22ZOU414N /22ZOU414

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION MAY 2025

Branch -**ZOOLOGY**

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	Which of the following has a coordination number as a feature? a) Coordination entity b) Ligand c) Central metal ion d) Coordination compound	K1	CO1
	2	Which component of fertilizer is used to stimulates early growth purpose? a) Phosphorus b) Nitrogen c) Potassium d) Oxygen	K2	
2	3	Which of the following is a not a five membered ring? a) Pyridine b) Pyrrole c) Furan d) Thiophene	K1	CO2
	4	_____is not a classified form of conjugated proteins. a) Lipoproteins b) Glycoproteins c) Metalloproteins d) Complete proteins	K2	
3	5	Which of the following is used as an antipyretics? a)Paracetamol b) aspirin c)analgin d) phenacetin	K1	CO3
	6	Which of the following is a basic dyes a) Congo Red b) Aniline Yellow c) Alizarin d) Indigo	K2	
4	7	The unit of conductance cannot be expressed in---. a) mho b) $(ohm)^{-1}$ c)Siemens d)ohm/m	K1	CO4
	8	___is concerned with chemical effects of light. a) Photochemistry b)Photolysis c) Both d) None of these	K2	
5	9	The haemoglobin is an iron containing pigment known as haem and it is attached with the ----known as Globin. a) Lipid b) WBC c) Protein d) Cell	K1	CO5
	10	Which of the following is a poor conductor of heat among the given metals? a) Sodium b) Calcium c) Lead d) Mercury	K2	

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.	Develop the basic idea following Co-ordination number of a central atom and Ligands	K3	CO1
		(OR)		
	11.b.	Build the classification of fetilizers.		
2	12.a.	Give the preparation, properties and uses of pyridine.	K4	CO2
		(OR)		
	12.b.	Analyse the classifications of proteins.		
3	13.a.	Justify the uses of anaesthetics.	K5	CO3
		(OR)		
	13.b.	Deduct the preparation of indigo.		
4	14.a.	Analyse Faraday's law.	K4	CO4
		(OR)		
	14.b.	Assume the laws of photochemistry.		
5	15.a.	Distinguish between haemoglobin and myoglobin.	K5	CO5
		(OR)		
	15.b.	Illustrate the toxicity of mercury.		

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	List out the postulates Werner's coordination theory.	K4	CO1
2	17	Discuss the manufacture of ethyl alcohol from molasses.	K5	CO2
3	18	Elaborate the chemical structure and applications of dyes.	K6	CO3
4	19	Examine the following terms.(3+3+2+2= 10marks) (i) Fluorescence (ii) Phosphorescence (iii) Chemiluminescence (iv) Quantum yield.	K4	CO4
5	20	Analyse the structure of haemoglobin and in function in oxygen transport.	K5	CO5

Z-Z-Z END