M.Sc.(Chemistry) CBCS Pattern Semester-IV PSCHT15.2 - Organic Chemistry Special Paper-II

P. P Tim	Pages : ne : Th	2 GUG/W/23/11 ree Hours * 6 4 5 0 * Max. Marks	456 : 80
	Note	es : 1. All questions are compulsory. 2. All questions carry equal marks.	
1.	a)	Explain the reaction mechanism catalyzed by carboxypeptidase A.	8
	b)	Illustrate enzyme's remarkable properties and its classification.	8
		OR	
	c)	Give two applications of enzymes in food industry.	4
	d)	Explain Baker's yeast catalyzed reaction.	4
	e)	Give the role of NADP+ in biological system.	4
	f)	Explain following terms.i)Coenzymeiii)Co-factoriv)Metalloenzyme	4
2.	a)	How is indole synthesized? Discuss its basic character. Give two electrophilic substitution reactions of Indole.	8
	b)	Write the synthesis of isothiazole and isoxazole.	8
		OR	
	c)	Give the synthesis of pyridazines.	4
	d)	Give the synthesis of Quinolines.	4
	e)	Explain synthesis and structure of oxazoles.	4
	f)	Give any two methods for the synthesis of thiazole.	4
3.	a)	Discuss the structure and function of m-RNA, t-RNA and r-RNA.	8
	b)	Define lipid which are the three classes of lipid found in membrane? Explain mosaic model of membrane structure.	8
		OR	
	c)	Explain synthesis of Vitamine E.	4
	d)	Explain β -oxidation of fatty acids.	4

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f)	Describe the primary and secondary structure of DNA.	4
a)	Explain:i) Condensation polymerization.ii) Addition polymerization.	8
b)	Write short notes on:i) Alizarinii) Fluorescein.	8
	OR	
c)	Synthesis ofi) Methyl dopaii) Acyclovir.	4
d)	Give the synthesis of Benzocaine.	4
e)	Write a note on Cyanine dye.	4
f)	Explain free radical polymerization.	4
a)	Give the biological functions of coenzyme A.	2
b)	What is bakers yeast?	2
c)	Write chemical properties of Pyrazole.	2
d)	Write one synthesis of benzofuran.	2
e)	Write structure and function of lipoprotein.	2
f)	Write function of tringlycerols.	2
g)	What are isotactic and atactic polymers?	2
h)	Name any two mordant dyes with structure.	2
	 a) b) c) d) e) f) a) b) c) d) e) f) g) h) 	 a) Explain: i) Condensation polymerization. ii) Addition polymerization. ii) Adizarin ii) Fluorescein. OR c) Synthesis of i) Methyl dopa ii) Acyclovir. d) Give the synthesis of Benzocaine. e) Write a note on Cyanine dye. f) Explain free radical polymerization. a) Give the biological functions of coenzyme A. b) What is bakers yeast? c) Write chemical properties of Pyrazole. d) Write one synthesis of benzofuran. e) Write structure and function of lipoprotein. f) Write function of tringlycerols. g) What are isotactic and atactic polymers? h) Name any two mordant dyes with structure.
