

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

**BVoc DEGREE EXAMINATION MAY 2022  
(Third Semester)**

**Branch – FOOD PROCESSING AND TECHNOLOGY**

**FOOD CHEMISTRY**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks (10 x 1 = 10)

1. Dispersion of finely divided liquid droplets in another liquid is termed as:  
a) Foam                      b) Emulsion                      c) Sol                      d) Gel
2. Name the term that indicates a liquid's internal resistance to flow.  
a) Surface Tension    b) Interfacial Tension    c) Viscosity                      d) Fluidity
3. What is water's heat of vaporization?  
a) 540 Cal/G                      b) 640 Cal/G                      c) 1000cal/G                      d) 79.7 Cal/G
4. Indicate the resultant product of oxidation of monosaccharides at C-1 position.  
a) Aldonic acid                      b) Uronic acid                      c) Sugar alcohol                      d) Furfural
5. Whipping of air into fat during crystallization stage, to give whiter, creamier, smoother and more uniform creaming is called:  
a) Plasticizing                      b) Hydrogenation                      c) Acetylation                      d) Winterization
6. Number of mg of KOH required to neutralize the fatty acids in a gram of a fat:  
a) Polenske number                      b) Saponification number  
c) Iodine number                      d) RM Number
7. The term that denotes the tendency for molecules in solution to settle out of the fluid:  
a) Denaturation                      b) Sedimentation                      c) Coagulation                      d) Renaturation
8. The enzyme used to clarify fruit juice and to make it flow more freely:  
a) Lipase                      b) Pectinase                      c) Amylase                      d) Protease
9. Which vitamin is sensitive to light?  
a) Thiamine                      b) Riboflavin                      c) Niacin                      d) Vitamin D
10. Label the category to which Diacetyl belong.  
a) Synthetic colour    b) Flavoring agent                      c) Natural pigment                      d) Emulsifier

**SECTION - B (35 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

11. a. Discuss - melting point, freezing point and boiling point.  
OR  
b. Explain titratable acidity.
12. a. Discuss the classification of carbohydrates.  
OR  
b. Infer the uses of modified starches.
13. a. Comment on the melting point, specific gravity and refractive index of fats and oils.  
OR  
b. Outline the classification of lipids.
14. a. Analyze the effect of heat on proteins.  
OR  
b. Bring out the role of enzymes in food processing.

Cont...

15. a. Narrate the significance of organic acids in food processing.

OR

b. Describe the sensory perception of flavour.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

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

16. Examine the types and properties of colloids.

17. Justify the significance of water activity in food industry.

18. Differentiate hydrolytic and oxidative rancidity. Point out methods to prevent rancidity.

19. Summarize the functional properties of protein.

20. Analyze the stability and impact of processing on vitamins.

Z-Z-Z

END