss the important by products of skim milk in dairy industry.
18. Comment on the characterisation and utilisation of egg shell.

(6×2=12 weightage)





Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Define waste water. Make a detailed note of the physical and chemical quality parameters assessed in waste water analysis.
20. With the help of a neat sketch, explain the process of effluent treatment by activated sludge process. Mention its merits and demerits.
21. Write in detail on biological waste water treatment by suspended growth process.
22. Make a detailed note on the various by-products of fish industry and its utilisation.

(2×5=10 weightage)

