



19103047

QP CODE: 19103047

Reg No :

Name :

B.Sc.DEGREE (CBCS) EXAMINATION, NOVEMBER 2019

First Semester

B.Sc Food Science & Quality Control Model III

Core Course - FS1CRT02 - BASIC FOOD CHEMISTRY

2017 Admission Onward

384632DD

Time: 3 Hours

Maximum Marks :80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Examine why tissues freeze more rapidly than they thaw when equal but reversed temperature differentials are employed.
2. Explain the proximate composition of food.
3. Draw the straight and ring structure of fructose.
4. Explain inversion of sucrose.
5. Distinguish between homopolysaccharides and heteropolysaccharides with example.
6. Discuss on peptide bond.
7. Give an example of salt of aminoacid which can act as flavour enhancer in food industry and how it is formed.
8. Discuss the role of alpha amylase in starch.
9. Distinguish between smoke flash and fire points.
10. Distinguish between oil in water and water in oil emulsions with examples.
11. Name the pigment present in tomato and annatto.
12. Discuss on flavonoids.

(10×2=20)





Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Discuss on osazone formation in carbohydrate with its importance.
14. Explain enzymatic browning and its method of control.
15. Discuss on chemical bonds involved in protein structure.
16. Discuss on denaturation of protein and agents causing it.
17. Explain the effect of temperature and pH of an enzyme catalysed reaction.
18. Explain the classification of lipids.
19. Explain the factors affecting the oxidation of fat.
20. Explain interesterification 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 any five chemical properties of fat.

(2×15=30)

