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Total No. of Pages : 02

Total No. of Questions : 06

M.Pharma(Pharmaceutical Chemistry) (2017 & Onwards) (Sem.-1)**ADVANCED ORGANIC CHEMISTRY-I**

Subject Code : MPC-102T

M.Code : 74664

Time : 3 Hrs.

Max. Marks : 75

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of SIX questions.
2. Each question carries FIFTEEN marks.

- Q1. a. Explain the stability of Free radicals with suitable examples. 3
- b. Write down the products of formations from the reaction of nitrene and alkene. 3
- c. Describe the methods of generation of carbenes. 3
- d. Write down two methods for generation of carbanion centre from carbonyl carbon. 3
- e. Discuss the stereochemical aspect of E1 and E2-reactions. 3
- Q2. Write down the reaction mechanism of the following reactions :
- a. Baeyer-Villiger Oxidation 5
- b. Shapiro Reaction 5
- c. Suzuki Reaction 5
- Q3. Write down the applications of following reagents with appropriate examples :
- a. Wilkinson's Catalyst 5
- b. DCC 5
- c. Wittig Reagent 5
- Q4. a. Enumerate the needs for doing protection with examples. 3
- b. What are the various ways used for protection and deprotection of -OH-group? 5
- c. What are various methods for determining reaction mechanism? Explain one of the method. 7



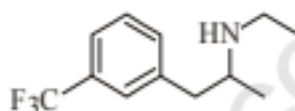
- Q5. a. Write down the synthetic equivalent's for following synthons : 4



- b. Suggest suitable steps for following conversion. 4



- c. Write down both the retrosynthetic analysis and forward synthesis of the following compound. 7



- Q6. a. Describe the Combes Quinoline synthesis. 5
- b. Write down the synthesis of Alprazolam. 5
- c. Discuss the Pinner Pyrimidine synthesis. 5

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.