22U425	(Pages: 2)	Name:
		Reg.No:

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2024

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U FTL4 B07 - FOOD CHEMISTRY AND ANALYTICAL INSTRUMENTATION

(Food Technology - Core Course)

(2019 Admission onwards)

Time: 2.5 Hours Maximum: 80 Marks

Credit: 4

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

- 1. Write a note on glucose.
- 2. Write a note on hemicellulose.
- 3. Milard reaction.
- 4. Define the principle of Biuret method.
- 5. Write down any four food sources of PUFA.
- 6. Give two examples of derived lipid.
- 7. What is known as antioxidants?
- 8. Define absorbed water.
- 9. Write down the classification of flavanoids.
- 10. Give any two examples of enzymes.
- 11. Write down any two properties of enzymes.
- 12. Define syneresis.
- 13. State the principle of Flurimetry.
- 14. List any two applications of column chromatography.
- 15. Expand HPLC.

(Ceiling: 25 Marks)

Part B (Paragraph questions)

Answer all questions. Each question carries 5 marks.

16. Write down the physical and chemical properties of carbohydrates.

- 17. Write down the role of Dietary fibre in daily diet.
- 18. Write down the classification of proteins.
- 19. What are the Physicochemical properties of protein?
- 20. Explain the classification of fatty acids.
- 21. Write a note on anthocyanins.
- 22. Write down the principle and types of adsorption chromatography.
- 23. Write a note on GCMS.

(Ceiling: 35 Marks)

Part C (Essay questions)

Answer any two questions. Each question carries 10 marks.

- 24. Explain the properties and reactions of lipids in detail.
- 25. Write down the physical and chemical properties of water in detail.
- 26. Explain food colloids under the following headings. a) sols b) gels c) suspensions and d) solutions
- 27. Discuss the principle, procedure, types and applications of column chromatography.

 $(2 \times 10 = 20 \text{ Marks})$
