

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

JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

# **UNIVERSITY EXAMINATIONS 2014/2015**

**SPECIAL /SUPPLEMENTARY EXAMINATION FOR THE DEGREE OF BACHELOR OF BUSINESS INFORMATION TECHNOLOGY**

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

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

**INSTRUCTIONS: ANSWER QUESTION ONE AND ANY OTHER TWO QUESTIONS**

**QUESTION ONE**

1. Differentiate between
2. Aggregation and association [4 marks]
3. Inheritance and multiple inheritance
4. Explain the use of the following diagrams
5. Class diagram
6. Deployment diagram
7. Package diagram [6 marks]
8. Discuss the class level relationships [6 marks]
9. Discuss three elements of a UML robustness analysis [6 marks]
10. Indicate the notations used to show the following UMLdiagrams [8 marks]

* Activity
* Decision
* …………………….
* Start end marker

**QUESTION TWO**

1. Discuss the stages covered during UML development process [6 marks]
2. Explain the difference between sequence diagram and collaboration diagrams. [4 marks]
3. Describe the following visibility types

* Private
* Public
* Protected

1. With examples, define class hierarchy [4 marks]

**QUESTION THREE**

1. Distinguish between dynamic binding and static binding. [4 marks]
2. Explain software development process. [6 marks]
3. (i) Define prototype [2 marks]
4. Explain four types of prototypes [8 marks]

**QUESTION FOUR**

1. Identify and describe the 00 software development process. [10 marks]
2. Briefly, show the similarities and differences in the methodologies advocated by the “Three Am……”. [10 marks]

**QUESTION FIVE**

1. Explain the terms as used in 00 AD [8 marks]
2. Message
3. Polymorphism
4. Instance
5. Object
6. Outline the three stages of 00 systems development appraisal [6 marks]
7. Briefly discuss Agile development, stating its manifesto, principles and why its preferred as a software development method. [6 marks]