

PARUL UNIVERSITY
FACULTY OF PHARMACY
B.Pharm. Summer 2017-18 Examination

Semester: 3

Subject Code: 08101201

Subject Name: Pharmaceutical Chemistry III (Organic Chemistry I)

Date: 08/05/2018

Time: 02:00PM TO 05:00PM

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)

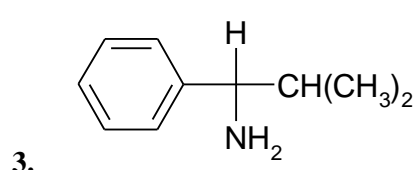
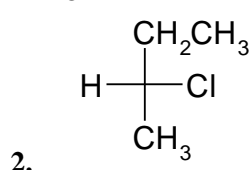
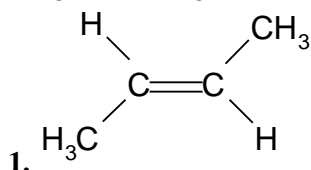
1. What are reactive intermediates? Enlist various reactive intermediates. Write a note on carbanion.
2. Define electrophilic aromatic substitution? Explain Friedel Crafts reactions & mechanism.
3. Explain Aryne/Benzyne mechanism with all supporting evidences.

Q.2 Short Essay type Questions. (Any 7 out of 9) (5 marks each) (35)

1. Explain different conformations of n-butane & discuss their stability.
2. Give reaction & mechanism of Reimer-Tieman reaction.
3. Write a note on hyperconjugation.
4. Give a short note on resolution.
5. Give a detailed note sp^3 hybridization with example.
6. Write a note on acid-base theories.
7. Give electrophilic aromatic substitution reactions of naphthalene.
8. What is phase transfer catalysis? Describe the phenomena with mechanism.
9. Write a note on carbocations.

Q.3 Answer in short. (2 marks each) (20)

1. Explain geometrical isomerism.
2. Justify: Though halogens are o/p-director, they are deactivators.
3. Define the following terms: 1. Organic chemistry 2. Enantiomers
4. Explain arenes with example.
5. Differentiate configuration and conformation.
6. What are the different types of solvents used in organic chemistry?
7. Give any two reduction reactions.
8. Differentiate ionic bond Vs. Covalent bond.
9. Assign the configuration of following structures. (any two)



10. Carbon tetrachloride has zero dipole moment, explain.