

**PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)**

**BVoc DEGREE EXAMINATION DECEMBER 2019  
(Second Semester)**

**Branch - FOOD PROCESSING TECHNOLOGY**

**FOOD CHEMISTRY**

Time : Three Hours

Maximum : 75 Marks

**SECTION-A (20 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** marks (10x2 = 20)

- 1 Define melting point.
- 2 What is meant by surface tension?
- 3 List out the sources of carbohydrates.
- 4 What is maillard reaction?
- 5 Define slipping point.
- 6 Define Rancidity.
- 7 What is meant of exogenous enzymes?
- 8 Define osmotic pressure.
- 9 What is flavour intensifier?
- 10 Mention any two biological role of vitamins.

**SECTION - B (25 Marks)**

Answer **ALL** Questions

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

- 11 a. Write a short note on Hydrogen ion activity.  
OR  
b. Define the following:
  - i) Coefficient of expansion
  - ii) Fluidity and plasticity
  - iii) Refractive index
- 12 a. Describe about the physical properties of water.  
OR  
b. Classify carbohydrates and give its sources.
- 13 a. Explain about the biological role of lipids.  
OR  
b. Brief note on hydrogenation of fats and oils.
- 14 a. Write a short note on gel formation of protein.  
OR  
b. Describe about whey processing.
- 15 a. Explain the volatile and non-volatile flavor compounds.  
OR  
b. Illustrate the determination of vitamin C content in foods.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

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

16. Explain about the colloidal chemistry of foods.
17. Discuss about the thickening and gelling properties of Xanthin and Pectin.
18. Explain the estimation of fats in foods by Soxhlet's method.
19. Discuss about the determination of protein in pulses by Kjeldahl method
20. Explain about the natural and artificial colour used in food processing.