

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF
MASTER OF SCIENCE IN AGRICULTURAL ECONOMICS**

AGRI 860: SEED SCIENCE & TECHNOLOGY

STREAMS: BSC (PLANT BREEDING) MSC (AGRO)

TIME: 3 HOURS

DAY/DATE: TUESDAY 14/04/2020

8.30 AM – 11.30 AM

INSTRUCTIONS:

Section A – Answer ALL Questions (20 Marks); Section B – Answer any Two Questions (40 Marks)

1. Describe breeder and foundation seed classes in a seed multiplication chain. [4 marks]
2. Describe matrix seed priming and explain its main disadvantage. [5 marks]
3. Describe relative and primary categories of seed dormancy and how to overcome the challenges. [5 marks]
4. Describe gene expression in dormant seed embryos. [6 marks]

Section B: Answer Two Questions

5. (a) Describe the rouging procedure and its importance in certified seed production. [9 marks]
(b) Discuss seed germinability function during development. [11 marks]
 6. (a) Giving examples, explain why cross border seed trade is difficult for Kenya seed companies. [7 marks]
(b) Describe seed formation from pollination to fertilization. [13 marks]
 7. Giving crop product examples, critique the consequences of biotechnology on the seed industry. [20 marks]
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