

TV221520V

Reg. No : .....

Name : .....

**B. Voc. DEGREE (C.B.C.S.) EXAMINATION, NOVEMBER 2022**  
**(2022 Admissions (regular) 2021 Admissions (Improvement / Supplementary), 2020, 2019, 2018, Admissions**  
**Supplementary)**

**SEMESTER I - SKILL COURSE (FOOD PROCESSING TECHNOLOGY)**  
**VFPT1S03B18 - FOOD CHEMISTRY**

**Time : 3 Hours**

**Maximum Marks : 80**

**Part A**

**I. Answer any Ten questions. Each question carries 2 marks**

**(10x2=20)**

1. What is the significance of the density of ice?
2. Differentiate between free water and bound water.
3. What are dextrans or dextrans?
4. Illustrate structure of D- and L- Glucose.
5. What are co-enzymes? How are they formed?
6. Depict peptide bond with annotation.
7. Differentiate between physical and chemical change.
8. What are sources of fats?
9. What are the functions of lecithin?
10. List the disadvantages of natural food colours.
11. Expand MSG? What is its use?
12. How is annato used as additive?

**Part B**

**II. Answer any Six questions. Each question carries 5 marks**

**(6x5=30)**

13. "Water is a polar molecule". Brief the properties exhibited by water due to polar nature.
14. Write a note on the chemistry of carbohydrates.
15. What is the effect of moist heat on starch?
16. Discuss about enzyme action. What is lock and key mechanism?
17. Explain the classification of proteins.
18. "Heat may bring about changes in structure of fats" .How? Explain.
19. Illustrate the classification of lipids. What are the functions of lipoproteins?
20. What is the role of micronutrients in food industry? Give examples.
21. Explain on the function of any 5 flavour compounds from different natural sources.

**Part C**

**III. Answer any Two questions. Each question carries 15 marks**

**(2x15=30)**

22. "Hydrogen bonding is responsible for the unique structure and properties of water". Explain.
23. Describe the procedures of any two quantitative tests for carbohydrates.
24. "C and N Terminal of amino acid can react distinctively". Illustrate the reactions of the functional groups.
25. Emulsifiers are one among the major food additives used in food industry. Explain with an example.