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DHANALAKSHMI SRINIVASAN COLLEGE OF ARTS & SCIENCE FOR WOMEN (AUTONOMOUS)



(For Candidates admitted from 2018-2019 onwards)

UG DEGREE EXAMINATIONS APRIL – 2021 B.SC - CHEMISTRY

ORGANIC CHEMISTRY-II

	Time: 3 Hrs				Max	.Marks: 75			
			PART	$\Gamma - \mathbf{A}$					
СНО	OSE THE CORRECT	ANSWER.				(10*1=10)			
1.	The oxidation of tolue	ene to benzaldehyde	benzaldehyde by chromyl chloride is called						
	a) Cannizaro reaction		b) Wu						
	c) Etard reaction		d) Rei	mer-Tiemann	reaction				
2.	Which is unreactive in	hydride reduction	ride reduction with NaBH ₄ ?						
	a) Acetone	b) Acetalde	hyde	c) Benzaldeh	yde d) N	Methyl acetate			
3.	Pick out the correct st	statement according to S_N2 reaction mechanism							
	a) S _N 2 reaction follows second order kinetics								
	b) No intermediate is involved in S _N 2 mechanism								
	c) S _N 2 reactions are or	S _N 2 reactions are one-step reaction							
	d) All of the mentione	ed							
4.	The reactivity order o	of halides for dehydrohalogenation is							
	a) $R-F > R-Cl > R-Br$								
	c) R-I>R-Cl>R-Br>R	-F	d) R-F>R-I>R-Br>R-Cl						
5.	Which of the following	g factors is not resp	ctors is not responsible for the denaturation of proteins?						
	a) Heat	b) Charge		change	d) Organic				
6.	What is the average molecular weight of an amino acid residue in a protein?								
	a) 120	b) 110	c) 130		d) 140				
7.	How many signals do	the aldehyde (CH ₃)	Idehyde (CH ₃) ₃ CCH ₂ CHO have in ¹ H NMR spectra?						
	a) Five	b) Three							
8.	What is the waveleng	th range for UV spec	nge for UV spectrum of light?						
	a) 400 nm – 700 nm	b) 700 nm t	b) 700 nm to 1 mm c) 0.01 nm to 10 nm d) 10 nm to 400 nm						

		A harrow-spectrum antib	notic is active against			
		a) Gram-positive or gram) (Gram-negative bacteria	only
		c) Single organism or one			oth gram-positive and	
	10	. Paracetamol is contradict			om gram positive and	gram-negative bacteria.
		a) Chronic hepatitis	b) Bleeding disorders	5	c) Fever	d) Nephritis
			PART	Γ-	В	
Al	VSV	VER ALL THE QUESTI				(F*7-25)
	11.	a) Illustrate the oxidation	property of OsO ₄ and ozo	one		(5*7=35)
			(OI			
		b) Describe the mechanism	m of oxidation of Dess-Ma	-	in reagent	
	12.	a) Narrate the stereochem	istry of S _N 1 and S _N i reacti	on	S	
			(OI			
		b) What are elimination re			nism of E ₁ elimination	
	13.	a) How are amino acids p	repared? Describe their ch	en	nical properties	
			(OF			
		b) Paraphrase the element		THE RESERVE		
	14.	a) Elaborate the types of e	lectronic transitions in UV	/ s	pectroscopy	
			(OR			
		b) Discuss the IR spectrun	n of acetamide and acetic	aci	d	
		a) Describe the preparation				
			(OR			
		b) Define the following		Shall the		
		i) Hypnotics	ii) Analgesics		iii) Stimulants	
NI	CXX	ED ANY DV	PART	-		
		ER ANY THREE QUES				(3*10=30)
	10.	Explain the reducing prope	erty with mechanism for th	ne i	following.	
	17 1	i) LiAlH ₄	ii) Na(CN)BH ₃			
	17.	Describe the mechanism of	f bromination and sulphon	ati	on of benzene	
	18.	Sketch and explain the second	ondary and tertiary structu	res	of proteins	
	19. I	Define chemical shift. Disc	cuss the factors affecting c	he	nical shift	
	20. I	Explain the structure, mech	nanism of action and uses	of	penicillin	