

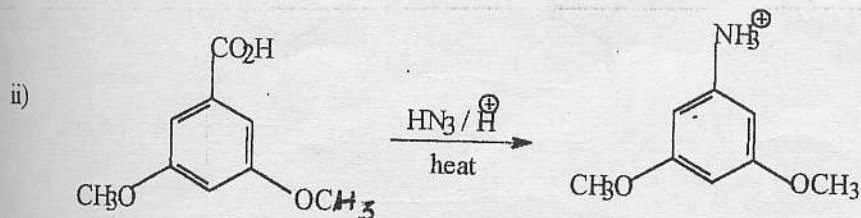
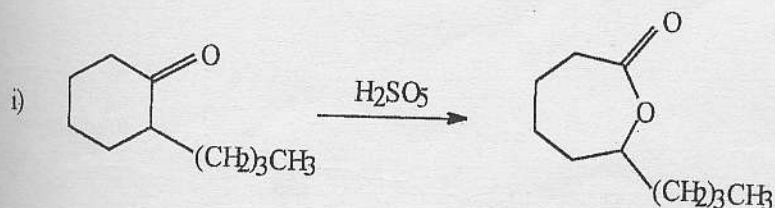
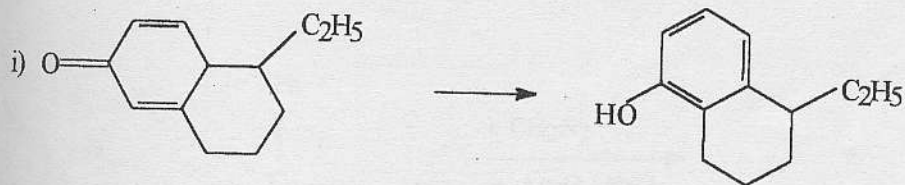
EASTERN UNIVERSITY, SRI LANKA
THIRD EXAMINATION IN SCIENCE (FIRST SEMESTER) 2001/2002
CH 302 REARRANGEMENT REACTIONS AND HETEROCYCLIC
CHEMISTRY (April 2002)

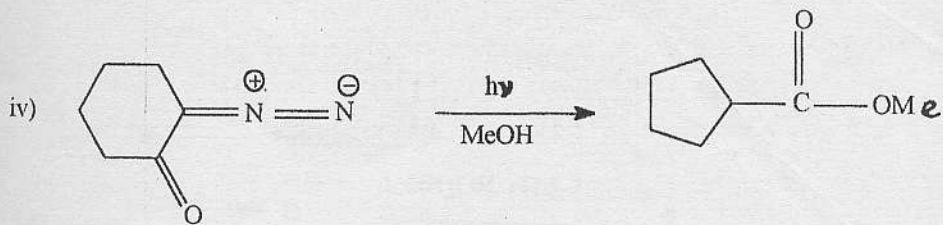
TIME: 01 HOUR

ANSWER ALL QUESTIONS.

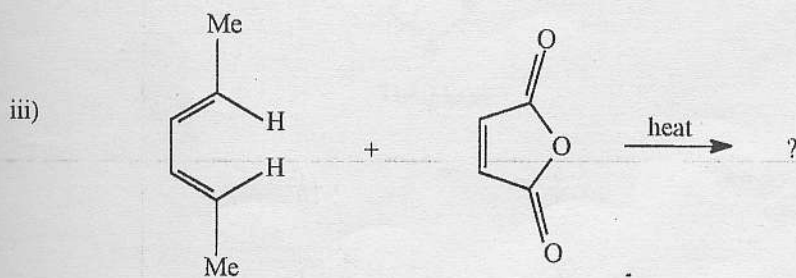
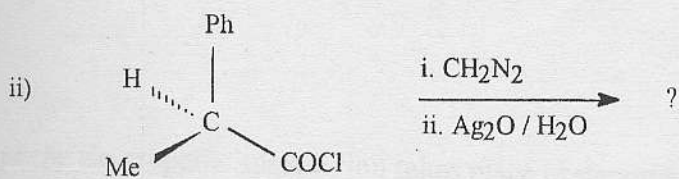
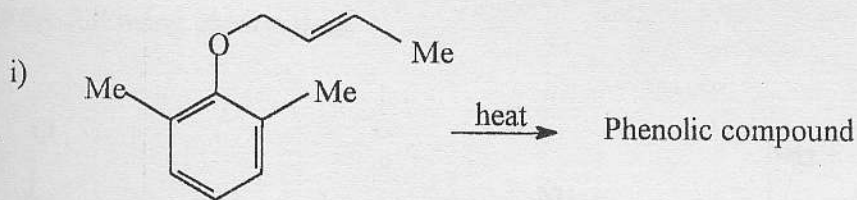
1) Answer **both** parts (a) and (b)

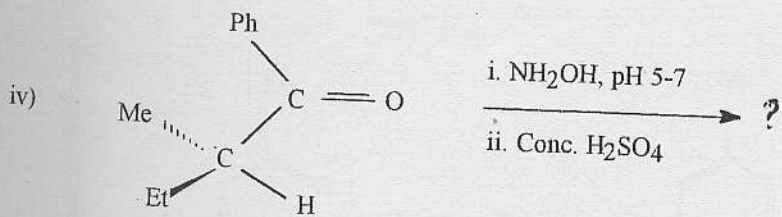
a) Suggest plausible mechanisms for **three** of the following rearrangement reactions.





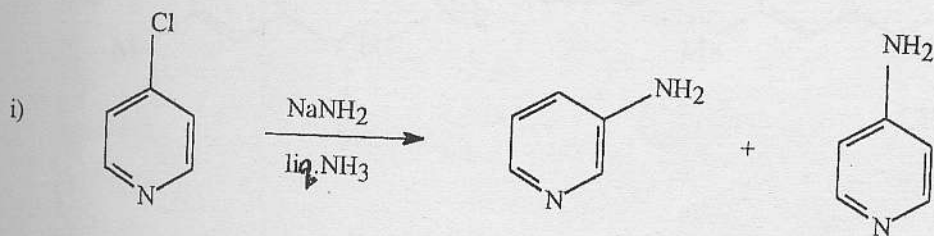
b) Give the structure of the product(s) of each of the following reactions.



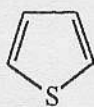


2) Answer **both** parts (a) and (b)

a) Explain the following observations



ii) In Thiophene electrophilic substitution takes place preferentially at position 2.



Thiophene

Cont.....

b) By means of equations show how **three** of the following transformations may be effected. Give essential experimental conditions.

