TECHICAL UNIVERSITY OF MOMBASA

Faculty of Engineering & Technology

DEPARTMENT OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY
(DICT M12)

ECT 2108: SYSTEM ANALYSIS DESIGN (SAD)

SUPPLEMENTARY/SPECIAL EXAMINATION
SERIES: FEBRUARY 2013
TIME: 2 HOURS

You should have the following for this examination
- *Answer Booklet*
This paper consist of **FIVE** questions
Answer 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) (i) Explain **TWO** types of systems. **(4 marks)**

(ii) Name any **FOUR** system analysis and design tools and techniques. **(4 marks)**

b) Outline any **TWO** logical structure techniques. **(2 marks)**

c) (i) Outline the objectives of logical data structure (L.D.S) **(3 marks)**

(ii) Name and discuss the **THREE** conceptual models. **(9 mark)**

(iii) Outline contents of feasibility study report (system proposal) **(6 marks)**

(iv) Name any **TWO** levels of organizational information for management. **(2 marks)**

Question Two

a) (i) Name and differentiate **TWO** types of data flow diagrams. **(4 marks)**

(ii) Name **TWO** uses of Data Flow Diagrams (DFDs) **(2 marks)**

b) (i) Outline the procedure for drawing Data Flow Diagrams (DFD) **(5 marks)**

(ii) Name **FOUR** data processing methods. **(4 marks)**

Question Three

With an aid of a diagram, describe the structure System Analysis and Design Methodology (SSADM) hierarchical structure. **(15 marks)**

Question Four

a) (i) Name **TWO** advantages of Structured System Analysis and Design Methodology (SSADM) **(2 marks)**
(ii) What is the aim of feasibility study? **(4 marks)**

b) Discuss the **THREE** levels of organization information for management. **(9 marks)**

Question Five

A company has one Chief Executive Officer who is not employed by the other companies. It has sever divisions each of which employ several people.

No employee works for more than one division.

Each division produces several products; no product is made by more than one division. Each product may be made out of one or more raw materials. Any raw material may go into more products.

Construct a logical data structure (L.D.S) for the above information.   **(15 marks)**