# JARAMOGI OGINGA ODINGA UNIVERSITY

# OF SCIENCE & TECHNOLOGY

# UNIVERSITY EXAMINATIONS 2012/2013

# 2ND YEAR 1ST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE (COMPUTER SECURITY AND AUDIT)

# (KISUMU L.CENTRE)

**COURSE CODE: IIT  3215**

**COURSE TITLE: SYSTEMS ANALYSIS AND DESIGN**

**DATE: 14/8/2013**                         **TIME: 9.00-11.00 AM**

**DURATION: 2 HOURS**

## INSTRUCTIONS

1. This paper consists of 5 Questions.
2.  Answer Question 1 (Compulsory) and any other 2 questions.
3. Write your answers on the answer booklet provided.

**Question one 30marks**

a) Name two major things to consider before creating a system.            (2 marks)

b) When is system analysis carried out?                                   ( 4 marks)

c) What does SDLC stand for? Name the various stages that take place.      (4 marks)

d) Name four ways that you can use to gather system requirements.          (4 marks)

e) What is process modelling? Name the technique you used for process modelling while working on your class assignment.                                  (4 marks)

f) What is a prototype? Name two advantages and two disadvantages of a prototype.
                                                                          (4 marks)

g) As a project, system analysis and design can either succeed or fail. Name four reasons a project would fail.                                                (4 marks)

h) Name four qualities of a good system design.                           (4 marks)

## Questions 2  20marks

i)

In order to create a system that can meet user requirements it is crucial that users are properly consulted.

a. What are 5 different ways in which current and prospective users can be reached for their opinion?                                                  (10 marks)

b. When users are not forth coming with their requirements what are five techniques a system analyst can employ in order to acquire the same information?     (10 marks)

## Question 3 20marks.

a. A system can be part of a system whereby automation occurs due to processes that run without the need to be initiated by a person. Name five things you need to consider before working on a replacement of one of the smaller systems that creates the larger one.                                                                 (10 marks)

b) The functionality of a system and its ultimate successful implementation will depend in the successful working of its parts. What steps can you take to ensure the systems success?                                                             ( 10 marks)

## Question 4 20marks

a. What is a data model? Name two types of data models and three of their characteristics. (10 marks)

b. What does DFD stand for? State what the shapes below stand for in a DFD. (10 marks)

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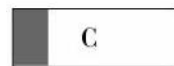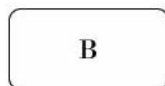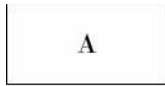
## Question 5 20 marks

a. What is project management? (2 marks)

b. What does JAD stand for? What is its importance in systems design? (4 marks)

c. What is a CASE tool and what is it used for? Name one type of case tool. (4 marks)

d. If you answered no to the question (c) above then provide a drawing of the correct diagram. If you answered yes to the question the state why the diagram below is incorrect. (10 marks)

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