ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

FOR GOD AND COUNTRY

WORKSHEET-47(CLASS-12)

TOPIC- ALDEHYDE AND KETONE

SUBTOPIC-PREPARATION AND CHEMICAL REACTIONS

SUBJECT – CHEMISTRY **F.M. - 15**

DURATION – 30 mins **DATE -01.08.20**

1.1 **During the nucleophilic addition reaction of an aldehyde or Ketone the change in hybridization state of the carbonyl atom changes-**

a) sp^2 to sp^3 b) sp^3 to sp^2 c) sp^2 to sp d) sp to sp^3

1.2 **Wolff Kishner reduction of a ketone is carried out in the presence of which of the following?**

a) H_2 and Pt as catalyst b) Glycol with KOH c) Zn-Hg with HCld) $LiAlH_4$

1.3 **The factor/factors that affect the rate of a chemical reaction of an aldehyde or a ketone is / are-**

a) Electronic effectb) steric effectd) both a and bd) none of these

1.4 **The hydration of an aldehyde or a ketone is reversible due to-**

a) Slowest step b) Formation of geminal di ol c) Formation of vicinal di ol d) Tautomerism

1.5 **Ammonia reacts with aldehyde or ketone to form-**

a) Imineb) Ureac) Amided) Amine

1.6**Reaction of ethyl ethanote with limited supply of CH_3MgI followed by hydrolysis gives-**

a) Ethanol b) n-propyl alcohol c) Acetaldehyde d) Isopropyl alcohol

1.7 **Both aldehyde and ketone can be identified by-**

a) Tollens reagent b) Sodium bisulphite addition c) Brady's reagent d) All of these

1.8 **Aldehyde and ketone are reduced to form-**

a) Alcohol b) Ether c) Alkane d) alkyne

1.9 **A strong base can abstract an alpha-hydrogen from –**

a) Amine b) Both c and dc) Ketoned) Ether

1.10 **Reduction of aldehydes and ketones into hydrocarbons using Hydrazine, KOH and u der heating condition-**

a) Cope reduction b) Dow reductionc) Wolff-Kishner reduction d) Clemmensen reduction

1.11 **Chloral forms stable geminal-di-ol, due to-**

a) Inter molecular H-bond formation b) Intra molecular H-bond formationc) Inductive effect
d) Hyperconjugation

1.12**Aldehydes are chemically more reactive than the ketones due to-**

a) Electrophilic character at the carbonyl carbon b) Steric factor c) both a and b d) none of these

1.13**Semicarbazide on treatment with Aldehyde forms-**

a) Salicyldehydeb) Semicarbazenec) Semicarbazone d) Semicarbazyne

1.14**aldehyde and ketone both undergo the type of chemical reaction/reactions-**

a) Condensation b) rearrangementc) additiond) all of these

1.15**The geometry of the carbonyl group is-**

a) Trigonal planar b) Pyramidal c) Square planer d) Linear

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