

CHEM 322 / 362 TEST

Organic Chemistry

Thursday 11 May 2006

Time: 12:00 pm to 1:00 pm

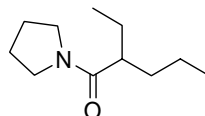
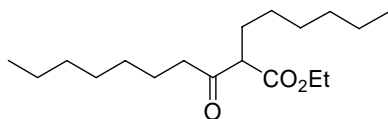
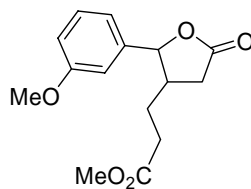
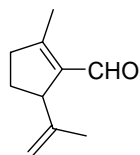
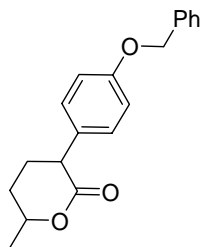
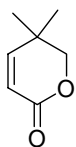
Time allowed: 60 minutes

Answer ALL questions. There are 40 marks available

1. (20 Marks)

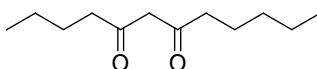
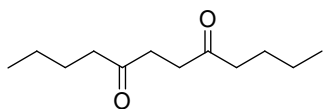
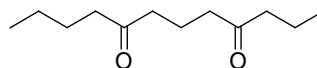
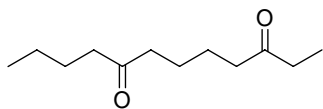
Using retrosynthetic analysis show how **FOUR** of the following compounds could be made.

Include all reagents required.



2. (20 Marks)

Show how the relationship between the two carbonyl functional groups influences your suggestions for a synthesis of **THREE** of the following diketones. Show by means of structural diagrams a mechanism for the reactions you use.



END OF PAPER