



THE PRESIDENT'S OFFICE
REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

FORM THREE MID – TERM EXAMINATION

CODE: 036/1 INFORMATION AND COMPUTER STUDIES 1

TIME: 2:30 Hours

Instructions

1. This paper consists of section A, B and C with a total of **eleven (11)** questions.
2. Answer **all** questions from section A and B and **two (2)** questions from section C.
3. Section A carries **Sixteen (16)** marks, section B carries **fifty-four (54)** marks and section C carries **thirty (30)** marks.
4. **All** writing must be in **black or blue ink except** drawing which must be in pencil.
5. Cellular phones, calculators and any unauthorized materials are **not** allowed in the examination room.
6. Write your **Examination Number** in every page.

SECTION A (16 Marks)

Answer **all** question in this section

1. Choose the correct answer from among the given alternatives and write its letter beside the item number in your answer booklet provided:

i) ##### means:

- A. You have entered a number wrongly
- B. You have misspelled something
- C. There is no value in the referenced cell
- D. The cell is not wide enough

ii) To demonstrate proficiency in document revision and control in Microsoft Word, which keyboard shortcut is used to undo the most recent action?

- A. Ctrl + Z
- B. Ctrl + X
- C. Ctrl + C
- D. Ctrl + Y

iii) Which of the following computer hardware components is responsible for temporarily storing data that the CPU (Central Processing Unit) is currently processing?

- A. SSD (Solid State Drive)
- B. GPU (Graphics Processing Unit)
- C. RAM (Random Access Memory)
- D. CPU Cache (L1, L2, L3 Cache)

iv) Which generation of computers is characterized by the use of integrated circuits as the primary electronic component and marked a significant advancement over vacuum tube-based computers?

- A. First Generation
- B. Second Generation
- C. Third Generation
- D. Fourth Generation

v) In HTML, which tag is used to create a hyperlink or anchor that links to another web page or resource?

- A. <link>
- B. <a>
- C. <url>
- D. <href>

vi) Which network topology is represented when every device is linked to a central hub or switch?

- A. Bus Topology
- B. Ring Topology
- C. Mesh Topology
- D. Star Topology

vii) What protocol is primarily used for sending and receiving emails over the internet?

- A. HTTP
- B. FTP
- C. SMTP
- D. TCP/IP

viii) To demonstrate a solid understanding of data and information, which statement best describes their relationship in an information context?

- A. Data is equivalent to information
- B. Information is unorganized data
- C. Data is raw facts, while information is processed data with meaning
- D. Data and information are interchangeable terms

ix) In Microsoft Access, which object is primarily used to create and manage the structure of a database, define tables, and set field properties?

- A. Queries
- B. Forms
- C. Reports
- D. Tables

x) To demonstrate your competence in computer software understanding, which software category is intended to empower users to efficiently carry out specific, task-oriented activities like word processing or spreadsheet calculations.

- A. System software
- B. Application software
- C. Firmware
- D. Shareware

2. Match each of the items in **LIST A** with a response in **LIST B** by writing its letter against the corresponding item number in the space provided:

LIST A	LIST B
i) Router ii) Firewall iii) Switch iv) DNS (Domain Name System) v) LAN (Local Area Network) vi) ISP (Internet Service Provider)	A. A network that covers a small geographic area, typically within a single building or campus B. Acts as document that connects other documents C. A device that connects devices within a local network and uses MAC addresses to forward data to the correct destination D. Unique name for an entire website E. A protocol that translates domain names into IP addresses, allowing users to access websites by name rather than numerical IP addresses F. Tell us how to use a program G. Preformatted document used to quickly create standard document H. A device that connects multiple network segments and makes forwarding decisions based on IP addresses I. A software or hardware system that filters incoming and outgoing network traffic to protect a network from unauthorized access J. A company or organization that provides internet access and related services to customers

SECTION B (54 Marks)

Answer **all** questions in this section

3. (a) What is meant by information in ICS?
 (b) What is the difference between dissemination and communication?
 (c) Explain ways on how information is disseminated and give five examples of each.
4. (a)(i) Explain the concept of networking within the context of information and computer studies.
 (ii) Identify and discuss four (4) disadvantages associated with networking computers.
 (iii) In light of the evolving computer landscape, the increasing automation, and its effect on employment, differentiate between the terms "job displacement" and "job replacement".
- b) Provide a list of three (3) types of information and communication technology (ICT) courses offered at the degree level.
- c) In the context of modern banking and financial institutions, define what is meant by the term "ATM card".
5. (a) Explain the concept of a "webpage" within the realm of ICT terminology.
 (b) The following is a simple sample of data table.

EMPLOYEE DETAILS		
Employee Name	Designation	Salary (\$)
John	Manager	4,000
Faith	Officer	2,500
Fatuma	Executive	3,000

- i) Write down the HTML codes to be used displaying the above table while viewing in a browser.
 - ii) Write the necessary steps of inserting above table in a word processor.
6. (a) Highlight the distinctions between the Internet and email.
- (b) (i) To demonstrate competence in ICT terminology, provide the full form of the abbreviation “URL”.
- (ii) Outline the key components of a URL.
- (iii) Clarify the variances between HTML and HTTP, demonstrating your proficiency in web-related terminology.
- (c) Differentiate between *router* and *brouter*
7. Mr. Jacob as a manager of Sales COMPANY decided to prepare the salary of his employees using Microsoft Excel. The following are details of workers include their basic salaries as recorded in Tanzania shillings:

NAME OF EMPLOYEE	BASIC SALARY	RENT ALLOWANCE	TRANSPORT ALLOWANCE	LOAN (DEDUCTION)	NET PAY
John	10000	2000	1500	5000	
Amina	12000	2000	800	-	
Joyce	8000	2000	3000	2500	
Anord	15000	2000	1500	7000	
TOTAL					

- i) Write the formula to find the Net pay of employee called John.
 - ii) Write the formula to show total amount in which the company pays for transport allowance in each month.
 - iii) Give the formula showing the net pay of Amina.
 - iv) What are the reasons for favoring the use of Microsoft Excel over Microsoft Word when creating a salary slip or managing a home budget?
8. Provide a brief explanation of six crucial factors to weigh when making the decision to purchase a new computer.

SECTION C: (30 Marks)

Answer **two (2)** question in this section

9. Today, technology is a big part of everyone's life. We all need to know how to use it properly and be punctual. If you are in a position of authority, like a teacher, tell your fellow students how technology, like computers and smartphones, can help us become more aware of important issues like road safety, corruption, gender equality, and HIV/AIDS.
10. In today's fast-paced world of computers and technology, some people use these advancements to steal private information from organizations. To protect against cybercriminals, explain six ways to make information systems more secure.
11. It is crucial that we regularly use computer networks in our daily lives. Why are computer networks important? (six points)