ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

WORKSHEET-08(CLASS-12)

TOPIC- ALKYL AND ARYL HALIDE

SUBTOPIC-CHEMICAL REACTIONS OF GRIGNARD REAGENT

SUBJECT – CHEMISTRY **F.M. - 15**

DURATION – 30 mins **DATE -11.05.20**

1.1 Which of the following produces 1^{O} alcohol on reaction with CH_3MgBr?

a) HCHO b) CH_3CHO c) CH_3COCH_3 d) $CH_3CH_2COCH_3$

1.2 Which of the following produces 2^{O} alcohol on reaction with CH_3MgBr?

a) HCHO b) CH_3CHO c) CH_3COOH d) CH_3CH_2COCl

1.3 Which of the following produces 3^{O} alcohol on reaction with CH_3MgBr?

a) HCHO b) CH_3CHO c) CH_3COCH_3 d) $CH_3OCH_2CH_3$

1.4 Grignard reagent when exposed to moisture-

a) Gets oxidized b) gets hydrolyzed c) gets decomposed to give hydrocarbon d) remains unaffected

1.5 Grignard reagent forms alkane with which of the following compound?

a) But-1-ene b) Carbon dioxide c) But-2-ene d) Ammonia

1.6 CH_3MgI reacts with CH_3OCH_3 to form-

a) Alcohol b) No product c) Water d) Ester

1.7 Grignard reagent cannot act as-

a) Reductant b) Nucleophile c) Base d) Both a and b

1.8 Grignard reagent doesn't react with aliphatic ether because it doesn't have-

a) Acidic H atoms b) electrophilic center c) Nucleophilic center d) Both a and b

1.9 Grignard reagent (RMgX) on treatment with CH_3CH_2COOH

a) RD b) RH c) H_2O d) Both b and c

1.10 $CH_3CH_2COCH_2CH_2CH_3$ on treatment with one equivalent of RMgX forms-

a) RH b) NH_3 c) H_2O d) All of these

1.11 $^{14}CH_3MgBr$ on treatment with CO_2 generates-

a) CH_3COOH b) $CH_3{}^{14}COOH$ c) $^{14}CH_3{}^{14}COOH$ d) $^{14}CH_3COOH$

1.12 CH_3MgI reacts with CH_3CONH_2, followed by hydrolysis to form-

a) 3^{O} Alcohol b) 2^{O} Alcohol c) Water d) 1^{O} Alcohol

1.13 CH_3MgI reacts with CH_3CN, followed by hydrolysis to form-

a) $(CH_3)_3COH$ b) CH_3CHO c) CH_3CH_2OH d) $(CH_3)_2CHOH$

1.14 During the reaction Grignard reagent with any ketone the hydrolysis step is carried out by using-

a) Aq. NH_4Cl b) HCl c) HNO_3 d) NH_4OH

1.15 CH_3CH_2Br on treatment with CH_3OH forms-

a) $CH_3CH_2CH_3$ b) CH_3CH_3 c) $CH_3CH_2CH_2CH3$ d) CH_4

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