

# EMBU UNIVERSITY COLLEGE (A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)

# TRIMESTER EXAMINATIONS 2013/2014

# SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURAL EDUCATION AND EXTENSION

### **AEX 202: PLANT TAXONOMY AND ECONOMIC BOTANY**

DATE: AUGUST 6, 2014

TIME: 11.00AM - 1.00PM

#### **INSTRUCTIONS:**

# Answer Question ONE and ANY Other TWO Questions.

#### **QUESTION ONE**

- i.) Define
  - a) Plant taxonomy
  - b) Nomenclature

(4 marks)

- ii.) State three differences between angiosperms and gymnosperms
- (3 marks)

iii.) Briefly explain four main objectives of plant taxonomy

- (8 marks)
- iv.) Define three characteristics of plants based on habit and size of stem
- (3 marks)
- v.) State two advantages why botanist prefer the use of scientific names over common names

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(2 marks)

vi.) Define three uses of a herbarium

(3 marks)

- vii.) State five species of flowering plants that are found in protected areas in savanna ecosystems (5 marks)
- viii.) Highlight two ecological roles of plants in their natural ecosystems

(2 marks)

### **QUESTION TWO**

Using examples, discuss various vegetation communities in East African eco-regions and their uses

(20 marks)

# **QUESTION THREE**

Discuss the procedure for collection and preservation of plant specimen for herbarium development (20 marks)

# **QUESTION FOUR**

Discuss the characteristics of plants in terrestrial ecosystems and their adaptation to these environments (20 marks)

#### **QUESTION FIVE**

Discuss various abiotic factors that determine the types and numbers of organisms of a species in an ecosystem (20 marks)

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