



TECHNICAL UNIVERISTRY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

UNIVERSITY EXAMINATIONS FOR DEGREE IN:
BACHELOR OF SCIENCE IN INFORMATION COMMUNICATION TECHNOLOGY
(BSIT 14S/BSSC 13S)

EIT 4205/BIT 2212/EIT 4206: SYSTEMS ANALYSIS & DESIGN

END OF SEMESTER EXAMINATION
SERIES: APRIL 2015
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 (Compulsory)** 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)

- a) Define the following terms:
- (i) Prototype
 - (ii) Model
 - (iii) System design
 - (iv) Data flow diagram
- (8 marks)**
- b) Explain the importance of testing a system **(4 marks)**
- c) Explain the roles of a system analyst at the state of system development process **(10 marks)**
- d) With a suitable diagram, explain in detail a DFD **(8 marks)**

Question Two

- a) State and explain the components of controls **(8 marks)**
- b) Define Auditing in detail explain how auditing of a system is done **(10 marks)**
- c) Discuss TWO reasons that may make an organization abandon a system **(2 marks)**

Question Three

- a) State and explain the challenges one could have in implementing a new system in an organization **(10 marks)**
- b) With a suitable diagram explain any TWO approaches you could use to design a system **(10 marks)**

Question Four

- a) Define the following terms:
 - (i) Feasibility study
 - (ii) CASE **(4 marks)**
- b) Explain how you can use a prototype to implement an e-commerce system **(12 marks)**
- c) Give reasons why it is important to test a system **(4 marks)**

Question Five

- a) Discuss the major types of models you will consider using during system logical design stage **(10 marks)**
- b) Discuss the circumstances under which the organization would acquire a readymade system, outline its benefits **(10 marks)**