

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

Semester: 4
Subject Code: 08101251
Subject Name: Pharmaceutical Chemistry-IV

Date: 12/12/2017
Time: 02:00PM to 05:00PM
Total Marks: 75

Instructions:

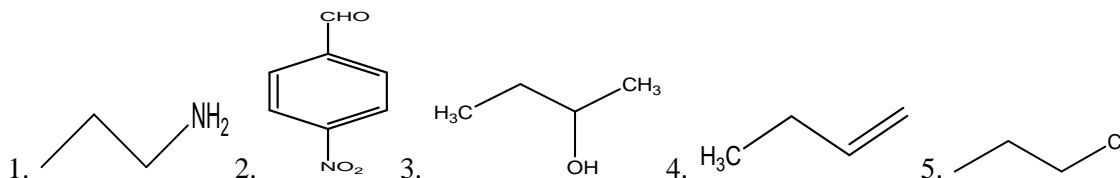
1. Figures to the right indicate full marks.
2. Make suitable assumptions wherever necessary.

Q.1 Essay type Questions. (Any 2 out of 3) (10 marks each) (20)

1. Give a brief note on Cannizzaro reaction, and Friedel crafts alkylation with reaction and mechanism.
2. Give a brief note preparation and reactions of Carboxylic acids and their derivatives.
3. Write short note on preparation and reactions of aldehyde and ketones.

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

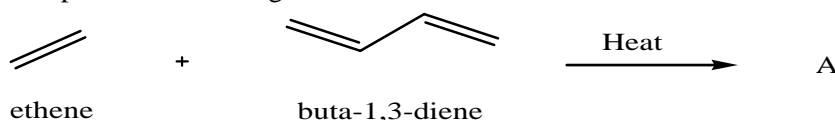
1. Write brief note on a Retrosynthesis.
2. Write principles of Green chemistry.
3. Write short note on Microwave chemistry.
4. Write principles and applications of Combinatorial chemistry.
5. Write IUPAC names of following:



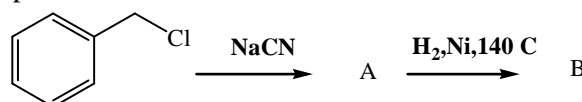
6. Explain: Hofmann rearrangement in brief.
7. Give a brief note on the reactions of Alkenes.
8. Write reaction and mechanism of Aldol condensation reaction.
9. Explain rules for IUPAC nomenclature of alkanes.

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

1. Complete the following reaction:



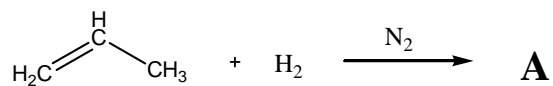
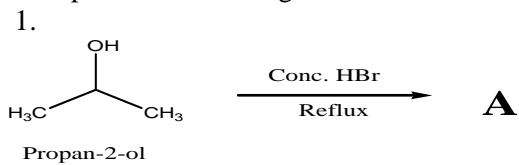
2. True or false, explain and give comment: alcohol has a higher boiling point than same molecular weight hydrocarbon.
3. Write any one reaction and preparation of Alkynes.
4. Complete the reaction:



1-(chloromethyl)benzene

5. Give example of Riemen tieman reaction.
6. Explain Azo dye reaction in brief.

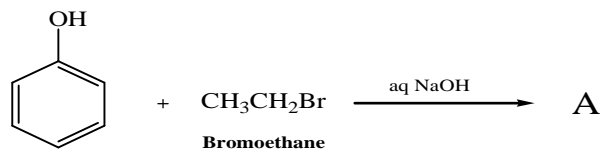
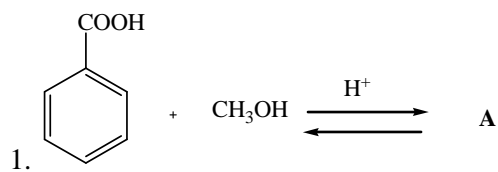
7. Complete the following reaction:



2. prop-1-ene

8. Explain substitution reactions of Diazonium salts.

9. Complete the reaction:



2. Phenol

10. Write Fries rearrangement reaction.