School of Basic and Applied Sciences

Forensic Science
ETE - Jun 2023

Time : 3 Hours **Marks : 100**

Sem II - C1UB201C/B020201T
Bioorganic and Medicinal Chemistry
Your answer should be specific to the question asked
Draw neat labeled diagrams wherever necessary

1.	Show the structure of Ribonucleotides and Deoxyribonucleotides.	K1 CO4	(5)
2.	Define zwitterions structure in amino acids with structure.	K1 CO1	(5)
3.	Illustrate the thiohydantoin method for the determination of C-terminal amino acid.	K2 CO2	(5)
4.	Identify the polynucleotide chemical structure of RNA (Draw chemical Structures).	K3 CO2	(10)
5)	Identify the mechanism of Mutarotation and its application.	K3 CO5	(10)

OR

	Identify the epimerization and draw different epimers of Glucose.	K3 CO5	(10)
6.	Illustrate the cyclic and open chain structure of Glucose.	K2 CO1	(10)
7.	Analyze the structures of Adenine, Guanine, Thymine, Cytisine and uracil in polynucleotides and show their bonding as per the chargaff's rule.	K4 CO3	(10)
8)	Simplify the complete oxidation of Glucose.	K4 CO4	(15)

OR

	Examine the various steps of central dogma of life. Also explain the modification steps in mRNA.	K4 CO4	(15)
9.	Identify the allosteric mode of enzyme activation and inhibition.	K3 CO2	(15)
10.	Classify the types fatty acids on the basis of their degree of saturation. Give structure of each.	K4 CO3	(15)