

**PARUL UNIVERSITY**  
**FACULTY OF PHARMACY**  
**M.Pharm. Summer 2018-19 Examination**

Semester: 2

Subject Code: MPC202T

Subject Name: Advance Organic Chemistry-II

Date: 17/04/2019

Time: 10:00am to 1:00pm

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)**

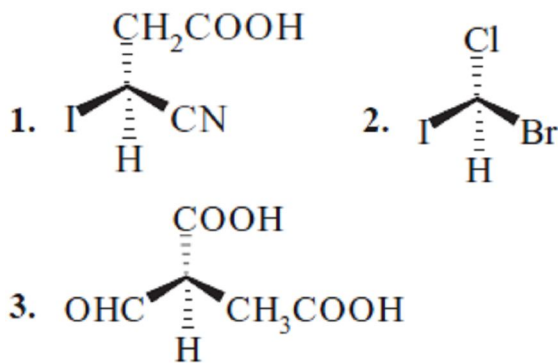
1. What is Green Chemistry? Explain principles of green chemistry with synthetic application.
2. Write any five reaction which can occur by ultrasound assisted reaction.
3. Write Solid Phase and Solution phase synthesis in peptide synthesis.

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

1. Write any five Microwave assisted organic synthesis.
2. Discuss Ziegler-Natta Catalyst in detail.
3. Write short note on Cycloaddition reaction.
4. Outline Jablonski diagram of Photochemistry.
5. Discuss resolution of racemic mixture.
6. Write difference between Fmoc and t-BOC in peptide synthesis.

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

1. Discuss Cis-Trans and E-Z isomer in brief.
2. Define (i) enantiomer (ii) diastereomer
3. Explain Homogeneous vs Heterogeneous catalyst in brief.
4. Explain electrocyclic reaction in brief.
5. Discuss Photorearrangement in brief.
6. Find out absolute configuration of following compound



7. Write abbreviation and structure formula of DMAP and DIPEA.
8. Discuss Transition Metal Catalyst in brief.
9. Explain Cram's rule in asymmetric synthesis with example.
10. Discuss example of Phase Transfer Catalyst in brief.