

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2024  
(Second Semester)

Branch - FOOD PROCESSING TECHNOLOGY

CHEMISTRY-II

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The difference between a statistic and the parameter is called a) Non-random                      b) Probability c) Sampling error                  d) Random	K1	CO1
	2	The purification method where solid substances change from solid to vapor state without passing through the liquid state is called as which of the following? a) Sublimation                      b) Crystallization c) Distillation                      d) Differential extraction	K2	CO1
2	3	What type of centrifuge is used for separating small particles, such as proteins or DNA? a) Microcentrifuge                  b) Ultracentrifuge c) Centrifuge tube                  d) Centrifuge rotor	K1	CO2
	4	In chromatography, which of the following can the mobile phase be made of _____. a) Solid or liquid                      b) Liquid or gas c) Gas only                              d) Liquid only	K2	CO2
3	5	Name the antimicrobial preservative used commonly in carbonated beverages. a) Palmitic acid                      b) Ascorbic acid c) Benzoic acid                      d) BHT	K1	CO3
	6	Which of the following is a function of a chemical additives? a) Preservation b) Serve as nutritional supplement c) Color modifier d) All of the above	K2	CO3
4	7	Identify the amino acids containing nonpolar, aliphatic R groups. a) Phenylalanine, tyrosine, and tryptophan b) Glycine, alanine, leucine c) Lysine, arginine, histidine d) Serine, threonine, cysteine	K1	CO4
	8	Identify the group transferring coenzyme a) CoA                      b) NAD <sup>+</sup> c) NADP <sup>+</sup> d) FAD <sup>+</sup>	K2	CO4
5	9	When is Biological neutralization of alkali usually done ? a) Flootation and fat separation b) Mixing c) BOD degradation d) Pasteurization	K1	CO5
	10	Which of the following solid wastes describes the term municipal solid wastes? a) Toxic                                  b) Hazardous c) Non-toxic                              d) Non hazardous	K2	CO5

Cont...



**SECTION - B (35 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11 a	Distinguish between sampling and sample preparation.	K4	CO1
	(OR)			
	11 b	Inspect the process of sublimation.		
2	12 a	Examine the principle and applications of Gas chromatography.	K4	CO2
	(OR)			
	12 b	Outline about filtration process.		
3	13 a	Deduce the chemistry of free radicals and antioxidants.	K5	CO3
	(OR)			
	13 b	Evaluate the types of mineral salts and explain its types.		
4	14 a	Explain about the classification of enzymes.	K4	CO4
	(OR)			
	14 b	Differentiate Coenzymes and cofactors.		
5	15 a	Classify the types of pollutants from the food industry based on their physical nature.	K4	CO5
	(OR)			
	15 b	Examine the liquid pollutants from food industry.		

**SECTION -C (30 Marks)**

Answer ANY THREE questions

ALL questions carry EQUAL Marks

(3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Elaborate about crystallization and explain its types.	K5	CO1
2	17	Discuss about Thin layer chromatography.	K6	CO2
3	18	Elaborate about the chemistry of food colourants and its extraction from natural sources.	K5	CO3
4	19	Evaluate the nomenclature and properties of enzymes.	K5	CO4
5	20	Interpret about the microbiology and disposal processes of solid waste.	K5	CO5

Z-Z-Z

END