

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

FOURTHYEAR EXAMINATION FOR THE AWARD OF DEGREE
OF BACHELOR OF SCIENCE (HORTICULTURE)

HORT 421: HORTICULTURAL SEED PRODUCTION

STREAMS: BSC (HORT) Y4S1

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 06/12/2017

2.30 P.M. – 4.30 P.M.

INSTRUCTIONS:

SECTION A – ANSWER ALL QUESTIONS (30 MARKS)

1. (a) Explain how isolation in seed crops and supplementary pollination should be carried out. [4 marks]
- (b) Explain how seed that do not dehisce at maturity can be harvested. [4 marks]
2. (a) Describe how natural crossing can lead to varietal deterioration and factors that lead to its occurrence. [5 marks]
- (b) Describe tomato seed extraction using the fermentation method. [5 marks]
3. Describe the roguing procedure in brinjal seed production. [6 marks]
4. Describe the general flowering process in cucurbits. [6 marks]

SECTION B – ANSWER ANY 2 QUESTIONS (40 MARKS)

5. (a) Describe the harvesting and threshing procedures in cabbage seed production. [5 marks]
- (b) Describe roguing process and justify the activity in seed crop process. [7 marks]
- (c) Explain steps that seed producers are required to use to ensure genetic purity is maintained during seed production. [8 marks]
6. (a) Discuss recalcitrant and orthodox seeds and effects on seed longevity. [10 marks]
- (b) Describe seed source control for maintain genetic purity and the different classes as set by AOSCA. [10 marks]

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7. (a) Describe the procedure for pumpkin seeds drying after extractions. [5 marks]
- (b) Discuss conditioned seed storage under controlled humidity and temperature. [15 marks]
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