



19101048

QP CODE: 19101048

Reg No :

Name :

B.Sc.DEGREE (CBCS) EXAMINATION, DECEMBER 2018

First Semester

B.Sc Food Science & Quality Control Model III

Core Course - FS1CRT02 - BASIC FOOD CHEMISTRY

2017 Admission (Reappearance)

BC6D7325

Maximum Marks: 80

Time: 3 Hours

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1. Justify the statement that water is found to melt and boil at unusually high temperatures.
2. List the water soluble vitamins.
3. Draw the straight and ring structure of glucose.
4. Draw the structure of sucrose.
5. Illustrate the reaction of fermentation of glucose.
6. Explain the principle of electrophoretic separation of proteins.
7. Distinguish between salting in and salting out effect of protein.
8. Discuss on the specificity of enzyme catalyzed reactions.
9. Define compound lipids with example.
10. Explain the synergism in antioxidant activity with examples.
11. Name the pigment present in tomato and anatto.
12. Discuss on flavonoids.

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Distinguish between amylose and amylopectin.
14. Explain Maillard reaction and its importance.
15. Explain the reactions of aminoacids with formaldehyde and nitrous acid.





16. Explain the mechanism of non competitive inhibition.
17. Explain the regulation of enzyme activity.
18. Discuss any five physical properties of lipids.
19. Explain R M P K values with its significance.
20. Explain hydrogenation of fat.
21. Distinguish between rancidity and reversion.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Explain the technology of oil and fat processing.
23. Explain the structure of protein.
24. Describe the application of enzymes in food industry.
25. Explain the mechanism of rancidity with factors affecting it and the methods of measurement.

(2×15=30)

