



EASTERN UNIVERSITY, SRI LANKA

FIRST SEMESTER FIRST EXAMINATION IN SCIENCE- 2015/2016 (2018)

CH 152: Organic Analysis: Elemental Identification and Functional Group Analysis

(Group 01)

1. Perform suitable tests on the sample **A** provided and record your observations and inferences clearly for each test. *Deduce* the elements present in the sample and indicate that these elements present in the sample are ionic or non-ionic state.

2. Perform suitable tests on the sample **B** provided and record your observations and inferences. *Identify* the functional groups present in the sample.
 - i) Solubility test with water, dil. HCl and dil. NaOH.
 - ii) Test the aqueous sample with Litmus paper
 - iii) Treatment with dil. Na₂SO₃ solution and test the evolved gas with lime water
 - iv) Test with 2,4-DNP reagent
 - v) Silver mirror test
 - vi) Test with neutral ferric chloride
 - vii) Esterify with dil. H₂SO₄ and acetic acid
 - viii) Test with chloroform and 10% NaOH solution
 - ix) Test with hydroxylaminehydrochloride (0.2 g) and 10% NaOH (aq).
