

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

**BVoc DEGREE EXAMINATION DECEMBER 2017
(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 (10 x 2 = 20)

- 1 Define viscosity.
- 2 What is meant by coefficient of expansion?
- 3 Write the food sources of carbohydrates.
- 4 Define caramelization.
- 5 Define saponification number.
- 6 Write the food sources of saturated fatty acids.
- 7 Define amphotorphism.
- 8 What is lipolytic enzymes?
- 9 Write any two biological functions of minerals.
- 10 Define food colours.

SECTION - B (25 Marks)

Answer **ALL** Questions

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

- 11 a What is homogenization? Mention its application in food processing.
OR
b Write a brief note on emulsification and dialysis
- 12 a Describe the thickening and gelling properties of Xanthin.
OR
b Write a short note on
(i) Enzymatic browning reactions (ii) Retrogradation.
- 13 a Write a short note on fat replacers and mimetics.
OR
b Describe the hydrogenation of fats and oil.
- 14 a Explain about the effect of heat treatment on egg and milk proteins.
OR
b Write a brief note on endogenous enzymes in food.
- 15 a Describe the role of minerals in food processing.
OR
b Elaborate about the sensory perception of flavour.

SECTION - C (30 Marks)

Answer any **THREE** Questions

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

- 16 Explain the physico-chemical properties of food.
- 17 Describe about the determination of carbohydrates in food by anthrone method.
- 18 Discuss about the estimation of fats in foods by Soxlet's method.
- 19 Explain the role of enzymes in cheese and bread making.
- 20 Elaborate the role of antioxidant in food processing.