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**SUBJECT CODE NO: - YY-2332**  
**FACULTY OF SCIENCE AND TECHNOLOGY**  
**B.Sc. F.Y (Sem- I)**  
**Examination May / June - 2023**  
**Chemistry Paper-II Organic Chemistry**

[Time: 1:30 Hours]

[Max. Marks: 40]

Please check whether you have got the right question paper.

N. B

- 1) All questions are compulsory.
- 2) All questions carry equal marks.

Q1 What is isomerism? Explain different types of isomerism with suitable examples. 10

OR

- a) Explain structure and stability of carbocation. 05
- b) Explain Huckel rule of aromaticity with example. 05

Q2 Explain SN' reaction with suitable example 10

OR

- a) Discuss Gattermann-Koch reaction with mechanism 05
- b) Explain Oppenauer Oxidation of diols 05

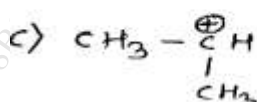
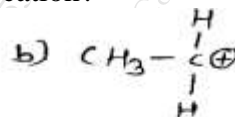
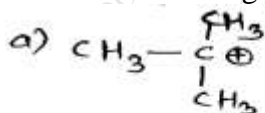
Q3 Write short notes on (any two) 10

- 1) Gattermann reaction
- 2) Enantiomers
- 3) Schotten Baumann reaction
- 4) Sulphonation reaction of benzene

Q4 Select and write correct answer of the following 10

- 1) From following which reagent acts as nucleophile?  
a)  $NO_2^{\oplus}$     b)  $SO_3$     c) Carbanion    d) None of these

- 2) Which of following is most stable carbocation?



d) All of these

- 3) In E and Z system of nomenclature, E and Z means

- a) Entgegen and Zusammen
- b) Entagone and Zusamen
- c) Entgegen and Zusmor
- d) Entagonist and Zusamenn

- 4) Diastereomers are -----
- a) Not mirror images of each other
  - b) Non superimposable mirror images of each other
  - c) Super imposable mirror images of each other
  - d) All of these
- 5) From the following which compound is aromatic in nature?
- a) Benzene     b) Aniline     c) Toluene     d) All of these
- 6) For sulphonation of benzene, ----- is used as reagent.
- |   |   |
|---|---|
| a) Conc. $\text{H}_2\text{SO}_4$                            | b) Conc. $\text{H}_2\text{SO}_4$<br>+<br>Conc. $\text{HNO}_3$ |
| c) Conc. $\text{H}_2\text{SO}_4$<br>+<br>Conc. $\text{HCl}$ | d) Conc. $\text{HNO}_3$                                       |
- 7) 1-butene on reaction with H Br in absence of hydrogen peroxide mainly gives.
- a) 1-bromobutane
  - b) 1-butanol
  - c) 2-bromobutane
  - d) 2-butanol
- 8) In Sandmeyer reaction ----- is used.
- a) Cupric chloride     b) Cupric bromide
  - c) Cuprous chloride     d) All of these
- 9) Secondary alcohol on oxidation with PCC gives,
- a) Ketone     b) Aldehyde     c) Ester     d) Ether
- 10) Carbon monoxide is used as reagent in -----
- a) Gattermann-Koch reaction
  - b) Reimer-Tiemann reaction
  - c) Oppenauer oxidation
  - d) Pinacole-Pinacolone rearrangement