

Home Assignment

30M

LS - VI B

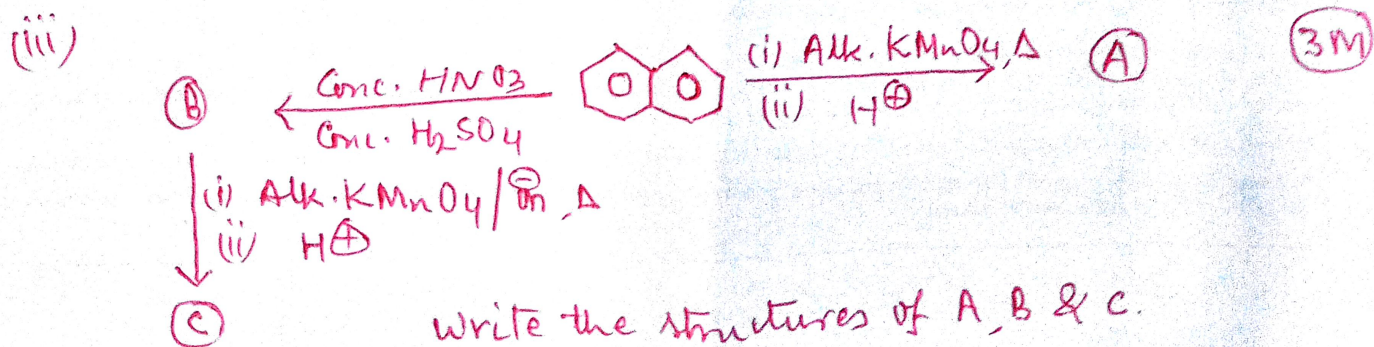
→ Attempt all the questions:

Q1. Write all the steps in the preparation of following compounds from Ethyl acetoacetalate. (8M)

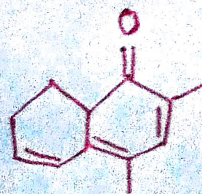
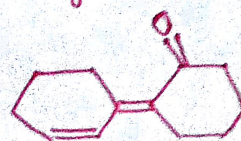
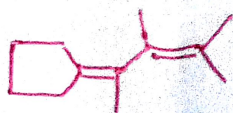
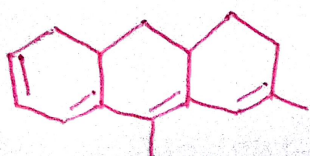
- (i) Hexan-1,6-dioic Acid
- (ii) 2-Methylbutanoic Acid
- (iii) 3-Ethylpentan-2,4-dione
- (iv) 3-Methylpentan-2-one

Q2. (i) The bromination of anthracene in presence of FeBr_3 and in absence of it gives substitution and addition products respectively. Account for this. (3M)

(ii) Why it is start with benzene and phthalic anhydride in presence of anhydrous AlCl_3 instead of naphthalene and succinic anhydride in presence of anhydrous AlCl_3 for preparation of anthracene by Haworth method? what will one get in later case, illustrate with mechanism. (4M)



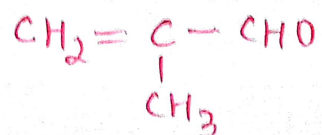
Q3 (i) Determine the λ_{max} for following compounds: (8M)



Q2.

(ii) How would the I.R. spectrum of butan-2-one and butan-2-ol differ? (2M)

(iii) Arrange the $\bar{\nu}_{C=O}$ in decreasing order for the following compounds. Also give suitable reason for your answer.



(2M)