

Roll No.

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Total No. of Pages : 1

Total No. of Questions : 06

M.Pharma(Pharmaceutical Chemistry) (2017 & Onwards) (Sem.–1)

ADVANCED ORGANIC CHEMISTRY-I

Subject Code : MPC-102T

Paper ID : [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.

1.
 - a. Briefly describe the methods of formation of Carbene. (5)
 - b. Discuss the stereochemical evidences in support of SN2 reactions. (5)
 - c. Discuss stereochemical evidences in support of E2 mechanism. (5)
2.
 - a. Explain the mechanism of Dieckmann reaction. (5)
 - b. Describe the synthetic applications of Mannich reaction. (5)
 - c. Explain the mechanism of the carbon-carbon bond formation by Michael addition. (5)
3.
 - a. Discuss the role of aluminium isopropoxide in oppenauer oxidation and Meerwein Ponndorf- Verley reduction. (7.5)
 - b. What is Witting reagent? Describe its important synthetic applications. (7.5)
4.
 - a. Explain the mechanism of Pinner pyrimidine synthesis. (5)
 - b. Describe syntheses of Metronidazole and Chloroquine. (10)
5.
 - a. Describe guidelines for good disconnection. (4)
 - b. Describe retrosynthetic analysis of 1,3-disfunctionalized compounds with suitable examples. (7)
 - c. Explain retrosynthesis based on 1, 2-disconnection. (4)
6. Write short notes on **any two** : (7.5×2)
 - a. Protection of carboxylic group by hydrazide.
 - b. Applications of N-bromosuccinamide.
 - c. Mechanism of Traube purine synthesis.