

**W1-2-60-1-6**

**JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY**

**UNIVERSITY EXAMINATIONS 2014/2015**

 **YEAR III SEMESTER II EXAMINATION FOR THE DEGREE OF BACHELOR OF INFORMATION TECHNOLOGY/BUSINESS INFORMATION TECHNOLOGY**

**BBIT 2205: OBJECT ORIENTED ANALYSIS AND DESIGN**

**DATE:AUGUST 2015 TIME: 2 HOURS:**

**INSTRUCTIONS: Answer question one and any other two questions.**

**QUESTION ONE**

a. Briefly discuss “object oriented” software life cycle. (8 marks)

b. Explain object modeling technique

c. Based on (b) above explain three proposed types of models. (9 marks)

d. Briefly compare 00AD and SSAD (6 marks)

e. Explain the difference between objects and classes. (4 marks)

**QUESTION TWO**

Briefly explain

a. The meaning of association. (3 marks)

b. Three types of association, giving relevant examples. (9 marks)

c. Explain cardinality ratios (2 marks)

d. Outline three types of cardinality ratios. (6 marks)

**QUESTION THREE**

a. Explain in details the meaning of

 i. aggregation (5 marks)

 ii. aggregate objects (3 marks)

b. With examples, explain the two types of containment (6 marks)

c. Outline any three benefits of objects models. (6 marks)

**QUESTION FOUR**

Discuss the following elements

a. Abstraction (5 marks)

b. Encapsulation (5 marks)

c. Modularity (5 marks)

d. Hierarchy (5 marks)

In each case clearly show the applicability of each element.

**QUESTION FIVE**

a. What is a state? (3 marks)

b. Identify and explain any three vital parts of a state. (6 marks)

c. Explain behavior with regards to OOAD (3 marks)

d. Explain any four parts of a transition. (8 marks)