SHIVAJI COLLEGE, UNIVERSITY OF DELHI

DEPARTMENT OF CHEMISTRTY

HOME ASSIGNMENT (Academic Year 2023-24)

Name of the Course : B.Sc (Life Science) Semester: IV

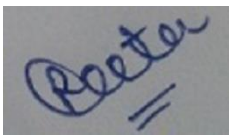
Name of the Paper : DSC: Chemistry of Carboxylic Acids & their Derivatives, Amins and Hetrocycles

Faculty Name : Dr Reeta

Maximum Marks: 08 Marks

Make a PPT or assignment given topics below as distributed in class

- Carboxylic Acids and their Derivatives (aromatic) Preparation: Oxidation reactions of alcohols, aldehydes and ketones,
- Acidic and alkaline hydrolysis of esters; Reactions: Hell-Volhard Zelinsky reaction
- Carboxylic acid derivatives (aliphatic): Preparation: Acid chlorides, anhydrides, esters and amides from acids and their interconversion
- Claisen condensation. Reactions: Relative reactivities of acid derivatives towards nucleophiles
- Reformatsky reaction
- Perkin condensation. Active methylene compounds: Keto-enol tautomerism. Preparation and synthetic applications of ethyl acetoacetate
- Amines Preparation: from alkyl halides,
- Gabriel's Phthalimide synthesis,
- Hoffmann bromamide reaction.
- Hoffmann vs Saytzeff elimination,
- carbylamine test, Hinsberg test,
- Schotten-Baumann reaction.
- Electrophilic substitution (case aniline): nitration, bromination, sulphonatio
- basicity of amines.
- Heterocyclic Compounds Introduction, classification, structure, nomenclature and uses.
- Preparation and properties of the following heterocyclic compounds with reference to electrophilic and nucleophilic substitution: furan, pyrrole, thiophene, and pyridine.



Faculty Signature: