20U440 (Pages: 2) Name: .....

Reg.No: .....

FOURTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2022

(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 maltose.
2. Give two exmaples of cellulose.
3. Define essential aminoacids.
4. Define the principle of kjeldhal method.
5. Write down the classification of fatty acids.
6. Define hydrolytic rancidity.
7. Give two examples of natural antioxidants.
8. Define water acitivity.
9. Write any two physical properties of water.
10. Define enzyme.
11. Mention the classification of enzymes.
12. Give any two examples of permanent emulsion.
13. Define Thin layer chromatography.
14. Give the principle of High Pressure Liquid chromatography.
15. Expand TLC.

(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 classification of dietary fibre.
18. Explain the term essential amino acids in detail.
19. Wite down the types of tests used to determine the protein.
20. Describe auto oxidation.
21. Write down the properties of enzyme.
22. Write down the properties of emulsion.
23. Differentiate between permenant and temporary emulsions with suitable examples.

(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. Discuss enzyme under the following headings. (a) properties (b) factors affecting enzyme activity.
26. Write in detail about the principle ,procedure, types and applications of paper chromatography.
27. Discuss the principle ,procedure, types and applications of column chromatography.

(2 × 10 = 20 Marks)

******