

Chemistry - 12th Class Chemistry Chapter 12 Short Questions Preparation

Q1. Explain one method of formation of formaldehyde form methyl alchohol. Ans 1: Formaldehyde is prepared in laboratory by passing a mixture of methyl alcohol vaporous and air over plantinized asbestos or copper or silver catalyst at 300 C.Acetaldehyde is prepared in laboratory by the oxidation of ethyl alchohol with acidified sodium dichromate solution. Q2. What is the use of iodoform test to distinguish between acetaldehyde and formaldehyde? Ans 1: The haloform reaction using iodine and aqueous sodium hydroxide is called the iodoform test, It results in the formation of water insoluble iodoform which is a yallow solid, lodoform test is used for distinguish acetaldehyde from other aldehydes, Q3. What is iodoform test? Ans 1: The haloform reaction using iodine and aqueous sodium hydroxide is called the iodoform test. It results in the formation of water insoluble iodoform which is yellow solid, iodoform test is used for distinguish, ethyl ketones from other ketones. Q4. What is halofrom reaction? Ans 1: Acetaldehyde and methyl ketones react with halogens in the presence of sodium hydroxide to give haloform this reaction is called haloform reaction, The term haloform is used for the distinguish acetaldehyde fromother aldehydes. Q5. How aldehyde reacts with hydrdzine?. Ans 1: Aldehyde react with phenyl hydrazine to form phenylhydrazone in the presence of an acid. Q6. Write the name of those weal oxidizing agents which can oxidize aldehyde but not the ketone? Ans 1: Tollen's reagent ,Fehling solution and Bendict's solution. Q7. Give formula of formaldehyde and acetaldehyde. Ans 1: Formula of formaldehyde: HCHO Formula of acetaldehyde: CH3CHO

Q8. Justify that Cannizzaro reaction is self oxidation-reduction reaction?

Ans 1: Cannizzaro reaction is a disproportion reaction.two molecules of the aldehyde are involved one molecule being converted into the corresponding alcohol (the reduce product) and the other into the acid in the salt form (the oxidation process).

Q9. Describe the mechanism of base catalyst nucleophillic addition to a carbonyl compound?

Ans 1: A base catalyzed nucleophilic addition will take place with strong nucleophilic reagent which has general mechanism.

Q10. Write down mechanism of Cannizzaro reaction?

Ans 1: The hydroxid ion act as a nucleophile. It attacks ion the electrophile carbonyl carbons to form a complex anion.