

Course Code: 4MSC5
Course: Stereochemistry
Credit: 3
Last Submission Date: October 31, (for January Session)
April 30 (for July session)

Max. Marks:-30

Min. Marks:-11

Note:-attempt all questions.

- Que1. Write details about the molecules with chiral axis and chiral planes.
- Que 2. What do you mean by the term homotopic, enantiotopic and diastereotopic. Explain
With giving suitable examples.
- Que3. What is stereoselective and stereospecific? What is meant by the term optical purity and enantiomeric excess?
- Que4. What is enantioselective synthesis? Write the enantioselective synthesis in a chiral approach of reaction with hydride donor and Hydroboration.
- Que5. Write notes on: (any one)
- (i) Sharpless epoxidation
 - (ii) Diels Alder selective synthesis
- Que6. What is conformation? What is butane-gauche interaction? Write the conformation of n-butane
- Que7. Write down the chair and boat forms of cyclohexane and discuss their relative stability
- Que8. Write the conformation of cis and trans decalins.
- Que9. Write the stereochemistry of Allenes and Spiranes.
- Que10. What are Atropisomerism? What is buttressing effect? Write the stereochemistry of Biphenyls.