



QP CODE: 18103647



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

2018 Admission only

91BE11DF

Maximum Marks: 80

Time: 3 Hours

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1. Define water holding capacity.
2. List the fat soluble vitamins.
3. Draw the structure of lactose.
4. Define pectin and write its application in food industry.
5. Discuss on the osazone formation reaction of carbohydrates.
6. Define essential aminoacids with any two examples.
7. Explain the lock and key mechanism of enzyme action.
8. Define zymogen with an example.
9. Define essential fatty acids.
10. Give the structure of BHA.
11. Explain the classification of food pigments.
12. Discuss on anthocyanins.

(10×2=20)

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain about the classification of monosaccharides with its structure.
14. Explain caramelisation with its food applications.





15. Discuss on chemical bonds involved in protein structure.
16. Explain the reactions of aminoacids with formaldehyde and nitrous acid.
17. Discuss any five applications of enzymes in food industry.
18. Discuss any five physical properties of lipids.
19. Explain the reaction along with significance and method of iodine value.
20. Explain the mechanism of autooxidation of fat.
21. Discuss on chlorophyll and myoglobin with its effect on processing.

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Explain in detail about the classification of carbohydrates with examples.
23. Explain on the physico-chemical properties of protein.
24. Describe the mechanism of competitive and non competitive inhibition in enzyme catalysed reaction with graphical representation.
25. Explain the refining of fat.

(2×15=30)

