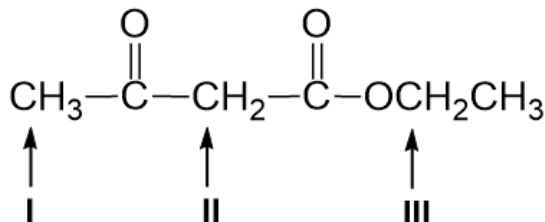




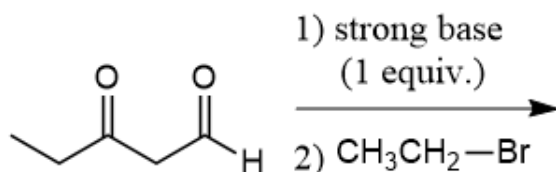
Arrange the following protons in the order of
INCREASING acidity (from least acidic to most acidic).

1



Predict the major product.

2

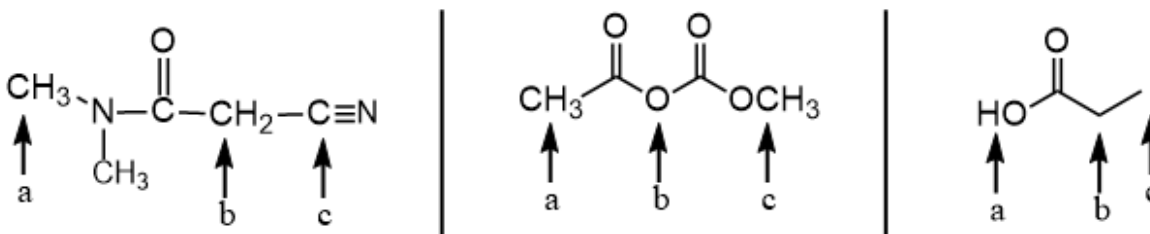


3

Draw LDA
(lithium diisopropylamide)

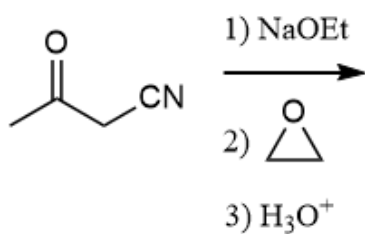
4

Predict which site will react with one equivalent of LDA.



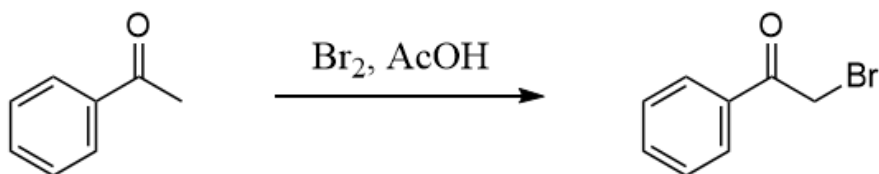
Predict the major product.

5



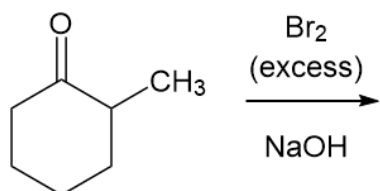
6

Provide a mechanism for the following bromination reaction.



If the reaction shown uses an excess of Br_2 and goes to completion, a total of how many bromine atoms will be in the final product?

7



Of the following, which compound is in equilibrium with the greatest percentage of its enol isomer?*

8

- A) CC=O
 B) CC(=O)C
 C) O=C1CCCCC1
 D) O=C1CCCCC1=O
 E) O=C1CCCCC1

*GRE