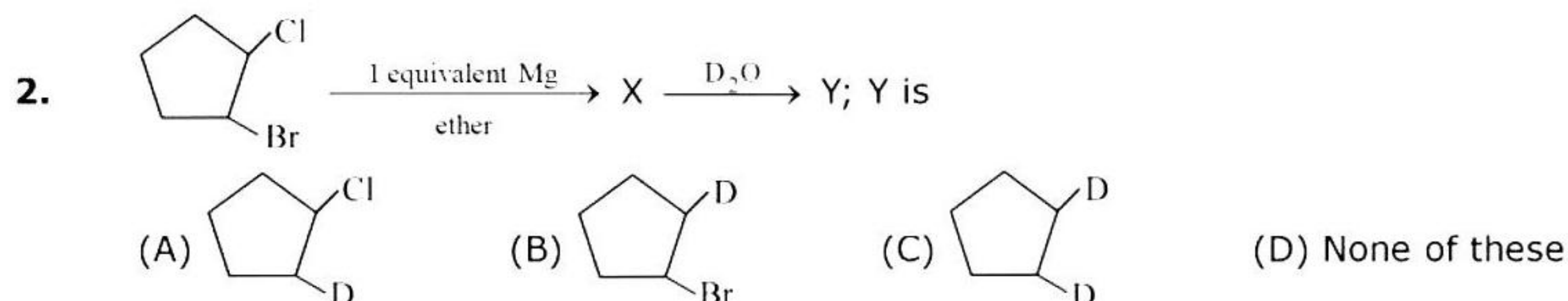


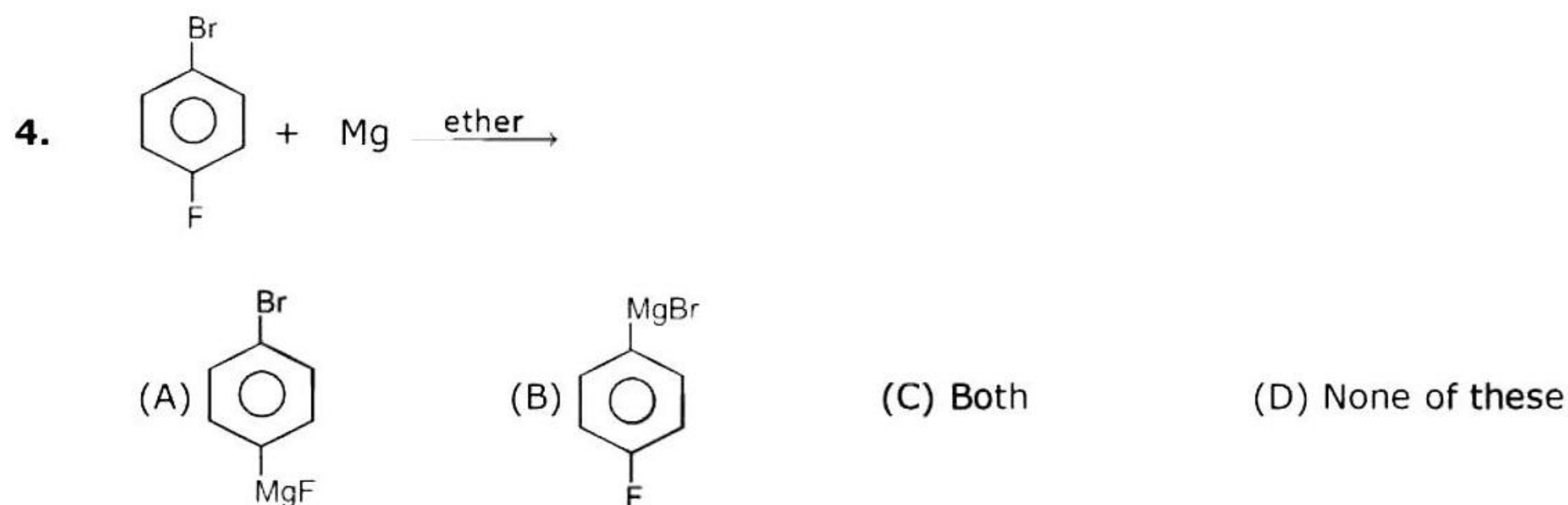
GRIGNARD REAGENT

DPP - 1

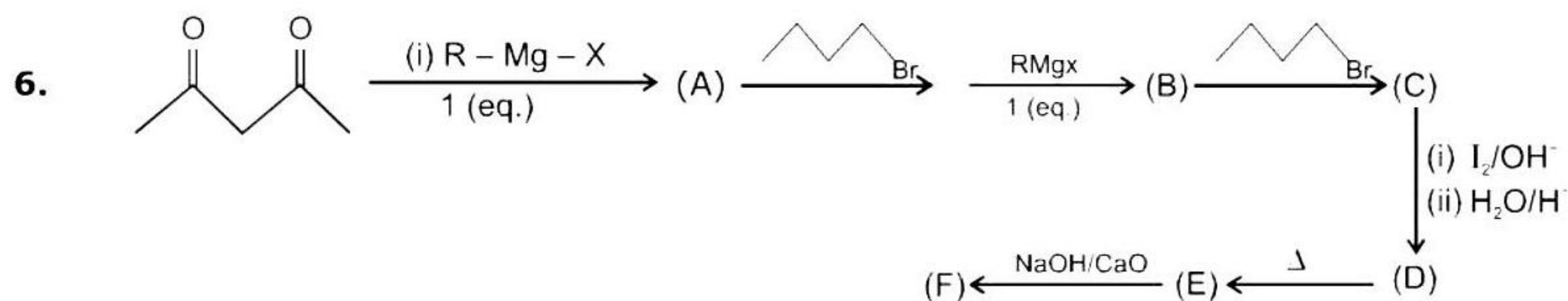
1. The order of reactivity of alkyl halide in the reaction $R-X + Mg \longrightarrow RMgX$ is
 (A) $RI > RBr > RCl$ (B) $RCl > RBr > RI$
 (C) $RBr > RCl > RI$ (D) $RBr > RI > RCl$



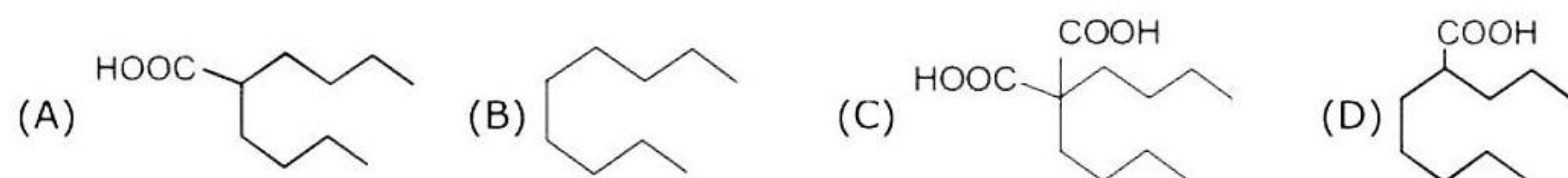
3. $C_6H_5COOH + CH_3MgI \longrightarrow ?$
 (A) $C_6H_5COOMgI$ (B) CH_4 (C) Both A & B (D) none

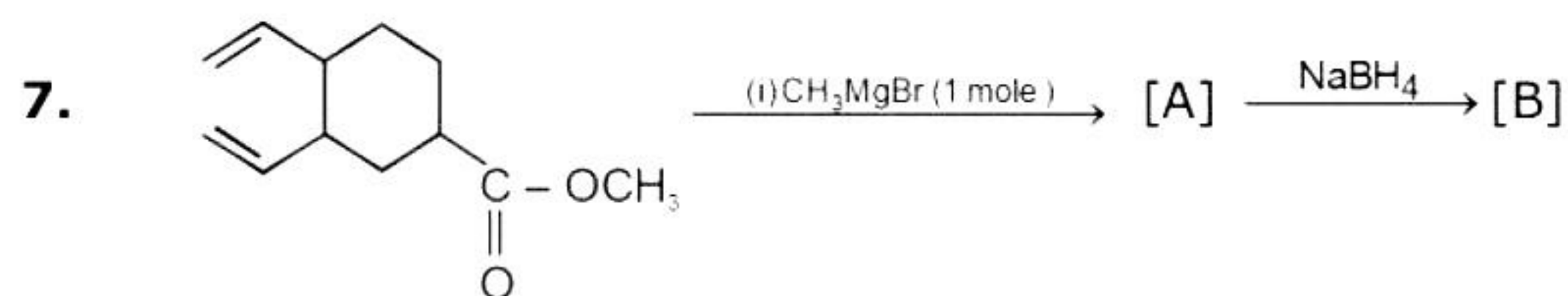


5. $R-Br \xrightarrow{Mg/ether} A \xrightarrow{D_2O} CH_3CH_2D$, $R-Br$ by Wurtz reaction forms :
 (A) $CH_3CH_2CH_2CH_3$
 (B) $CH_3CH_2CH_2CH_3$, CH_3CH_3
 (C) $CH_3CH_2CH_2CH_3$, CH_3CH_3 , $CH_2=CH_2$
 (D) $CH_3CH_2CH_2CH_3$, $CH_2=CH_2$

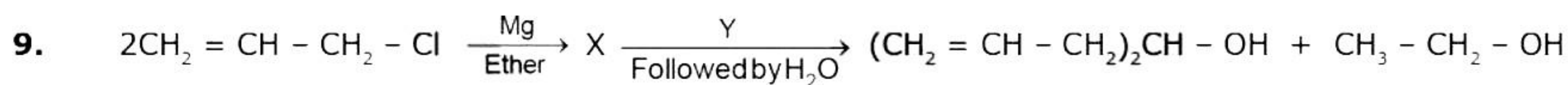
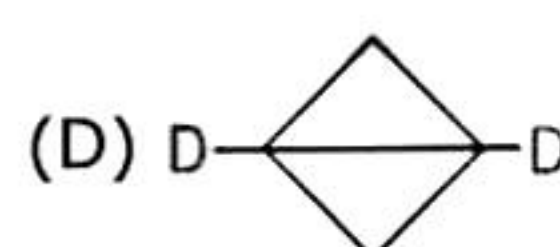
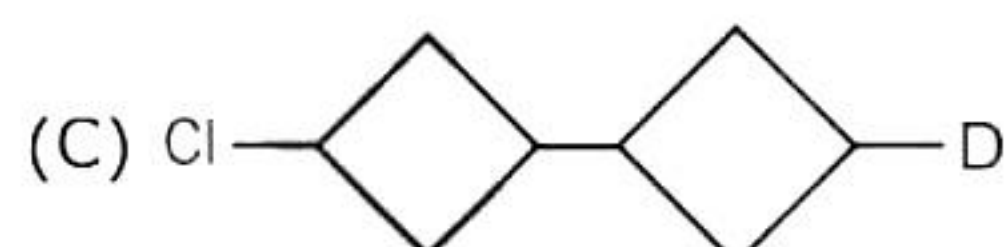
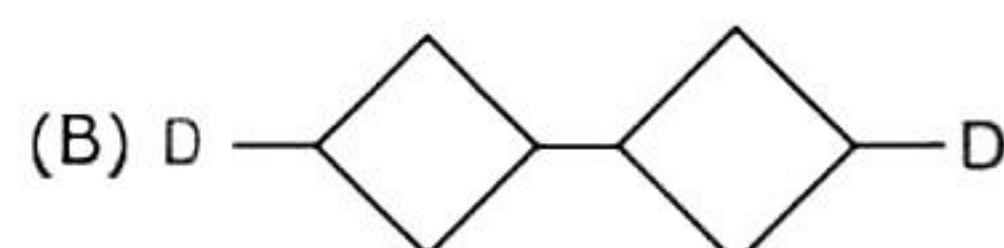
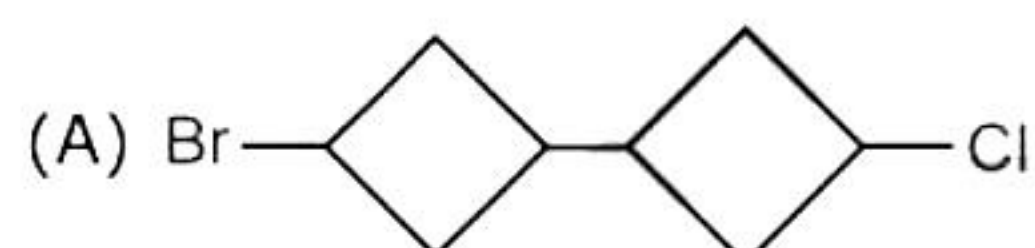
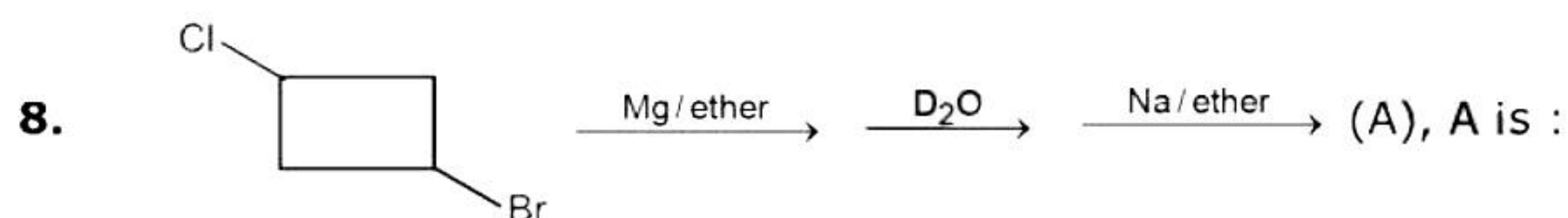
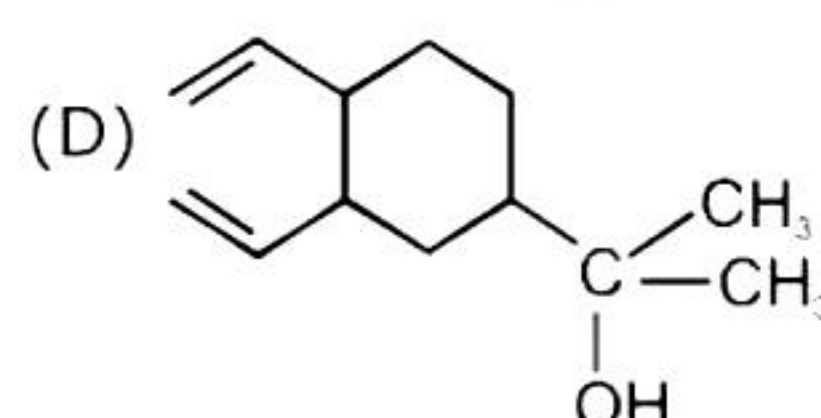
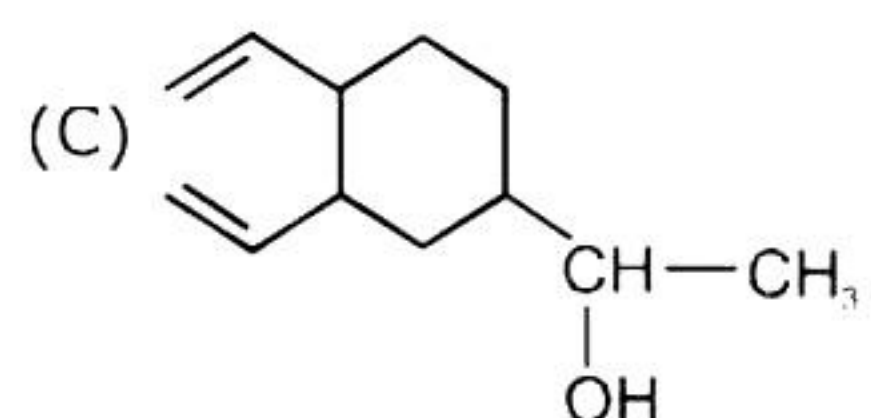
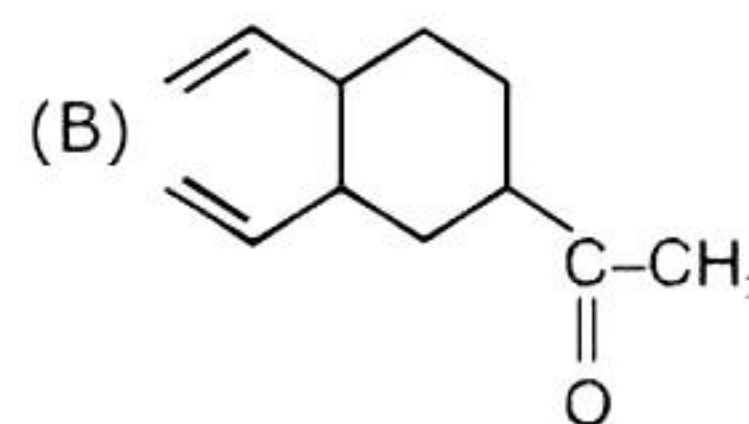
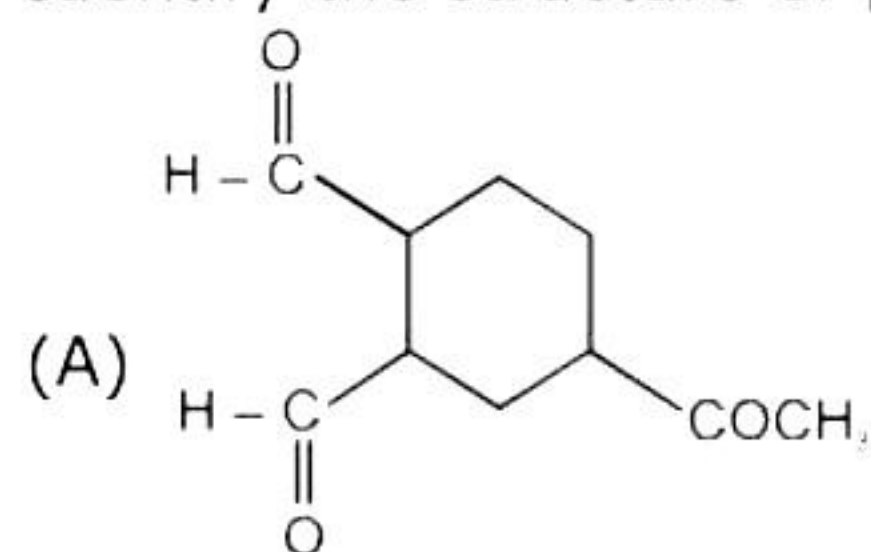


Identify the structure of 'E'.





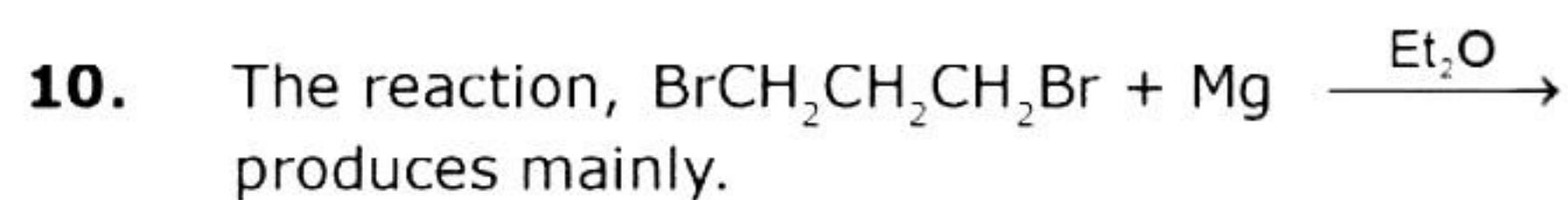
Identify the structure of [B] in following sequence of reactions.



In the above chemical reaction, Y may be

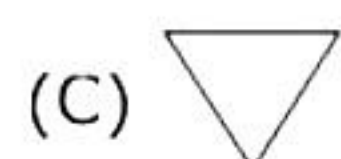
- (A) Ethyl formate
(C) Isopropyl methanoate

- (B) Methyl formate
(D) Ethanoylchloride



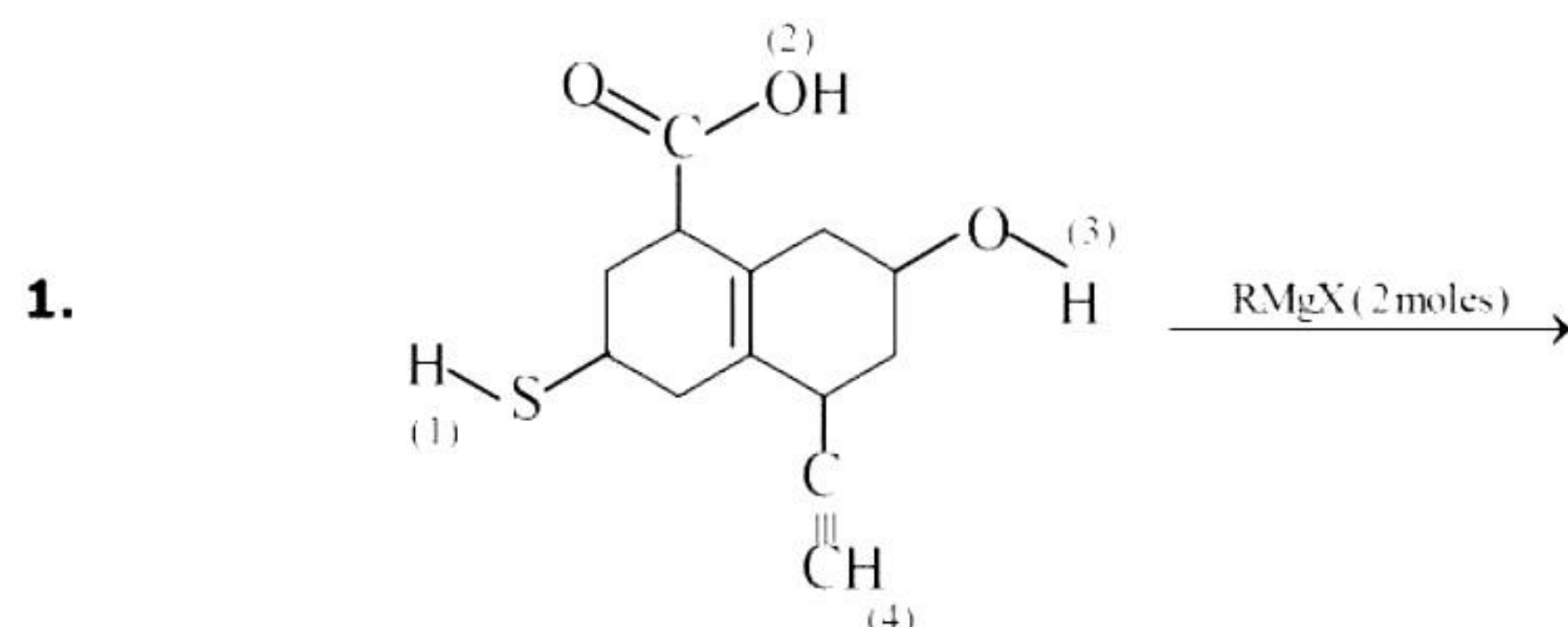
- (A) $\text{CH}_3\text{CH}_2\text{CH}_3$

- (B) $\text{BrMgCH}_2\text{CH}_2\text{CH}_2\text{MgBr}$



- (D) $\text{CH}_3\text{CH}=\text{CH}_2$

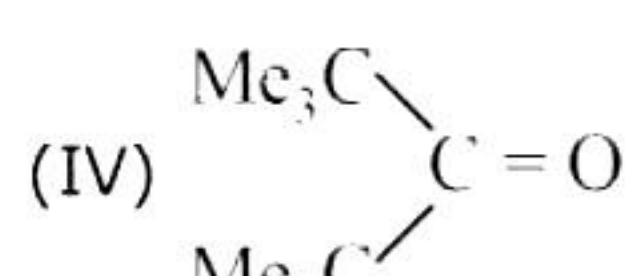
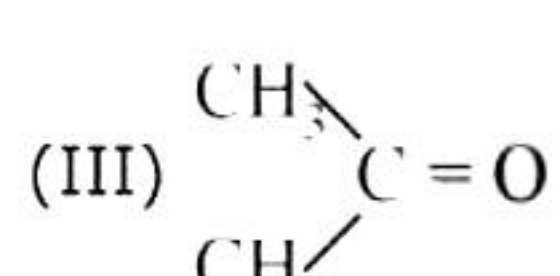
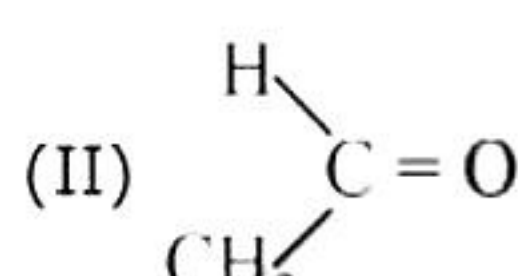
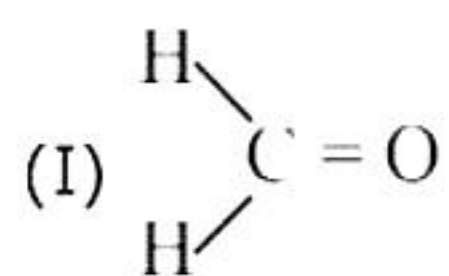
GRIGNARD REAGENT DPP - 2



Deprotonation will occur from the following positions:

- (A) 1,2 (B) 1,3 (C) any two positions (D) 1,4

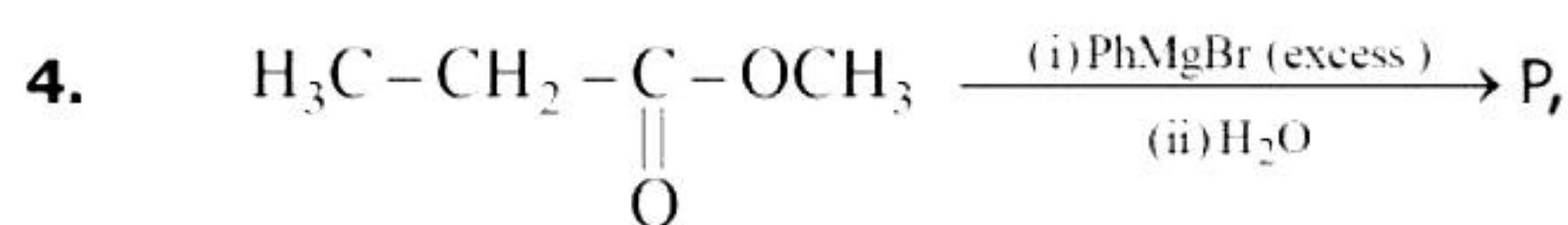
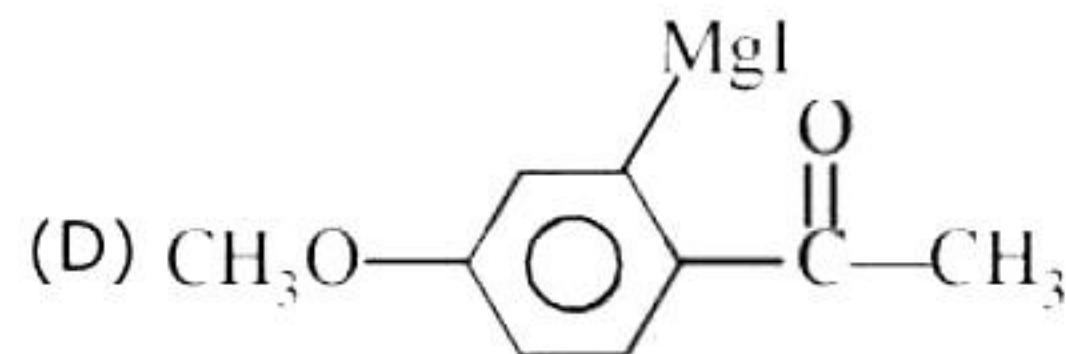
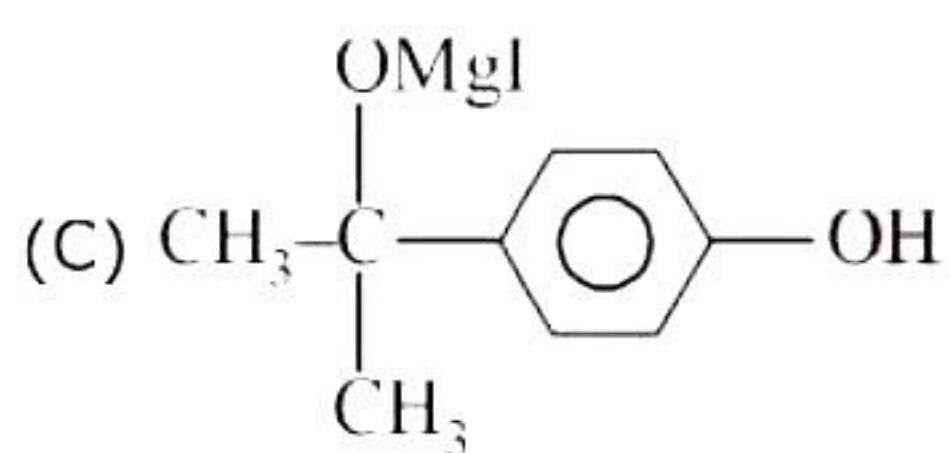
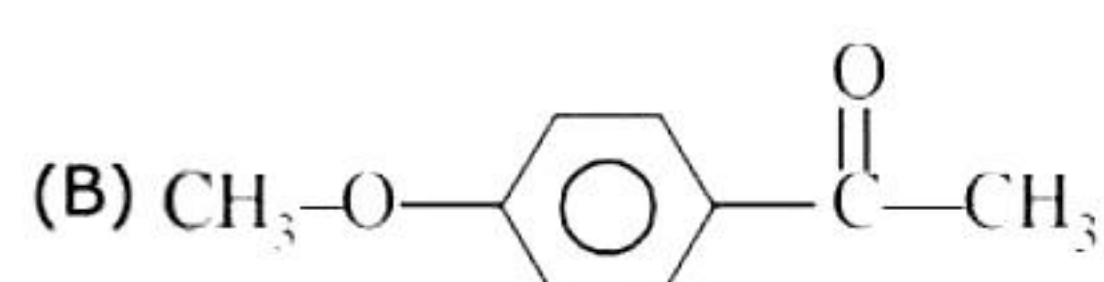
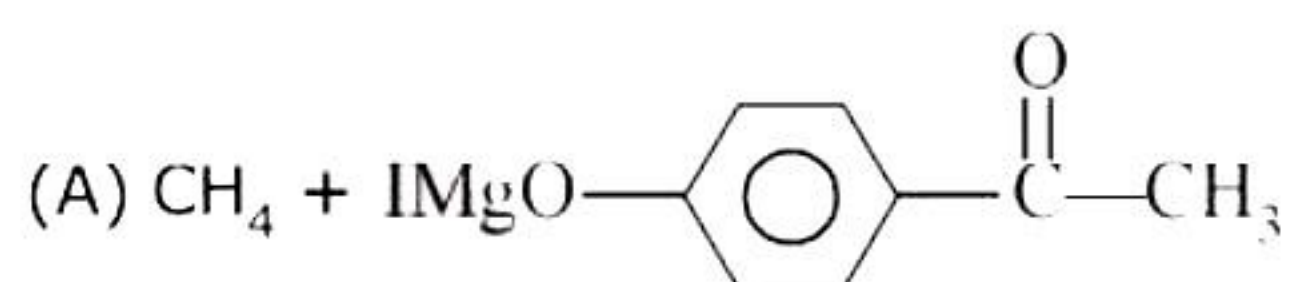
2. What will be the order of reactivity of the following carbonyl compounds with Grignard's reagent?



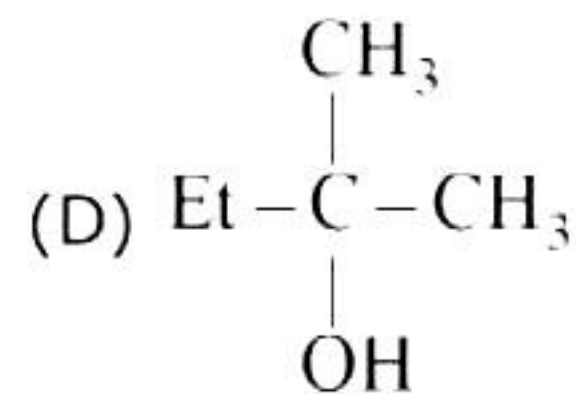
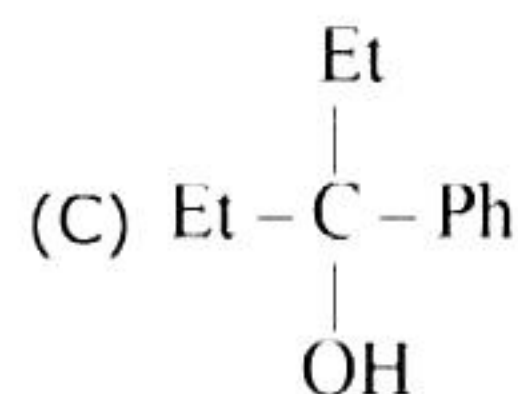
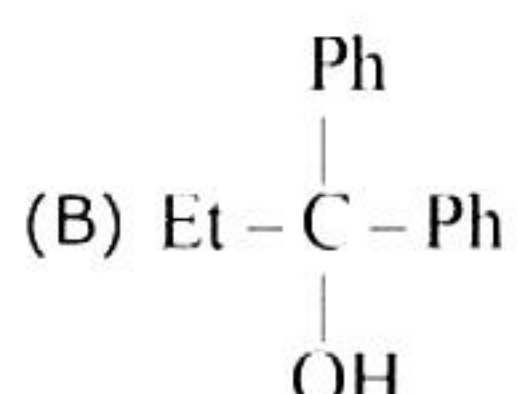
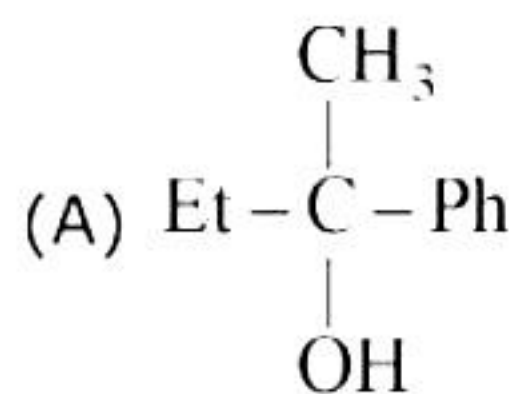
- (A) I > II > III > IV
(C) II > I > IV > III

- (B) IV > III > II > I
(D) III > II > I > IV

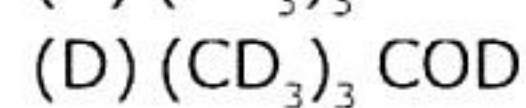
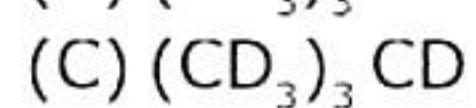
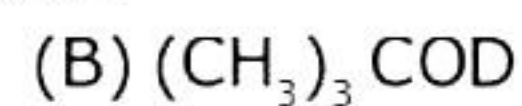
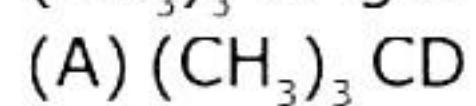
3. The reaction of 1 mole each of p-hydroxy acetophenone and methyl magnesium iodide will give

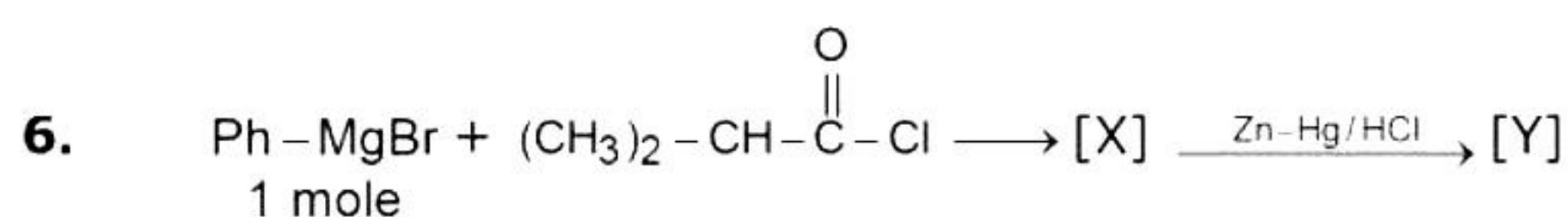


P is :

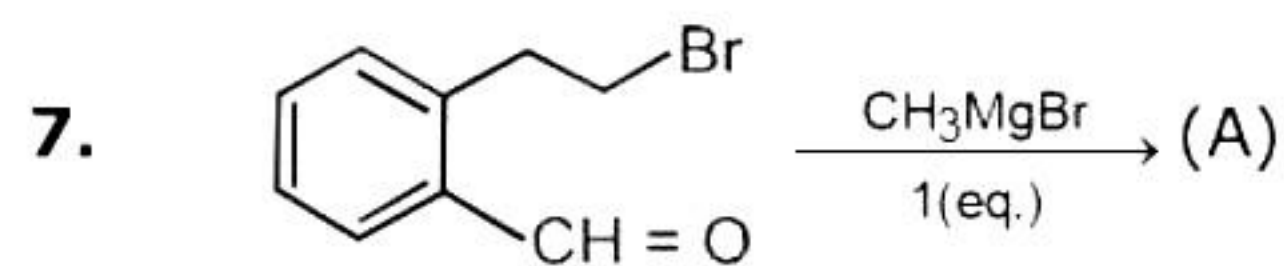
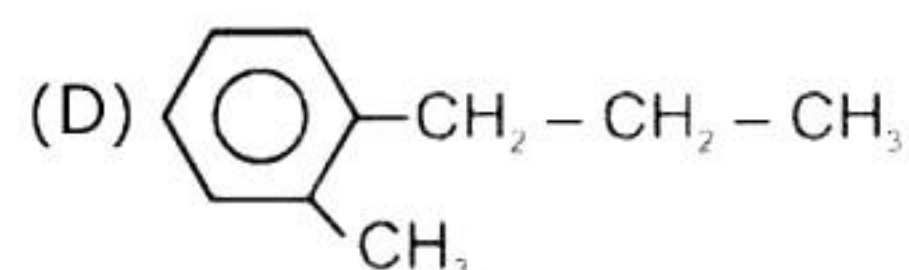
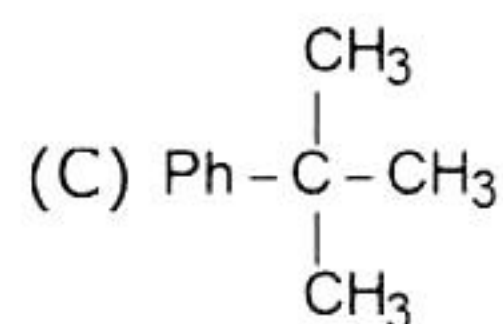
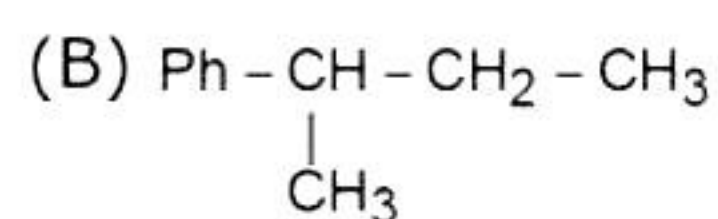
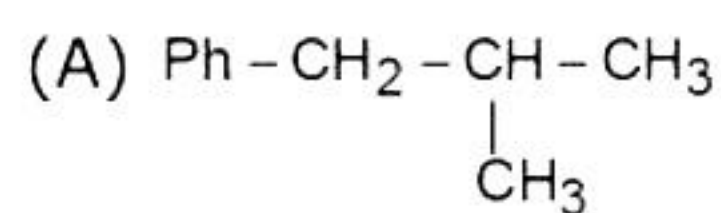


5. $(\text{CH}_3)_3\text{CMgCl}$ on reaction with D_2O , produces :

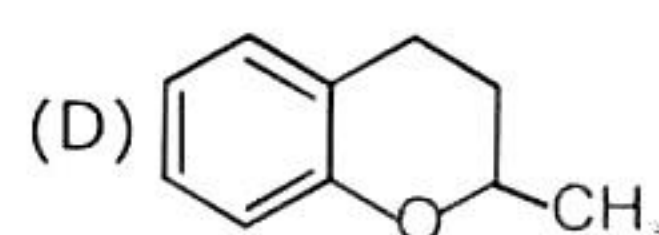
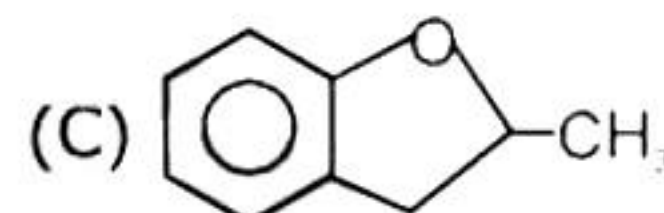
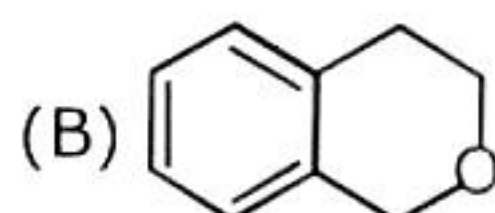
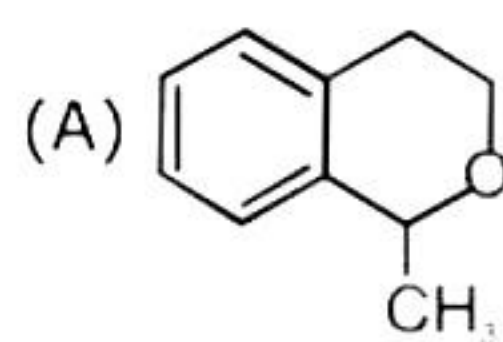




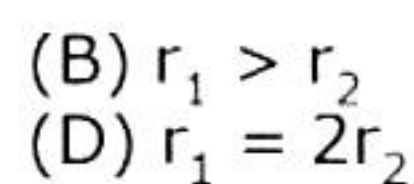
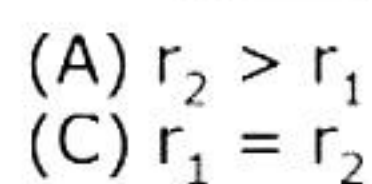
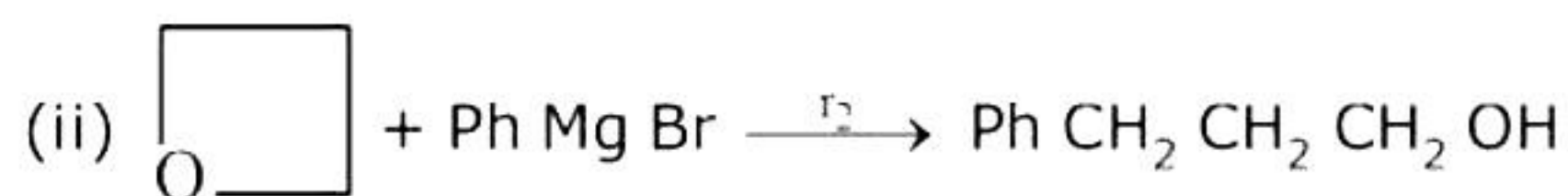
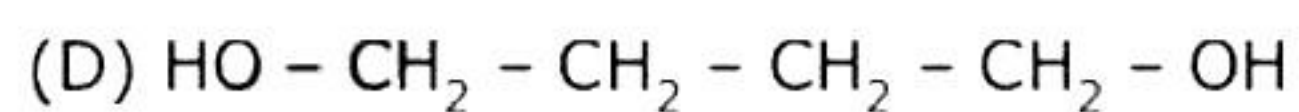
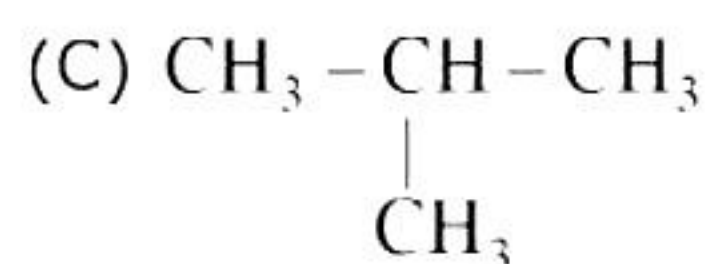
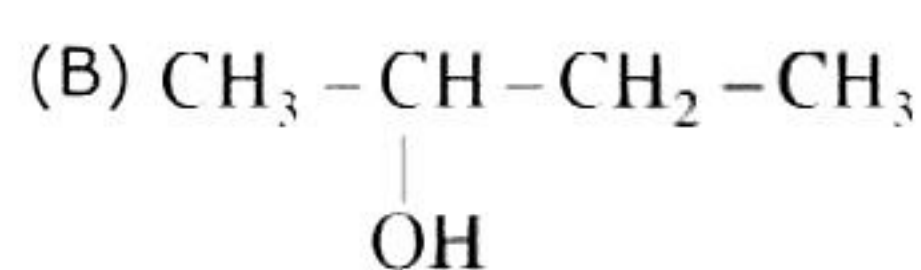
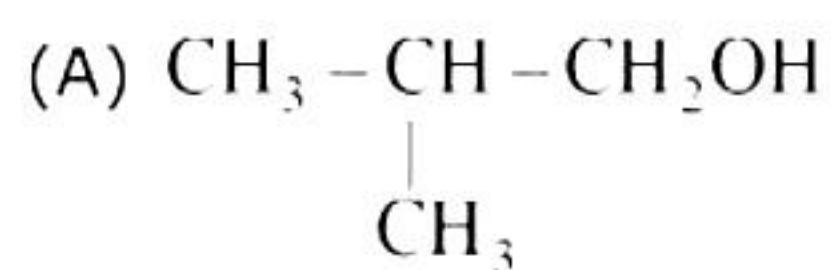
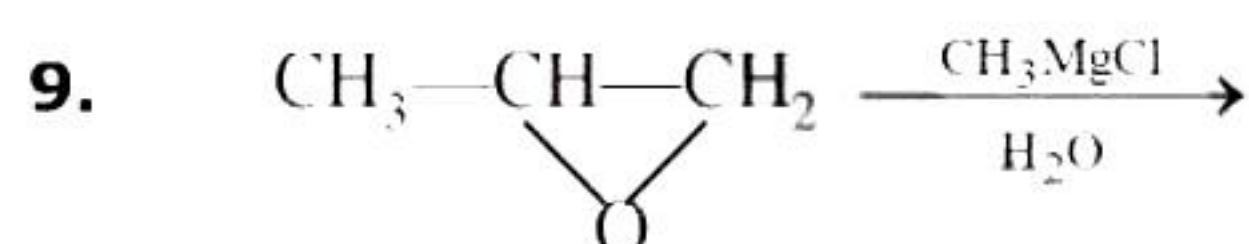
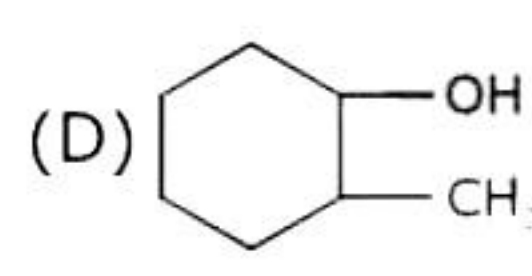
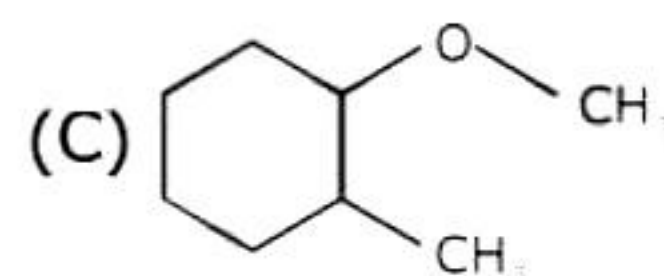
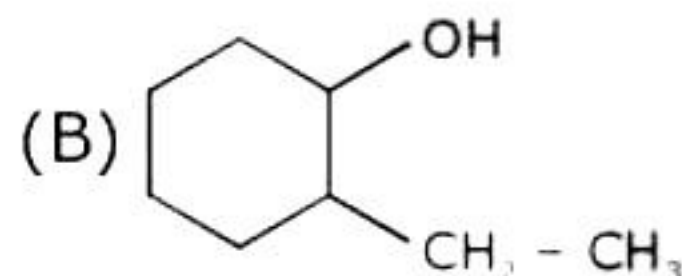
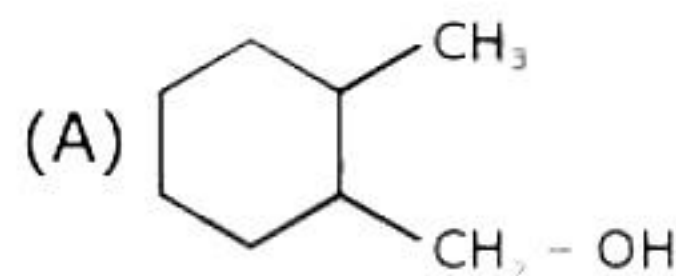
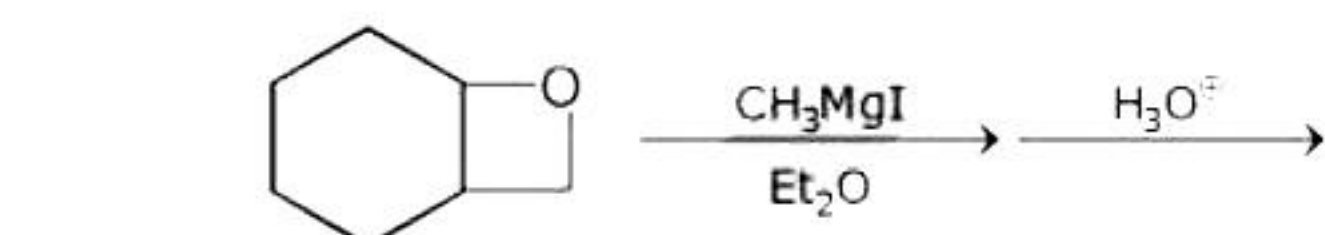
Identify structure of [Y].



Identify A



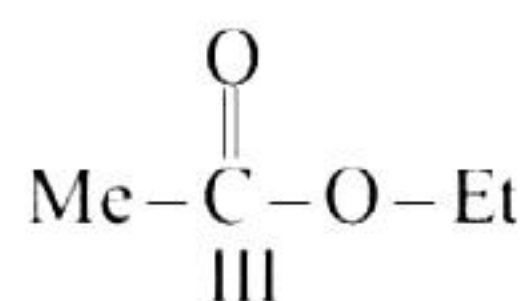
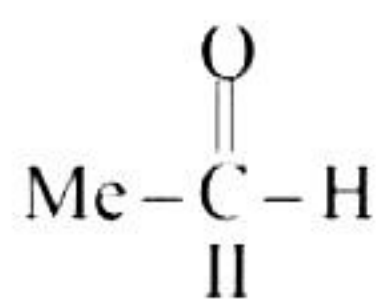
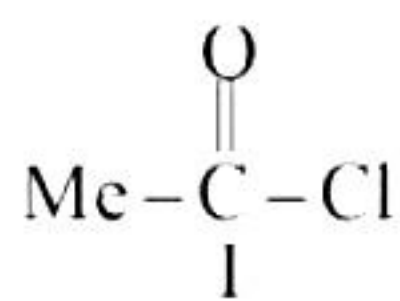
8. What is the major product of the following reaction?



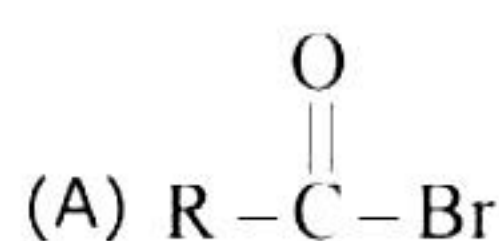
GRIGNARD REAGENT

DPP - 3

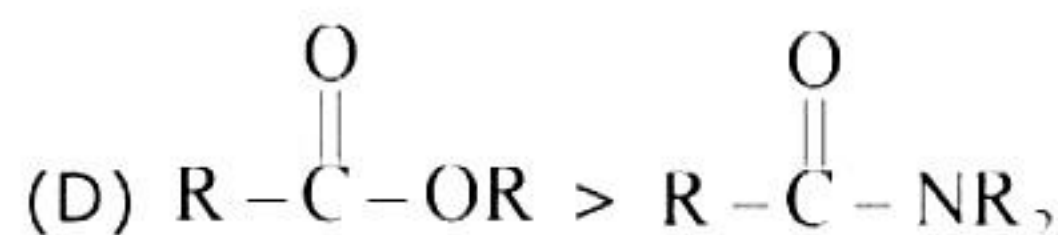
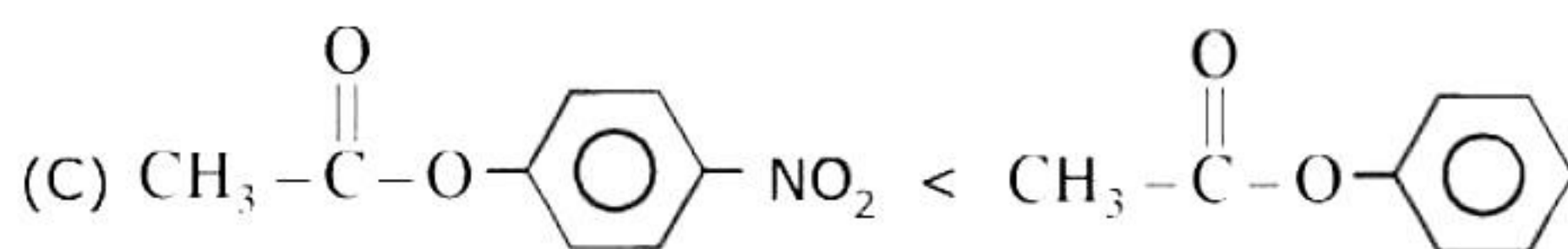
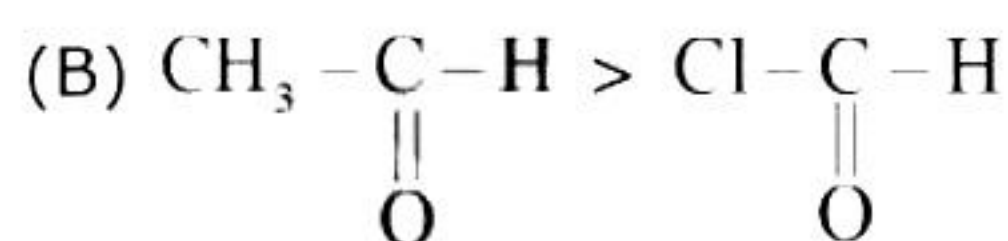
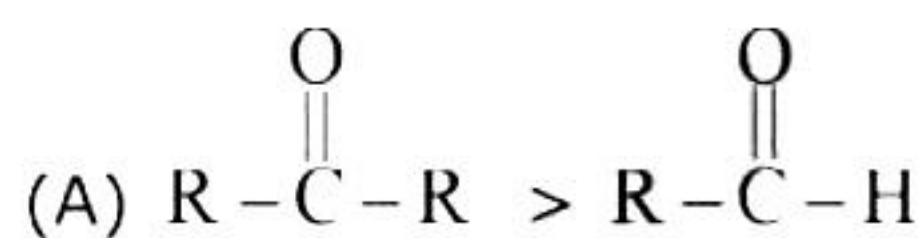
1. Order of rate of reaction of following compound with phenyl magnesium bromide is:



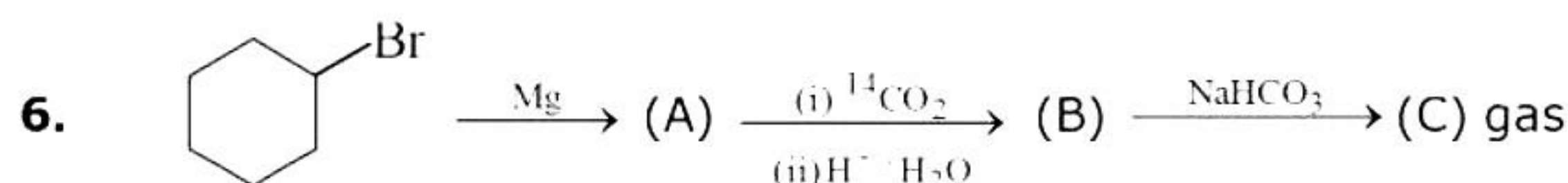
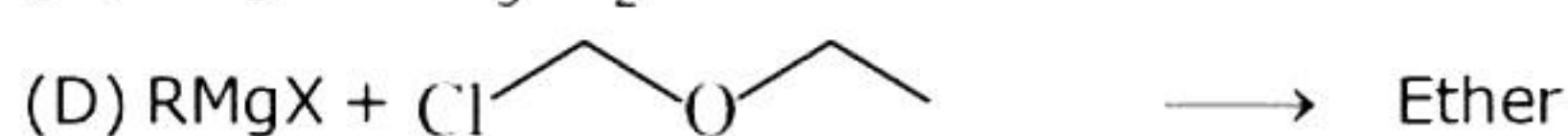
- (A) I > II > III (B) II > III > I (C) III > I > II (D) II > I > III
2. Select the correct order of decreasing reactivity of the following compounds towards the attack of Grignard reagent
 (I) Methyl benzoate (II) Benzaldehyde (III) Benzoylchloride (IV) Acetophenone
 (A) II > III > I > IV (B) III > IV > II > I
 (C) III > II > IV > I (D) II > IV > I > III
3. Which of the following reacts faster with RMgX.



4. Select the correct order of reactivity towards Grignard reagent for nucleophilic attack.



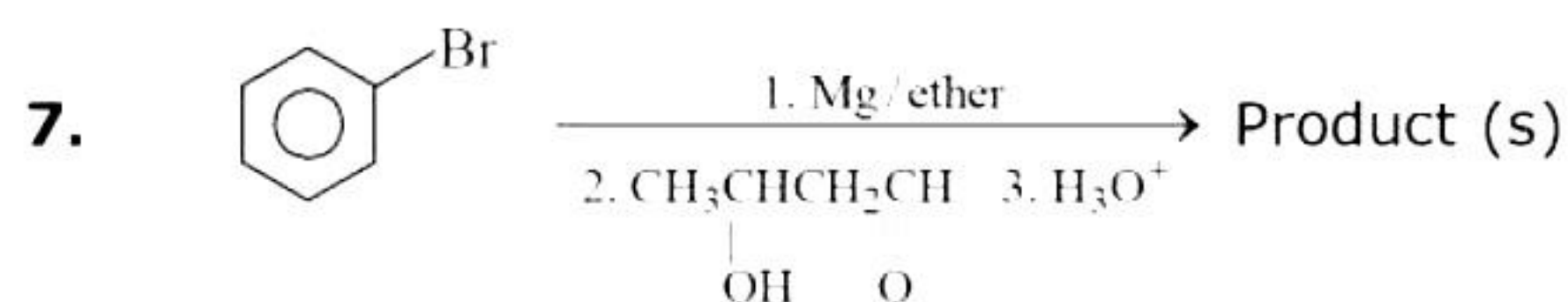
5. In which one of the following reaction products are not correctly matched in



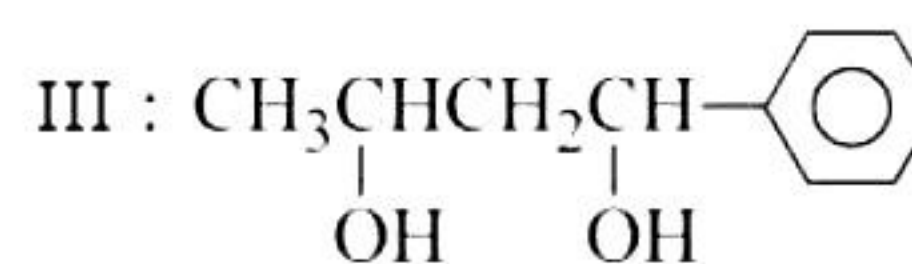
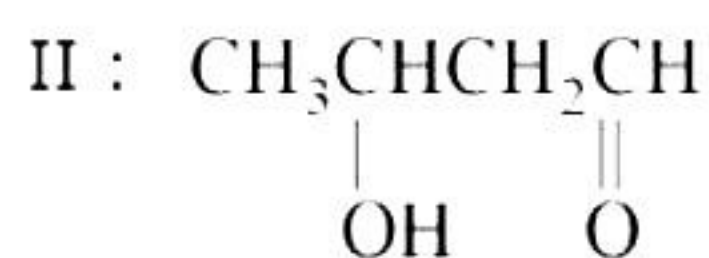
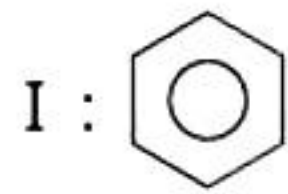
Product C is

- (A) CO
(C) CO₂

- (B) ¹⁴CO₂
(D) A mixture of ¹⁴CO₂ and CO₂



Select the product from the following

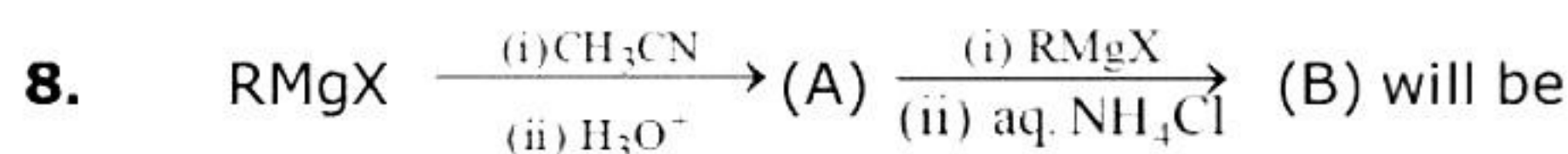


(A) III

(B) I, III

(C) I, II

(D) II, III

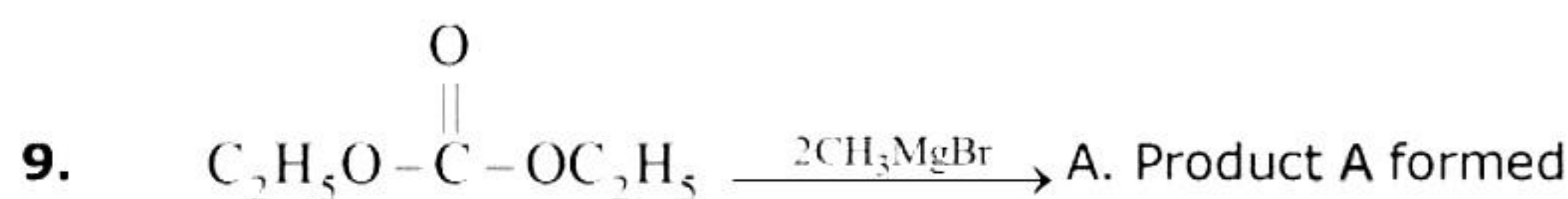


(A) 1° ROH

(B) 2° ROH

(C) 3° ROH

(D) Alkene



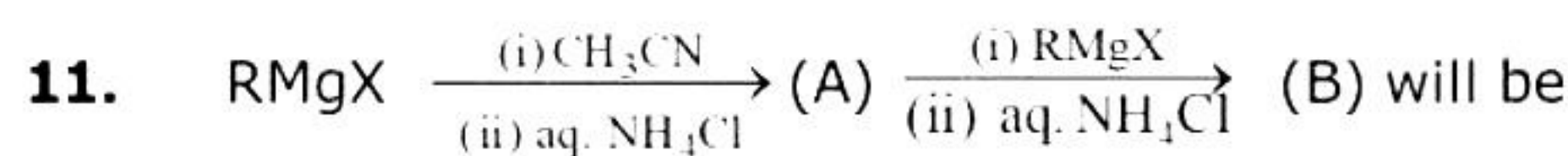
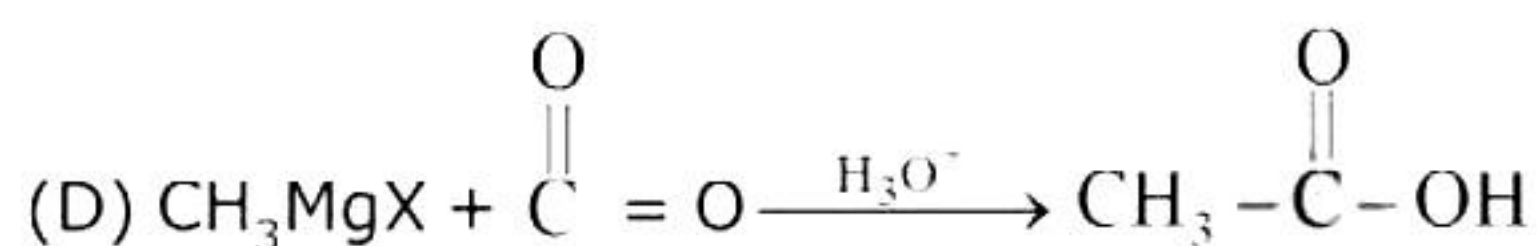
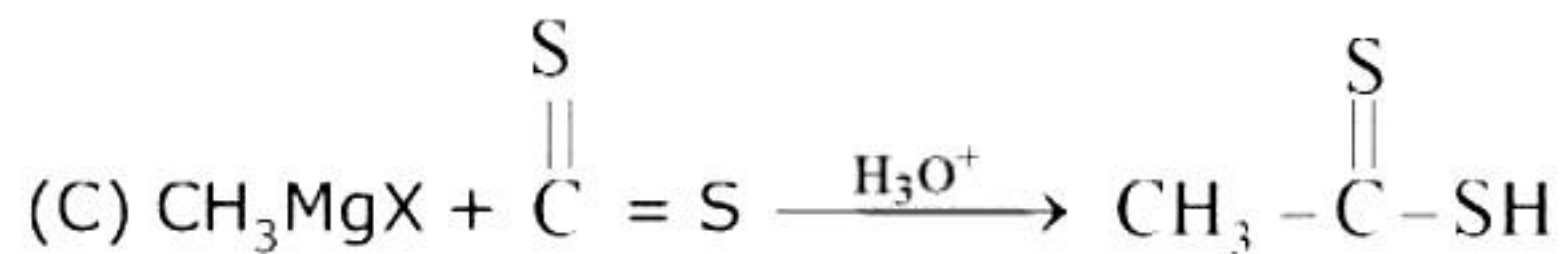
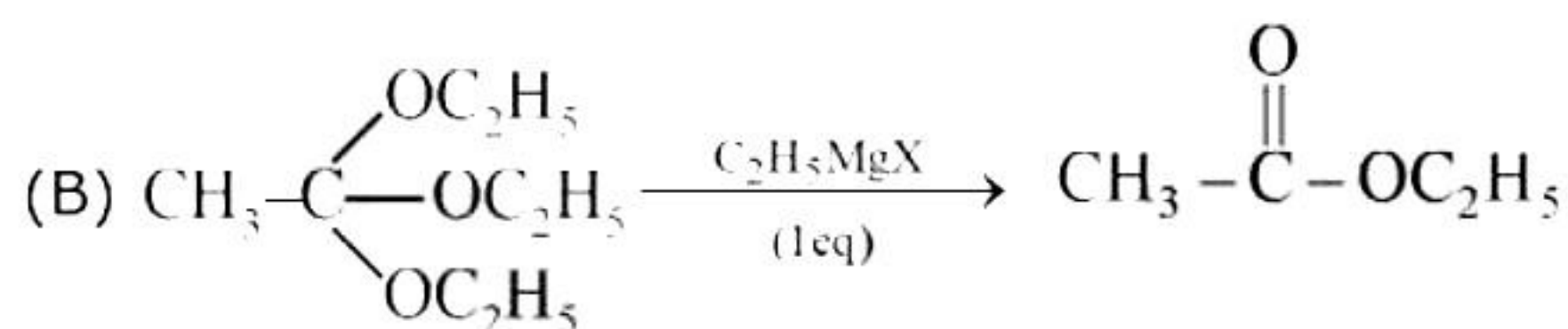
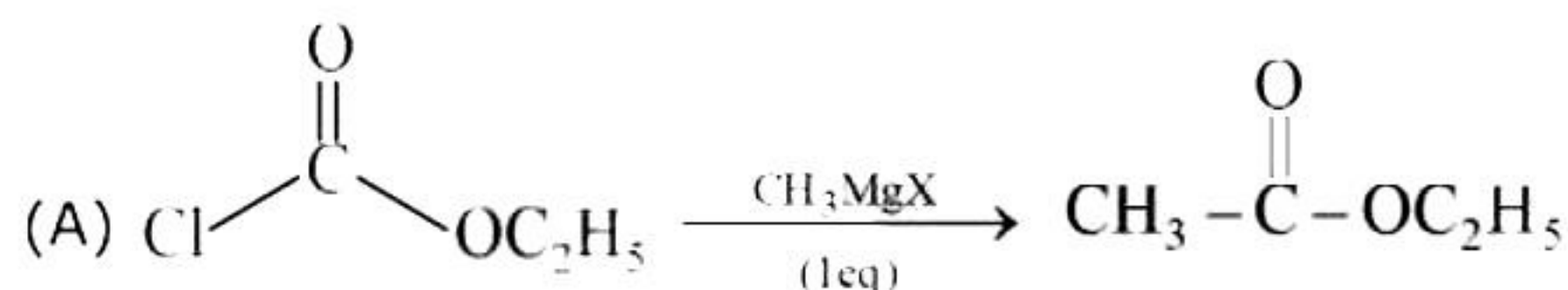
(A) is ethyl acetate

(B) further react with $\text{CH}_3\text{MgBr}/\text{H}_2\text{O}^+$ to give acetone

(C) further react with $\text{CH}_3\text{MgBr}/\text{H}_2\text{O}^+$ to give t-butyl alcohol

(D) Cannot give pinacol when treated with Mg followed by H_2O

10. Which of the following is incorrect.



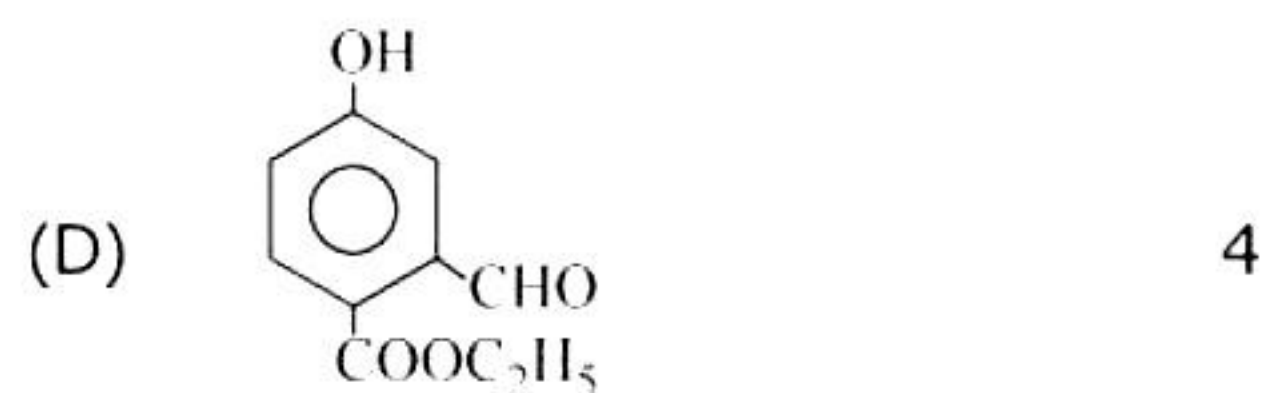
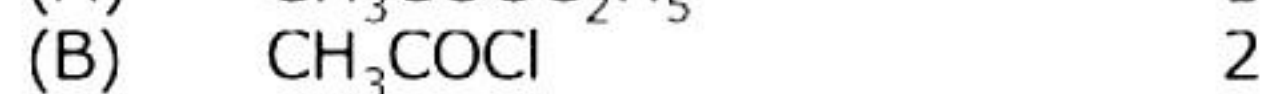
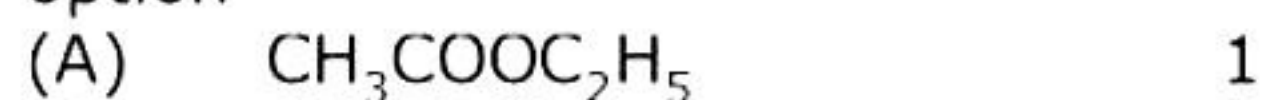
(A) 1° ROH

(B) 2° ROH

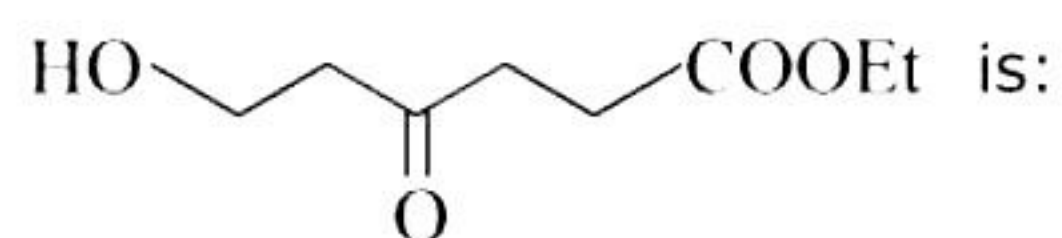
(C) 3° ROH

(D) Alkene

12. Compounds are shown with the no. of RMgX required for complete reaction, select the incorrect option

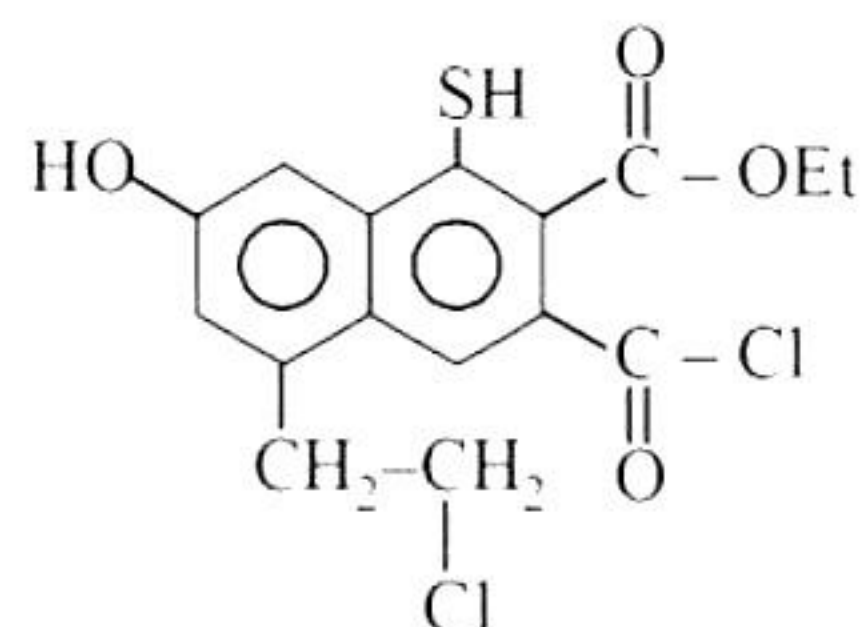


13. The number of moles of grignard reagent consumed per mole of the compound



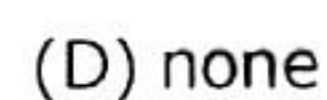
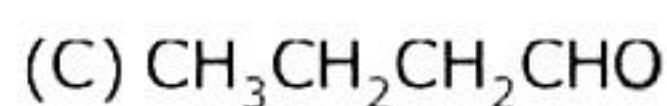
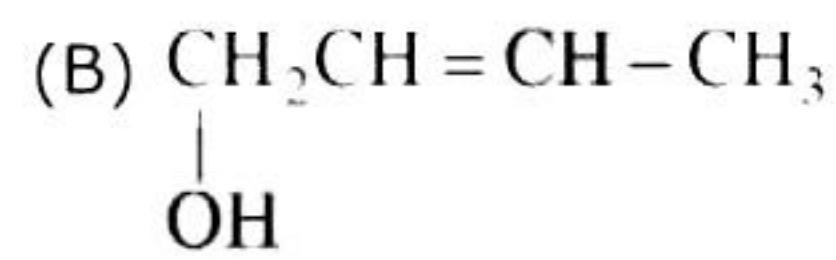
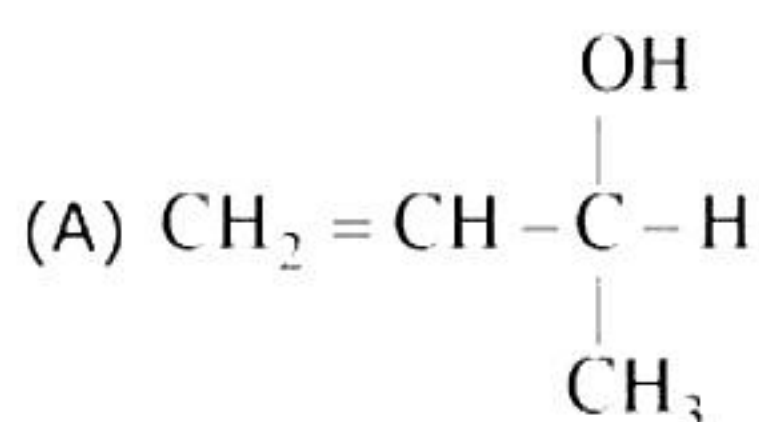
- (A) 4 (B) 2 (C) 3 (D) 1

14. How many moles of Grignard reagent will be required by one mole of given compound?

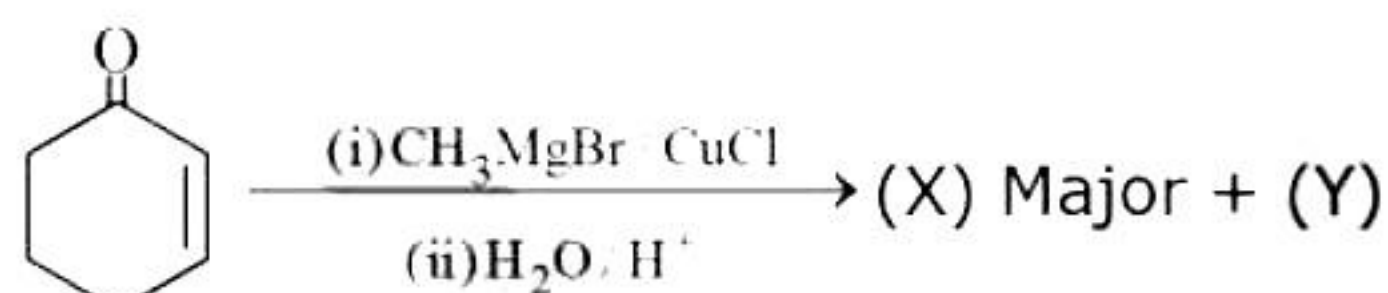


- (A) 7 (B) 6 (C) 8 (D) 5

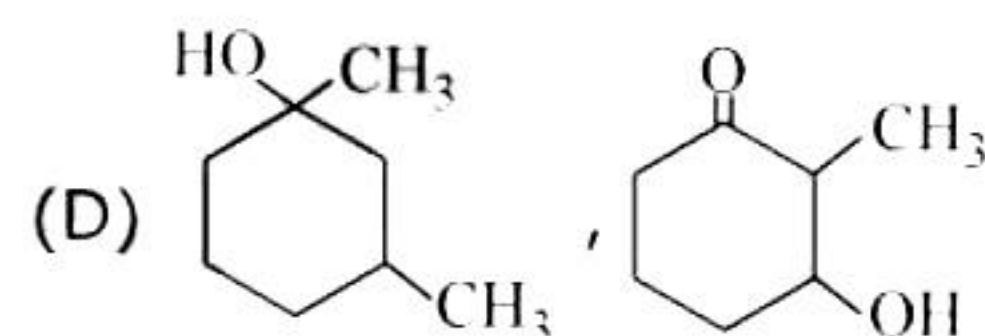
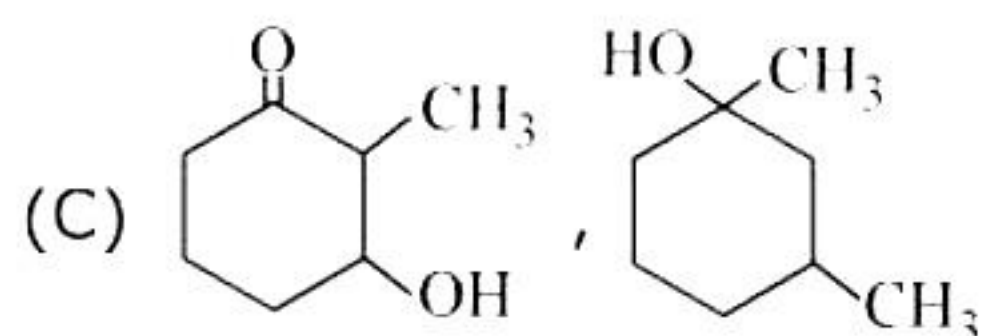
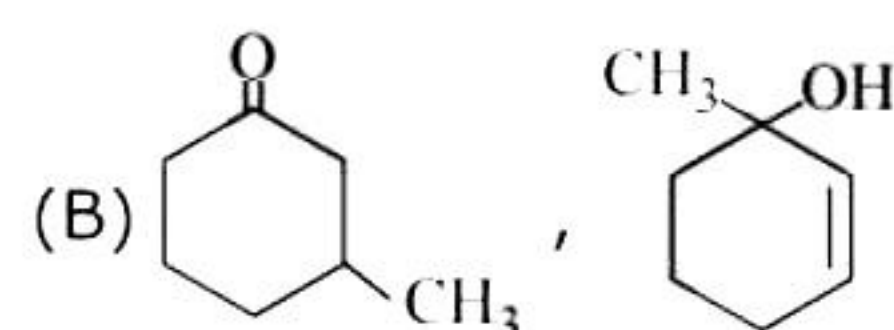
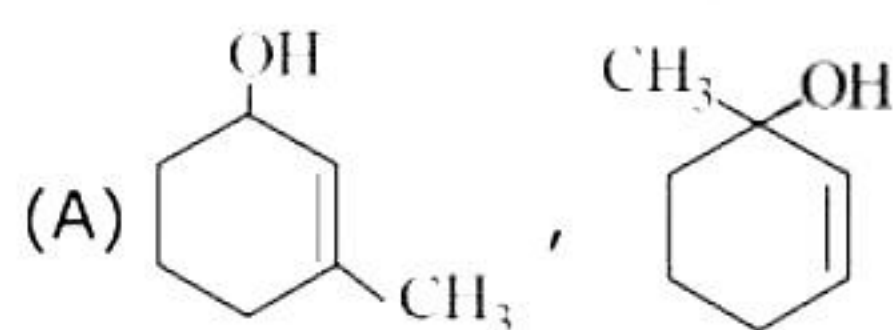
15. $\text{CH}_2=\text{CH}-\overset{\text{O}}{\underset{\text{O}}{\text{C}}}-\text{H} \xrightarrow[\text{(ii) H}_3\text{O}^+]{\text{(i) CH}_3\text{MgBr} \cdot \text{CuCl}}$ Product (1, 4 addition). It is



16. In the reaction sequence:



(X) & (Y) respectively are



17. Which method is not a good method for preparation of ketone

