











1. What is DMB? Explain the transformation of compound $\mathbf{3}$ to $\mathbf{4}$.
2. Give the structure of the intermediate $\mathbf{5}$ and account for the formation of $\mathbf{7}$ from $\mathbf{6}$.
3. Explain the conversion of $\mathbf{9}$ to $\mathbf{1 0}$.
4. Account for the formation of $\mathbf{1 2}$.
5. Propose a stepwise formation of the intermediate $\mathbf{1 3}$.

## Q1. What is DMB? Explain the transformation of compound 3 to 4 .

DMB = dimethoxybenzyl


Q2. Give the structure of the intermediate $\mathbf{5}$ and account for the formation of $\mathbf{7}$ from $\mathbf{6}$.

## Mukaiyama Aldol Addition






Q3. Explain the conversion of 9 to $\mathbf{1 0}$.


Q4. Account for the formation of $\mathbf{1 2}$.




Q5. Propose a stepwise formation of the intermediate 13.

- Step 1: Ester hydrolysis to carboxylic acid
- Step 2: Peracetylation
- Step 3: Hundsdiecker iodinative decarboxylation




