

DTEMS PAST PAPER
TECHNICAL

SIR ARTHUR LEWIS COMMUNITY COLLEGE
DIVISION OF TECHNICAL EDUCATION AND MANAGEMENT STUDIES

EXAMINATION SESSION : End of Semester Examination
TUTOR : Annie Sealy-Emmanuel
PROGRAMME TITLE : Computer System Engineering
PROGRAMME CODE : 3EE-CMS-AD
COURSE TITLE : Information Systems
COURSE CODE : CMP205
CLASS : Year 2
DATE :
COMMENCEMENT TIME :
DURATION : 2 ½ Hours
ROOM :
INVIGILATOR(S) : TBA



INSTRUCTIONS

- Put your ID number ONLY in the top right-hand corner of EVERY page submitted
- There are Ten (10) questions in all
- Answer ALL questions
- ALL writing must be done in ink
- Sketches/Drawings can be done in pencil.
- Hand in ALL papers at the end of the exam, including this Exam paper.

1. (a) Differentiate between Information systems and Information Technology (2)
(b) In the context of Information Systems, define the following: (6)
 - (i) Data
 - (ii) Information
 - (iii) Knowledge(c) Based on your understanding of the following, "define":
 - i) A System (2)
 - ii) An Information System (2)

2. (a) Describe each of the types of Information Systems listed below, paying attention to their roles in Organizations such as, what it is they are used for and who uses them
 - (i) Management Information System (MIS)
 - (ii) Executive Information Systems (EIS)
 - (iii) Transaction Processing System (TPS) (9)(b) Give three reasons why an organization may choose to create or modify and Information System. (3)

3. The first task for a system developer in any system development project is to find out as much as possible about the client organization.
 - (i) Briefly describe four methods of capturing this information. (8)
 - (ii) Give four different kinds of information that can be obtained during this investigation. (4)

4. (a) During the System Design stage, one of the deliverables will be outlines of different technical solutions. These technical solutions may have different "Systems boundaries" and "Automation boundaries". Differentiate between the two types of boundaries. (4)
(b) Briefly explain **three** other possible differences in the technical solutions at this stage. (6)

5. (a) Once all planned testing procedures have been completed satisfactorily, the system can be handed over to the client. Briefly explain **four** methods of changeover. (8)
(b) Which changeover method would be most suitable for a supermarket chain implementing a new point of sale system at the checkout? Justify your answer. (4)

6. (a) Four basic categories are utilized in describing computer crime. These are: **theft, fraud, copyright infringement, and attacks**. In the context of information systems and the Internet, briefly explain each. (8)
- (b) Give two examples of how DoS attacks are carried out (2)
7. Prototyping when used in system development is based on the concept of a working model.
- (i) Give two advantages of using prototyping for the client
- (ii) Give two advantages of using prototyping for the system developer (4)
8. (a) Documentation serves several purposes. Give **three** reasons to support developing and providing proper documentation to the client after system handover (6)
- (b) Give two guidelines to follow when developing documentation for novice users (2)
9. (a) Briefly explain the concept of "Change control" within Information Systems. (2)
- (b) The six step "change control" process includes: Documenting the change request, Formal assessment, Planning, Design and testing, Implementation and review and Final assessment.
- Briefly explain what happens at the **first three stages** if the change was the addition of features to software application. (6)
- (c) A "change request" can be triggered by Users, Managers and/or the ICT department. This is brought about by internal or external factors or both. Give two examples of external factors (2)
10. (a) With regards to Information System development, differentiate between the three types of testing (6)
- (b) Give the name and significance of each number of the following software version number
Version 1.9.0.1 (4)