



# EMBU UNIVERSITY COLLEGE

(A Constituent College of the University of Nairobi)

2015/2016 ACADEMIC YEAR

SECOND SEMESTER EXAMINATION

THIRD YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE  
(AGRICULTURE)

ACS 309: INDUSTRIAL, BIOFUEL AND MEDICINAL CROPS

DATE: APRIL 11, 2016

TIME: 11:00-1:00

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## INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions

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### QUESTION ONE

a) Define the following terms

- i) Biofuel (1 Mark)
- ii) Medicinal crops (1 Mark)
- iii) Industrial crops (1 Mark)
- iv) Pruning (1 Mark)
- v) Tipping (1 Mark)

b) Differentiate between

- i) Cherry and parchment (2 Marks)
- ii) Bole and copra (2 Marks)
- iii) Ray florets and disc florets (2 Marks)

c) Write short notes on the following

- i) Problems faced by tea (*Camellia sinensis*) farmers in Kenya. (5 Marks)
- ii) Harvesting of rosemary plant (*Rosmarinus officinalis*). (5 Marks)
- iii) Uses of press cake residue derived from *Jatropha* (*Jatropha curcas*). (4 Marks)

- d) Assume you are a crop's production officer in an area where sugarcane is grown. You are to brief visitors on the importance of sugarcane growing to the economic development of Kenya. Outline your notes. (5 Marks)

### **QUESTION TWO**

Assume you have secured a job with One Acre Farm organization and you are to brief members of the public on possible health benefits derived from rosemary plant. Discuss your points. (20 Marks)

### **QUESTION THREE**

- a) Citing relevant examples, describe the challenges faced by sugarcane farmers in Kenya (10 Marks)
- b) Discuss the challenges experienced by coffee farmers in Kenya (10 Marks)

### **QUESTION FOUR**

- a) Outline the attributes of an ideal pyrethrum variety (7 Marks)
- b) Discuss the health benefits of consuming coconut *Cocos nucifera* (8 Marks)
- c) Discuss five (5) uses of cotton (5 Marks)

### **QUESTION FIVE**

- a) Assume that you are an extension officer with the Ministry of Agriculture and you are to give a talk to farmers on the economic importance of Artemisia (*Artemisia annua*). Discuss your points. (10 Marks)
- b) As a crop's specialist, you have been invited to a radio station to talk to the members of public on the health benefits associated with cashew nuts (*Anacardium occidentale*). Discuss your notes. (10 Marks)

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