



Eastern University, Sri Lanka

First Year Second Semester Examination in Science-2019

Old Syllabus (Repeat/proper)

**CH 152: ORGANIC ANALYSIS: ELEMENTAL IDENTIFICATION AND
FUNCTIONAL GROUP ANALYSIS**

Answer all questions

Time: Three Hours

01. Perform suitable tests for the sample **A** provided and record your observations and inferences clearly for each test. Deduce the elements present in the sample and indicate that the elements present in the sample are in ionic or non-ionic state.
02. The provided sample **B** contains two functional groups. Perform the following tests on sample **B** and record your observations and inferences. Hence, identify the functional groups present in the sample **B**.

Perform the suitable confirmatory tests if necessary.

- I. Solubility test with water.
- II. Test the aqueous sample of **B** with Litmus paper.
- III. Acetate test.
- IV. Oxidation test for alcohols.
- V. Test with 10% $\text{NaOH}_{(\text{aq})}$ and analyze the evolving gas with Litmus paper/ Nessler's Reagent.
- VI. Treat with Hydroxylamine hydrochloride and neutral Ferric chloride.
- VII. Test with 2,4-DNPH reagent.
