

19. (a) Write a note on peroxide value of fats and oils.

Or

- (b) Discuss the advantages of fat substitutes.
20. (a) Explain the effect of cooking on chlorophyll pigment.

Or

- (b) Explain the mechanism of flavors produced from fermentation.

SECTION C — (3 × 10 = 30)

Answer any THREE questions.

21. Discuss in detail on different types of emulsions.
22. Discuss the factors affecting gelatinization.
23. Elaborate on gluten formation and factors effecting gluten formation.
24. What is rancidity. Explain different types of rancidity and suggest measures to prevent rancidity.
25. Discuss the role of different types flavours in food industry.

S.No. 6551

P 22 FSCC 11

(For candidates admitted from 2022–2023 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2023.

Food Service Management and Dietetics

CHEMISTRY OF FOODS

Time : Three hours

Maximum : 75 marks

SECTION A — (20 marks)

Answer ALL questions.

- I. (A) Multiple Choice questions : (5 × 1 = 5)
1. Lyophobic colloids are
- (a) Water loving (b) Acid loving
- (c) Water hating (d) None of these
2. Invert sugar is produced on hydrolysis of
- (a) Dextrose (b) Glucose
- (c) Fructose (d) Sucrose

3. Identify the factor responsible for 3D shape of protein
 - (a) The amino acid sequence
 - (b) Interaction with other polypeptides
 - (c) The peptide bond
 - (d) Interaction with molecular chaperons
4. Vanaspathy is manufactured by the process of
 - (a) Reduction polymerization
 - (b) Hydrogenation
 - (c) Oxidation polymerization
 - (d) Saponification
5. Identify the fat soluble pigment present in fruits and vegetables

(a) Carotenoids	(b) Flavonoids
(c) Tannins	(d) Anthocyanins

(B) Fill in the blanks: (5 × 1 = 5)
6. Butter is a _____ emulsion.
7. Amylose is made up of _____ chain glucose molecules.
8. The enzyme responsible for the conversion of pectin into pectic acid is _____.
9. Triglycerides composed of a glycerol and _____ fatty acids.
10. The characteristic flavor of cabbage is due the presence of _____.

- II. Answer ALL questions : (5 × 2 = 10)
11. What is a foam?
 12. What are polysaccharides?
 13. What are amino acids?
 14. Define rancidity.
 15. Give the classification of pigments.

SECTION B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b).

16. (a) Write a note on colloids.

Or

(b) Write a note on rheology.
17. (a) What are modified starches?

Or

(b) Write a note on dextrinisation of starches.
18. (a) Give the classification of proteins.

Or

(b) Explain the mechanism of action of enzymes in foods.