

KENYA METHODIST UNIVERSITY
End of Trimester Examination, April 2009

Faculty : Arts and Sciences
Department : Computer Information Systems
Course Code : CISY 222
Course Title : Systems Analysis and Design
TIME : Two Hours

Instruction:

- Answer question one and then answer two other questions of your choice.

QUESTION ONE (30 marks)

1. Describe the 4 System Design methodologies discussed in this course? (4Mks)
2. System Analysts are the key individuals in the system development project, describe their analytical skills (5Mks)
3. Define the following terms:
 - a) System
 - b) Sub optimization
 - c) Modularity
 - d) Methodology (4Mks)
4. An interface exists at the point where a system meets its environment, what are the 6 functions of an interface (6Mks)
5. In legal and contractual feasibility, what are the 3 possible considerations to be included (3Mks)
6. What are the traditional methods of determining requirements? (5Mks)
7. Describe 3 methods of interacting with a system when designing interface and dialogues (3Mks)

QUESTION TWO (20 marks)

1. Who are the people involved in a system development process and describe at least 2 roles of each person (5Mks)
2. Using a diagram briefly explain the System Development Life Cycle (15Mks)

QUESTION THREE (20 marks)

1. Describe the impact of Computer-Aided software engineering to individual involved in system development (4Mks)
2. Outline the objectives of CASEs for an organization (5Mks)
3. Briefly explain the 3 principle activities in project identification and selection (6Mks)
4. Define feasibility study and list the 7 categories of feasibility study (5Mks)

QUESTION FOUR (20 marks)

1. Define the term analysis and describe the 3 processes in this phase. (4Mks)
2. Discuss the 2 approaches used in this course to improving system development (5Mks)
3. Describe the situations when prototyping is most useful for requirements determination (8Mks)
4. In process modeling, what are the 3 models used in the process (3Mks)

QUESTION FIVE (20 marks)

1. In a given production process, a product is passed as fit for sale if it pass a mechanical and electrical tests, and has the correct dimensions. If it fails the mechanical or electrical tests but not both, it is sent back to the workshop for repairs. In all other cases the product is rejected.
 - a) Draw a decision table for the above narrative, illustrating all the stubs for drawing such a table (5Mks)
 - b) Draw a decision tree to represent the same processing logic (5Mks)
 - c) Write the Structured English for the above. (5Mks)
2. Describe at least 5 activities that make up system implementation (5Mks)