SMZ

ZANZIBAR EXAMINATION COUNCIL

FORM THREE ENTRANCE EXAMINATION, 2013

063   **INFORMATION AND COMPUTER STUDIES**

Time: 2:30 Hours.

INSTRUCTIONS TO CANDIDATES

1. This paper consists of Three (3) sections A, B and C.

2. Answer **ALL** questions from Section A and B and **ONLY ONE** questions from section C

3. Write your examination number on each page.

4. Write all answers on the space provided.

5. Use a blue or black pen in writing. Drawings must be in pencil.

6. Cellular phones and unauthorized materials are not allowed in the examination room.

	THIS PART FOR EXAMINER'S ONLY	
Question number	**MARKS**	**SIGNATURE**
1.		
2.		
3.		
4.		
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6.		
7.		
8.		
9.		
10.		
11.		
12.		
TOTAL		

Section A: (15 Marks)

Attempt ALL questions from this section.

1. Choose the letter of the correct answer and write it in the table provided.

i) Which of the following is a type of system software?

   A. Microsoft Word

   B. Adobe Photoshop

   C. Operating system

   D. Google Chrome

ii) The term GUI stands for:

   A. General User Internet

   B. Graphical User Interface

   C. Global User Index

   D. Graphics User Input

iii) Which of these is a characteristic of ROM?

   A. It is volatile

   B. It is used for temporary storage

   C. It is non-volatile

   D. It is a secondary storage device

iv) A type of computer that is small, lightweight, and has a battery is a:

   A. Desktop computer

   B. Mainframe

C. Supercomputer

D. Laptop

v) The main purpose of a printer is to:

A. Display images

B. Input text

C. Produce a hard copy

D. Store data

vi) The term IP address stands for:

A. Internet Protocol Address

B. Internal Protocol Address

C. Internet Port Address

D. Internal Port Address

vii) A program that is designed to help a user remove unwanted files and clean up a hard disk is a:

A. Word processor

B. Spreadsheet program

C. Utility program

D. Database program

viii) Which of the following is an example of an open-source operating system?

A. Microsoft Windows

B. macOS

C. Linux

D. Chrome OS

ix) The term cyberspace refers to:

A. The physical space in a computer

B. The virtual world of computers and networks

C. The space between computers

D. A type of computer memory

x) The process of converting data into a secret code to prevent unauthorized access is:

A. Decryption

B. Compression

C. Encryption

D. Formatting

2. Match the terms in Column A with their descriptions in Column B. Write the letter of the correct response in the table below.

COLUMN A	COLUMN B
i. Modem	A. A device that connects two LANs to create a single network.
ii. Router	B. A device that connects multiple computers and sends data to all of them.
iii. Switch	C. A device that directs data traffic between networks.

iv. Hub	D. A device that converts digital data into analog signals and vice versa.
v. Bridge	E. A device that connects multiple computers and sends data to a specific recipient.
	F. A device used to produce a hard copy.
	G. The main circuit board.

Section B: (75 Marks)

Attempt ALL questions from this section.

3. a) Define computer hardware and computer software.

   b) Give two (2) examples of each.

   c) Explain the relationship between hardware and software.

4. a) What is a user interface?

   b) Briefly explain the purpose of a user interface.

   c) Differentiate between GUI and CLI.

5. a) Explain what a computer peripheral is.

   b) State the main function of the following peripherals:

   i. Scanner

   ii. Plotter

   c) Differentiate between an impact printer and a non-impact printer.

6. a) What is online privacy?

    b) Explain two (2) reasons why it is important to protect your personal information online.

    c) Mention three (3) potential risks of not protecting your online privacy.

7. a) Briefly explain the concept of e-commerce.

    b) Give two (2) examples of e-commerce websites.

    c) State two (2) advantages and two (2) disadvantages of e-commerce.

8. a) Define social media.

    b) Give two (2) examples of social media platforms.

    c) Analyze two (2) advantages and two (2) disadvantages of using social media.

9. a) What is a network topology?

    b) Draw a simple diagram of a Star topology.

    c) State one (1) advantage and one (1) disadvantage of a Star topology.

10. a) What is data backup?

    b) State two (2) reasons for performing data backup.

    c) List two (2) types of external storage devices used for data backup.

Section C: (10 Marks)

Attempt ONLY ONE (1) question from this section.

11. A school treasurer uses a spreadsheet to track the monthly fees paid by students. Use the table below to answer the questions that follow.

	A	B	C	D	E	F	G
1	Student Name	January	February	March	Total Fees	Average	

2	Sarah	10000	12000	10000			
3	David	12000	11000	12000			
4	Emily	9000	10000	11000			
5	James	11000	12000	10000			

a) Write a formula to calculate the total fees paid by each student in column F.

b) What formula would you use in cell G2 to find the average fees paid by Sarah?

c) What is the formula to find the highest amount paid in February?

d) Write a formula to calculate the total fees collected in the month of March.

12. a) Define the term web page.

b) Differentiate between a website and a web page.

c) Briefly explain the purpose of a Uniform Resource Locator (URL).

d) What is a homepage?