

QP CODE: 21100731



Reg No :

Name :

B.Voc Degree Examination, MARCH 2021

First Semester

B.Voc Food Technology and Analysis

BOVS102 - FOOD CHEMISTRY

2018 Admission Onwards

08E46CB7

Time: 3 Hours

Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. Discuss on hydrogen bonding in water.
2. Draw the straight and ring structure of glucose.
3. Discuss on sineresis in starch.
4. Discuss on the osazone formation reaction of carbohydrates.
5. Name and draw the structure of sulphur containing aminoacids.
6. Distinguish between salting in and salting out effect of protein.
7. Define enzyme activity unit.
8. Define derived lipids with example.
9. Distinguish between smoke flash and fire points.
10. Explain rendering of fat.
11. Name the pigment present in tomato and anatto.
12. Discuss on anthocyanins.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Distinguish between reducing and non reducing sugar.





14. Explain enzymatic browning and its method of control.
15. Discuss on denaturation of protein and agents causing it.
16. Explain the ninhydrin reaction of aminoacids and its applications.
17. Explain the regulation of enzyme activity.
18. Discuss any five applications of enzymes in food industry.
19. Explain the reaction along with significance and method of saponification.
20. Explain the methods for measuring the oxidation of lipids.
21. Discuss on chlorophyll 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 along with structures.
23. Explain primary, secondary, tertiary and quaternary structure of protein.
24. Write down the mechanism of uncompetitive inhibition in enzyme catalysed reaction with graphical representation.
25. Write down the classification of antioxidants with its mechanism of action.

(2×15=30)

