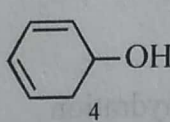
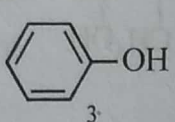
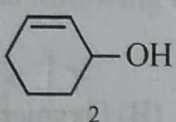
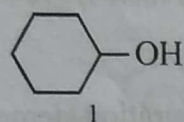


(D) None of these

2. Correct order of dehydration of following alcohols will be :



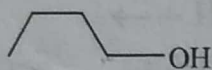
(A) $1 < 2 < 3 < 4$

(B) $4 > 3 > 1 > 2$

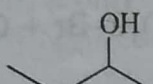
(C) $4 > 2 > 1 > 3$

(D) $1 > 3 > 4 > 2$

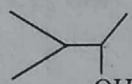
3. Dehydration of the alcohols



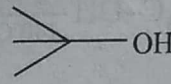
(I)



(II)



(III)



(IV)

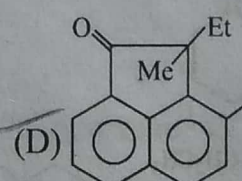
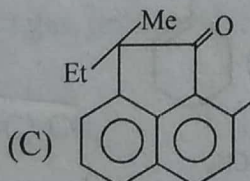
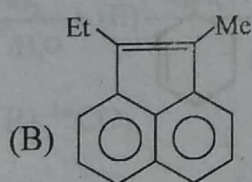
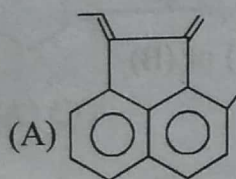
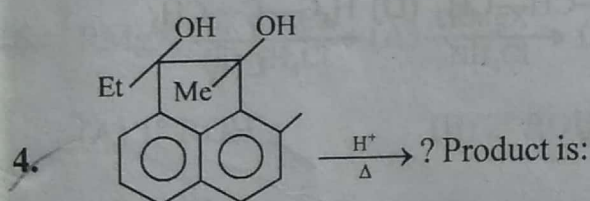
What will be the order of rate of reaction ?

(A) $\text{IV} > \text{III} > \text{II} > \text{I}$

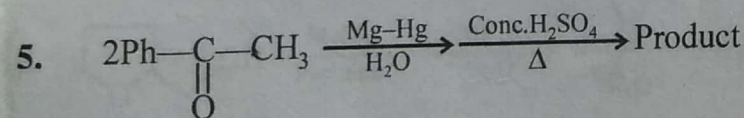
(B) $\text{I} > \text{II} > \text{III} > \text{IV}$

(C) $\text{IV} > \text{II} > \text{III} > \text{I}$

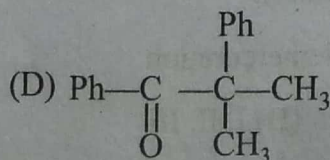
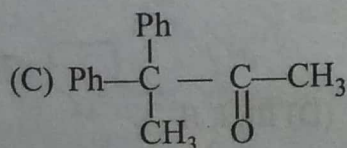
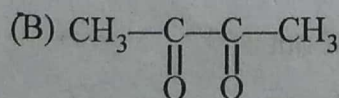
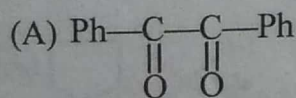
(D) $\text{II} > \text{IV} > \text{I} > \text{III}$



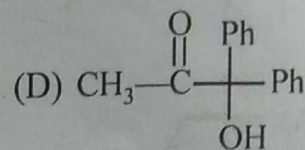
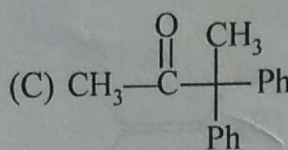
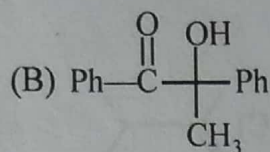
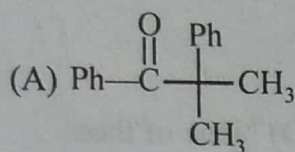
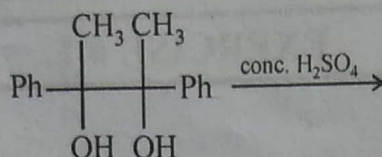
SBG STUDY



The main product is :



6. Find out major product of following reaction.



7. $\text{H}_3\text{C}-\underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}}-\text{CH}=\text{CH}_2 \longrightarrow \text{H}_3\text{C}-\underset{\text{CH}_3}{\overset{\text{CH}_3}{\text{C}}}-\underset{\text{CH}_3\text{OH}}{\text{CH}}-\text{CH}_3$, This interconversion can be achieved by :

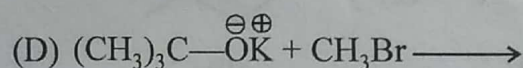
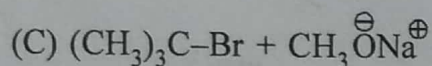
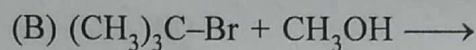
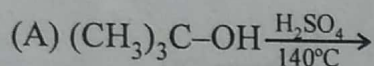
(A) Acid catalysed hydration

(B) Oxymercuration-demercuration

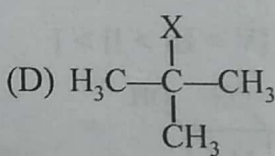
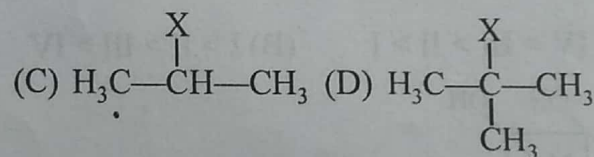
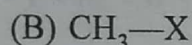
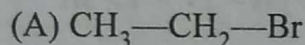
(C) Hydroboration - oxidation

(D) Any method mentioned above

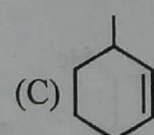
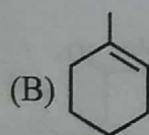
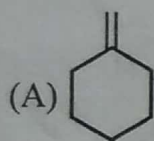
8. Which of the following reactions would give the best yield of t-butyl methyl ether ?



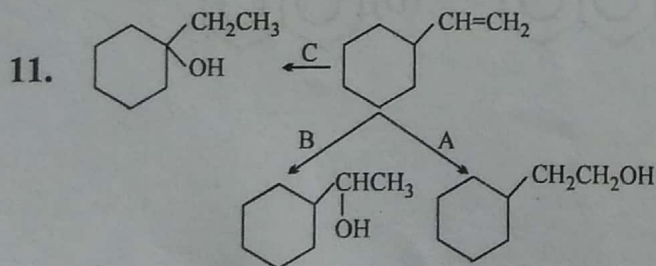
9. Sodium tertiary butoxide forms ether only with :



10. A $\xrightarrow[\text{(ii) NaBH}_4, \text{OH}^-]{\text{(i) Hg(OAc)}_2, \text{HOH}}$ 1-Methylcyclohexanol. Here A is :



(D) (A) or (B)



Select schemes A, B, C out of

(I) Acid catalysed hydration

(II) HBr

(III) Oxymercuration-demercuration

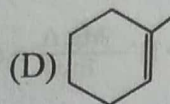
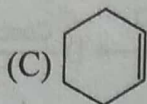
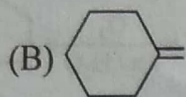
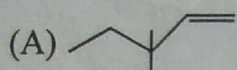
(A) I in all cases

(B) I, II, III

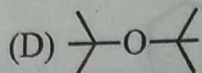
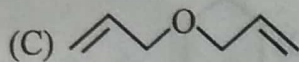
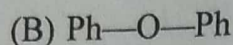
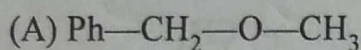
(C) II, III, I

(D) III, I, II

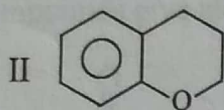
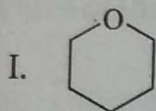
12. HBO, oxymercuration-demercuration and acid catalysed hydration will give same product in



13. Which of the following ethers is the most unreactive to cleavage with conc. HBr ?



14. Consider the reaction of HI with the following :



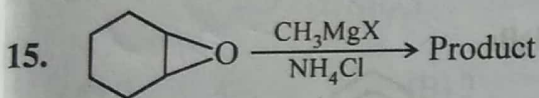
Which forms di-iodide on reaction with HI (excess)?

(A) I and II both

(B) II only

(C) I only

(D) none



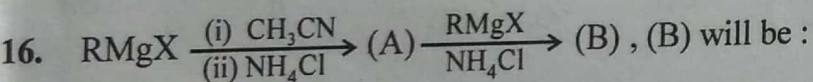
What is the product ?

(A) Enantiomer

(B) Diastereoisomer

(C) Meso

(D) Achiral

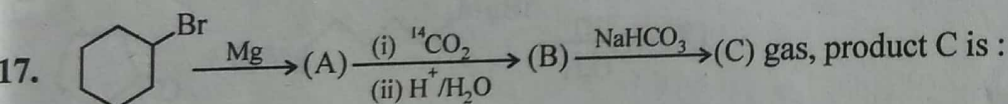


(A) 1° ROH

(B) 2° ROH

(C) 3° ROH

(D) Alkene

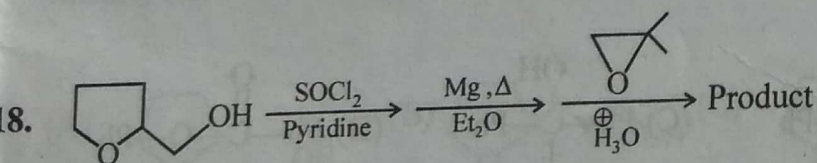


(A) CO

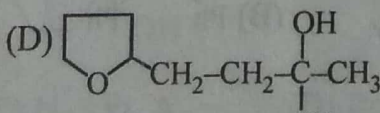
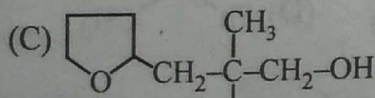
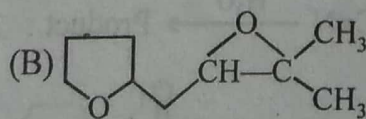
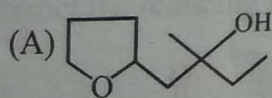
(B) $^{14}\text{CO}_2$

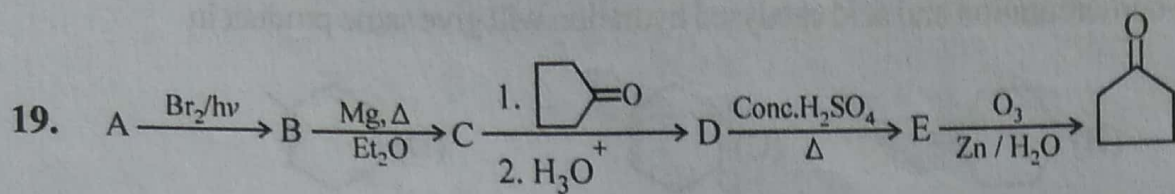
(C) CO_2

(D) A mixture $^{14}\text{CO}_2$ and CO_2

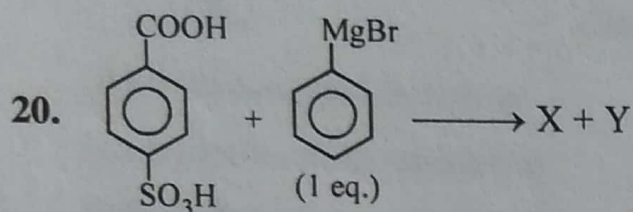
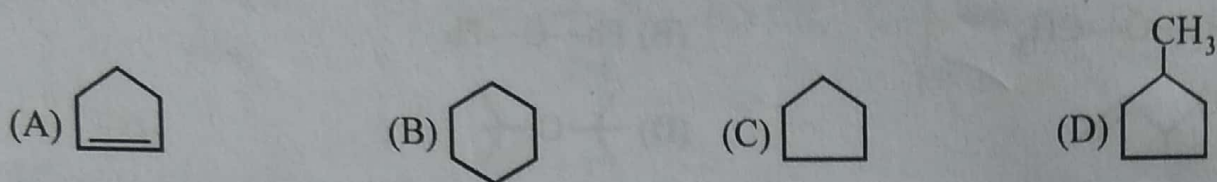


Product of reaction is :

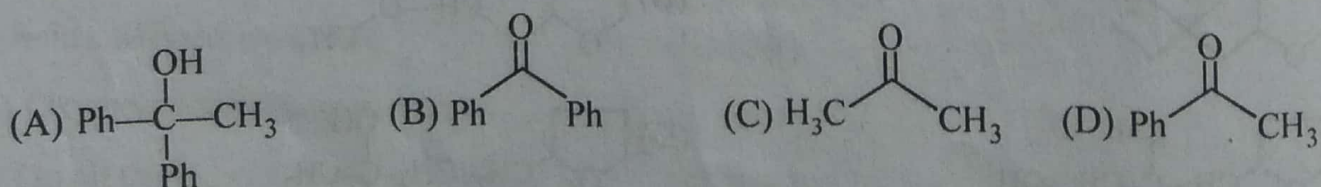
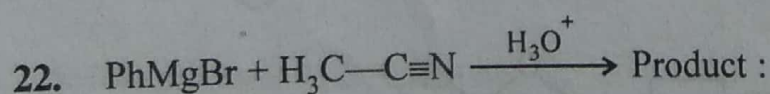
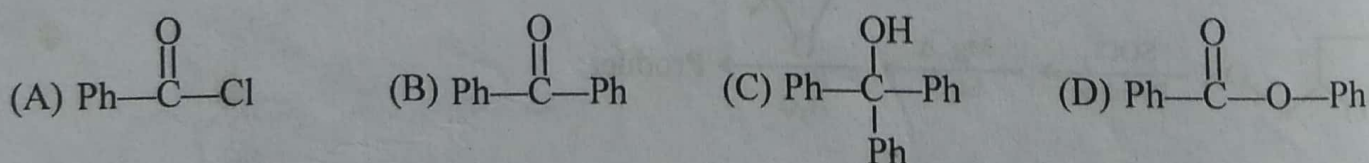
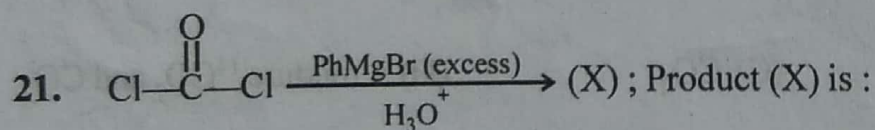
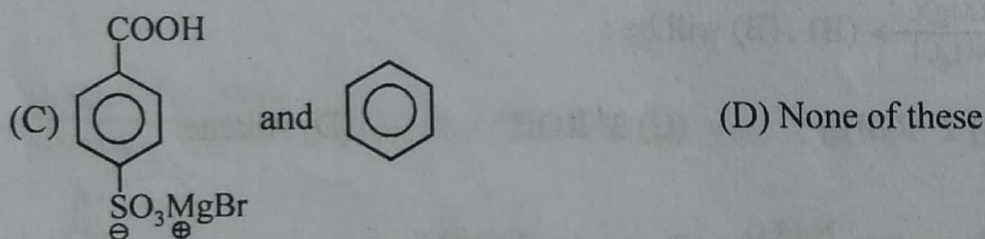


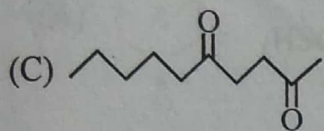
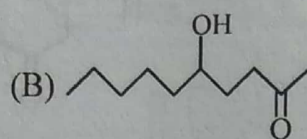
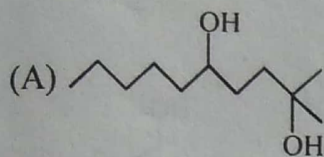
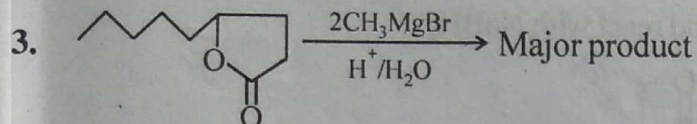


Find out the structure of 'A' :



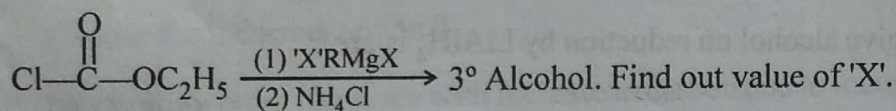
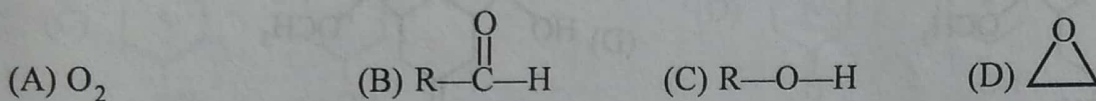
X and Y are respectively :



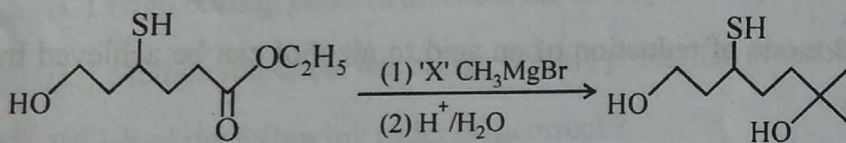


(D) No reaction

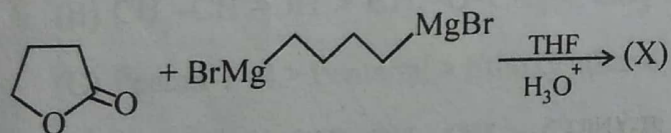
1. Which of the following compounds give alcohol on reaction with RMgX ?



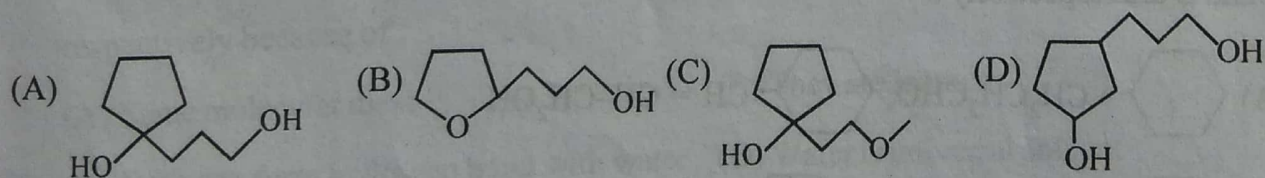
(A) 2 (B) 3 (C) 4 (D) 1



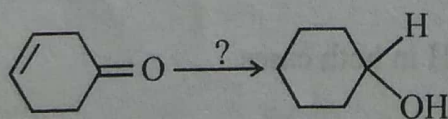
(A) 2 (B) 3 (C) 4 (D) 5



Identify (X):

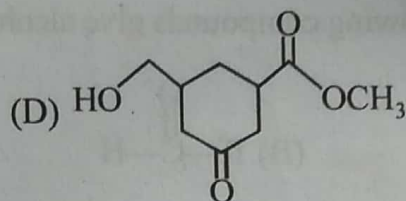
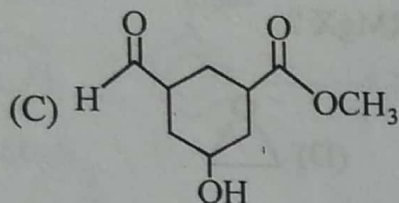
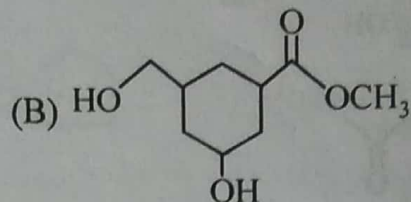
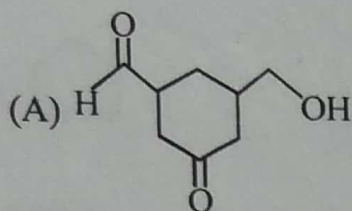
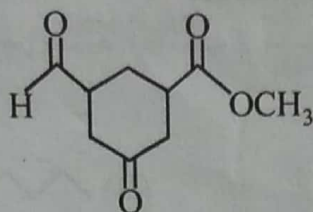


5. Predict the reducing agents in following reaction.

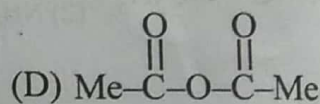
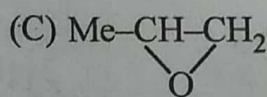
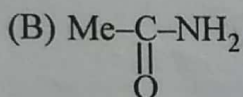
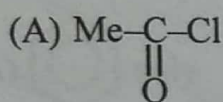


(A) LiAlH_4 (B) NaBH_4 (C) $\text{H}_2 / \text{Pt}, \Delta$ (D) Both (A) and (B)

29. Find out the product when the following compound react with NaBH_4 :



30. Compound which does not give alcohol on reduction by LiAlH_4 is/are ?



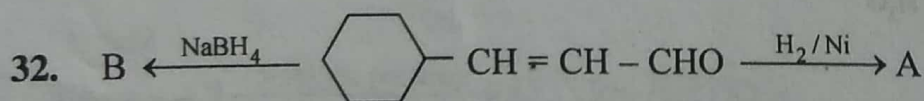
31. $\text{R}-\text{COOH} \rightarrow \text{R}-\text{CH}_2\text{OH}$. This mode of reduction of an acid to alcohol can be achieved by

(A) $\text{Zn}(\text{Hg})$, HCl

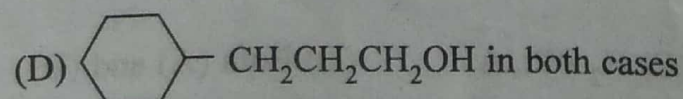
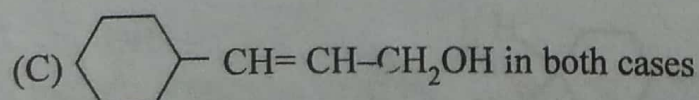
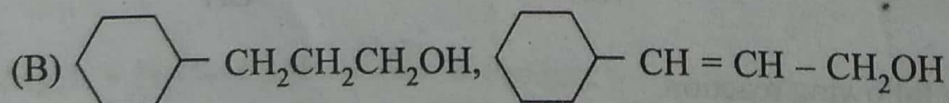
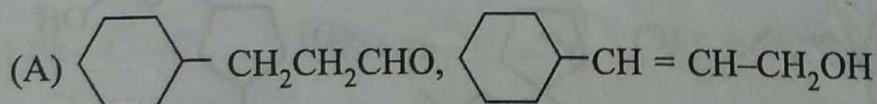
(B) Na -alcohol

(C) Aluminium isopropoxide and isopropyl alcohol

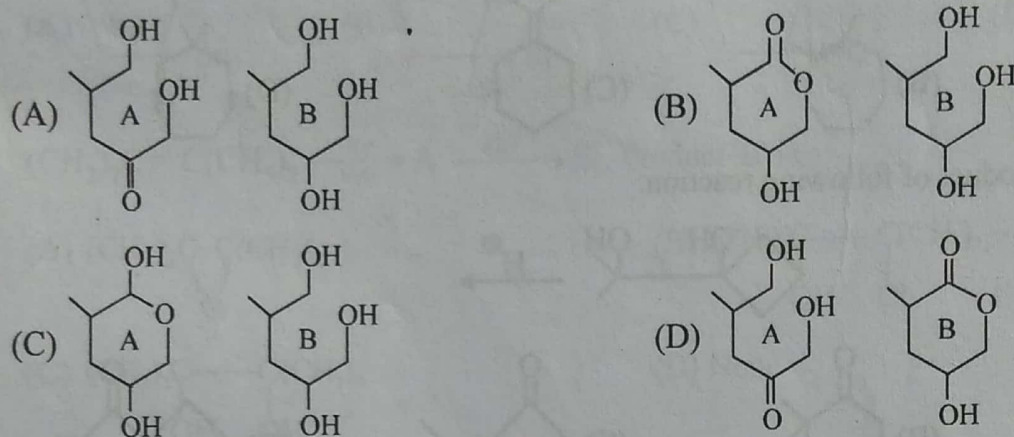
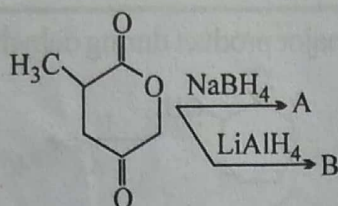
(D) LiAlH_4



A and B are respectively :



33. Predict major organic product from the following reaction:



34. Choose the incorrect option ?

- (A) Boiling point increases with increase in carbon due to increase in vander wall forces
- (B) Branching in carbon decreases the boiling point
- (C) High boiling point of alcohols are mainly due to pressure of intermolecular H-bonding
- (D) Methoxymethane has higher boiling point than ethanol & propane

35. Which of the following order is incorrect ?

- (A) $\text{CH}_3\text{-CH}_2\text{-OH} > \text{CH}_3\text{-CH}_2\text{-CH}_2\text{-OH} > \text{CH}_3\text{-CH}_2\text{-CH}_2\text{-CH}_2\text{-OH}$ (Solubility in H_2O)
- (B) $\text{CH}_3\text{-CH}_2\text{-OH} > \text{CH}_3\text{-O-CH}_3 > \text{CH}_3\text{-CH}_2\text{-CH}_3$ (Boiling point)
- (C) Pentan-1-ol > Pentanal > Ethoxy ethane (Boiling point)
- (D) $\text{CH}_3\text{-OH} > \text{CH}_3\text{-CH}_2\text{-OH} > \text{CH}_3\text{-CH}_2\text{-CH}_2\text{-OH}$ (Boiling point)

36. Ethoxyethane & butan-1-ol are miscible to almost same extent (7.5 & 9 gm per 100 ml water respectively because of :

- (A) Same molecular mass
- (B) They are isomers
- (C) Both can form hydrogen bond with water
- (D) Water is universal solvent