THE UNITED REPUBLIC OF TANZANIA

NATIONAL EXAMINATIONS COUNCIL

CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

036/1 **INFORMATIONAND COMPUTER STUDIES 1**

(For Both School and Private Candidates)

Time : 3 Hours **ANSWERS** **Year : 2023**

Instructions

1. This paper consists of sections A, B and C.
2. Answer all questions in section A and B and **one (1)** question from section C.
3. Non-programmable calculators may be used.
4. Communication devices and any unauthorised materials are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).

1. (i) What is the function of the tool as used in Microsoft Access?
   A. To create table
   B. To create query
   C. To create relationship
   D. To create report
   E. To create form

   Correct answer: B. To create query
   Reason: The icon shown is for creating a query in Microsoft Access, which is used to retrieve and manipulate data from tables.

   (ii) Form One students reported some school laboratory computers malfunctioning. The investigation of the reported problem revealed the failure of data transfer in the CPU. Which part caused the reported problem?
   A. ALU
   B. CU
   C. Memory
   D. RAM
   E. ROM

   Correct answer: B. CU
   Reason: The Control Unit (CU) of the CPU is responsible for directing the flow of data and instructions. If data transfer fails, the CU is the part affected.

   (iii) You were asked to prepare a presentation on the importance of studying the computer studies subject. What kind of software will you use to accomplish the task?
   A. Microsoft Publisher
   B. Microsoft PowerPoint
   C. Microsoft Word
   D. Microsoft Excel
   E. Microsoft Access

   Correct answer: B. Microsoft PowerPoint
   Reason: PowerPoint is specifically designed for preparing presentations, making it the correct software for the task.

(iv) How can you differentiate third computer from second computer generation?

A. Third computer uses transistor while second computer use vacuum tube.

B. Third computer uses vacuum tube while second computer use transistor.

C. Third computer uses microprocessor while second computer use transistor.

D. Third computer uses integrated circuits while second computer use transistor.

E. Third computer uses artificial intelligence while second computer use transistor.

Correct answer: D. Third computer uses integrated circuits while second computer use transistor

Reason: The second generation used transistors, while the third generation introduced integrated circuits, marking the difference.

(v) A subject teacher wants to assign the position of his students using the Microsoft excel program as given in the following figure. Which function would you suggest to be used by a teacher to perform the intended task?

A. =RANK(B2,$B$3:$B$5)

B. =RANK((B2,B3:B5)

C. =RANK(B2,$B$2:$B$5)

D. =RANK((B2,$B$2:$B$5)

E. =RANK(B2,$3B:$5B)

Correct answer: C. =RANK(B2,$B$2:$B$5)

Reason: This formula correctly ranks the values in column B by comparing each student's marks with the full list $B$2:$B$5.

(vi) Sikujua designed a brochure for her ICT club members. She wants to produce 20 printouts of her work. Which one represents the correct procedures for accomplishing her goal?

A. Click print, click file menu, select printer, type 20 copies then click print.

B. Click file menu, select printer, click print, type 20 copies then click print.

C. Click file menu, type 20 copies, click print, select printer and then click print.

D. Click file menu, click print, select printer, type 20 copies then click print.

E. Select printer, click file menu, click print, type 20 copies then click print.

Correct answer: D. Click file menu, click print, select printer, type 20 copies then click print

Reason: This is the proper sequential order of printing procedures in Microsoft Word or Publisher.

(vii) You have been invited to prepare Form Four graduation songs in a digital audio file. Which one would be your initial step for the task?

A. Digitising the analog material

B. Setting proper recording levels

C. Balancing the sound quality

D. Increase higher audio beats

E. Determining digital audio size

Correct answer: A. Digitising the analog material

Reason: Before editing or improving audio, the first step is converting it into digital format through digitisation.

(viii) Your school secretary wants to see thumbnails of all Microsoft Power Point slides for easily rearrangement. Which type of a view would you suggest to be used to accomplish the task?

A. Normal

B. Reading

C. Outline

D. Notes page

E. Slide sorter

Correct answer: E. Slide sorter

Reason: Slide sorter view displays slides in thumbnails which can easily be rearranged.

(ix) Which attribute led the display of default statement "Enter your name" appeared in the following HTML textbox?

A. Value

B. Name

C. Input

D. Default

E. Selected

Correct answer: A. Value

Reason: The value attribute specifies the default text to be displayed in a textbox in HTML.

(x) Why is it important to preview the document before printing?

A. It minimizes the consumption of cartilages to be used.

B. It helps to reduce typographical errors within the document.

C. It corrects spelling and formatting mistakes made.

D. It regulates automatically the margin of the document.

E. It gives the assurance of the document to be printed.

Correct answer: B. It helps to reduce typographical errors within the document

Reason: Print Preview allows the user to spot layout errors, page breaks, and mistakes before wasting paper and ink.

2. Match the descriptions of the text button alignment used in Microsoft excel in List A with the corresponding alignments in List B by writing the letter of a correct answer beside the item number in the answer booklet provided.

List A

(i) It aligns the cell contents to the top edge of the cell.

(ii) It aligns the cell contents to the right edge of the cell.

(iii) It aligns the cell contents to the left edge of the cell.

(iv) It centers the cell contents horizontally within the cell.

(v) It aligns the cell contents to the bottom edge of the cell.

(vi) It centers the cell contents vertically within the cell.

Correct answers: G, K, H, I, A, F

3. What is the function of each of the given database objects?

   (a) Form

A form is used to enter, view, and edit data in a user-friendly manner. It simplifies the process of interacting with a database compared to directly using tables.

(b) Table relationship

A table relationship is used to link data between different tables by matching key fields. This ensures data consistency and helps reduce redundancy.

(c) Macros

Macros are used to automate repetitive tasks in a database. They contain a set of instructions that can be executed with a single command.

(d) Query

A query is used to retrieve, update, or manipulate specific data from one or more tables. It allows users to filter and sort data based on given conditions.

(e) Report

A report is used to present database information in a structured and printable format. It organizes data into readable summaries for decision-making.

4. You have been assigned to create an e-mail account for effective communication for your further studies.
   (a) Which program would you use to accomplish the task?

The program to use is an internet browser such as Google Chrome or Mozilla Firefox to access an email service provider like Gmail or Yahoo Mail.

(b) Which steps would you follow to accomplish the task?

First, open an internet browser and visit the website of an email provider.

Second, click on “Create Account” or “Sign Up” to begin registration.

Third, fill in personal details such as name, date of birth, username, and password.

Finally, confirm registration through a verification process such as a code sent to your phone or an alternative email.

(c) Briefly explain the use of spam, Carbon Copy, and Blind Carbon Copy in the electronic mail.

Spam refers to unwanted or junk email usually sent in bulk for advertising or fraudulent purposes. It clogs the inbox and wastes storage space.

Carbon Copy (CC) is used to send a copy of the email to additional recipients apart from the main addressee. All recipients can see the addresses of those in CC.

Blind Carbon Copy (BCC) also sends copies to additional recipients but keeps their addresses hidden from other recipients, maintaining privacy.

5. The academic master created the computer backup by using a storage medium located within the same office. Suddenly the office got fire caused by electricity problem and the data were lost.
   (a) Identify the method of backup done by the academic master.

The method of backup done is local backup.

(b) Explain three benefits of the method of backup identified in 5(a).

Local backup is fast because files are stored directly onto a local storage device without requiring internet connectivity.

It is inexpensive since it uses storage devices like external hard drives or flash disks.

It allows full control over data security as the storage medium remains physically close to the user.

(c) Which method of backup could be used to avoid the problem that happened? Give one reason.

The method is cloud backup. The reason is that it stores data online on remote servers, which means data will still be safe even if a local office or device is destroyed.

6. Form Six students complained that their graduation video film had poor quality in term of order, size, color and transitions. The analysis done showed that one of the stages in preparing the video was skipped.
   (a) Identify the skipped step.

The skipped step is editing.

(b) Explain four procedures you would follow to accomplish the skipped step.

One procedure is arranging video clips in the correct sequence to maintain proper order.

Another procedure is adjusting the size and resolution of the video for clarity.

A third procedure is correcting and enhancing colors to make the video more appealing.

A fourth procedure is adding smooth transitions and effects between clips to improve presentation.

7. Study carefully the following HTML codes and answer the questions that follow:

(a) Which line had the tag used for inserting picture?

The tag used for inserting a picture is found on line 13: <img src="Crane.jpg" Align="right">.

(b) What is the function of the HTML tags presented by line 6, 8 and 11?

Line 6 <form> is used to create a form where users can input data.

Line 8 <input type="text"> is used to create a textbox for entering text.

Line 11 <td colspan=2> is used to merge two columns into a single cell in a table.

(c) What will happen if the tag presented by line 3 will be deleted?

If line 3 <body bgcolor="white"> is deleted, the webpage will no longer have a white background and will default to the browser's standard background color.

(d) If line 11 and 13 were deleted from the given codes, what will be the output?

If line 11 is deleted, the cell will not span across two columns and the table arrangement will change.

If line 13 is deleted, the picture "Crane.jpg" will not appear in the output.

8. (a) A company is planning to conduct a minor LAN renovation by connecting all computers and other devices to a central server.
   (i) Identify the type of network physical topology to be designed.

The type of physical topology to be designed is the star topology.

(ii) Why did the company choose the type of topology identified in 8(a)? Give two reasons.

The company chose the star topology because it is easy to manage and troubleshoot, since each computer is connected directly to the central server.

Another reason is that failure of one cable or device does not affect the rest of the network, making it more reliable.

(b) If the designed network would be modified to WLAN. What advantages will the company experience with the new design? Give two advantages.

One advantage is flexibility and mobility, since users can connect to the network without being restricted by cables, allowing them to move freely within the coverage area.

Another advantage is reduced cabling costs, because the wireless system does not require extensive physical wiring, which lowers installation expenses.

9. ESC Ltd is a company which uses the face to face way of selling its devices. The company marketing officer decided to adapt the electronic commerce to widen their business. However, he/she had limited knowledge of this approach. Explain to him/her three benefits and three limitations that the company will face by adapting the new system.

One benefit is wider market coverage, since electronic commerce allows the company to reach customers beyond physical boundaries.

Another benefit is reduced operational costs, because fewer physical outlets are required, saving on rent and utility expenses.

A third benefit is convenience, as customers can browse, order, and pay for products online at any time.

One limitation is the risk of cyberattacks and fraud, as online transactions are vulnerable to hacking and scams.

Another limitation is dependency on technology, since system failures or poor internet connectivity can disrupt business operations.

A third limitation is lack of physical interaction, which may reduce customer trust when compared to face-to-face transactions.

10. A school management asked you to design a certificate for the best oral presenter award in the final year projects presentation session. In accomplishing the task, you decided to use the Microsoft Desktop Publisher program. Why have you decided to use such a program? Explain by giving five points.

Microsoft Desktop Publisher is suitable because it allows creation of high-quality printed materials such as certificates with professional layouts.

It provides ready-made templates that make the designing process faster and easier for beginners.

It supports text and graphic integration, enabling both images and wording to be used effectively on the certificate.

It has design tools such as alignment and color features that enhance the appearance and attractiveness of the certificate.

It allows easy editing and customization, so changes can be made quickly without starting the design from scratch.

11. The director of the Computer Supplier Company Ltd conducted the press conference to inform the customers about proper ways of handling electronic devices. After the conference, most of the customers complained that the communication done was not effective. Analyze four factors that attributed to the reported problem.

One factor could be unclear presentation. If the director used too much technical language, customers may have failed to understand the message.

Another factor could be poor use of communication media. If only verbal communication was used without visual aids like slides or demonstrations, the message may not have been effective.

A third factor could be poor audience engagement. If the director did not allow questions or feedback, customers might have felt left out.

A fourth factor could be time mismanagement. If the conference was too short or too long, important points may not have been properly communicated.