

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

**BVoc DEGREE EXAMINATION DECEMBER 2023  
(First Semester)**

**Branch - FOOD PROCESSING TECHNOLOGY**

**CHEMISTRY-I**

Time: Three Hours

Maximum: 75 Marks

**SECTION-A (10 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

(10 × 1 = 10)

Question No.	Question	K Level	CO
1	Threshold vapour concentration refers to ----- concentrations of chemical substances. a) airborne b) waterborne c) liquid d) vapour	K1	CO1
2	Ratio of absolute error of measurement to actual measurement is called ----- error a) true b) relative c) threshold d) basic	K2	CO1
3	In ----- bonding, both electrons come from the same atom. a) hydrogen b) ionic c) coordinate d) couple	K1	CO2
4	In alkaline solution the pH is in the range between --- a) 1-4 b) 3-5 c) 7-14 d) 5-7	K2	CO2
5	The measure of solute concentration in a solution is --- a) molarity b) molality c) volume d) liquidity	K1	CO3
6	A mixture in which the molecules of different species are distinguishable is ----- solution. a) non-ideal b) ideal c) homogenous d) heterogenous	K2	CO3
7	When a naturally occurring organic compound contains at least one nitrogen atom, it is called ----- a) terpenoid b) pyridine c) alkaloid d) terpene	K1	CO4
8	Broccoli and spinach are rich sources of ----- a) phenolics b) terpenoids c) flavones d) flavanoids	K2	CO4
9	----- are used in bubblegums manufacturing. a) piperine b) mint c) elastomers d) starch	K1	CO5
10	The abbreviation for GRP is ----- a) Glass run polymer b) Gloss rate product c) Glass reinforced plastic d) Glass reinforced polymer	K2	CO5

Cont...

**SECTION - B (35 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks (5 × 7 = 35)

Question No.	Question	K Level	CO
11.a.	Define antidote. Explicate on the storage and handling of chemicals.	K3	CO1
(OR)			
11.b.	Identify the types of errors. Suggest methods of error elimination.		
12.a.	Build the electronic theory and VSEPR theory of bonding.	K3	CO2
(OR)			
12.b.	Develop auto oxidation and its mechanism.		
13.a.	Analyze the methods of expressing concentrations in solutions.	K4	CO3
(OR)			
13.b.	Examine the effect of electrolytes in blood pressure and osmotic pressure.		
14.a.	Inspect the biological properties of piperine and nicotine.	K4	CO4
(OR)			
14.b.	List the uses of citral, camphor and geraniol.		
15.a.	Explain polymers. Classify and give examples.	K5	CO5
(OR)			
15.b.	Apprize the types of pesticides and insecticides.		

**SECTION -C (30 Marks)**

Answer ANY THREE questions

ALL questions carry EQUAL Marks (3 × 10 = 30)

Question No.	Question	K Level	CO
16	Elucidate on the heating methods and filtration techniques in food industries.	K3	CO1
17	Elaborate on the types, characteristics and properties of bonding.	K4	CO2
18	Assess the conductance and classification of electrolytes.	K4	CO3
19	Classify and explain the chemistry of flavanoids with food sources and their importance.	K5	CO4
20	Discover the types, properties and applications of fibre in food packaging.	K4	CO5

Z-Z-Z

END