

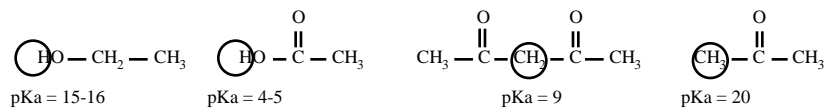
Organic Chemistry II CHEM 335

EXAM 3.0

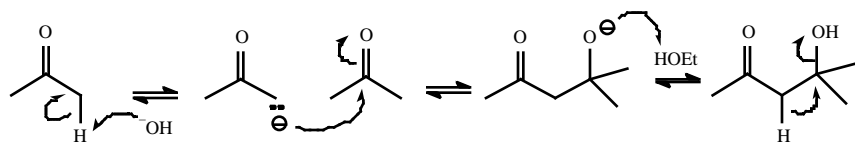
KEY

Nov. 15, 1999

1.



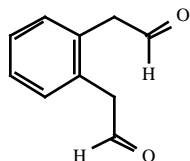
2.



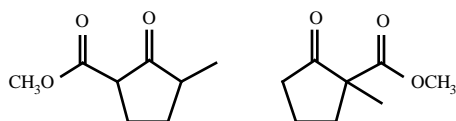
3.  $A < C < B$

$A < C < D < B$

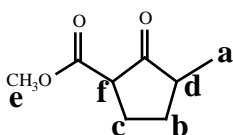
4.



5.A.



5.B.



6.

$H_3O^+$ ,

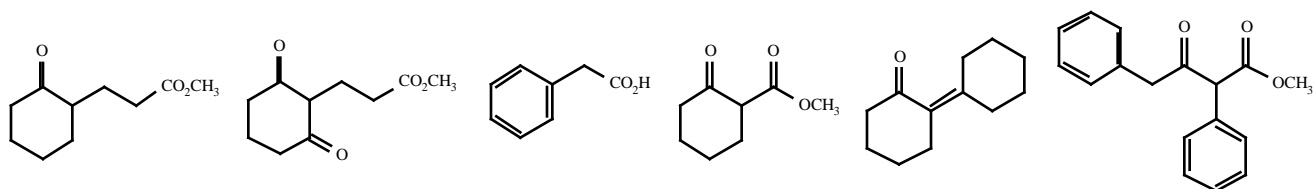
NaOH,  $I_2$

1) NaOEt 2) Br-(CH<sub>2</sub>)<sub>5</sub>-Br 3)  $H_3O^+$

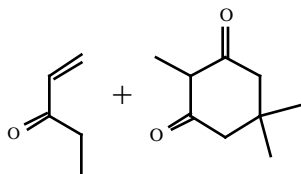
$H^+$ , Br<sub>2</sub>

1) LDA 2) CH<sub>3</sub>I

7.



8.



9.

