

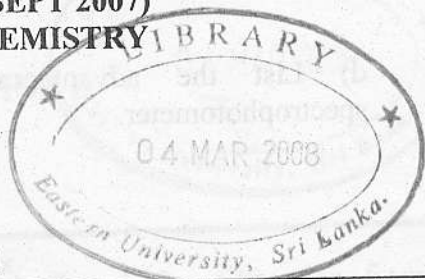


EASTERN UNIVERSITY, SRI LANKA.
SECOND EXAMINATION IN SCIENCE 2005/2006 - REPEAT
FIRST SEMESTER (AUG/SEPT 2007)
CH 202 ANALYTICAL CHEMISTRY

Time allowed: **ONE Hour**

Answer all the questions

The use of a non-programmable calculator is permitted



- 1) a) Explain the difference between paper chromatography and thin layer chromatography. (20 marks)
- b) Briefly explain the use of paper chromatogram in qualitative and quantitative analysis. (30 marks)
- c) Explain the differences between ascending and descending paper chromatography. (20 marks)
- d) Explain the following terms
- i) Normal phase liquid – liquid chromatography.
 - ii) Reverse phase liquid – liquid chromatography. (30 marks)
- 2) a) What is the difference between emission and absorption of radiation? (15 marks)
- b) Draw a labelled diagram to show the basic components of an atomic absorption unit. Briefly describe the function of each component. (35 marks)
- c) Discuss,
- i) The effect of a continuous source such as a deuterium lamp on the response of the detector used in an atomic absorption spectrophotometer. (20 marks)

ii) The feasibility of applying Beer - Lambert's law directly to atomic absorption spectrophotometry. (15 marks)

d) List the advantages and disadvantages of an atomic absorption spectrophotometer. (15 marks)

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