23U425 (Pages: 2) Name : .....

Reg. No : .....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2025

(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. Classify carbohydrates.
2. Write a note on cellulose.
3. Classify protein based on composition.
4. Write down the advanteges of kjeldhal method.
5. Write down the classification of fatty acids.
6. Define derived lipids.
7. Expand LDL.
8. Define Ph value of water.
9. Write any two chemical properties of water.
10. Give three examples of chlorophyll.
11. Write down any two properties of enzymes.
12. Give any two examples of permanent emulsion.
13. State the principle of Flurimetry.
14. List any two applications of adsorption chromatography.
15. Write down the types of HPLC.

(Ceiling: 25 Marks)

Part B (Paragraph questions)

Answer ***all*** questions. Each question carries 5 marks.

16. Write down the properties of cellulose and hemi cellulose in detail.
17. Write down the factors affecting gelatinization.

18. Briefly explain the classification of aminoacids.

19. Explain Kjeldhal method in detail.

20. Describe auto oxidation.

21. Describe enzyme specificity.

22. Describe the types and properties of gels.

23. Write down the principle and procedure of paper chromatography.

(Ceiling: 35 Marks)

Part C (Essay questions)

Answer any ***two*** questions. Each question carries 10 marks.

24. Explain rancidity and auto oxidation reactions in lipids.

25. Write down the role and scope of enzymes in food industry.

26. Describe the principle and instrumentation of flurimetry.

27. Explain the principle, procedure, types and applications of Gas chromatography.

(2 × 10 = 20 Marks)

****