Sushital Jana

Propose suitable mechanism for the following transformations & explain the outcomes:

$$\frac{\text{TsOH, PhH}}{\text{reflux, 21 h}} \text{CO}_{2}\text{Me}$$
(enantioenriched) (racemic)

$$Br^{\ominus}$$
 O
 H
 $NaHCO_3$
 H_2O , steam bath
 OH