

# **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 SOL KCU 201: PRINCIPLES OF CROP PRODUCTION

DATE:	23/9/2019

TIME: 2.00-4.00 PM

## **INSTRUCTIONS;**

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

# SECTION A: COMPULSORY: (30 MARKS)

#### **QUESTION ONE**

a)	Explain two method of zoning	(4 marks)
b)	Explain four economic importance of weeds in crop production	(4 marks)
c)	Explain four reasons why you would advise a farmer to use compound fertilizers compared to	
	straight fertilizers	(4 marks)
d)	Describe three characteristics of Carbamide fertilizer that makes farmers prefer in utilizing than	
	Chilean Nitrate	(3 marks)
e)	Explain six reasons why farmers carry out seed bed preparation	(6 marks)
f)	Explain any four factors that affect planting density in crop production	(4 marks)
g)	Explain two special classification of crops useful to a farmer specializing in legume production	
		(2 marks)
h)	Describe disease triangle concept useful in management of disease	(3 marks)

#### SECTION B: Answer any TWO Ouestions (40 Marks)

## **QUESTION TWO**

- a) Explain six ecological factors that affect crop production in Kenya (12 marks)
- Explain four ways in which Kenyan farmers can adopt in order to enhance production in drylands of Kenya
  (8 marks)

#### **QUESTION THREE**

- a) Explain five methods of fertilizer application in crops that farmers can use (10 marks)
- b) Explain five methods farmers can apply in an effort to control soil erosion in their farms

(10 marks)

#### **QUESTION FOUR**

a) Describe six methods a farmer can successfully employ to manage pests and diseases in crops

(12 marks)

b) Explain four ways farmers can adopt to manage post-harvest losses in Kenya (8 marks)

#### **QUESTION FIVE**

- a) Describe three types of organic fertilizers you can advise farmers to adopt as an extension officer in Kisii county (12 marks)
- b) Explain four methods of planting farmers can adopt in Nakuru regions (8 marks)