TECHNICAL UNIVERSITY OF MOMBASA

UNIVERSITY EXAMINATION FOR:
Diploma in Information Communication Technology

Unit Code: EIT 2210
Unit Name: Object Oriented Analysis and Design
End of semester Examination

SERIES: April 2016

Paper 1
Time: 2 Hours

Attempt any **THREE** questions

Questions 1 (20 Marks)

a) Explain the following concepts giving an example as applied to Object Oriented Analysis and Design (OOAD):

     I.   Class
    II.   Object
    III.   Encapsulation
    IV.   Polymorphism
    V.   Inheritance   **[10 Marks]**

b) Explain any FOUR advantages of OOAD [8 Marks]

c) State the main difference between Object Oriented Analysis and traditional analysis [2 Marks]

Question 2 (20 Marks)

a) Describe the use of Use Case diagrams **[2 Marks]**
b) List and describe the components of Use Case diagrams **[12 Marks]**
c) Explain any two advantages and one disadvantage of use case **[6 Marks]**

Question 3 (20 marks)

a) Describe any 4 advantages and any three disadvantages of Iterative and Incremental System Development Life Cycle (SDLC) model [14 Marks]
b) Distinguish between functional and non-functional requirements [4 Marks]
c) List any FOUR typical functional requirements [2 Marks]

Question 4 (20 Marks)

a) Briefly describe the Iterative Development Model [4 Marks]
b) Discuss when to use Iterative Model [6 marks]
c) State any TWO typical non-functional requirements [2 Marks]
d) Discuss the phases of Iterative Model

Question 5 (20 Marks)

a) Identify and describe the modeling and diagramming techniques used for following methodologies:

     I.   Structured
     II.   Data-Oriented
     III.   Object Oriented Analysis and Design   [8 Marks]

b) Identify and describe four types of skills a person needs in order to succeed as a systems analyst. For each type of skill, indicate the tasks and roles in which the analyst will utilize the skill.   [10 Marks]

c) Identify FOUR parameters which deployment diagrams control   [2 Marks]