

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

BSc DEGREE EXAMINATION DECEMBER 2025
(Fourth Semester)

Branch – BOTANY

CHEMISTRY II

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks.

$$(10 \times 1 = 10)$$

Cont..

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO
1	11.a.	Define Fertilizers. Why do plants need fertilizers? How are fertilizers classified? Explain with examples. (OR)	K3	CO1
	11.b.	Write short account on insecticides.		
2	12.a.	Give the preparation, properties and uses of furan. (OR)	K4	CO2
	12.b.	Define proteins. Describe the classifications of proteins.		
3	13.a.	How will you prepare alizarin? (OR)	K5	CO3
	13.b.	Write structure and characteristics of flavones.		
4	14.a.	State and explain Kohlrausch's law. (OR)	K4	CO4
	14.b.	Write the difference between physisorptions and chemisorptions.		
5	15.a.	Discuss the sources of heavy metal pollution. (OR)	K5	CO5
	15.b.	Write short note on fluoride toxicity.		

SECTION - C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Explain the manufacturing of urea and triple superphosphate fertilizers.	K4	CO1
2	17	Discuss the manufacture of wine and vinegar.	K5	CO2
3	18	Illustrate the classifications of dyes based on applications and chemical structure.	K6	CO3
4	19	Describe the Freundlich adsorption isotherm.	K4	CO4
5	20	Illustrate the structure and functions of haemoglobin.	K5	CO5