

PARUL UNIVERSITY
FACULTY OF PHARMACY
Pharm.D Examination April- 2019

Year: 1

Subject Code: 08207104

Subject Name: Pharmaceutical Organic Chemistry

Date: 22/04/2019

Time: 10.00 am to 1.00 pm

Total Marks: 70

Instructions

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

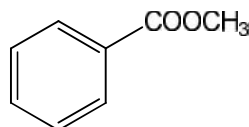
Q.1 Essay Type Questions. (any 2 out of 3) (15 Mark Each) (30)

1. Write reaction and mechanism of S_N1 and S_N2 reaction. Explain kinetics and role of solvent in S_N1 and S_N2 reaction.
2. Explain 1, 2-elimination. Explain about E_2 and E_1 reaction, mechanism and evidence for E_2 mechanism in brief.
3. Explain Diazotization reaction, Hoffman rearrangement reaction and Aldol condensation reaction.

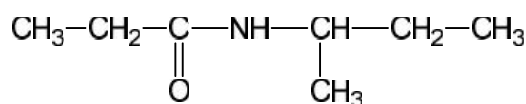
Q.2 Short Essay Type Questions. (any 4 out of 5) (5 Mark Each) (20)

1. Write on friedel-craft reaction.
2. Write free radical addition reaction of alkene.
3. Explain addition reaction for Dienes.
4. Write note on hyperconjugation.
5. Write IUPAC name of following structure.

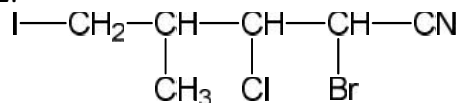
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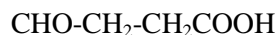
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2.



5.



3.

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

1. Define polar solvent with examples.
2. Write medicinal use of glycerin trinitrate and urea.
3. Why cyclopropane is less stable than cyclobutane?
4. Write structure of 3-hydroxypentanoic acid and 1,6-Hexadiene.
5. Write any two reduction reaction of carbonyl compounds.
6. Write product.
 - i) $\text{CH}_3\text{-CH}=\text{CH}_2 + \text{HBr}$ Peroxide ?
 - ii) $\text{CH}_3\text{-CH}=\text{CH}_2 + \text{HBr}$ Non peroxide ?
7. Explain saytzeff rule of elimination.
8. Write ionization of carboxylic acids.
9. Discuss basicity of amine.
10. Define : a) Enantiomer b) Diastereoisomer