

**FOOD CHEMISTRY**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (10 x 2 = 20)

- 1 Define refractive index.
- 2 Define emulsification.
- 3 List out any two physical properties of water.
- 4 Define gelatinization.
- 5 What is turbidity point?
- 6 Define rancidity.
- 7 What is precipitation?
- 8 List out the food sources of protein.
- 9 Write the food sources of vitamin E.
- 10 Define antioxidant.

**SECTION - B (25 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 5 = 25)

- 11 a Explain the basic characteristics of food.  
OR  
b Write a short note on hydrogen ion activity.
- 12 a Explain the water activity and activity of microorganism.  
OR  
b Illustrate the biological role of carbohydrates.
- 13 a Describe the classification of lipids and its sources.  
OR  
b Give an account on rancidity.
- 14 a Explain the biological role of protein.  
OR  
b What are the factors affecting enzyme activity?
- 15 a Write a short note on vitamin D.  
OR  
b Describe the factors affecting stability of coloured compounds.

**SECTION - C (30 Marks)**

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Describe the colloidal chemistry of food.
- 17 Explain the determination of moisture content of food.
- 18 Write a short note of the following (i) Saponification number  
(ii) Iodine number (iii) Acid number (iv) Acetyl value of Lipids.
- 19 Determine protein by kjeldahl method.
- 20 Explain the natural and artificial colours used in food processing.