19U441	(Pages: 2)	Name:	

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2021

(CBCSS - UG)

CC19U FTL4 B07 - FOOD CHEMISTRY AND ANALYTICAL INSTRUMENTATION

(Food Technology - Core Course)

(2019 Admission - Regular)

Time: 2.5 Hours Maximum: 80 Marks

Credit: 4

Reg.No:

Part A (Short answer questions)

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

- 1. Write a note on lactose.
- 2. Write a note on sucrose.
- 3. Define the nutritional classification of protein.
- 4. Name the classification of protein based on composition.
- 5. Write any two functions of fat.
- 6. Write down any two physical properties of lipids.
- 7. Give any two examples of synthetic antioxidants.
- 8. Define Free water.
- 9. Define bound water.
- 10. Write down the classification of flavanoids.
- 11. Define enzyme specificity.
- 12. Give any two properties of gel.
- 13. Give any two examples of permanent emulsion.
- 14. State the principle of Atomic absorption spectrophotometry.

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 role of Dietary fibre in daily diet.
- 18. Write down the significance of Millard reactions.
- 19. Write down the procedure of Biuret method.
- 20. Explain rancidity with types and examples.
- 21. Describe functions of Carbohydrates.
- 22. Write down the functions of emulsifiers in food industry.
- 23. Write down the principle and procedure of thin layer chromatography.

(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 physical and chemical properties of water in detail.
- 26. Write in detail about the principle procedure, types and applications of paper chromatography.
- 27. Explain the principle procedure, types and applications of thin layer chromatography.

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