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SUBJECT CODE NO:- B-2144
FACULTY OF SCIENCE
B.Sc. F.Y (Sem-I) Examination March/April 2018
Chemistry Paper-II
Organic Chemistry

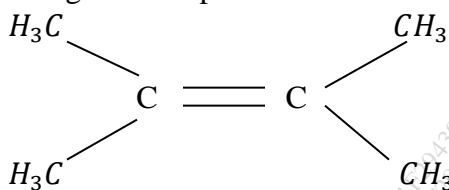
[Time: 1:30 Hours]

[Max.Marks: 50]

- N.B Please check whether you have got the right question paper.
- 1) Attempt all questions.
2) Use blue or black pen only
- Q.1 a) Explain any two methods of formation of carbanions and carbocations each. 10
b) Explain optical isomerism and geometrical isomerism with suitable examples. 10
- OR**
- c) Explain Inductive effect and steric effect with example. 10
d) Describe Homolytic Fission and Heterolytic fission in detailed. 10
- Q.2 A. i) Explain catalytic oxidation of alkanes. 05
ii) Explain Saytzeff's rule and Markownikoff's Rule. 05
- B. i) Explain Resonance structure of Benzene. 05
ii) Write any two methods of formation of chloroform. 05
- OR**
- Write short notes on (any four) 20
- a) Addition Reaction
b) Distinguish between enantiomers and diastereomers.
c) Write a note on Corey-House reaction.
d) Hydrogenation of alkenes.
e) Sulphonation of benzene with mechanism.
f) Discuss methods of formation of aryl halides.
- Q.3 Choose and write the correct answers of following: 10
1. Donation of electron density through the σ – bonds of the molecule is ----- effect.
- a) Inductive
b) Mesomeric
c) Steric
d) Hyper conjugation

2. ----- involves the migration of atom or group of atoms from one position to another position within the molecule.
- Addition
 - Substitution
 - Elimination
 - Rearrangement

3. The given compound shows how many hyper conjugative structures?



- 9
 - 6
 - 3
 - 12
4. Diethyl ketone and methyl-n-propyl ketone shows ----- isomerism.
- Functional
 - Tautomerism
 - Metamerism
 - Geometrical
5. In Kolbe's electrolytic reaction, which gas is evolved at cathode?
- O_2
 - H_2
 - N_2
 - CO_2
6. Optical isomerism is not shown by -----
- Mesoform
 - Resimic mixture
 - Both a & b
 - None
7. Polymerization of ----- results into polyethylene.
- Vinyl chloride
 - Ethylene
 - Ethane
 - Propylene

8. Each carbon atom in benzene is ----- hybridized.

- a) sp^2
- b) sp^3
- c) dsp^2
- d) dsp^3

9. $2 C_6H_5I + 2Cu \xrightarrow[\text{ether}]{\text{dry}} C_6H_5 - C_6H_5 + 2CuI$ is ----- reaction.

- a) Wurtz Filling
- b) Ullmann
- c) Sandmeyers
- d) None of above

10. Peroxide effect is applicable only for -----

- a) HCl
- b) HBr
- c) HI
- d) HF