EASETRN UNIVERSITY, SRI LANKA

SECOND YEAR FIRST SEMESTER EXAMINATION IN SCIENCE

2012/2013 (April/ May 2015)

CH 202 ANALYTICAL CHEMISTRY

Answers all questions   **Time: One hour**

1.

(a) Discuss the basic principle involved in the colorimetric method

(25 Marks)

(b) A 0.005 M solution of $[Cu(NH_3)]^{2+}$ transmits 70 % of the incident radiation. If the path length is 1 cm, calculate the following:

(i) Absorption

(ii) The molar extinction coefficient

(iii) Percentage of transmittance for 0.001 M $[Cu(NH_3)]^{2+}$ solution.

(40 Marks)

(c) Briefly describe the development of paper chromatogram and explain how the separated compounds can be identified and analysed.

(35 Marks)

(P.T.O)

2.

    (a) (i)   Briefly describe the 'Ion Exchange Chromatography'.

        (ii)   Discuss the factors determining the distribution of ions in 'Ion Exchange Chromatography'.

        (iii)   Briefly discuss the applications of 'Ion Exchange Chromatography'

(40 Marks)

(b) List out the difference between planar chromatography and column Chromatography

(20 Marks)

(c) Briefly describe the Gas Chromatography by using a labelled diagram and write the function/s of each basic component of Gas Chromatography.

(40 Marks)