

15.4

TM244402R

Reg. No :

Name :

MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024

2022 ADMISSIONS REGULAR

SEMESTER IV - Food Science And Nutrition

FN4E03TM20 - Biophysical Techniques

Time : 3 Hours

Maximum Weight : 30

Part A

I. Answer any Eight questions. Each question carries 1 weight.

(8x1=8)

1. Write a note on Thin Layer Chromatography(TLC).
2. What is retention factor?
3. Define Isoelectric pH of a protein.
4. Differentiate PAGE and SDS PAGE.
5. Write a note on co-enzymes.
6. List the different classes of enzymes.
7. Define Absorbance.
8. Explain the term Absorption spectrum.
9. Write a note on the turbidimetric method of assay.
10. What are radioactive and stable isotopes? Give examples.

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

11. Discuss the separation of a mixture of amino acids using paper chromatography.
12. Explain the experimental procedure for Gas Liquid Chromatography.
13. Explain the principle and application of immuno electrophoresis.
14. Comment on the clinical applications of enzymes.
15. Discuss enzyme specificity.
16. Explain the instrumentation of a fluorometer with a neatly labelled diagram.
17. Differentiate light microscope and electron microscope.
18. Mention the requisites of micro-organisms used for microbiological assays of vitamins.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

19. Elaborate on the principle and applications of Gas Chromatography.
20. Explain the principle and application of SDS-PAGE.
21. Elaborate on different types of ELISA.
22. Discuss the principle, instrumentation and working of an electron microscope.

