



AMREF INTERNATIONAL TRAINING CENTRE

Qualification Code : 091906T4HRI
Qualification : Health Records and Information Technology Level 6
Unit Code : AITC/HRIT/06/6/A
Unit of Competency : Computer System analysis and design

WRITTEN ASSESSMENT

INSTRUCTIONS TO CANDIDATE

1. You have **2 hours** to answer all the questions.
2. Marks for each question are indicated in the brackets.
3. The paper consists of **TWO** sections: A and B.
4. Candidates should answer the questions in English

This paper consists of 2 printed pages

Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing

SECTION A

Answer ALL questions in this section

1. In the world of computer systems, a systems analyst plays a very important role. State FOUR personal qualities are helpful to the systems analyst. (4marks)
2. Outline FOUR problems of group interaction that group decision support systems (GDSS) and computer supported collaborative work systems (CSCWS) were designed to address. (4marks)
3. Unit testing and integration testing are fundamental components of ensuring the robustness and reliability of a system. Distinguish between unit testing and integration (4marks)
4. Feedback serves as a fundamental mechanism for fostering growth in an organization. List FOUR purposes of feedback in organizations. (4marks)
5. Entity-Relationship (E-R) diagrams serve as powerful visual tools in database design. Explain TWO symbols are used to draw E-R diagrams (4marks)
6. Feasibility studies are integral components of strategic planning. Outline FOUR types of feasibility study (4marks)
7. Name FOUR advantages of mounting applications on the Web. (4marks)
8. Explain the meaning of the phrase “the planning game”. (4marks)
9. Active relationships are referred to as behavioral relationships and are used primarily in use case diagrams. Highlight FOUR basic types of behavioral relationships in use case diagrams. (4marks)
10. Effective system analysis and design form the cornerstone of successful information technology implementations. State FOUR importance of system analysis and design (4marks)

SECTION B: (60 MARKS)

Answer THREE questions from this section.

11. Systems design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development.
- a) Describe FIVE qualities of a good system design. (10 Marks)
 - b) Explain FIVE Function of a systems analyst (10 Marks)
12. As with almost any technical process, software testing has a prescribed order in which things should be done. Different levels of testing are used in the testing process; each level of testing aims to test different aspects of the system.
- a. Describe FOUR hierarchical levels of testing (8 Marks)
 - b. Explain FIVE factors to be considered when selecting the selecting the best delivery method of training (12 Marks)
13. Systems implementation is the construction of the new system and the delivery of that system into production.
- a) Describe FOUR system implementation techniques (14 marks)
 - b) Use a diagram to illustrate how each technique works (6 Marks)
14. In system analysis and design, gathering information is a crucial step. One common method used to collect information from many people is through a questionnaire.
- a. Define the term questionnaire. (2 Marks)
 - b. Explain FIVE circumstances when an analyst will adopt a questionnaire. (10 Marks)
 - c. Discuss FOUR disadvantages of questionnaire. (8 Marks)