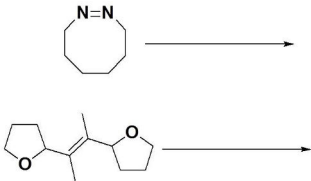


End Semester Examinations - 2015-16 Even Semester - May 2016

15CH3018 Synthetic Reagents and Concerted Reactions

Set B

Time : 3 hrs
Total Marks: 100

1. 1. A. Explain the mechanisms of the following (15+5)
i. Bayer-Viliger Oxidation ii. Birch Reduction
B. Write notes on Osmium Tetraoxide as an Oxidizing agent?
OR
2. 2. A. How are Pericyclic Reactions classified? (5)
B. Construct the molecular orbital correlation diagram for 1,3,5-hexatriene system? (15)
3. 3. A. Explain the Jablonski Diagram in detail? (15)
B. Write down the classification of Cycloaddition reactions? (5)
OR
4. 4. A. Explain the 1,3-Dipolar Cycloaddition reactions? (10)
B. Explain Chelotropic reactions with an example? (10)
5. 5. A. Write notes on
i. Cope Rearrangement ii. Claisen Rearrangement (7+7)
B. Explain the Group Transfer Reaction with an example? (6)
OR
6. 6. A. Write notes on "Paterno-Buchi reaction and Norrish type II reactions? (10+10)
7. 7. A. Write a detailed note on the Norrish type I reaction with examples? (20)
OR
8. 8. A. Explain the intramolecular Dimerization of alkenes in the photochemistry of pi-pi systems? (10)
B. Write the trans form of the following compounds? (10)
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9. 9. A. What are the different types of transforms involving C-C bonds in Retrosynthesis? (15)
B. Write notes on Synthons and Synthetic Equivalents? (5)