



EMBU UNIVERSITY COLLEGE

(A Constituent College of the University of Nairobi)

2015/2016 ACADEMIC YEAR

FIRST SEMESTER EXAMINATION

**SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
IN AGRICULTURE**

ACS 301: FIELD CROPS

DATE: 1st DECEMBER, 2015

TIME: 14:00-16:00

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION ONE

- a) Discuss the uses of maize (4 marks)
- b) Understanding the development of any given crop is important for successful crop management. Explain. (1 mark)
- c)
 - i) Using cereals as an example give three important agronomic practices stating the correct stage(s) of implementation (3 marks)
 - ii) Why would you encourage a farmer to plant wheat (4 marks)
- d) State reasons why it is important to understand the origin of a crop (2 marks)
- e) Using examples explain why ridging is a good practice in crops (2 marks)
- f) Explain four major causes of food insecurity in Kenya and their solutions (4 marks)
- g)
 - i) Explain why sorghum and cassava production should be encouraged in semi- arid parts of Kenya (4 marks)
 - ii) Explain why cassava should not be planted after a legume (2 marks)
- h) Explain the effect of temperature in pigeon pea production (2 marks)

- i) You have been employed as a technician in a pulse production farm. Explain why you need to know the soil pH. (2 marks)

QUESTION TWO

- a) Discuss the roles the following practices in crop production (12 marks)
- i) Crop rotation
 - ii) Mulching
 - iii) Fertilization
 - iv) Intercropping
- b) Describe four methods of planting yams (8 marks)

QUESTION THREE

- a) Outline the procedure used in beans production (10 marks)
- b) Describe six measures used in pulse disease control (6 marks)
- c) Discuss the uses of linseed (4 marks)

QUESTION FOUR

- a) Describe methods of planting rice (12 marks)
- b) Discuss the advantages and disadvantages of each method in (a) above (8 marks)

QUESTION FIVE

A farmer intends to venture into crop production as a business. Discuss the major constraints he/she is likely to face and the possible solutions (20 marks)

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