



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF AGRICULTURAL SCIENCES

DEPARTMENT OF AGRICULTURAL EDUCATION AND EXTENSION

SECOND YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION AGR

201: PRINCIPLES OF CROP PRODUCTION

DATE:

TIME:

INSTRUCTIONS:

Answer question one and two other questions

QUESTION ONE

- a) Describe TWO categories of farming systems (4 marks)
- b) Explain FOUR advantages of vegetative propagation (4 marks)
- c) Explain FOUR negative effects of weeds (4 marks)
- d) Describe FOUR reasons for crop storage (4 marks)
- e) Explain FOUR advantages of using resistant varieties in crop protection (4 marks)
- f) Describe FOUR roles of nitrogen to a plant (4 marks)
- g) Describe the features of “zone III” agroecological zone according to FAO classification (3 marks)
- h) Explain THREE ways in which light affects crop production (3 marks)

SECTION B: Answer any TWO Questions (40 Marks)

QUESTION TWO

Describe the following farming systems giving their constraints

- a) The tea-based system (5 marks)
- b) Sugarcane-based system (5 marks)
- c) Livestock- cereals system (5 marks)
- d) Group ranching system (5 marks)

QUESTION THREE

Discuss FOUR strategies used in biological control of pests and diseases (20 marks)

QUESTION FOUR

Describe the following methods of weed control

- a) Biological weed control (5 marks)
- b) Chemical weed control (5 marks)
- c) Cultural weed control (5 marks)
- d) Mechanical weed control (5 marks)

QUESTION FIVE

Explain the role, and deficiency symptoms of the following plant nutrients

- a) Phosphorus (5 marks)
- b) Sulphur (5 marks)
- c) Boron (5 marks)
- d) Copper (5 marks)