



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2016/2017

**FOURTH YEAR SECOND SEMESTER EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE WITH
INFORMATION TECHNOLOGY**

MAIN CAMPUS

AAG 411: SEED SCIENCE AND TECHNOLOGY

Date: 27th July, 2017

Time: 8.30 - 11.30 am

INSTRUCTIONS:

- Answer ALL questions in this paper



AAG 411: SEED SCIENCE AND TECHNOLOGY

Attempt ALL questions in this paper

Date:

TIME: 3hrs

Total Marks 70%

1. Discuss pollination physiological and morphological development in the Angiosperms (5 marks)
 2. What happens in the following cases?
 - i. Self pollination (1 mark)
 - ii. Cross incompatible cultivar(1 mark)
 - iii. Self fruitful cultivar (1 mark)
 - iv. Cross pollination (1 mark)
 3. (a) Define and discuss the Physiology involved in: a recalcitrant and orthodox seeds (9 Marks)
 - (b).In a laboratory, explain the procedures for seed viability testing (4 marks)
 - (c).With at least two examples, define seed longevity (2 marks)
 - 4(a).Give the primary goal of seed health testing (3marks)
 - (b). What is meant by seed quality control and how should a label look like? (8 marks)
 - 5(a).Discuss in details the functions of seed technology and ideal seed label (10 marks)
 - (b).What are the precautions one should take to ensure that high quality (genetically pure) seeds are produced? (6 marks)
 - 6(a).Account, with relevant examples, the attributes of hybrid seeds production (5marks)
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(b). Explain, citing examples, the process of:

- i. Hybrid seeds production (3 marks) similar to 6a
- ii. The economic importance of hybrid seeds in Horticulture (3 marks)

7).Using relevant points evaluate essence of possessing Plant Genetic Resource in your Country and the methods to be employed to ensure conservation?

(9.Marks)