

**Total No. of Pages : 01**

**M. Pharmacy (Sem.-2)**  
**ADVANCED ORGANIC CHEMISTRY-II**  
**Subject Code : PHCHM-132**  
**M.Code : 72352**

**Max. Marks : 80**

1. Attempt any FIVE questions out of SIX questions.
2. Each question carry SIXTEEN marks.

1. Write a short note on :
  - a. Aldol condensation (5)
  - b. Sigmatropic reactions (6)
  - c. Jablonski diagram (5)
2. Explain in detail various type of pericyclic reactions. (16)
3. Name the different reductive method for carbonyl compounds. Explain the detailed mechanism of any two in detail with suitable examples. (16)
4. What do you mean by protection and de protection of functional groups? Discuss their significance covering suitable examples. (16)
5. Give the detail mechanism of :
  - a. Wittig rearrangement (6)
  - b. Claisen rearrangement (5)
  - c. Homologization of aldehydes and ketones (5)
6. Give the IUPAC nomenclature for the four broad mechanistic classes of nucleophilic aromatic substitution and discuss in detail any two mechanism. (16)

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**