

Assignment II
CHE-201
Sem III 2017
Unit Test II

Unit-I (B) Amino Acid

Long Questions:

- (1) Write short note on Iso electric point.
- (2) Write Strecker's synthesis for the preparation of amino acid.
- (3) Write short note on Zwitter ion.
- (4) Write Gabrielphthalimide synthesis for the preparation of amino acids.
- (5) Write reaction of amino group of amino acid.
- (6) Write reaction of carboxylic acid group of amino acid.
- (7) Discuss Ninhydrine reaction.

Short Questions:

- (1) Which test is use for detection for amino acid ?
- (2) What is the pH value of Zwitterion ?
- (3) Glucose contains how many chiral carbon ?
- (4) Fructose contains how many chiral carbon ?

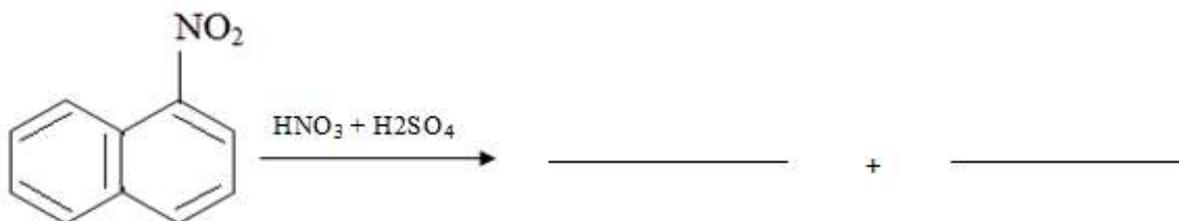
Unit-II (B) Poly nuclear aromatic hydrocarbons

Long Questions:

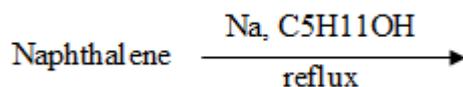
- (1) Discuss Oxidation and Reduction reaction of Naphthalene.
- (2) Electrophelic substitution reaction in Naphthalene occurs at α -position. Explain with σ - complexes.
- (3) Give Howarth synthesis of Naphthalene and 1(α)-Methyl naphthalene
- (4) Discuss the constitution (structure) of naphthalene.

Short Questions:

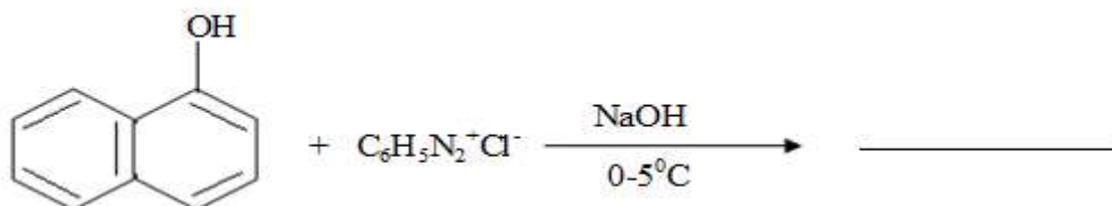
- (1) How many σ (sigma) and π (pai) bonds are present in naphthalene?
- (2) Naphthalene + $\text{HNO}_3 \longrightarrow$
- (3) Complete the following reaction:



- (4) Complete the following reaction:



(5) Complete the following reaction:



Unit-III (B) β -Dicarbonyl Compounds.

Long Questions

[A] Answer the following

- (1) Give synthesis of Ethyl Aceto Acetate (EAA)
- (2) Give synthesis of Diethylmalonate.
- (3) Synthetic application of β -Dicarbonyl Compounds
 - (a) Crotonic Acid from Ethyl Aceto Acetate (EAA)
 - (b) Valeric Acid from Diethylmalonate.

[B] **Short Questions:**

- (1) How many Active Methylene group present in Diethylmalonate?
- (2) Give structure of Ethyl Aceto Acetate (EAA)

Unit IV

Long Questions:

- (6) Write short notes on Metamerism Or Tautomerism.
- (7) Write short notes on Steric effect, hydrogen bond and resonance effect.
- (8) Explain: "Aliphatic amine is weaker than aromatic amine".
- (9) Explain: "Acetic Acid is stronger than Phenol".
- (10) N-N dimethyl aniline is weaker than N-N Dimethyl OrthoToluidine.
- (11) Salicylic acid Or Ortho Hydroxy Benzoic Acid is stronger than Perahydroxy benzoic acid.