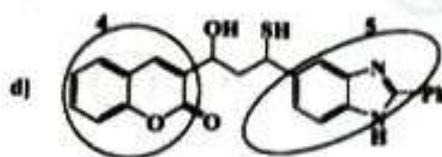
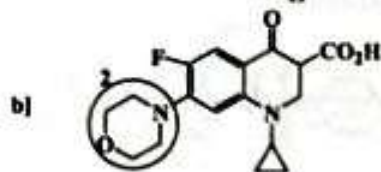
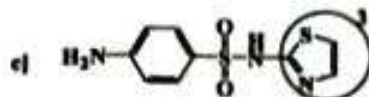
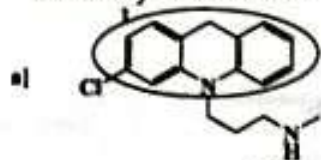


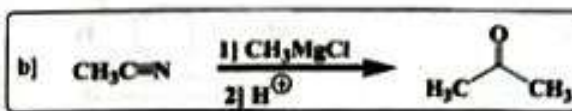
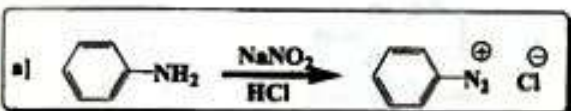
Name: Student No.

ANSWER ALL THE FOLLOWING QUESTIONS:-

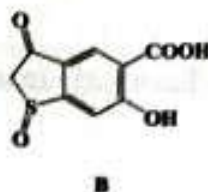
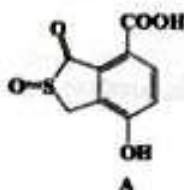
- 5 pts Q1] In each of the following arbitrary compounds, give the name for each circled heterocyclic nucleus



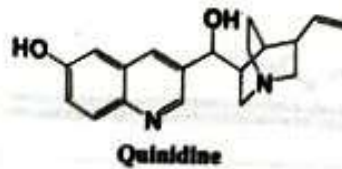
- 10 pts Q2] Write a clear mechanism for each of the following two reactions shown below. (For full credit be sure to show all intermediates and any formal charges in your structures).



- 6 pts Q3] a) Which is more acidic? Justify your answer



b) Draw the structures of Quinidine sulfate and quinidine dicitrate.

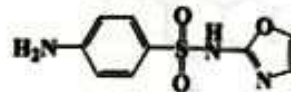


10
pts

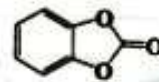
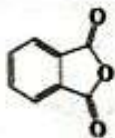
Q4]

How the following conversions might be accomplished?

a)



b)



6
pts

Q5]

a. Friedel-Crafts alkylation is uncontrolled reaction. Explain briefly

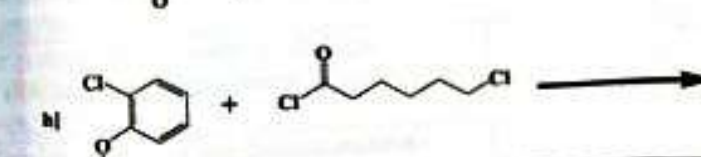
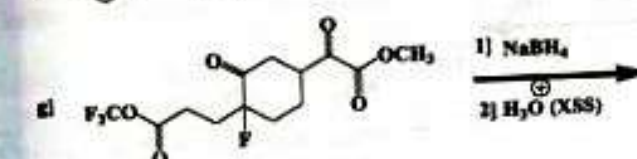
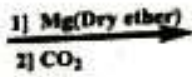
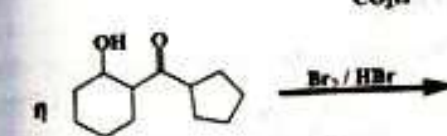
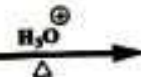
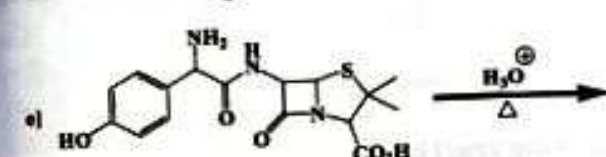
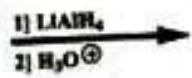
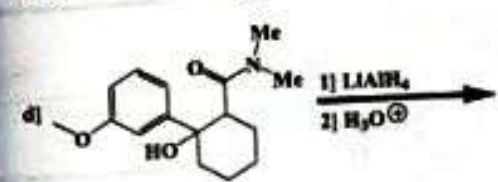
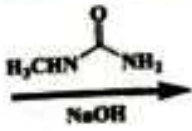
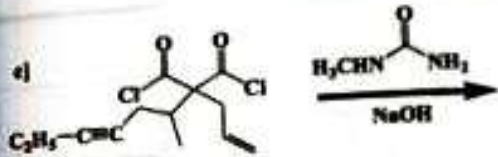
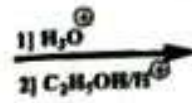
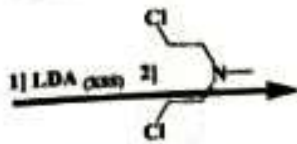
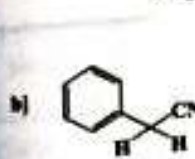
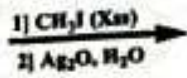
Q7]

b. What does aniline protection-deprotection mean? Explain briefly

c. Exemplify imine, semicarbazone and sulfonamide functionality

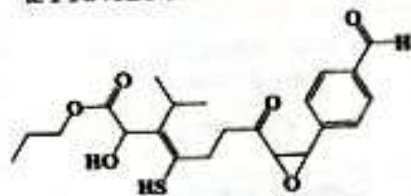
10 pts

06] Provide the missing



9 pts

07] a. Provide the IUPAC name for the following compound:-

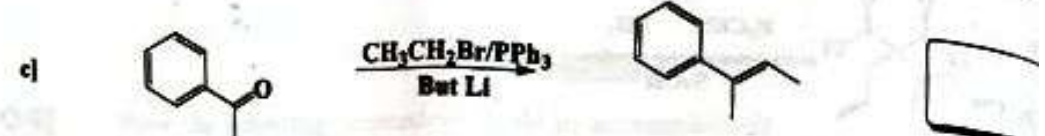
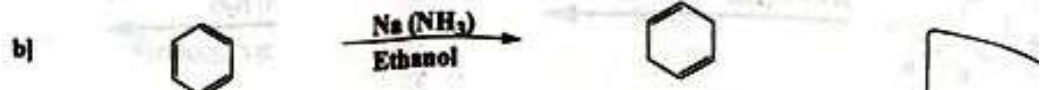
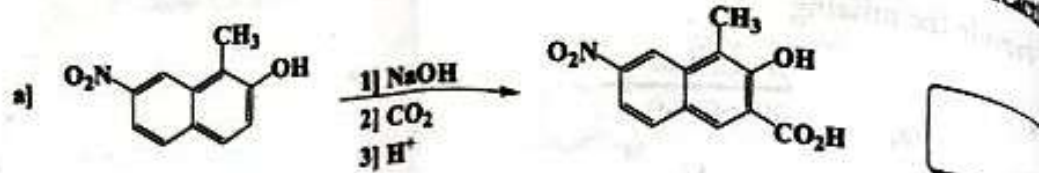


b. Provide the structure for the following given name

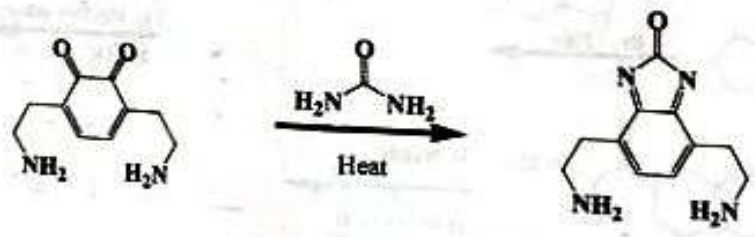
3-acetyl-5-allyl-4-benzoylthio-4-dimethylaminobenzoyl bromide

4 pts

Q8] a. Provide the well-known name for the following well-known reactions



b. What is wrong in the following reaction?




Best Wishes
Dr. Kumar, NE Walehidi