

# **CHEM – 647**

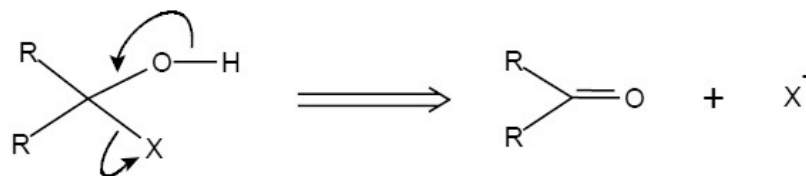
## **Organic synthesis**



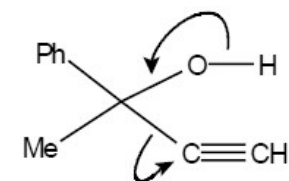
**Dr. Humaira Yasmeen Gondal**  
Department of Chemistry  
University of Sargodha



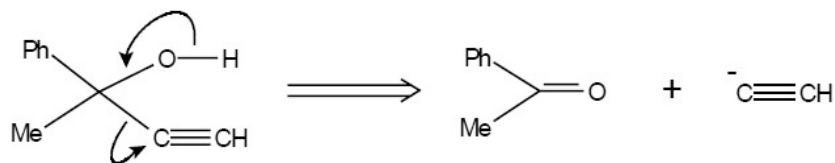
# DISCONNECTIONS OF SIMPLE ALCOHOLS



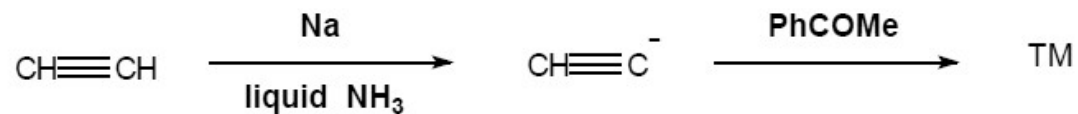
Target Molecule



Disconnection



Synthesis

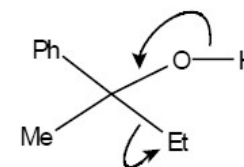




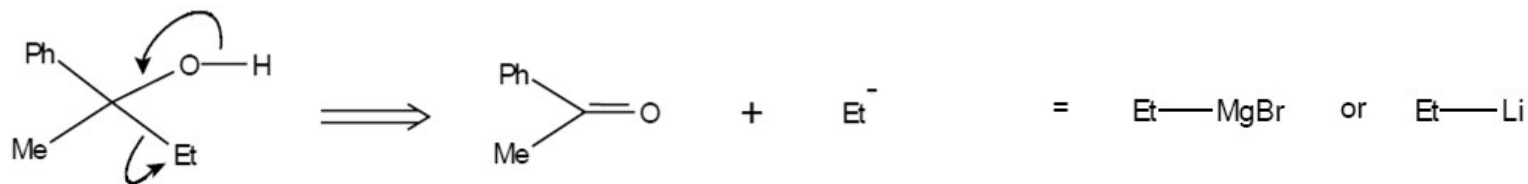
# DISCONNECTIONS OF SIMPLE ALCOHOLS



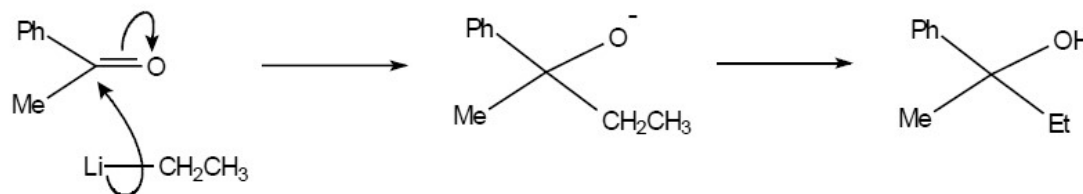
**Target Molecule**



**Disconnection**

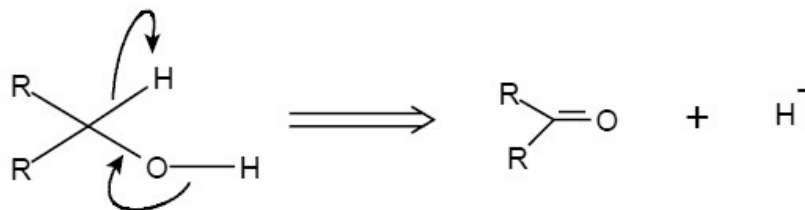


**Synthesis**

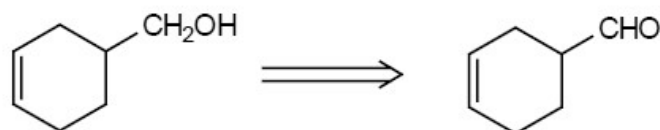




# DISCONNECTIONS OF SIMPLE ALCOHOLS

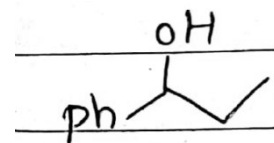


Reduction with  $\text{NaBH}_4$  or  $\text{LiAlH}_4$



## Exercise

Attempt with all alkyl groups  
one by one

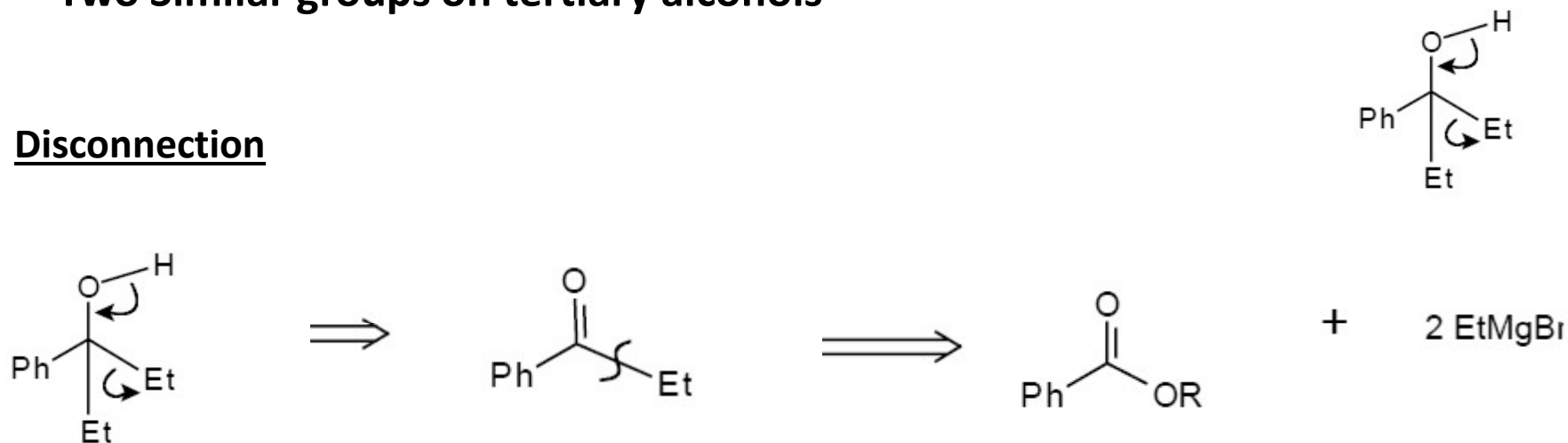




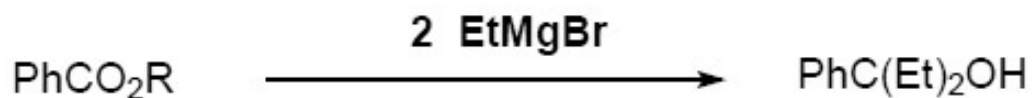
# DISCONNECTIONS OF SIMPLE ALCOHOLS

Two Similar groups on tertiary alcohols

## Disconnection



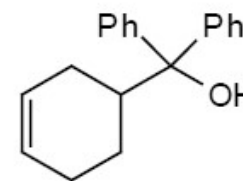
## Synthesis



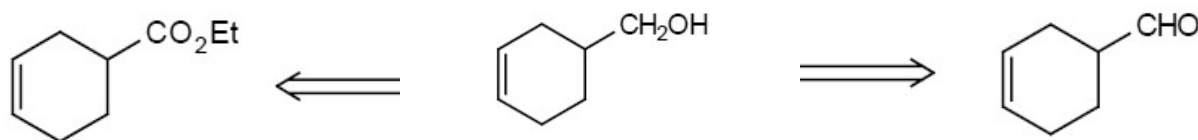
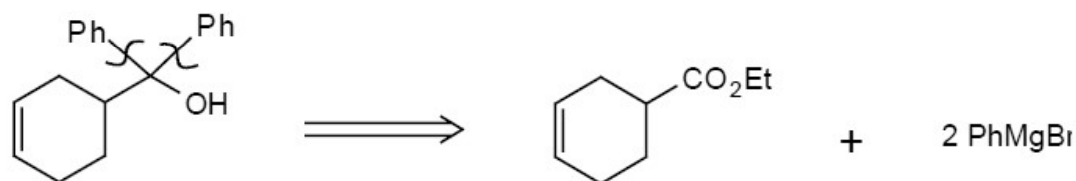


# DISCONNECTIONS OF SIMPLE ALCOHOLS

Two Similar groups on tertiary alcohols



Disconnection





# COMPOUNDS DERIVED FROM ALCOHOLS

## Functional Group Interconversions or FGI

