23U160 (Pages: 2) Name: .....

Reg.No: .....

FIRST SEMESTER B.Voc. DEGREE EXAMINATION, NOVEMBER 2023

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC21U SDC1 FC02 - FOOD CHEMISTRY, NUTRITION AND INSTRUMENTATION

(Food processing Technology)

(2021 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 an example for Polysaccharides.
2. Define pectic substances.
3. Define the structure of protein.
4. Define the protein denaturation occurs during food processing.
5. Define the role of lipids in food.
6. Give an Examples for Anti-oxidants.
7. Define bound water.
8. List the methods to find the moisture.
9. Identify the relation between myoglobin and meat.
10. List the uses of lipases.
11. Recall the principle of meal planning.
12. Define emulsion with one example.
13. Recall Beer lamberts law.
14. List the uses of liquid chromatography.
15. List the uses of gas chromatography.

(Ceiling: 25 Marks)

Part B (Paragraph questions)

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

16. Explain about the properties of Monosaccharides.

17. Discuss about inversion and invert sugar.

18. Expalin the methods to determine the protein content of food.

19. Explain about enzymic browning.

20. Discuss about emulsion, write about the types of emulsion.

21. Explain about the instrumentation of colourimetry.

22. Explain about chromatography, write about the applications of chromatography.

23. Explain about Supercritical fluid chromatography.

(Ceiling: 35 Marks)

Part C (Essay questions)

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

24. Explain the classification of proteins based on their structure. Give a suitable diagram.

25. Discuss about Saturated and Unsaturated fatty acids. Explain the structure and give suitable examples.

26. Explain about the various colloidal systems and their significance in the food industry. Elaborate on colloids. Explain about food colloids with suitable examples.

27. Explain spectrophotometry using Beer-Lambert law. Give suitable illustrations.

(2 × 10 = 20 Marks)

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