

M.Sc. Sem.-3 Examination

501

Chemistry (O)

March-2025

Time : 2-30 Hours]

[Max. Marks : 70

Que. 1	Answer the followings	14
A	Prove the presence and position of side chain and double bond in cholesterol.	7
B	Give detail classification of sex hormones? Give synthesis of Testosterone.	7
	OR	
A	Prove the presence and position of angular methyl group and nucleus in ergosterol.	7
B	Discuss the chemistry of plant hormones.	7
Que. 2	Answer the followings	14
A	Discuss HVZ amination reaction.	7
B	Discuss disulfide linkage in peptides.	7
	OR	
A	What is degradation? Explain the Edman degradation method.	7
B	Explain solid-phase peptide synthesis.	7
Que. 3	Answer the followings	14
A	Discuss the derivatives of polysaccharides.	7
B	Define carbohydrates. Give the classification of monosaccharides.	7
	OR	
A	Discuss the chemistry of glycogen.	7
B	Discuss the ring structure of Glucose.	7
Que. 4	Answer the followings	14
A	Discuss the chemical synthesis of purine nucleobases.	7
B	Write a note on various types of RNA.	7
	OR	
A	Write a note on essentials fatty acids.	7
B	Discuss the Double Helix structure of DNA.	7
Que 5	Answer the following in short. (Any seven)	14
1	Give structure of chrysene and picene.	
2	What is insulin?	
3	Mention the position of double bond in ergosterol.	
4	Give structure of plant Hormon auxin-a.	
5	Mention only the structure of pentose sugars present in DNA.	
6	Draw the structure of amylose.	
7	Give example of mixed amino acid.	
8	Define mutarotation in glucose.	
9	Give heteropolysaccharides with an example.	
10	Give types of glycosidic linkage.	
11	What do you mean by electrophoresis?	
12	How to classify fatty acids using length?	