



EASTERN UNIVERSITY, SRI LANKA
SECOND EXAMINATION IN SCIENCE-2010/2011 (APRIL/MAY' 2013)
FIRST SEMESTER
CH 202 ANALYTICAL CHEMISTRY

Answers all questions

Time: One hour

1. (a) "Chromatography can be classified according to its separation mechanism which depends on the physical property of its stationary phase". Explain this statement.

(40 Marks)

(b) Paper Chromatography has been most commonly used to separate pigments, dyes and inks. Briefly describe the Paper Chromatography and explain the different types of Paper Chromatography with suitable diagrams.

(40 Marks)

(c) List out the most commonly used adsorbents and solvents for Thin Layer Chromatography (TLC).

(20 Marks)

Contd...

2. (a) Discuss the basic principle involved in the colorimetric method of analysis

(30 Marks)

(b) A 0.01 M solution of permanganate solution transmits 60% 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 0.005 M permanganate solution.

(30 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)
