



EASTERN UNIVERSITY, SRI LANKA
THIRD EXAMINATION IN SCIENCE 2012/2013(May/ June 2016)
FIRST SEMESTER- Group - II
CH 351 ORGANIC CHEMISTRY

Answer All Questions

Time: Three hours

1. Take the 4.0 ml of compound **P** in a round bottom flask. Add 30 ml of solution **Q** into the round bottom flask. Reflux the resulting mixture for 30 minutes. Allow the mixture to cool and acidify with Con. HCl. Filter the crude product and wash with water. Recrystallise the product using a suitable solvent.
 - a. Submit the dried crystals **R** in a labelled test tube
 - b. Determine the melting point of the above crystal **R**
2. Using the following spectral data, deduce the structures of the compound **A** and **B**

Compound **A** (C_7H_9NO)

IR frequencies (cm^{-1}): 3400, 3300, 3200, 1600, 1300, and 850.

1H NMR Signals (δ / ppm): 6.6 (4H, dd), 3.5(2H, s), 3.7(3H, s).

Compound **B** ($C_9H_{11}NO_2$)

IR frequencies (cm^{-1}): 3500, 3200, 1800, 1770, 1750, 1600, 1300 and 850.

1H NMR Signals (δ / ppm): 8.2(1H, s), 6.6(4H, dd), 3.7(3H, s), 2.0(3H, s).