



1. What is ultrasound assisted reaction? Discuss different types of sono-chemical reactions with their applications.
2. Describe coupling reaction in peptide synthesis with suitable examples.
3. Enumerate different types of Pericyclic reactions with examples. Write a note on electro-cyclic reaction with example.
4. What is racemic modification? Discuss the different methods of resolution of racemic mixtures.

**SHORT ESSAY (Answer any Nine)**

**9 X 5 = 45 Marks**

5. Define green chemistry. Write the principle of green chemistry.
6. Explain the effects of solvents in microwave assisted reactions.
7. Explain site specific chemical modification of peptide.
8. Describe formation of peptide and peptide amide with suitable examples.
9. Explain Cycloaddition reaction with example.
10. Discuss the importance of transition metal in metal catalysed reaction.
11. Describe briefly about Zeigler-Natta catalyst.
12. Explain with suitable examples use of enzymes in organic synthesis.
13. Describe Fischers D and L notation and E and Z notation.
14. Write a note on Stereo selective synthesis with examples.

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