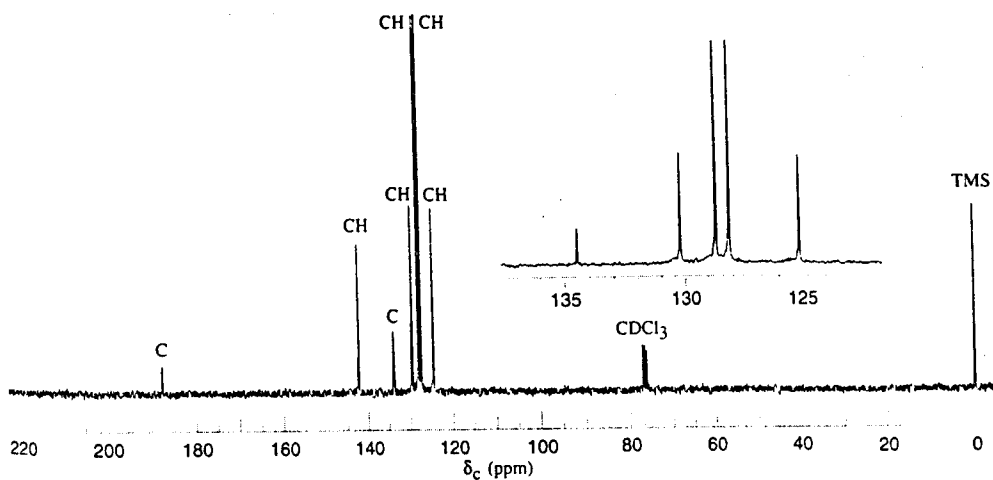
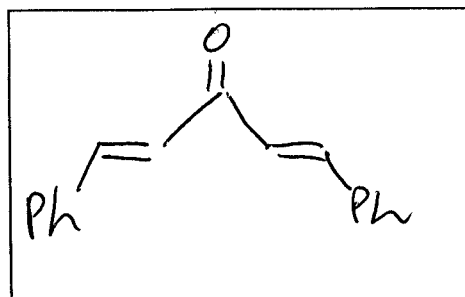
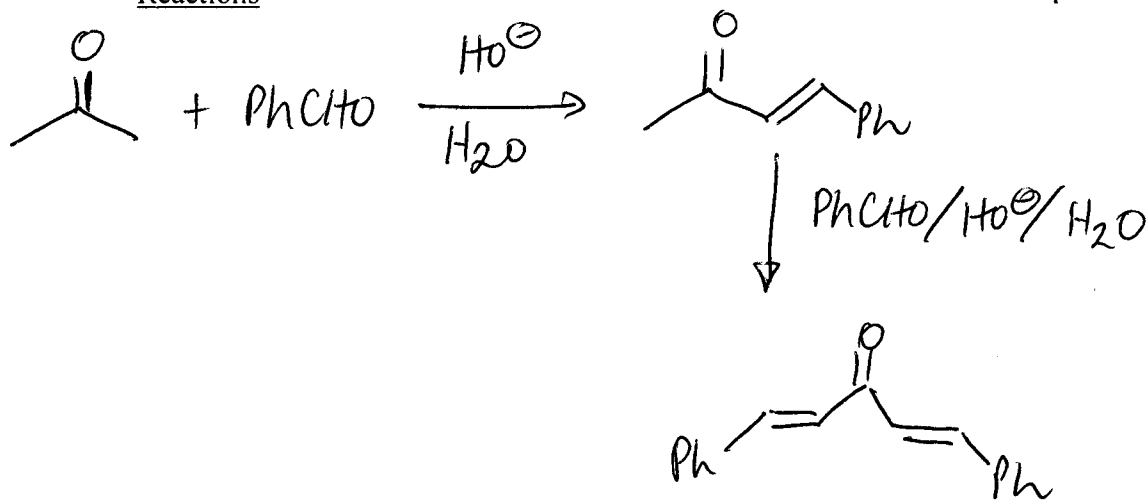


5. Stirring 1 mol of acetone and 2 mols of benzaldehyde in a hot mixture of KOH/ethanol for an hour yields a precipitate, whose ^{13}C NMR spectrum is shown below.

Write out the reactions that occurred to form the product (full mechanisms not required), and write the structure of the final product in the box. (10 marks)



Reactions



Structure: