TECHNICAL UNIVERISTY OF MOMBASA

Faculty of Engineering & Technology

UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN MATHEMATICS & COMPUTER SCIENCE
BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY
(BMCS 12J, BSIT 13S)

EIT 4206/BIT 2112: SYSTEMS ANALYSIS & DESIGN

END OF SEMESTER EXAMINATION
SERIES: APRIL 2014
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 as used in the systems analysis and design:
   (i) System
   (ii) Data
   (iii) Systems analysis
   (iv) Model   **(8 marks)**

b) Outline the THREE methods of eliciting user requirements.   **(6 marks)**

c) Systems documentation is an important step during systems development. Discuss any FOUR uses of systems documentation.   **(8 marks)**

d) Outline FOUR roles of a Systems Analyst   **(8 marks)**

Question Two

Discuss the waterfall systems development model outlining the advantages and disadvantages of using this model.   **(20 marks)**

Question Three

a) Explain what a prototype is and describe how it can be used in requirement determination phase
                                    (10 marks)
b) Discuss any FOUR classes of systems maintenance and for each indicate where in the systems development it is applicable.   **(10 marks)**

Question Four

a) Explain what you understand by the term systems testing outlining FOUR types testing that will be undertaken during the system delivery (at the users site)   **(10 marks)**

b) Citing any FIVE tools for systems documentation, explain why diagrams are preferred over native text to model systems requirements.   **(10 marks)**

Question Five

Discuss the application of Computer Aided Software Engineering (CASE) tool during the systems development life cycle outlining its merits and demerits.   **(20 marks)**