



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRIBUSINESS AND TRADE

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRIBUSINESS AND TRADE

KRM 303/AGR203 FIELD CROPS PRODUCTION

DATE: 25/7/2019

TIME: 8.30-10.30 AM

INSTRUCTIONS:

Answer *ALL* questions from Section A and any other *TWO* from Section B:

SECTION A: COMPULSORY: (30 MARKS)

- a) Define the following terms as used in crop genetic improvement;
- i) Plant Breeding (2 marks)
 - ii) Polyploidy (2 marks)
 - iii) Pureline (2 marks)
 - iv) Clone (2 marks)
 - v) Heterosis (2 marks)
- b) With specific examples, describe **FOUR** types of pre or post-harvest losses associated with crop production (8 marks)
- c) Explain **TWO** types of maturity that determine crop harvesting (4 marks)
- d) Giving relevant examples, explain classification of important crops in Kenya (8 marks)

SECTION B: Answer any TWO questions (40 Marks)

- a) Describe **FIVE** methods used for the general management of weeds (10 Marks)
- b) Explain **FIVE** important agronomic practices that need to be carried out to realize high maize crop yields (10 Marks)

QUESTION THREE

- a) Giving relevant examples, discuss **FIVE** key roles played by field crops production in the economic development in Kenya (10 Marks)
- b) Describe the suitable climatic and edaphic conditions required for the optimal production of the following major field crops;
 - i. Sugarcane (2 marks)
 - ii. Coffee (2 marks)
 - iii. Tea (2 marks)
 - iv. Soybeans (2 marks)
 - v. Wheat (2 marks)

QUESTION FOUR

Describe the production of cotton under the following headings;

- a) Planting spacing (5 marks)
- b) Agronomic practices (5 marks)
- c) Harvesting (5 marks)
- d) Processing (5 marks)