

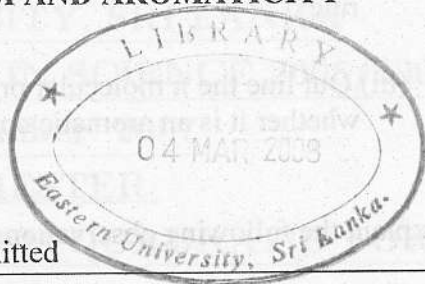


EASTERN UNIVERSITY, SRI LANKA.
SECOND EXAMINATION IN SCIENCE 2005/2006 - REPEAT
FIRST SEMESTER (AUG/SEPT 2007)
CH 204 REACTION MECHANISM AND AROMATICITY

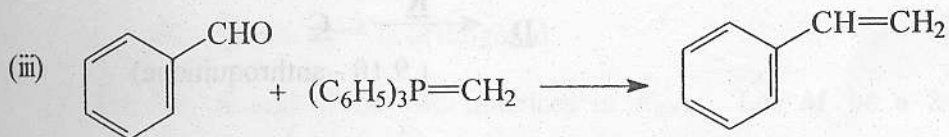
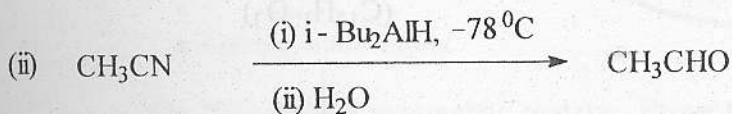
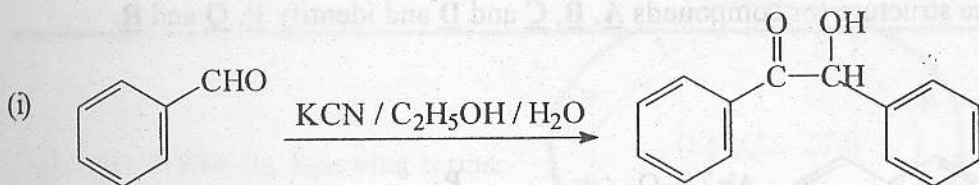
Time allowed: **ONE Hour**

Answer all the questions

The use of a non-programmable calculator is permitted



1) Suggest a plausible mechanism for the following reactions.



2) a) (i) State Huckel's rule.

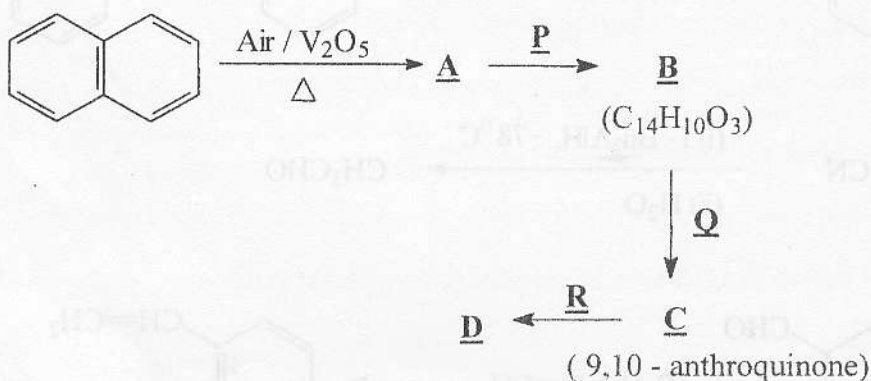
(ii) Would you expect cyclopentadienyl anion to be aromatic according to Huckel rule?

(iii) Out line the π molecular orbitals of cyclopentadienyl anion and determine whether it is an aromatic compound.

b) Explain the following observation.

"On nitration, naphthalene gives 85% of 1-nitronaphthalene and 15% of 2-nitronaphthalene"

c) Give the structure for compounds A, B, C and D and identify P, Q and R.



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