

2) 2 – Bromo pentane is heated with alcoholic KOH the major product formed is

- a) 1 – pentene
- b) Cis 2 – pentene
- c) Trans 2 – pentene
- d) 2 – ethoxy pentene

3) The yield of chlorobenzene obtained by the reaction of phenol with  $\text{PCl}_5$  is less due to the formation of

- a) P – chlorophenol
- b) Ortho chlorophenol
- c)  $\text{POCl}_3$
- d)  $(\text{C}_6\text{H}_5)_3\text{PO}_4$

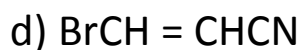
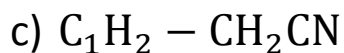
4) The Friedel – Crafts reaction of n – propylbromide with Benzene in presence of Anhydrous  $\text{AlCl}_3$  gives

- a) n – propyl benzene
- b) Iso – propyl benzene
- c) Styrene
- d) 1,4 Dipropyl benzene

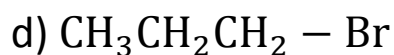
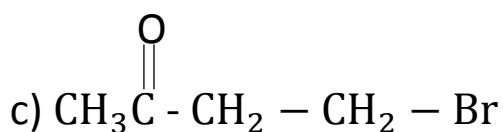
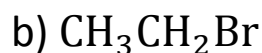
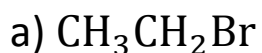
5) In the reaction  $\text{CH}_3\text{CH}_2\text{I} \xrightarrow[\text{KOH}]{\text{Alcoholic}} \text{X} \xrightarrow[\text{Bromine}]{\text{Br}_2} \text{Y} \xrightarrow[\text{alcoholic}]{\text{KCN}} \text{Z}$ .

Z is

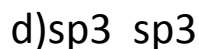
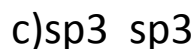
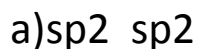
- a)  $\text{CH}_3\text{CH}_2\text{CN}$
- b)  $\text{CH}_2\text{BrCH}_2\text{CN}$



6) Among the following the most reactive towards alcoholic KOH is



9) 1.2 Dibromoethane when heated with alcoholic KOH gives the product X. The hybridization of carbon present in X is



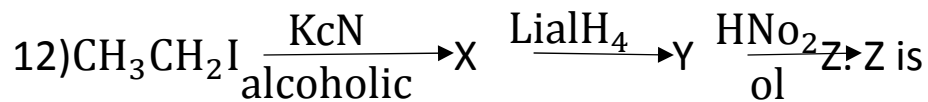
10) When ter-butyl chloride is treated with sodium methoxide, the major product formed is



11) Bromobenzene reacts with Mg in dry Ether to form X, X treated with ethanol gives y. y is



- c) Ethyl Benzene
- d) Phenyl Methyl Ether



- a)  $\text{CH}_3\text{CH}_2\text{NH}_2$
- b)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{NH}_2$
- c)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{OH}$
- d)  $\begin{array}{c} \text{CH}_3 - \text{CH} - \text{CH}_3 \\ | \\ \text{OH} \end{array}$

14) A mixture of the ethyl iodide and n-propyl iodide is subjected to Wurtz reaction. The compound which is not formed during the reaction

- a) Butane
- b) Hexane
- c) Pentane
- d) Propane

15)  $\text{SN}^2$  reaction is catalyzed by

- a)  $\text{OH}^-$
- b)  $\text{CN}^-$
- c)  $\text{ZnCl}_2$
- d)  $\text{NH}_2^-$

16)  $\text{CH}_3\text{Br} \xrightarrow[\text{HCOOH}]{\text{Aqueous}} \text{C}_6\text{H}_5\text{OH}$ . This reaction follows mechanism

- a)  $\text{SN}^2$
- b)  $\text{SN}^1$
- c) Both  $\text{SN}^1$  and  $\text{SN}^2$
- d)  $\text{E}^1$

19)  $\text{R}-\text{Cl} + \text{KF} \xrightarrow[6-\text{Ether}]{18\text{-crown}} \text{R}-\text{F} + \text{KCl}$ . This reaction is called

- a) Swats reaction
- b) Finkelstein reaction
- c) Hunsdicker reaction
- d) Groove's reaction

21) In the reaction  $\text{C}_6\text{H}_5\text{Cl} + \text{X} \rightarrow \text{C}_6\text{H}_5\text{CN}$ . X is

- a)  $\text{HCN}$
- b) Alc.  $\text{NaCN}$
- c)  $\text{CuCN} + \text{Pyridine}$
- d) Aqueous  $\text{KCN}$ .

22)  $\text{C}_6\text{H}_5\text{Br} + 2[\text{H}] \xrightarrow{\text{X}} \text{C}_6\text{H}_6 + \text{Br.X}$  is

- a)  $\text{Na} + \text{alcohol}$
- b)  $\text{Zn} + \text{Dilute HCl}$
- c)  $\text{Ni} + \text{Al} + \text{NaOH}$
- d)  $\text{LiAlH}_4$

25) Hunsdiecker reaction is not useful in the preparation of

- a)  $\text{CH}_3\text{Br}$
- b)  $\text{C}_2\text{H}_5\text{Br}$
- c)  $\text{CH}_3\text{CH}_2\text{CH}_2\text{Br}$
- d)  $\text{C}_2\text{H}_3\text{I}$

28) Per fluoroolecalin is used as

- a) Antiseptic
- b) Explosive
- c) Blood substitute
- d) Hypnotic

30) The base used in the elimination reaction in comparison with their strength

- a)  $\text{OH}^- > \text{C}_2\text{H}_5\text{O}^- > \text{NH}_2^- > \text{CH}_3 - \underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}} - \text{O}^-$
- b)  $\text{NH}_2^- > \text{CH}_3\text{CH}_3 - \underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}} - \text{O}^- > \text{C}_2\text{H}_5\text{O}^- > \text{OH}^-$
- c)  $\text{NH}_2^- > \text{OH}^- > \text{C}_2\text{H}_5\text{O}^- > \text{CH}_3 - \underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}} - \text{O}^-$

