

PARUL UNIVERSITY
FACULTY OF PHARMACY
M.Pharm. Winter 2017 - 18 Examination

Semester: 1
Subject Code: MPC102T
Subject Name: Advanced Organic Chemistry-I

Date: 10/01/2018
Time: 10:00 am to 1:00 pm
Total Marks: 75

Instructions:

1. Figures to the right indicate maximum marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay Type Questions. (any 2 out of 3) (15 Marks Each) (30)

1. Write reaction, mechanism, reactivity, stereochemistry of SN_1 and SN_2 reaction.
2. What is retro synthesis analysis? Explain guideline for dissection of molecules with example.
3. Write protection and deprotection of carbonyl, hydroxyl and amino acid group.

Q.2 Short Essay Type Questions. (any 5 out of 6) (5 Marks Each) (25)

1. Write reaction, mechanism, reactivity, evidence of E_1 reaction.
2. Explain the role of DCC and DEAD in reaction with example.
3. Write short note on Ugi and Ullmann coupling reaction.
4. Write short note on Smiles and Brook rearrangement
5. Explain Knorr Pyrazole Synthesis and Combes Quinoline Synthesis.
6. Outline synthesis of Ketoconazole and Triamterene.

Q.3 Short Answers. (2 Marks Each) (20)

1. Explain synthetic reagent and application of N-Bromosuccinimide.
2. Write short note on Michael addition.
3. Outline synthesis of Chloroquinoline.
4. Explain application of Wittig reagent in brief.
5. Write insertion of oxygen reaction and mechanism in brief.
6. Outline synthesis of Chlorpromazine.
7. Draw structure of Purine and Acridine Heterocycles.
8. Explain synthetic reagent & application of Aluminiumisopropoxide.
9. Explain Hofmann rule with example.
10. Explain Ozonolysis in brief.