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**JOMO KENYATTA UNIVERSITY**

**OF**

**AGRICULTURE AND TECHNOLOGY**

# University Examinations 2012/2013

**SECOND YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE**

# AHS 2203: WEED SCIENCE

**DATE: AUGUST, 2012**  **TIME: 2 HOURS**

**INSTRUCTIONS: Answer ALLQuestions.**

**Question One**

What is ‘seed bank’ and which factors influence its size? [10 marks]

**Question Two**

Using specific examples discuss how weeds can be controlled using cultural practices.

 [10 marks]

**Question Three**

a) Describe approaches used in the biological control of weeds. [6 marks]

b) Identify possible drawbacks to the widespread adoption of biological control of weeds in Kenya. [4 marks]

**Question Four**

What is herbicide selectivity and how is it achieved? [10 marks]

**Question Five**

Mrs. Makwekwe is a small scale vegetable farmer around Juja. In one season she weeded only half of her crop of cabbages due to shortage of labour. During a dry spell that followed, the non-weeded crop wilted more than the weeded crop. Furthermore, after irrigation the non-weeded field showed signs of wilting earlier than the weeded. When soil samples were taken from the fields and assessed for moisture content, it was found that the weeded plot had 30% moisture content at 30 cm depth and 70% moisture content at 90 cm depth while the non weeded had 10% moisture content at 30 cm and 50% moisture content at 90 cm depth. The crop was finally harvested. The weeded plot yielded 0.5 tons per hectare while the non-weeded yielded 0.1 ton per hectare. Identify any key lessons from the above observations and provide explanations for them. [10 marks]

**Question Six**

Discuss water hyacinth and couch grass as major weeds in Kenya. [20 marks]