

Organic Chemistry Quiz-5: 16-Feb-2023. Time: 15 min

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Write your roll number on the top of the page. Generally speaking, space available in this single page is expected to be sufficient; however ask for additional page if needed.

1. (5 points) For nucleophilic addition, Sykes book mentions Cram's rule. Give an example of its application. Give an explanation of the basis of the rule.
2. (5 points) Ozonolysis is a common technique to identify organic compounds. Write an example reaction, illustrating the reactant, mechanism (via electron pushing diagrams) and the products. Note that ozone action on rubbers is one of the main causes for 'aging' of plastics.
3. (5 points) In presence of a strong base (Bronsted-Lowry type), carbonyl compounds tend to form carbanions that can start a nucleophilic attack. Give an example, with electron pushing mechanism.