



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DEGREE OF MASTER SCIENCE IN AGRONOMY

KST 546: ADVANCED PLANT NUTRITION

DATE: Friday 30th March, 2012

TIME: 9.00 a.m. – 12.00 p.m.

INSTRUCTIONS

Answer any FOUR (4) questions in separate answer sheets.

1. Discuss rhizosphere in respect to root exudation, microbial activity, pH changes and nutrient availability. [25 marks]
2. Discuss the role of Vesicular Arbuscular Mycorrhizae (VAM) fungi in nutrient availability to agricultural crops. [25 marks]
3. Give a concise description of phosphates estimations by scientists. [25 marks]
4. Give account of mechanisms of membrane transport of agricultural crops. [25 marks]
5. Discuss iron uptake strategies employed by monocot plants growing in Semi-Arid tropical soils particularly found in compacted soils. [25 marks]

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