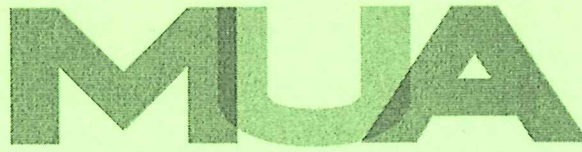


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**CERTIFICATE UNIVERSITY EXAMINATIONS**  
**SCHOOL OF MANAGEMENT AND LEADERSHIP**  
**CERTIFICATE IN BUSINESS INFORMATION TECHNOLOGY**

**CBT 104 : BASIC SYSTEM ANALYSIS AND DESIGN**

**DATE: 21<sup>st</sup> JULY 2022**

**DURATION: 2 HOURS**

**MAXIMUM MARKS: 70**

**INSTRUCTIONS:**

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX (6)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **FOUR** questions.
6. Question **ONE** carries **30 MARKS** and the rest carry **10 MARKS** each.
7. Write all your answers in the Examination answer booklet provided.

## QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

### NWDL COMMERCIAL SACCO

NWDL Commercial Sacco Ltd is situated in Nakuru County. The Sacco is owned by dairy farmers of Nakuru wakulima Dairy Ltd (NWDL) whom are the main shareholders. Milk farmers in Nakuru did not have a proper financial institution that could offer them affordable financial services; hence this necessitated the creation of the Sacco

It has the best services in the region through offering such services indicated below

#### Coffee Picking Advance

It is available to the coffee farmers whose coffee payments are made through the Sacco. The advance is recovered from the first payment of the coffee being picked.

This is available for all employed *Salary Advance*

And pensioned persons whose salaries/ pensions are paid through the Sacco.

#### Loans

Loans are only available to Sacco Members. The only security required is guarantee by fellow members. The member has also to proof the ability to repay.

Being a growing Sacco the management has decided to automate some of its activities such as firm produced record, payment records, registration of new members and also the number of vehicles that the Sacco owns. You as a system analyst and system designer you have been tasked by your company to help the Sacco to develop a new system that will carter for all the user requirements needs by answering the following questions.

#### Required

- a. Explain the term Software Requirement Specification as used in system analysis and design. (2 Marks)
- b. State Four reasons that may lead to System Development termination. (4 Marks)
- c. Propose three Methods that can be use by System Analyst to gather Information. (6 Marks)



- d. State four objectives of conduct Quality Assurance in System Development. (4 Marks)
- e. Differentiate between Adaptive and Non-Adaptive System. (4 marks)
- f. Define the term Integration as used in System Analysis and Design. (2 Marks)
- g. Propose three types of Models that could be used in System Development stage. (6 Marks)
- h. State Two roles of a System Analyst. (2 Marks)

## QUESTION TWO

- a. Define the term Unified Modeling Language as used in System Analysis and Design. (2 Marks)
- b. State and Explain four types of test done before a System is fully implemented for use. (8 Marks)

## QUESTION THREE

IT Study is a company offering many diverse courses in Information Technology. They have a manual system in place for all their administration work, which has recently expanded beyond what the system can cope with due to demand. Naturally this increase in workload requires a new system (solution) to ensure the successful running of the company. Before the overall system is designed and developed, feasibility study must be carried out for effective planning. Using this case study, explain five types of feasibility studies that should be carried out. (10 Marks)

## QUESTION FOUR

- a. Briefly explain the six phase of The SDLC. (6 Marks)
- b. State and explain two types of System Maintenance conducted after System Implementation. (4 Marks)

**QUESTION FIVE**

- a. Propose four methods that can be used in System Conversion. (4 Marks)
- b. State four importance of conduct system Audit Security. (4 Marks)
- c. Define the term System Design. (2 marks)

**QUESTION SIX**

- a. Formulate four methods that can be used in file organization. (8 Marks)
- b. State two elements of a good System. (2 Marks)