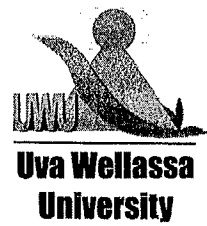


**Uva Wellassa University**  
**Faculty of Animal Science and Export Agriculture**  
**BSc in Palm & Latex Technology and Value Addition**

**End Semester Examination – September/October 2013**  
**Year II Semester I**



**Advanced Crop Physiology PLT 251-2**

**Instructions**

Answer all the questions

No. of questions : Two (02)

No. of pages : One (01)

Time : One hour (01)

Total marks allocated : 40 %

Index No.



**Part II – Essay**

**Question 01**

(20 marks)

- I. Describe the key physiological and environmental factors affecting transpiration in crop canopies (as given in Penman-Monteith equation)
- II. Explain **three (03)** main components/sections distinguished in latex after centrifuging.

**Question 02**

(20 marks)

- I. Explain the principle behind the Infra-Red Gas Analysis (IRGA) with the emphasis on its practical use in physiological studies.
- II. Infra-Red Gas Analysis (IRGA) is significantly interfered by the presence of water vapour in the air. Briefly discuss the statement and explain methods used in commercial IRGA to avoid this problem.
- III. What is the difference between open and closed systems of infra-red gas analysis used in portable photosynthesis systems?
- IV. Briefly discuss the advantage of the open system over closed system.