



ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

WORKSHEET-04

TOPIC- ALKYL AND ARYL HALIDE

SUBTOPIC-PREPARATION OF ALKYL AND ARYL HALIDE

SUBJECT – CHEMISTRY

DURATION – 30 mins

F.M. - 15

DATE -06.05.20



- 1.1 The halogenation of alkane follows-
- a) Free radical mechanism b) carbocationic mechanism c) Carbanionic mechanism d) None of these
- 1.2 Anti-Markownikoff's addition follows-
- a) HBr b) HCl c) HI d) HF
- 1.3 Which of the following compounds is most rapidly hydrolyzed by S_N2 mechanism?
- a) C_6H_5Cl b) $CH_2=CH-CH_2Cl$ c) $(C_6H_5)_3CCl$ d) $C_6H_5CH_2Cl$
- 1.4 Which type of reaction mechanism is followed by Anti-Markownikoff's addition-
- a) Free radical mechanism b) carbocationic mechanism c) Carbanionic mechanism d) None of these
- 1.5 Which method is the most appropriate for the preparation of unsymmetrical alkane?
- a) Corey-House synthesis b) Wurtz reaction c) Frankland synthesis d) Decarboxylation
- 1.6 What will be the products when reactants are alcohol & thionyl chloride in the presence of pyridine?
- a) $RCI+S+HCl$ b) $RCI+SO_2+HCl$ c) $RCI+SO_2+H_2O$ d) $RCI+S+H_2O$
- 1.7 Pick out the compound which reacts fastest in the presence of $AgNO_3$ -
- a) $(CH_3)_3CCl$ b) $(CH_3)_2CHCH_2Cl$ c) $(CH_3)_2CHCl$ d) CH_3CH_2Cl
- 1.8 The ether used in Wurtz synthesis is
- a) Acidic b) Dry c) Basic d) aqueous
- 1.9 Grignard reagent is reactive due to
- a) The presence of halogen atom b) the presence of magnesium atom c) the polarity of C-Mg bond d) all of these
- 1.10 Which one of the following species is not an electrophile?
- a) NH_3 b) Br^+ c) H^+ d) BF_3
- 1.11 In primary alkyl halides the halogen atom is attached to a carbon which is further attached to how many carbon atoms-
- a) One b) Two c) Three d) Four
- 1.12 Alkyl halides undergo a type of reaction
- a) Nucleophilic substitution b) Nucleophilic addition c) Elimination d) both a & c
- 1.13 When CO_2 is made to react with ethyl magnesium iodide followed by acid hydrolysis the product formed is-
- a) Propane b) propanoic acid c) propanal d) propanol
- 1.14 Which C-X bond has the highest bond energy per mole?
- a) C-F b) C-Cl c) C-Br d) C-I
- 1.15 Which one among the following is not a good leaving group?
- a) HSO_4^- b) Cl^- c) OH^- d) Br^-

PREPARED BY: MR. ARNAB PAUL CHOWDHURY