

QP CODE: 24001079



Reg No	:	

Name :

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE EXAMINATIONS, MARCH 2024 Sixth Semester

B.Sc Food Science & Quality Control Model III

CORE COURSE - FQ6CRT03 - FOOD ANALYSIS

2017 Admission Onwards B38C0F84

Time: 3 Hours Max. Marks: 80

Part A

Answer any **ten** questions.

Each question carries **2** marks.

- 1. Add a note on AOAC.
- 2. Comment on importance of moisture assay.
- 3. What are the disadvantages of dry ashing?
- 4. Give a list of disadvantages of kjeldahl method.
- 5. Add a short note on DCIP method.
- 6. Add a note on lactometer.
- 7. What do you mean by critical angle?
- 8. What is a Penetrometer?
- 9. What are the factors affecting mobility of particles in SDS-PAGE electrophoresis? Write an equation showing the relation of each factor.
- 10. Add a note on emulsifying capacity of protein.
- 11. What is the significance of titratable acidity of a food?
- 12. What is the principle behind Englyst Cummings method?

 $(10 \times 2 = 20)$

Part B

Answer any **six** questions.

Each question carries **5** marks.

- 13. Add short notes on the following a) convenience sampling b) systematic sampling c) stratified sampling d) judgement sampling.
- 14. Explain the chemical method of moisture determination.



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- 15. Explain the principle and procedure for Somogyi-Nelson method for reducing sugar analysis.
- 16. The Mohr and Volhard titration methods often are used to determine the NaCl content of foods. Compare and contrast these two methods, as you explain the principles involved.
- 17. Elaborate on CIE system and write the application of tristimulus colorimeter.
- 18. Draw a neat sketch of U-tube viscometer and explain its working.
- 19. Write a note on protein seperation using dialysis and other membrane processes.
- 20. Add brief notes on Ion exchange chromatography and Affinity chromatography.
- 21. Explain the significance of dietary fiber.

 $(6 \times 5 = 30)$

Part C

Answer any two questions.

Each question carries 15 marks.

- 22. Discuss about different solvent extaction methods for crude fat.
- 23. Exaplain the non-solvent wet extraction method for fat analysis.
- 24. Explain fat characterization.
- 25. Explain the gravimetric method for dietary fiber estimation.

 $(2 \times 15 = 30)$

