

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BVoc DEGREE EXAMINATION MAY 2026
(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	Crystallization is a common method used for the _____ of solid organic compounds (i) Filtration (ii) Purification (iii) Evaporation (iv) Extraction	K1	CO1
	2	The process of separating components of a liquid mixture based on differences in boiling points is called _____ (i) Filtration (ii) Crystallisation (iii) Distillation (iv) Sedimentation	K2	CO1
2	3	The technique used to separate particles from a liquid by rapid spinning is called _____ (i) Filtration (ii) Centrifugation (iii) Sedimentation (iv) Decantation	K1	CO2
	4	Organic compounds that contain a benzene ring are classified as _____ compounds (i) Aliphatic (ii) Heterocyclic (iii) Aromatic (iv) Saturated	K2	CO2
3	5	Compounds that donate electrons to neutralize free radicals are called _____ (i) Enzymes (ii) Antioxidants (iii) Emulsifiers (iv) Preservatives	K1	CO3
	6	Colourants obtained from plant or animal sources are classified as _____ colourants (i) Synthetic (ii) Natural (iii) Artificial (iv) Mineral	K2	CO3
4	7	The bond formed between two amino acids during peptide formation is called a _____ bond (i) Glycosidic (ii) Hydrogen (iii) Peptide (iv) Ester	K1	CO4
	8	Amino acids that rotate plane-polarized light are said to exhibit _____ (i) Isomerism (ii) Stereochemistry (iii) Optical activity (iv) Chirality	K2	CO4
5	9	Waste materials such as plastics, paper, and food residues generated from processing units are classified as _____ pollutants (i) Liquid (ii) Gaseous (iii) Solid (iv) Radioactive	K1	CO5
	10	The process of controlled burning of solid waste at high temperatures is known as _____ (i) Composting (ii) Incineration (iii) Pyrolysis (iv) Sanitary landfilling	K2	CO5

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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.	Choose any one purification techniques used for organic compounds and give its application in the food industry.	K1	CO1
		(OR)		
	11.b.	Recall about probability sampling.		
2	12.a.	Construct the principles behind each method of the following method a. Filtration b. Fractionation	K3	CO2
		(OR)		
	12.b.	Apply the principle and techniques of ion exchange chromatography.		
3	13.a.	Differentiate between natural and artificial colourants .	K3	CO3
		(OR)		
	13.b.	Identify any 2 artificial preservatives used in food industry.		
4	14.a.	Classify enzymes.	K3	CO4
		(OR)		
	14.b.	Outline the basic steps involved in peptide synthesis by the solution method?		
5	15.a.	List out the types of pollutants from food industry.	K4	CO5
		(OR)		
	15.b.	Analyse about any 2 treatment s of water .		

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	Categorize the different methods of sampling used in food analysis and Analyze the steps involved in sample collection and preparation?	K4	CO1
2	17	Intepret the principle, and techniques of HPLC used in food analysis. and explain one food-industry application ?	K5	CO2
3	18	What is food colourants and recall its classification sand applications in the food industry ?	K1	CO3
4	19	Identify the factors influencing the mechanism of enzyme action ?	K3	CO4
5	20	Explain the complete wastewater treatment process in detail and demonstrate the role of waste utilization in sustainable food processing?	K2	CO5

Z-Z-Z END