

Enrollment No: _____

Exam Seat No: _____

C.U.SHAH UNIVERSITY

Winter Examination-2022

Subject Name : Organic Chemistry-II**Subject Code : 4SC04OCH1****Branch : B.Sc. (Chemistry)****Semester: 4****Date: 20/09/2022****Time: 02:30 To 05:30****Marks: 70**

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
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Q-1	Attempt the following questions:	(14)
	a) Write an Isoprene rule.	01
	b) Give one example of Curtius rearrangement.	01
	c) Define: Carbocation	01
	d) Define: Terpenoids	01
	e) Draw the chemical structures of Indigo.	01
	f) Define the term "Dyes".	01
	g) Draw the chemical structures of Coniine.	01
	h) Define: Nucleophile	01
	i) Define: Drug	01
	j) Draw the structures of Citral.	01
	k) Opium contains% of morphine and% of cinchona.	01
	l) Write the only equation for reaction of Mannich synthesis.	01
	m) Draw the structures of Congo red.	01
	n) How many isoprene units are present in di-terpene?	01

Attempt any four questions from Q-2 to Q-8

Q-2	Attempt all questions	(14)
	a) Explain Barbier-Wieland reaction with its application.	07
	b) Write a brief note on Kolbe synthesis with mechanism and its applications.	07
Q-3	Attempt all questions	(14)
	a) Discuss Beckmann rearrangement with mechanism and its applications.	07
	b) Write a note on Fries rearrangement.	07
Q-4	Attempt all questions	(14)
	a) Give the synthesis and uses of Malachite green.	07
	b) Give the synthesis and uses of Congo red.	07



Q-5	Attempt all questions	(14)
	a) Explain the classification of dyes on the basis of structure and methods of application.	07
	b) Write a note on Hoffmann rearrangement.	07
Q-6	Attempt all questions	(14)
	a) Give the synthesis and applications of Atenolol.	07
	b) Write synthesis and applications of Indigo dye.	07
Q-7	Attempt all questions	(14)
	a) Explain the classification of alkaloids on the basis of source and structure with appropriate examples.	07
	b) Discuss the constitution of nicotine.	07
Q-8	Attempt all questions	(14)
	a) Write a note on constitution of Citral.	07
	b) Discuss about the general procedure for determining structure of terpenoids.	07

