

QP CODE: 24018735



Reg No : .....

Name : .....

**MSc DEGREE (CSS) EXAMINATION , APRIL 2024**

**Second Semester**

M Sc FOOD TECHNOLOGY AND QUALITY ASSURANCE

**CORE - FQ010202 - FOOD ANALYSIS AND INSTRUMENTATION**

2019 Admission Onwards

EEAAC5F9

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight **1** each.*

1. Explain sampling for attributes or variables.
2. Define Electrophoresis.
3. Importance of carbohydrate analysis in food products.
4. What is Soxhlet solution?
5. Criticize the importance of fat analysis.
6. Explain Goldfish method for fat analysis.
7. Explain the principle of Kjeldhal method.
8. Demonstrate the general procedure for measuring wheat proteins by the Sulfosalicylic acid method.
9. Importance of vitamin analysis.
10. Discuss about the Vitamin D analysis by HPLC method.

(8×1=8 weightage)

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

*Answer any **six** questions.*

*Weight **2** each.*

11. Discuss about wave length selectors used in a spectrophotometer.
12. Identify the detectors used in HPLC.
13. Explain Lactose/D-galactose method for the analysis of carbohydrates.
14. Discuss about various methods which are employed for Specific gravity measurements.





15. Discuss about the instrumental methods for fat analysis.
16. Discuss about physical methods involved in moisture analysis.
17. Explain BCA method with principle, procedure, applications, advantages & disadvantages.
18. Discuss about the sample preparation procedures before mineral analysis. Explain the factors influencing selection of analytical method.

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Explain in detail about the principle & instrumentation of a colorimeter.
20. Illustrate the generalized analytical scheme for the Theander-Marlett approach for determining fiber.
21. Discuss on the oven drying methods in moisture analysis.
22. Discuss about the various ashing techniques used in ash analysis.

(2×5=10 weightage)

