

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

Time: 2:30 Hours

ANSWERS

Tuesday 20th November 2018

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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1. For each of the following items (i)-(x), choose the correct answer and write its letter in the box provided:

i. The SI unit for measuring the amount of information stored on the computer disk is called

- A. Byte
- B. Bit
- C. Hz
- D. bps

Answer: A. Byte

Reason: The byte is the standard unit of data storage used to measure information on computers.

ii. Which one of the following are examples of modern ways of information dissemination?

- A. Internet, meeting and telephone
- B. Newspaper, television and whistle
- C. Internet, radio and letters
- D. Horns, radio calls and television

Answer: A. Internet, meeting and telephone

Reason: Modern information dissemination methods rely on internet and digital communication technologies.

iii. Which of the following can be used to avoid data loss due to disk damage or failure in a computer?

- A. Installing licensed antivirus
- B. Creating backup
- C. Using password
- D. Creating separate user accounts

Answer: B. Creating backup

Reason: Backups ensure data recovery in case of disk failure or corruption.

iv. What is the main function of CTRL + F keys combination when applied in a Microsoft word program?

- A. Save the current file/document
- B. Open a find text dialog box
- C. Find images in the document
- D. Open the format dialog box

Answer: B. Open a find text dialog box

Reason: CTRL + F is a shortcut to search for text within a document.

v. What does the term software mean?

- A. An instruction followed by a computer
- B. An alternative word for hardware
- C. The results of computer processing
- D. Tangible part of the computer

Answer: A. An instruction followed by a computer

Reason: Software refers to sets of instructions that tell a computer how to perform tasks.

vi. Which of the following formulas can be used to calculate the total value in a spreadsheet?

A. =SUM(B2,B3,B4,B5)

B. =Total(B2:B5)

C. =Count(B2:B5)

D. =Add(B2:B5)

Answer: A. =SUM(B2,B3,B4,B5)

Reason: The SUM function is used in spreadsheets to add values in a range of cells.

vii. Word processing, spreadsheet and photo editing programs are examples of

A. System software

B. Application software

C. Operating system

D. User-interface software

Answer: B. Application software

Reason: These programs are used to perform specific tasks for users.

viii. An organization/company which owns facilities to enable users to access the internet is known as

A. Internet Access Company

B. Internet System Program

C. Internet Service Provider

D. Internet Service Program

Answer: C. Internet Service Provider

Reason: ISPs provide access to the internet through infrastructure and services.

ix. A temporary memory which is used to store a copied text or image is called

A. Chip board

B. Clipboard

C. Buffer

D. Register

Answer: B. Clipboard

Reason: The clipboard temporarily stores copied or cut items to be pasted elsewhere.

x. Which of the following is the sign to indicate that a computer has a virus infection?

A. Missing files or data

B. No icons could be seen on the desktop

C. Inability to access the internet

D. The task bar slips down when the cursor is taken out of it

Answer: A. Missing files or data

Reason: Missing or corrupted files are common symptoms of a virus infection.

2. Match the following functions of input devices in List A with their corresponding devices in List B by writing the letter of the correct corresponding device below the item number in the table provided:

List A:

- i. A device used to capture data from an object and converting it into digital format.
- ii. A device that uses radio or infrared waves instead of being physically connected to the system unit.
- iii. An input device used on portable devices such as laptops and mobile phones.
- iv. A device used to enter data in form of speech into the computer.
- v. A device that looks like a lever used to control a pointer on the screen.

List B:

- A. Joystick
- B. Cordless mouse
- C. Printer
- D. Scanner
- E. Monitor
- F. Keypad
- G. Keyboard
- H. Microphone

Answers:

- i. D
- ii. B
- iii. F
- iv. H
- v. A

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

i. Networking enables various computers to share resources on the same network.

Answer: True

Reason: Networking allows computers to share files, printers, and other resources efficiently.

ii. Disk driver is a hardware that reads and writes information on the disk.

Answer: False

Reason: A disk driver is software that allows the operating system to communicate with the hardware. The hardware component is called a disk drive.

iii. A barcode reader is one example of an input device.

Answer: True

Reason: A barcode reader is used to input data into a computer by scanning barcodes.

iv. A LAN is faster than the internet.

Answer: True

Reason: A LAN operates locally and typically provides higher speeds compared to internet connections that rely on external service providers.

v. In relative cell reference, the formula remains the same.

Answer: False

Reason: Relative cell references adjust when the formula is copied or moved to another cell.

4. Answer all questions in this section.

a. Give the computer generation which produces a lot of heat.

Answer: Second generation

Reason: Second-generation computers used transistors, which produced more heat compared to vacuum tubes used in the first generation.

b. Mention the technology used during the following generation of computers:

i. Fourth generation

Answer: Microprocessors

Reason: Fourth-generation computers were based on microprocessor technology, which integrated circuits onto a single chip.

ii. Second generation

Answer: Transistors

Reason: Second-generation computers used transistors for processing instead of vacuum tubes.

c. Mention four early computing devices that were made by a man.

i. Abacus

ii. Napier's Bones

iii. Pascaline

iv. Difference Engine

d. Outline three main characteristics of the fifth generation computers.

i. Use of artificial intelligence to solve complex problems.

ii. Extremely fast processing speeds and efficiency.

iii. Support for parallel processing and quantum computing technology.

5. a. What is an operating system?

An operating system is a system software that manages computer hardware and software resources and provides services for computer programs.

b. Differentiate multiuser from multitasking operating system.

Multiuser operating system allows multiple users to access a computer simultaneously, while a multitasking operating system allows a single user to execute multiple tasks simultaneously.

c. i. Why is it advisable to store files into a folder?

It is advisable to store files in folders to organize data systematically, make file retrieval easier, and prevent data loss.

ii. Outline the procedures you would follow to restore deleted files to their original location.

- Open the Recycle Bin on your computer.
- Locate the deleted file you want to restore.
- Right-click on the file.
- Select "Restore" from the context menu.
- The file will be returned to its original location.

6. a. i. Define the term an electronic mail.

Electronic mail (email) is a method of exchanging digital messages between people using electronic devices connected to a network like the internet.

ii. Give two advantages and two disadvantages of electronic mail.

Advantages:

- Allows instant communication over long distances.
- Cost-effective and accessible anytime.

Disadvantages:

- Risk of spam and phishing emails.
- Requires internet connectivity.

b. Differentiate "To" from "Carbon Copy (CC)" field as applied in electronic mail.

The "To" field is used to specify the primary recipients of an email, while the "CC" field is used to send a copy of the email to additional recipients without expecting them to reply or act.

c. Give three main parts of electronic mail.

- Header (contains "To", "From", and "Subject").
- Body (the main content of the email).
- Attachments (files added to the email).

7. a. Mention four examples of charts which can be created in spreadsheet.

- Bar chart
- Pie chart
- Line chart
- Column chart

b. Explain the importance of formatting rows and columns in Excel.

Formatting rows and columns enhances the readability of data, organizes information systematically, and improves the overall presentation of the spreadsheet.

c. Read the given snapshot and answer the questions that follow:

i. State the name of the program used to create a chart above.

The program used is Microsoft Excel.

ii. Write the type of the chart given in a snapshot.

The chart is a Bar Chart.

iii. What are the names of horizontal and vertical axes?

- Horizontal axis: Region Names

- Vertical axis: Income Contribution

iv. What does a chart represent?

A chart represents the graphical representation of data to illustrate relationships, trends, or comparisons effectively.

8. a. What do you understand by the term "network topology"?

Network topology refers to the physical or logical arrangement of nodes (devices) and connections in a network.

b. Explain three types of computer network.

i. Local Area Network (LAN):

A LAN is a network that connects computers within a limited area, such as a home, school, or office, using wired or wireless connections.

ii. Wide Area Network (WAN):

A WAN is a network that covers a large geographical area and connects multiple smaller networks, often using public or private transmission lines.

iii. Metropolitan Area Network (MAN):

A MAN is a network that spans a city or campus, connecting several LANs to form a larger network.

9. (a). i. Write the steps required in deleting a paragraph in Microsoft Word program:

- Highlight the paragraph you wish to delete.

- Press the "Delete" key on the keyboard.

ii. Mention five names of bars found on Microsoft Word program window:

- Title Bar

- Menu Bar

- Toolbar

- Status Bar

- Ribbon

i. Give the name of the bar in a Microsoft Word program which acts as the communication link between a user and the program:

- Title Bar

ii. List two examples of word processor programs:

- Microsoft Word

- Google Docs

10. Explain three advantages and three disadvantages of using computers in daily life.

Advantages:

i. Efficiency: Computers speed up tasks such as data processing and communication.

ii. Accessibility to Information: They allow users to access a wide range of information through the internet.

iii. Automation: They enable automation of repetitive tasks, increasing productivity.

Disadvantages:

i. Health Issues: Prolonged use can lead to health problems like eye strain and poor posture.

ii. Cybersecurity Threats: Risks such as hacking and data breaches are associated with computer usage.

iii. Overdependence: Excessive reliance on computers may reduce problem-solving and critical thinking skills.