



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF SCIENCE
COMPUTER SECURITY & FORENSICS
1ST YEAR 2ND SEMESTER 2013/2014 ACADEMIC YEAR
CENTRE: MAIN

COURSE CODE: IIT 3122

COURSE TITLE: SYSTEM BUILDING

EXAM VENUE: LR 2

STREAM: BSc. Computer Security & Forensics

DATE: 13/12/2013

EXAM SESSION: 11.30 – 1.30 PM

TIME: 2 HOURS

Instructions:

- 1. Answer question 1 (Compulsory) and ANY other 2 questions.**
- 2. Candidates are advised not to write on the question paper.**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room.**

QUESTION ONE

- a) State the three (3) key components that need to be considered and understood when defining a project.
- b) Briefly discuss four (4) measures of project success.
- c) List and explain the steps of system development life cycle method of information systems development.
- d) Explain the different factors considered in the identification of a problem to be considered for computerization.
- e) Discuss different types of feasibility analysis.

6+8+8+4+4

QUESTION TWO

- a) Differentiate between Top down functional decomposition and object oriented decomposition as forms of design approaches.
- b) Describe how prototyping can be used during requirements determination and outline if it is better or worse than traditional methods?
- c) What is a data flow diagram and why do systems analysts use them?

6+8+6

QUESTION THREE

- a) Discuss four design constraints in system design
- b) Data dictionary is an important tool for documentation. Explain what data dictionary is and how it's used in system development.
- c) As a system developer, discuss five factors you will consider so as to design a user friendly system software

4+6+10

QUESTION FOUR

- a) How can object oriented system development reduce time and cost of developing a system
- b) What are CASE tools and briefly give examples of how they are used in systems building
- c) Explain **an Information Systems Architecture giving specific examples.**

8+8+4

QUESTION FIVE

- a) Compare and contrast between system designers and system builders and explain their roles in systems building
- b) Outline and describe the four distinct focuses in a system
- c) Explain the building blocks of systems interfaces

6+8+6