

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)
BSc DEGREE EXAMINATION MAY 2026
(Second Semester)
Branch - **CHEMISTRY**
INDUSTRIAL CHEMISTRY

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	Face powders mainly contain (i) Alcohol (ii) Talc (iii) Glycerine (iv) Wax	K1	CO1
	2	Soap is produced by the reaction called (i) Polymerization (ii) Neutralization (iii) Saponification (iv) Oxidation	K2	CO1
2	3	Knocking in petrol engines is due to (i) Smooth combustion (ii) Premature ignition (iii) High water content (iv) Low temperature	K1	CO2
	4	Fractional distillation of crude oil is based on (i) Density difference (ii) Boiling point difference (iii) Colour difference (iv) Solubility	K2	CO2
3	5	Vinegar contains (i) Acetic acid (ii) Sulphuric acid (iii) Nitric acid (iv) Hydrochloric acid	K1	CO3
	6	Ethyl alcohol is manufactured from molasses by (i) Oxidation (ii) Polymerization (iii) Fermentation (iv) Hydrolysis	K2	CO3
4	7	Plastic laminates are used mainly as (i) Insulating materials (ii) Semiconductors (iii) Conductors (iv) Electrolytes	K1	CO4
	8	Chemotronics deals with (i) Nuclear reactions (ii) Chemical effects (iii) Optical fibres (iv) Gas insulation	K2	CO4
5	9	Tertiary treatment is used for (i) Increasing solids (ii) Producing sewage (iii) Crushing waste (iv) Advanced purification	K1	CO5
	10	Effluent from sugar industry mainly contains (i) Heavy metals (ii) Organic matter (iii) Radioactive waste (iv) Only salts	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.	Write an essay on natural cosmetic materials used in ancient India	K2	CO1
		(OR)		
	11.b.	Discuss the ingredients of toothpaste and their functions.		
2	12.a.	With a neat diagram explain catalytic cracking process of petrol.	K4	CO2
		(OR)		
	12.b.	Discuss in detail the constituents of paints		
3	13.a.	Demonstrate the manufacture of sugar from sugarcane.	K3	CO3
		(OR)		
	13.b.	Point out characteristics of enzymes.		
4	14.a.	Write notes on superconductors and cryogenic conductors	K2	CO4
		(OR)		
	14.b.	Discuss dielectric properties and characteristics of insulating materials		
5	15.a.	Describe the characteristics and types of industrial waste	K2	CO5
		(OR)		
	15.b.	Explain role of safety committee and safety department in industries		

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	Illustrate the batch process manufacturing of soap in detail.	K2	CO1
2	17	Describe with a diagram distillation of crude petroleum and any one refining method.	K4	CO2
3	18	Enumerate the various steps involved in manufacture of paper.	K3	CO3
4	19	Evaluate the effect of temperature on conductivity of intrinsic and impurity semiconductors.	K3	CO4
5	20	Explain the treatment of important chemical wastes from paper and metal industries.	K3	CO5

Z-Z-Z

END