

#### **UNIVERSITY OF EMBU**

#### 2016/2017 ACADEMIC YEAR

#### SECOND SEMESTER EXAMINATION

# SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGROECOSYSTEM MANAGEMENT

#### **AEM 203: AGRO-ECOLOGY II**

DATE: APRIL 7, 2017 TIME: 8:30-10:30AM

#### **INSTRUCTIONS:**

#### Answer Question ONE and ANY other TWO Questions

#### **QUESTION ONE**

| a) | Explain the term ecological resilience:                                      | (2 marks) |
|----|--|-----------|
| b) | Describe forms of agricultural production that lead to trace gas emissions   | (4 marks) |
| c) | Explain how soil moisture and water saturation influence soil organic matter | (6 marks) |
| d) | Explain the concept of capital according to Bourdieu                         | (4 marks) |
| e) | Explain key principles for sustainability in agriculture                     | (4 marks) |
| f) | Explain mechanisms by which sustainable agroecosystems maintain immunity     | (4 marks) |
| g) | Describe the functions of humus in the soil                                  | (6 marks) |

#### **QUESTION TWO**

| a) | Discuss factors limiting Agricultural productivity in Kenya | (10 marks) |
|----|---|------------|
| b) | Discuss the strategies to overcome the limitations          | (10 marks) |



## **QUESTION THREE**

| a) Describe strategies used in managing microclimates | (10 marks) |
|---|------------|
| b) Explain factors that affect micro-climate          | (10 marks) |

# **QUESTION FOUR**

| a) | Discuss impacts of global food system on global environment   | (15 marks) |
|----|---|------------|
| b) | Analyze efforts made towards fighting plastic menace in Kenya | (5 marks)  |

### **QUESTION FIVE**

| a) | Describe the sustainable development goals.                | (5 marks)  |
|----|--|------------|
| b) | Discuss the three pillars of sustainable development goals | (15 marks) |

**END** 

