Seat No: Enrollment No:

PARUL UNIVERSITY FACULTY OF PHARMACY

B.Pharm. Summer 2018-19 Examination

Semester: 4 Date: 01/04/2019

Subject Code: 08101251 Time: 2.00 pm to 5.00 pm

Subject Name: Pharmaceutical Chemistry-IV (Organic Chemistry-II) Total Marks: 75

Instructions:

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

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each)

(20)

- 1. Give a brief note preparation and reactions of Carboxylic acids and their derivatives.
- 2. Write Mechanism of Friedal craft alkylation and friedal craft acylation.
- 3. Explain principles of green chemistry in detail.

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each)

(35)

- 1. Explain Hofmann rearrangement reaction with mechanism.
- 2. Explain SN₁reaction and mechanism along with evidences.
- 3. Write short note on Microwave chemistry.
- 4. Give a brief note on the reactions of Alkenes.
- 5. Write reactions of aldehyde.
- 6. Discuss Aldol condensation in brief.
- 7. Explain E2 reaction and mechanism along with supporting evidences.
- 8. Write principles and applications of Combinatorial chemistry.
- 9. Write any three reactions of amines and two reactions of alcohols.

Q.3 Answer in short. (2 marks each)

(20)

- 1. Define phase transfer catalysis with example.
- 2. Write brief note about protic and aprotic solvents.
- 3. Explain any two chemical reactions involving diazonium salts.
- 4. Explain Fries reaction with mechanism.
- 5. Explain Markovnikov and Anti Markovnikov rule.
- 6. Write any one reaction and preparation of Alkynes.
- 7. Write properties of ketone.
- 8. Write brief note on cannizaro reaction.
- 9. Explain synthesis of any one drug using retro synthesis approach.
- 10. What is diene? Give one reaction of it.