



Department of Food Technology
School of Interdisciplinary Sciences and Technology
Jamia Hamdard, New Delhi-110062

END SEM EXAMINATION (B Tech Food Tech (IIISem), Dec 2024

Roll No.....

2024
3rd Sem

Paper Title: Food Chemistry
Time allotted: 3Hrs.

; Paper Code: _BFTC-301

Max Marks: 60

Section-A (2 Marks each, Attempt All)

- Q1. Draw the structure of glucose & fructose. (CO2/PO3, PO5)
Q2. Define epimers. (CO2/PO2, PO5)
Q3. What is zwitterion? (CO3/PO5, PO8)
Q4. Enlist sulphur containing amino acids. (CO3/PO2, PO3)
Q5. Define iodine value. (CO4/PO4, PO5)

Section- B (Attempt any 5) (5 Marks Each)

- Q6. Illustrate what significant changes does gelatinization and retrogradation causes in the starch morphology. (CO2/PO4, PO5)
Q7. Explain rancidity and its types in fats & oils. (CO4/PO4, PO6)
Q8. Discuss the steps involved in lipid refining. (CO4/PO1, PO2)
Q9. Write a short note on the structure and properties of water & ice. (CO1/PO2, PO5)
Q10. Define macronutrients and micronutrients. Mention their sources, deficiency disease & RDA of any three macronutrients. (CO5/PO2, PO4)
Q11. Discuss different pigments & their application in food industry. (CO5/PO2, PO3)
Q12. What are enzymes? What factors affect the enzyme activity. Give application of enzymes in food. (CO3/PO4, PO5)
Q13. Write a detailed note on fat modification and its types. (CO4 /PO2, PO5)

Section C (Attempt any 2) (12.5 Marks Each)

- Q14. Elaborate post-harvest or post-mortem biochemical changes in foods & its implications on quality of food. (CO1/PO2, PO5)
Q15. Provide a detailed description of browning & its types in foods. How do it affect the quality of foods? (CO2/PO2, PO3)
Q16. Define proteins. Explain in detail the structural organization of proteins along with properly labelled diagrams. (CO3/PO4, PO5)
Q17. Vitamins play vital role in maintaining health. Support the argument with scientific reasoning. Mention in detail their types, their sources and deficiency disease & RDA. (CO5/PO5, PO6)