

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

**BSc DEGREE EXAMINATION MAY 2026
(Second Semester)**

Branch -NUTRITION, FOOD SERVICE MANAGEMENT & DIETETICS

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	Steam distillation is suitable for purification of (i) Sugar (ii) Aniline (iii) Sodium chloride (iv) Glucose	K1	CO1
	2	Ion-exchange chromatography separates molecules based on (i) Size (ii) Volatility (iii) Charge (iv) Colour	K2	CO1
2	3	Soap is chemically the sodium or potassium salt of (i) Alcohols (ii) Fatty acids (iii) Carbohydrates (iv) Proteins	K1	CO2
	4	The Oxo-process involves the reaction of an olefin with (i) Oxygen and Nitrogen (ii) Sodium hydroxide (iii) Sulfuric acid (iv) Carbon monoxide and Hydrogen	K2	CO2
3	5	Alkaloids are mostly obtained from (i) Plants (ii) Minerals (iii) Metals (iv) Petroleum	K1	CO3
	6	Citral is used in (i) Cement industry (ii) Glass industry (iii) Fertilisers (iv) Perfumes	K2	CO3
4	7	Order of reaction can be (i) Only integer (ii) Only whole number (iii) Fractional or zero (iv) Always equal to molecularity	K1	CO4
	8	Promoters are substances that (i) Decrease catalyst activity (ii) Increase catalyst activity (iii) initiate the reaction (iv) terminates the reaction	K2	CO4
5	9	Effect of global warming includes (i) Sea level rise (ii) Decrease in temperature (iii) Formation of ozone (iv) Increase in rainfall always	K1	CO5
	10	COD measures (i) Only bacteria (ii) Total oxidisable pollutants (iii) Only dissolved oxygen (iv) Water hardness	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.	Explain the fractional crystallisation method of purification of solids.	K2	CO1
		(OR)		
	11.b.	Discuss thin layer chromatography (TLC) with principles and uses.		
2	12.a.	Give an account of the hot process and cold process of soap manufacture.	K2	CO2
		(OR)		
	12.b.	Classify surface-active agents with examples.		
3	13.a.	Write a note on preparation, properties and uses of benzene.	K3	CO3
		(OR)		
	13.b.	Discuss the isoprene rule and classification of terpenoids.		
4	14.a.	Describe pseudo unimolecular reactions with suitable examples.	K2	CO4
		(OR)		
	14.b.	Detail on the characteristics of catalytic reactions.		
5	15.a.	Write briefly about eutrophication.	K2	CO5
		(OR)		
	15.b.	Explain contamination of food with toxic chemicals and pesticides.		

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	Explain in detail any two methods of purification of liquids.	K2	CO1
2	17	Elaborate on the alfol process and Welsh process in detail.	K3	CO2
3	18	Report the extraction and uses of nicotine and piperine.	K3	CO3
4	19	Describe in detail consecutive and parallel reactions with examples.	K2	CO4
5	20	Discuss air pollution with special reference to acid rain and global warming.	K3	CO5

Z-Z-Z END