[A-12]

SARDAR PATEL UNIVERSITY

B.Sc. (Semester-VI) Examination, CBCS Friday, 30th September, 2022 3:30 p.m. to 5:30 p.m. US06CCHE01: - Organic Chemistry



			· · · · · · · · · · · · · · · · · · ·	Total Mark	2:70
	Choose the cor	rect option for th	ne following:		10
1	Which of the fo	llowing is the ket b) Maltose	ohexose? c) Fructose	d) Mannose	
2	Which of the fo	llowing is the con b) Sucrose	nmon table sugar? c) Fructose	d) Glucose	
3				? d) D (+) Mannose	
4	Nitration of Na a) 1	phthalene gives_ b) 2	nitronapthalen c) 9	e d) 10	
5	Which of the fo	ollowing is aroma b) Furan	tic according to Huc c) Pyrrole	kel rule? d) all	
6	Electrophilic sul a)3	bstitution reaction b) 1,3	n in phenanthrene c c) 9	occurs atposition d) 9,10	
7	Diels-Alder rea a) [2+2]	oction is cyc b) [4+2]	loaddition reaction. c) [4+4]	d) [6+6]	
8	Which of follow a) -NH ₂	ing group is the c b) -NO ₂	consider as an auxoc c) -N=N-	chrome? d) -N=O	
9	Optical brighter a) White dyes	ners or whiteners b) Red dyes	which may be calle c) Blue dyes	d d) Black dyes	
10					
1 2 3 4 5 6 7	Give your answer in form of True or False Glucose and Mannose are epimers. Honey is an invert sugar? β-Naphthylamine can be prepared by Friedal – Craft synthesis Vigorous catalytic hydrogenation of tetralin gives Naphthalene Cyclopropenyl radical is an aromatic compound. The diene must be in Trans configuration for Diels-Alder reaction. Erythrosine dyes use as a food dyes.				
	2 3 4 5 6 7 8 9 10 123456	 Which of the foral Glucose Which of the foral Starch Which of the foral D (+) Glucose Nitration of Nata 1 Which of the foral Benzene Electrophilic sulal a)3 Diels-Alder read a) [2+2] Which of follow a) -NH2 Optical brighter a) White dyes Wool is the a) Natural aning c) Semi synthemals Give your answ Glucose and Mathoney is an investigation of the dienemust of the	 Which of the following is the ket a) Glucose b) Maltose Which of the following is the cora) Starch b) Sucrose Which of the following is considera) D (+) Glucose b) (+)-Maltose Nitration of Naphthalene gives_a) 1 b) 2 Which of the following is aromana) Benzene b) Furan Electrophilic substitution reactiona) a) b) 1,3 Diels-Alder reaction is_cyclar a) [2+2] b) [4+2] Which of following group is the condoctional a) -NH2 b) -NO2 Optical brighteners or whiteners a) White dyes b) Red dyes Wool is the a) Natural animal fibrech Semi synthetic fibre Give your answer in form of True Glucose and Mannose are epime Honey is an invert sugar? β-Naphthylamine can be prepared Vigorous catalytic hydrogenation Cyclopropenyl radical is an aromana The diene must be in Trans configured Erythrosine dyes use as a food dy 	a) Glucose b) Maltose c) Fructose Which of the following is the common table sugar? a) Starch b) Sucrose c) Fructose Which of the following is consider as an invert sugar a) D (+) Glucose b) (+)-Maltose c) (+)- Sucrose Nitration of Naphthalene gives	Choose the correct option for the following: 1 Which of the following is the ketohexose? a) Glucose b) Maltose c) Fructose d) Mannose 2 Which of the following is the common table sugar? a) Starch b) Sucrose c) Fructose d) Glucose 3 Which of the following is consider as an invert sugar? a) D (+) Glucose b) (+)-Maltose c) (+)-Sucrose d) D (+) Mannose 4 Nitration of Naphthalene gives nitronapthalene a) 1 b) 2 c) 9 d) 10 5 Which of the following is aromatic according to Huckel rule? a) Benzene b) Furan c) Pyrrole d) all 6 Electrophilic substitution reaction in phenanthrene occurs at position a) 3 b) 1,3 c) 9 d) 9,10 7 Diels-Alder reaction is cycloaddition reaction. a) [2+2] b) [4+2] c) [4+4] d) [6+6] 8 Which of following group is the consider as an auxochrome? a) -NH₂ b) -NO₂ c) -N=N- d) -N=O 9 Optical brighteners or whiteners which may be called a) White dyes b) Red dyes c) Blue dyes d) Black dyes 10 Wool is the a) Natural animal fibre b) Natural vegetable fibre c) Semi synthetic fibre d) Synthetic fibre Give your answer in form of True or False 1 Glucose and Mannose are epimers. 2 Honey is an invert sugar? 3 β-Naphthylamine can be prepared by Friedal – Craft synthesis Vigorous catalytic hydrogenation of tetralin gives Naphthalene Cyclopropenyl radical is an aromatic compound. The diene must be in Trans configuration for Diels-Alder reaction. Erythrosine dyes use as a food dyes.

Q.3		Answer the following in short (Attempt any Ten).	20
	1.	What are carbohydrates? How they are classified?	
	2	Explain the osazone formation.	
	3	Explain the term Epimers.	
	4	Discuss the Nitration of Naphthalene with suitable example	
	5	write note on bucherer reaction.	
	6	Draw all resonance hybride structures of anthracene	
	7	write the characteristic of pericyclic reaction	
	8	Explain the term symmetry allowed and symmetry forbidden	
	9	Give the difference between Exo and Endo	
	10	Difference between dye and pigment.	
	11	. Define the term Bathochromic effect	
	12	What are the requisites for a true dye?	
Q.4		Answer the following (Any Four)	
	1	Explain, (+)- Glucose is a pyranose and not a furanose. Give the synthesis of	32
		/ / meso raitaric acid itom (+)- giftose	
	2	How will conform the structure of (+)- Glucose? Presence of -CHO group	
		and Fresence of Traiconolic –OH group.	
	3	Give the synthesis of (i)1-methyl naphthalene from henzene (ii) Howerth	
		Synthesis of Naphthalene.	
	4	Write a short note on aromatization.	
	5	Write note on: Sigmatropic reaction and Cone rearrangement	
	6	explain(1) Diels-Alder reaction with favourable condition (ii) Woodward	
		Tronnam rules for electrocyclic reaction with suitable example	
	,	vitial is fastness? Explain various Fastness properties	
i	ŏ	Write short note on Witt's theory. Give the synthesis and application for the	
		followings (a) Crystal violet (b) Hansa yellow.	
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