TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATION FOR BACHELOR OF TECHNOLOGY IN
INFORMATION TECHNOLOGY (BTIT J12/FT, BSIT J12/FT)

BIT 2112: SYSTEMS ANALYSIS & DESIGN

END OF SEMESTER EXAMINATION
SERIES: APRIL 2013
TIME: 2 HOURS

Instructions to Candidates:
You should have the following for this examination
  - *Answer Booklet*
This paper consists of **FIVE** questions. Attempt question **ONE** and any other **TWO** questions
Maximum marks for each part of a question are as shown
This paper consists of **TWO** printed pages

Question One (Compulsory)

You are a Senior Systems analyst at precision tools, you are leading the development team for a major client. You need to explain structured analysis to your two newly hired junior analysts. (James and Joseph) before meeting with clients tomorrow afternoon.

a) Make a basic list of dos and don'ts when developing DFDs.   **(5 marks)**
b) Precision Tools
     A precision tool sells a hire of high-quality wood working tools. When customers place orders on the Company's website, the system checks to see if the items are in stock, issues a status message to the customer and generates a shipping order to the warehouse, which fills the order. When the order is shipped, the customer is billed. The system also produces various reports.

     Draw a diagram O DFD for the order system.   **(10 marks)**

Question Two

a) What is feasibility study? List and briefly discuss FOUR feasibility tests.   **(5 marks)**

b) What are the steps in preliminary investigation? **(6 marks)**

c) Explain the relationship between logical and physical design. **(4 marks)**

Question Three

a) What is RAD? What are the FOUR RAD phases? Explain the functions of every phase.
(6 marks)

b) Where does systems implementation fit in the SDLC? Explain the tasks at system implementation.
(4 marks)

c) Define unit testing integration testing and system testing. **(3 marks)**

d) What is configuration management and why it is important. **(2 marks)**

SECTION B (Answer the following questions)

Question Four

Low-voltage components:

You are the IT-Manager at Low-voltage components, a medium size from that males specialized circuit boards. Low-voltage's largest customer, TX industries recently installed a computerized purchasing system. If Low-voltage connects to the new system, TX will be able to submit purchase orders electronically. Although Low-voltage has a computerized accounting system, that system is not capable of handling EDI.

a) Should Low-voltage develop a system to connect with TX industries purchasing system? Why or why not? **(5 marks)**

b) What terms or concepts describe the proposed computer-to-computer relationship between low-voltage and TX industries? **(5 marks)**

c) Is Low-voltage's proposed new system a transaction processing system? Why or why not?
(5 marks)

d) Before Low-voltage makes a final decision, should the company consider an ERP system? Why and why not? **(5 marks)**