



**BONDO UNIVERSITY COLLEGE**

**UNIVERSITY EXAMINATION 2012/2013**

**2<sup>ND</sup> YEAR 2ND SEMESTER EXAMINATION FOR THE  
DEGREE OF BACHELOR OF EDUCATION SCIENCE WITH IT  
(REGULAR)**

**COURSE CODE: SBT 203**

**TITLE: ECONOMIC BOTANY**

**DATE: 5/11/2012**

**TIME: 15.00-17.00PM**

**DURATION: 2HOURS**

**INSTRUCTIONS**

- 1) This paper contains sections.**
- 2) Answer ALL questions in section A COMPULSORY and ANY other TWO [2] questions in section B.**
- 3) Write ALL answers in the booklet provided.**

## SECTION A (COMPULSORY) 30 MARKS

### Question 1

- a) (i) Define the term “Economic Botany” (1 mark)  
(ii) Briefly explain how plants supply the basic needs of humans? (2 marks)
- b) Give an account of the different categories of nuts stating their food value and an example in each case (3 marks).
- c) Define essential oils and list any two uses of these oils (3 marks).
- d) Briefly, give an account on the role of spices in human diet (3 marks).
- e) Write short notes on the uses of *Avena sativa* (3 marks).
- f) Outline the methods used in determination of the origin of crops (3 marks).
- g) What are phytochemicals or nutraceuticals. State why they are important to mankind (3 marks).
- h) Briefly state the pre-harvest and post-harvest factors affecting the quality of vegetables and fruits (3 marks).
- i) Outline any six (6) golden rules for high bean yields (3 marks).
- j) Explain giving suitable reason why farmers generally use leguminous plants with nodulated roots for rotation of crops (3 marks)

## SECTION B: ANSWER ANY TWO QUESTIONS (20 MARKS EACH)

### QUESTION 2

Discuss the useful aspects of lower plants to the well-being of mankind

### QUESTION 3

- a) Discuss the steps involved in the processing of green and black tea (12 marks)
- b) Enumerate the challenges facing the tea and coffee production in Kenya giving suggestions as to what should be done to overcome them (8 marks)

### QUESTION 4

Discuss the various methods of crop improvement that have been applied in plant –breeding. Give an example of an improved variety of field crop in each case

## **QUESTION 5**

k) Write an essay to explain why maize is considered more important than other cereals