KENYA METHODIST UNIVERSITY

END OF TRIMESTER EXAM APRIL 2009

FACULTY   :   ARTS AND SCIENCES
DEPARTMENT   :   COMPUTER INFORMATION SYSTEMS
COURSE CODE   :   CISY 222/COMP220
COURSE TITLE   :   SYSTEM ANALYSIS AND DESIGN
MODE   :   SCHOOLBASED

Total Marks (70)

TIME: 2 HOURS

INSTRUCTIONS

Answer all questions in SECTION A and ANY TWO questions in SECTION B

SECTION A - Answer all questions

Question 1 – 30 marks
   a. Define the following terms   (5 marks)
          i. System
         ii. Data
       iii. Information
       iv. Information system
        v. Modularity
   b. Give at least four reasons why an organization conducts system analysis
                                                                                      (4 marks)
   c. An interface exists at the point where a system meets its environment, what

      are the functions of an interface.   (6 marks)

   d. System analysts are the key individuals in the system development process,

      describe their five roles.   (5 marks)

   e. Briefly explain five elements of computer based systems.   (5 marks)

   f. Describe the term system analysis.   (2 marks)

   g. State three methods of collecting and recording facts.   (3 marks)

SECTION B – Answer ANY two questions

Question 2 – 20 marks

   a. State and briefly explain five characteristics of a system   (10 marks)

   b. Differentiate between:

         i. Open and Closed systems   (5 marks)

        ii. Deterministic and Probabilistic systems   (5 marks)

Question 3 – 20 marks

a. What is feasibility study? (2 marks)

b. Explain the following types of feasibility study (6 marks)
   i. Technical Feasibility
   ii. Economic Feasibility
   iii. Operation Feasibility

c. State and briefly explain four types of information systems (12 marks)

Question 4 – 20 marks

a. Define the following terms: (4 marks)
   i. Methodology
   ii. Coupling
   iii. Cohesion
   iv. Process

b. Using a diagram briefly explain the system development life cycle

   (12 marks)

c. What is Prototyping? (1 mark)

d. Mention three activities sometimes described as prototyping. (3 marks)