

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Summer Examination-2022

Subject Name: Organic Chemistry-III

Subject Code: 4SC05OCH1

Branch: B.Sc. (Chemistry)

Semester: 5

Date: 26/04/2022

Time: 11:00 To 02:00

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) What are free radicals? (1)
 - b) Give an example of homolytic cleavage and heterolytic cleavage of bond. (1)
 - c) What are electrophiles? Give one example of it. (1)
 - d) Draw the structure of Pinacolone. (1)
 - e) What is hydrolysis? (1)
 - f) What is general molecular formula of carbohydrates? (1)
 - g) What are carbohydrates? (1)
 - h) How many chiral carbons are present in fructose? (1)
 - i) Write the full form of EAA. (1)
 - j) What are Epimers? (1)
 - k) What do you mean by rearrangements? (1)
 - l) Give only reaction of Skruap synthesis. (1)
 - m) Draw the structure of anyactive methylene compound. (1)
 - n) Define Ylides. (1)

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

- Q-2 Attempt all questions (14)**
- a) What are carbocations? How they are generated? Introduce their structure. (7)
 - b) Give the generation of free radicals and ylides. (7)
- Q-3 Attempt all questions (14)**
- a) Discuss Meerwein-Pondorf Varley reaction with mechanism and its applications. (7)
 - b) Discuss Ullmann reaction with mechanism and its applications. (7)



