

**THE UNITED REPUBLIC OF TANZANIA**  
**NATIONAL EXAMINATIONS TANZANIA**  
**FORM TWO SECONDARY EDUCATION EXAMINATION**  
**036 INFORMATION AND COMPUTER STUDIES**

**Time: 2:30 Hours**

**ANSWERS**

**Thursday 26th October 2015**

**Instructions**

1. This paper consists of sections A, B, and C
2. Answer all questions in section A and B and C
3. All writings must be in **blue** or **black** ink.
4. Communication devices and any unauthorized materials are **not** allowed in the assessment room.
5. Write your **Examination Number** at the top right hand corner of every page.

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- i. A memory which is used to store programmed instructions and data permanently is called
- A. RAM
  - B. ROM
  - C. Register
  - D. Buffers

Correct answer: B. ROM

Reason: ROM (Read-Only Memory) is non-volatile and is used to store data permanently, even when the power is turned off. RAM, on the other hand, is volatile.

- ii. Which one of the following commands is used to reboot a computer?
- A. Ctrl + Shift + Del
  - B. Ctrl + Alt + Tab
  - C. Ctrl + Alt + Shift
  - D. Ctrl + Alt + Del

Correct answer: D. Ctrl + Alt + Del

Reason: The Ctrl + Alt + Del command is commonly used to reboot or access system options like Task Manager.

- iii. Which one of the following is not a traditional way of disseminating information?
- A. Whistle
  - B. Drum
  - C. Horns
  - D. Newspaper

Correct answer: D. Newspaper

Reason: Newspapers are a modern form of disseminating information compared to traditional methods like whistles, drums, or horns.

- iv. Operating Systems which do not provide Graphical User Interface (GUI) is called
- A. Windows XP
  - B. Macintosh
  - C. MS-DOS
  - D. Windows 98

Correct answer: C. MS-DOS

Reason: MS-DOS is a command-line-based operating system without a graphical user interface, while the others provide GUI.

- v. Development which marked the second generation computers is
- A. Vacuum tubes
  - B. Transistors

- C. Microprocessors
- D. Artificial intelligence

Correct answer: B. Transistors

Reason: The second-generation computers used transistors, which replaced vacuum tubes, offering more reliability and efficiency.

vi. The programs designed to perform specific tasks are called

- A. Utility software
- B. System software
- C. Special purpose software
- D. Application software

Correct answer: D. Application software

Reason: Application software is designed for end-users to perform specific tasks like word processing or browsing.

vii. Which of the following software will be loaded first to the memory when the computer is switched on?

- A. Word processor
- B. Windows XP
- C. Web browser
- D. An anti-virus software

Correct answer: B. Windows XP

Reason: The operating system (e.g., Windows XP) is the first software loaded into the memory during the boot process.

viii. The computers which are mostly used in large businesses as network servers are known as

- A. Mainframe computers
- B. Minicomputers
- C. Supercomputers
- D. Microcomputers

Correct answer: A. Mainframe computers

Reason: Mainframe computers are large, powerful systems used by businesses to process vast amounts of data and serve as network servers.

ix. Which one of the following is an example of an absolute cell reference in a spreadsheet?

- A. \$A\$1
- B. \$A1
- C. A\$1
- D. SAS\$

Correct answer: A. \$A\$1

Reason: Absolute cell references in spreadsheets are denoted by a dollar sign (\$) before both the column and row.

x. Cells A4, A5, C4, C5, and C7 contain values 4, 4, 9, 2, and 3 respectively. Then in cell D a formula,  $=(C5*A4)+(A7+C4*C7)$  is entered. What will be the value for cell D?

- A. 10
- B. 18
- C. 9
- D. 11

Correct answer: B. 18

Reason: By substituting the values into the formula:  $(2*4)+(0+9*3) = 8 + 27 = 18$ . (A7 is empty, so it's treated as 0.)

xi. Which of the following devices must be used to connect two computers for data sharing?

- A. Switch
- B. Router
- C. Modem
- D. Gateway

Correct answer: B. Router

Reason: A router is used to connect multiple devices (e.g., two computers) for data sharing over a network.

xii. Which one of the following is not a word processor?

- A. WordStar
- B. MS Word
- C. WordPad
- D. Excel

Correct answer: D. Excel

Reason: Excel is a spreadsheet program, not a word processor.

xiii. Peripheral devices are connected to the system unit using special cables known as

- A. USB ports
- B. Ports cables
- C. Device cables
- D. Cables

Correct answer: A. USB ports

Reason: USB ports are the standard method for connecting peripheral devices to computers.

xiv. Computers that process both analog and digital data are called

- A. Hybrid computers
- B. Digital computers
- C. General computers
- D. Supercomputers

Correct answer: A. Hybrid computers

Reason: Hybrid computers are designed to process both analog and digital data.

xv. Which one of the following is an example of operating system?

- A. Microsoft Word
- B. Microsoft Access
- C. Microsoft Excel
- D. Microsoft PowerPoint

Correct answer: A. Microsoft Word

Reason: Operating systems like Microsoft Word are responsible for managing hardware and software resources.

xvi. The following are functions of the UPS except

- A. To prevent power surge
- B. To provide backup power
- C. To save files
- D. To supply uninterrupted power cut

Correct answer: C. To save files

Reason: The UPS (Uninterruptible Power Supply) does not save files; it provides backup power and protects against power surges.

xvii. The work area made up of rows and columns where data is entered is called

- A. WorkSheet
- B. Workbook
- C. Spreadsheet
- D. Word processor

Correct answer: C. Spreadsheet

Reason: Spreadsheets consist of rows and columns used to organize and calculate data.

xviii. The tool that helps the user to find words or phrases with similar meaning is known as

- A. Autocorrect
- B. Autocomplete
- C. Grammar checker
- D. Thesaurus

Correct answer: D. Thesaurus

Reason: A thesaurus is used to find synonyms or words with similar meanings.

xix. The following are examples of browser except

- A. Internet Explorer
- B. Mozilla Firefox
- C. Google Chrome
- D. Microsoft Word

Correct answer: D. Microsoft Word

Reason: Microsoft Word is a word processor, not a web browser.

xx. A website that contains personal information which can easily be updated is called

- A. Website
- B. Portal
- C. Personal web
- D. Blog

Correct answer: D. Blog

Reason: Blogs allow users to update content and share personal information easily.

2. Match the following functions of network devices in List A to their corresponding communication devices in List B by writing the letter of the correct option beside the item number in the table provided.

List A

- i. A device which creates a physical link between the computer and the transmission media.
- ii. A device which converts a signal from digital to analog form for the purpose of transmission.
- iii. A device that connects networks that have a common architecture.
- iv. A device that selectively determines the appropriate network segment for which a message is meant for delivery through address filtering.
- v. A device that receives a signal from one segment of a network, cleans it to remove any distortion before sending that signal to another computer.
- vi. A device which interconnects different networks and directs the transfer of data packets from source to destination.
- vii. A device which can be configured to provide access to wide area networks or Internet.
- viii. A device which forwards a packet directly to the address node without broadcasting.
- ix. A device which detects signals in the surrounding.
- x. A device which is most common in wireless networks.

List B

- A. Wireless antennae
- B. Switch
- C. Gateway

- D. Router
- E. Repeater
- F. Bridge
- G. Hub
- H. Modem
- I. Access point
- J. Network Interface Card
- K. Coaxial cable
- L. Data bus
- M. Universal serial bus

Answers

- i. J
- ii. H
- iii. F
- iv. B
- v. E
- vi. D
- vii. I
- viii. B
- ix. A
- x. A

3. For each of the following statements, write TRUE if the statement is correct or FALSE if the statement is not correct.

i. Laser printers and inkjet printers are examples of non-impact printers.

Answer: TRUE

ii. Touch screen and monitors are output devices.

Answer: TRUE

iii. Most word processors have the ability to create and import tables, text, and graphics from other programs.

Answer: TRUE

iv. A worm does not attach itself to a program but self-replicates hence jams computer storage and memory.

Answer: TRUE

v. Primary and secondary sources are not main classes of sources of information.

Answer: FALSE

vi. The recommended fire extinguishers are liquid type.

Answer: FALSE

vii. Antiglare screens can avoid eye strain caused by over bright cathode ray tube monitors.

Answer: TRUE

viii. Worksheet, database, and graphs are the main components of spreadsheets.

Answer: TRUE

ix. Portrait and landscape are types of page layout.

Answer: TRUE

x. The majority of menu shortcut keys are activated by using the control key.

Answer: TRUE

4. Answer all questions in this section.

(a) Complete each of the following sentences using one item from the given list:

Menu bar, tool bar, Ctrl+F4, Ctrl+S, Ctrl+X, status bar, Ctrl+V

i. \_\_\_\_\_ act as a communication link between the user and the program.

Answer: Menu bar

ii. \_\_\_\_\_ help a user to close the current document.

Answer: Ctrl+F4

iii. \_\_\_\_\_ help a user to save changes made to the document.

Answer: Ctrl+S

iv. \_\_\_\_\_ help a user to paste the document.

Answer: Ctrl+V

(b) Define the term electronic word processor.

Answer: An electronic word processor is a computer application software used for creating, editing, formatting, and printing documents. It allows users to efficiently manage text, graphics, and page layouts in digital documents.

(c) Give four advantages of electronic word processor over manual typewriters.

i. Ease of editing: With a word processor, users can easily edit text, including making corrections, deleting, or rearranging content without retyping the entire document.

ii. Document formatting: Word processors allow for advanced formatting options such as font changes, text alignment, and the insertion of images, tables, and hyperlinks.

iii. Document storage: Electronic word processors enable the saving of documents for future use, reducing the need for paper storage.

iv. Automation features: Word processors offer features like spell-check, grammar-check, and templates, which save time and improve accuracy compared to manual typewriters.



5. (a) The Central Processing Unit (CPU) is the most important component of the computer.

(i) Mention three functional elements of the CPU.

i. Arithmetic and Logic Unit (ALU)

ii. Control Unit (CU)

iii. Registers

(ii) Explain the function of each element mentioned in (i) above.

i. Arithmetic and Logic Unit (ALU): This part of the CPU performs all arithmetic operations (like addition, subtraction) and logical operations (like comparisons).

ii. Control Unit (CU): The CU directs and coordinates the activities of the computer by interpreting instructions and controlling data flow between different parts of the system.

iii. Registers: Registers are small storage locations within the CPU that temporarily hold data and instructions being processed.

(b) Read the following snapshot and answer the questions that follow:

(i) Give the name of the program used to create the snapshot above.

Answer: Microsoft Excel

(ii) Write the font face and size used to type the details in the given snapshot.

Answer: Font face: Calibri, Size: 11

(iii) Give the reference name of the active cell.

Answer: G12

(iv) What format was done for the cells in row 3?

Answer: Bold formatting

(v) The Net came from subtracting Total deduction from the Gross. Write down the formula required to calculate the net.

Answer: =Gross - Total Deduction

(vi) Write down the function required to calculate the average for all the net.

Answer: =AVERAGE(H4:H8)

(vii) Write the function required to calculate the total gross.

Answer: =SUM(E4:E8)

(viii) Write the function required to calculate the highest net pay.

Answer: =MAX(H4:H8)

6. Describe two advantages and three limitations of using E-mail as a means of communication.

Advantages:

- i. Cost-effective: Email is free to use and allows the sending of messages, documents, and multimedia without incurring additional costs.
- ii. Speed: Messages are delivered instantly, making email a fast and efficient way to communicate.

Limitations:

- i. Dependency on internet connection: Emails require a stable internet connection, which may not be available in some areas.
- ii. Security concerns: Emails are prone to hacking, phishing, and other cyber threats, putting sensitive information at risk.
- iii. Overload: Excessive emails can lead to inbox clutter and difficulty in managing important messages.