# ORGANIC CHEMISTRY

# ORGANOMETALLIC COMPOUNDS

1. The major product in the following reaction is

[JEE(Advanced) 2014]

$$^{\rm (A)}_{\rm H_3C} \stackrel{\rm O}{\longleftarrow}_{\rm CH_3}$$

(B) 
$$H_2C$$
  $CH_3$ 

$$(C)$$
  $CH_2$ 

### JEE Advanced Chemistry 10 Years Topicwise Questions with Solutions

#### **SOLUTIONS**

### 1. Ans. (D)

Cl
(Leaving group)
[Polar 
$$\pi$$
-bond give nucleophilic addition reaction]
give substitution

(i) Grignard prefer to give nucleophilic addition on polar  $\pi$ -bond and form anion intermediate.

$$Cl$$
 + Me Mg Cl  $\longrightarrow$  Cl  $O^{-}$  Me

(ii) In next step anion give intramolecular nucleophilic substitution reaction & form 5 membered ring.

$$CI \longrightarrow Me$$