21U425 (Pages: 2) Name: .....

Reg.No: .....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2023

(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. Give any three examples of monosaccharides.
2. Give two examples of soluble fibres.
3. Give any four examples of essential aminoacids.
4. Define the principle of Biuret method.
5. Define polyunsaturated fatty acids with two examples.
6. Give two examples of compound lipid.
7. Define oxydative rancidity.
8. Write down any two chemical properties of water.
9. Define absorbed water.
10. Wrie down any two functions of enzymes.
11. List out the factors affecting specifisity.
12. Define gel.
13. Give any two examples of permanent emulsion.
14. Give any two properties of emulsion.
15. Write the any two industrial applications of Spectrophotometry.

(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. Explain the effect of moist heat on carbohydrate.

18. Write down the classification of proteins.

19. Wite down the types of tests used to determine the protein.

20. Discuss the health benefits of natural anti oxidants and synthetic anti oxdidants.

21. Write down the properties of enzyme.

22. Write down the principle and procedure of thin layer chromatography.

23. Write a note on HPLC with principle and types.

(Ceiling: 35 Marks)

Part C (Essay questions)

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

24. Describe the classification and sources of lipids.

25. Write down the different methods used to determine the moisture in foods.

26. Explain the types and uses of emulsion in detail.

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

(2 × 10 = 20 Marks)

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