



# **SOUTH EASTERN KENYA UNIVERSITY**

## **UNIVERSITY EXAMINATIONS 2017/2018**

### **FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN FOOD NUTRITION & DIETETICS**

#### **AEC 306: PRINCIPLES OF RESOURCE USE AND MANAGEMENT**

**DATE: 06<sup>TH</sup> DECEMBER, 2017**

**TIME: 8.00 -10.00 AM**

**Instructions: Answer ALL questions in Section I and any TWO questions in Section II**

#### **Section I (30 Marks)**

1. List the basic steps that you would follow as a manager in planning for the running of your organization (6 marks)
2. Define the following terms as they are used in the management of natural resources
  - a) Pollutant (2 Marks)
  - b) externality (2 Marks)
  - c) property rights (2 Marks)
3. Briefly explain the rationale of including technology and environment as factors of production in agribusiness (6 marks)
4. Outline the four economic assumptions about resources (6 marks)
5. Briefly explain the three roles of effective management in any organization (6 marks)

#### **Section II: Answer TWO Questions only (40 marks)**

6. a) With the help of a well labeled diagram, briefly explain the material balance model (8 marks)  
b) Briefly discuss any TWO threats that human economic behavior may negatively impact on the material balance model (6 marks)  
b) Explain the two attributes that differentiate a public good from a private good (6 marks)
7. a) With the use of appropriate formulae, differentiate between the discounted rate of cash flow and internal rate of return (12 marks)  
b) Explain the importance of time management in organizations (8 marks)

8. a) What is depreciation? (3 marks)
- b) With the use of appropriate formulae and examples, explain any THREE methods of calculating depreciation showing the advantages and disadvantages of each method (12 marks)
- c) Of the methods explained in 7(b), which one would you use in the management of farm machinery and why (5 marks)