

,B.TECH FOOD TECHNOLOGY
III Semester Examination 2020
Course Code- BFTC- 301
Course Title - Food Chemistry

Roll No:

B.Tech.
2020
3rd Sem.

TIME: 3 hours

Max. Marks: 75

Note: 1. Answer all the questions in Section-A.

2. Answer any five questions in Section- B.

Section A (5*5=25)

- 1) Explain any **one** of the following:
 - a) Autooxidation (5M)
 - b) Protein Denaturation (5M)
- 2) Explain any **one** of the following
 - a) Structure and properties of water and ice (5M)
 - b) Zwitter ion and Lactose Intolerance (5M)
- 3) Discuss any **one** of the following:
 - a) Moisture content and Water activity (5M)
 - c) Basic, acidic, aromatic and sulphur containing amino acids (5M)
- 4) Illustrate any **one** with examples:
 - a) Enantiomers and Diastereomers (5M)
 - b) Acrylamide formation in food (5M)
- 5) What do you understand by gelatinization and retrogradation of starch? (5M)

Section B (5*10=50)

1. Explain browning of foods and its types in detail. (10M)
2. Discuss the post-harvest biochemical changes affecting the quality of fruits. (10M)
3. Give an account of fat- and water-soluble vitamins, their sources and deficiency disease. (10M)
4. Illustrate the post mortem biochemical changes affecting the quality of meat. (10M)
5. What do you understand by hydrogenation? Explain the process of lipid refining. (10M)
6. Discuss in detail the classification of carbohydrates on the basis of carbon atoms. (10M)
7. What are essential and non-essential amino-acids? Explain the structural organization of proteins. (10M)
8. Depending upon their amount in adult's body, discuss the minerals as macronutrients and micronutrients. (10M)