# THE UNITED REPUBLIC OF TANZANIA
# NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
# CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

**036/1** **INFORMATION AND COMPUTER STUDIES 1**

(For Both School and Private Candidates)

**Time: 3 Hours** **Year: 2021**

## Instructions

1. This paper consists of sections A, B and C with a total of **twelve (12)** questions.
2. Answer **all** questions in sections A and B and **one (1)** question from section C.
3. Section A carries **fifteen (15)** marks, section B **seventy five (75)** marks and section C carries **ten (10)** marks.
4. Cellular phones and any unauthorised materials are **not** allowed in the examination room.
5. Write your **Examination Number** on every page of your answer booklet(s).

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## SECTION A (15 Marks)

Answer **all** questions in this section.

1. For each of the items (i) - (x), choose the correct answer from among the given alternatives and write its letter beside the item number in the answer booklet provided.

(i) In a computer system, unprocessed numbers, text and pictures for various purposes are known as

A knowledge. B data. C information.
D contents. E figures.

(ii) Which objects will you use to create a form in Microsoft access?

A Tables and queries B Tables and design views
C Tables and reports D Queries and reports
E Queries and design views

(iii) Which method is best for protecting the computer against short circuiting?

A Providing standby generator B Providing fire extinguisher
C Providing surge protectors D Providing insulated cables
E Providing air ventilation

(iv) What does an advertisement with a combination of text, audio, pictures and some animations presents?

A Hyperlink presentation B Hypermedia presentation
C Multimedia presentation D Single media presentation
E Interactivity presentation

(v) The correct sequence of computers arranged in descending order according to their physical size and processing power is

A mainframe computer, minicomputer, supercomputer
B minicomputer, mainframe computer, supercomputer
C supercomputer, mainframe computer, minicomputer
D minicomputer, supercomputer, mainframe computer
E mainframe computer, supercomputer, minicomputer

(vi) What is the function of the features  as used in Microsoft Excel?

A To align the text top, middle and left.
B To align the text left, middle and center.
C To align the text top, middle and right.
D To align the text left, center and right.
E To align the text top, middle and bottom.

(vii) The shortcut key used to open the new Microsoft word document without closing the existing document is

A enter+N B ctrl+N C shift+N
D insert+N E alt+N

(viii) Which one is a correct order of making audio files?

A Editing, Mixing, Recording and Burning
B Recording, Editing, Mixing and Burning
C Mixing, Editing, Burning and Recording
D Recording, Mixing, Editing and Burning
E Mixing, Editing, Recording and Burning

(ix) Which software can you use to prepare a month calendar?

A Microsoft word
B Microsoft excel
C Microsoft access
D Microsoft Photoshop
E Microsoft publisher

(x) Which function can be applied in the following worksheet in order to display the status of PROFIT or LOSS? Hint: Status = Revenue - Cost.

| | COST | REVENUE | STATUS |
|---|---|---|---|
| | 2300 | 4560 | PROFIT |
| | 1500 | 1230 | LOSS |

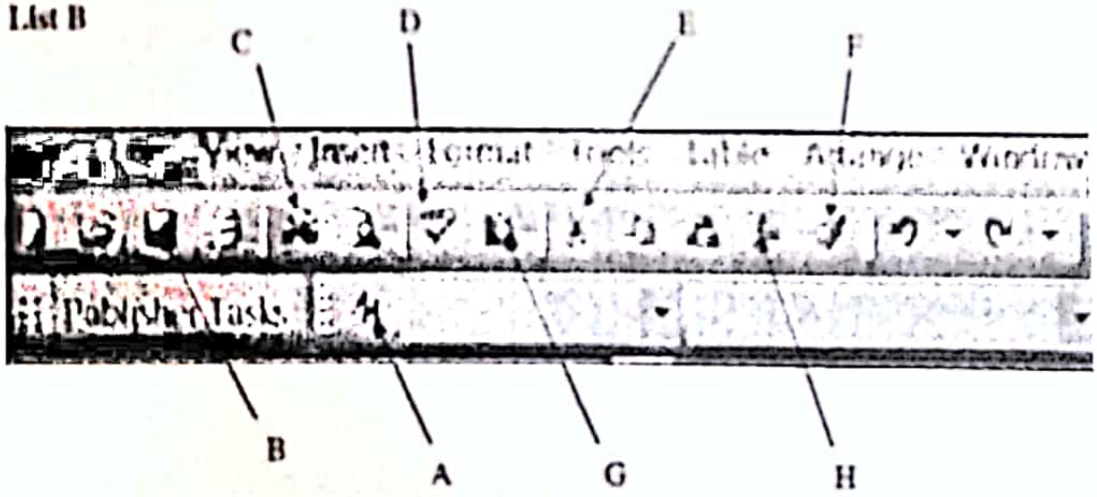
A =IF(B2-D2>0,"PROFIT","LOSS")
B =IF(B2-C3>0,"PROFIT","LOSS")
C =IF(C2-C3>0,"LOSS","PROFIT")
D =IF(C2-B2>0,"PROFIT","LOSS")
E =IF(B2-C2>0,"PROFIT","LOSS")

2. Match the functions of Microsoft office publisher icons in **List A** with their corresponding icons on the screenshot in **List B** by writing the letter of the correct answer beside the item number in the answer booklet provided.

**List A**

(i) The icon which is used to check for spelling and grammar mistakes.
(ii) The icon which is used to print publisher document.
(iii) The icon which is used to save publisher document.
(iv) The icon which is used to remove text on a publisher document.
(v) The icon which is used to apply styles on a text in publisher document.

**List B**



## SECTION B (75 Marks)

Answer all questions in this section.

3. The following are steps for designing a good database. Study the steps carefully and then arrange them in a correct order beginning with the first step to the last step by writing the letter of each step in the answer booklet provided.

   A Define a primary key for each table.
   B Design a draft database to determine the number of files or tables.
   C Design data entry forms needed for the database.
   D Carefully study the requirements of the user.
   E Divide the information into separate fields, records and tables.

   **(5 marks)**

4. Suppose a Computer Subject teacher plans to install a network in a staff room and you are asked to give an advice on his decision:
   (a) What type of network would you suggest to be installed in the staff room? **(2 marks)**
   (b) Why have you proposed such type of network in part (a)? Give two reasons. **(4 marks)**
   (c) What two things the teachers will benefit from the network established in part (a)? **(4 marks)**

5. (a) What is the function of each of the following components in the Computer System? **(6 marks)**
      (i) Arithmetic Logical Unit (ALU)
      (ii) Control Unit (CU)
      (iii) Uninterruptible Power Supply (UPS)
   (b) Why computers store data in a binary form? Give a reason. **(2 marks)**
   (c) Why is it strongly advised to always save your work while working in Microsoft Word document? **(2 marks)**

6. Jimi has no technical knowledge about the computer, but he plans to buy a new computer for his learning purpose.
   (a) Explain three factors he should consider before buying a new computer. **(6 marks)**
   (b) Explain two types of computer software expected to be installed in a computer bought. Give two examples for each category. **(4 marks)**

7. A seller prepared the following worksheet by using a spreadsheet program in order to monitor the sales of text books. Study the following worksheet carefully and then answer the questions that follow:

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | Records of Textbook Sales | | | | | | |
| 2 | Books | Selling Price | Number of Books Sold | Total Sales | Purchasing Price | Profit for Each | Total Profit |
| 3 | Mathematics | 12000 | 12 | 144000 | 11020 | 980 | |
| 4 | Biology | 14300 | 34 | 486200 | 12732 | 1568 | |
| 5 | History | 9700 | 5 | 48500 | 8300 | 1400 | |
| 6 | Geography | 6500 | 32 | 208000 | 6237 | 263 | |
| 7 | French | 7400 | 4 | 29600 | 6897 | | 2032 |
| 8 | English | 5800 | 27 | 156600 | 4948 | | |
| 9 | | | | | | | |
| 10 | Total number of books sold | | 114 | | | | |
| 11 | | | | | | | |
| 12 | Total sales value | | | 1,072,900 | | Total profit | |

(a) Which function can be applied in cell D12 to calculate the total sales? **(1 mark)**

(b) Give two advantages of using the functions in a worksheet. **(3 marks)**

(c) Use cell reference to write the formulae that will be used to calculate the total profit for French books stored in cell G7. Hint: (Profit for one item = Selling Price - Purchasing Price). **(2 marks)**

(d) Use any cell in the given worksheet as an example to differentiate absolute cell referencing from relative cell referencing. **(4 marks)**

8. (a) What is the importance of theme in Microsoft PowerPoint? **(1 mark)**

(b) Describe the following types of views as applied in Microsoft PowerPoint.

(i) Normal
(ii) Slide Sorter
(iii) Slide Show
(iv) Notes page

**(6 marks)**

(c) Suppose you have been given a task to switch a slide to a different layout, which steps would you follow to complete the given task? **(3 marks)**

9. (a) Explain three importance of database system in daily life. **(6 marks)**

(b) One of the Government institutions has two different departments. One department uses paper-based database while the other use computerized database. Which department will work more efficient? Give four reasons for your answer. **(4 marks)**

10. (a) Your teacher assigned all students in your class to design a website that advertises your school. The advertisement in the page includes: information about physical address, e-mail address, image of the school map and a link to a Home page named "Go to Home". One of your fellow students had the following HTML codes which need some corrections. Identify the mistakes made and write the correct codes in order to give the correct results.

```
<html>
  <body bgcolor="lavendar">
     <Font face="Tahoma" size="7">CONTACT US</font> <br>
     <table border="1" cellpadding="3">
        <tr>
          <th>Physical Address </th>
          </td>Changarawe Secondary School<br>
               P.O Box 7234<br>
               Songea</td>
        <tr>
          <th>E-mail Address: </th>
          <td><A href="mailto:changarawe@yahoo.ac.tz">Mail Us</A></td>
        </tr>
        <tr align="center">
          <td colspan="2"><img source="Koala.jpg" width="80" height="50"></td>
        </tr>
        <tr align="center">
          <td colspan="2"><A link ="Home.html">Go to Home</A></td>
        '</tr>
      <table>
</html>
```

**(6 marks)**

(b) Give an output of the following HTML codes which will be displayed in a web browser.

```
<html>
  <body>
    <b>Student name: </b>  <input type="text" name="stdname" ><br>
    <b>Gender: </b>  <input type="radio" name="stdname">Male
                   <input type="radio" name="stdname">Female<br>
    <b>Other information: </b> <br>
        <textarea wrap> </textarea>
  </body>
</html>
```

**(4 marks)**

## SECTION C (10 Marks)

Answer **one (1)** question from this section.

11. Why schools should include the use of Information and Communication Technology in teaching and learning process? Explain by giving four reasons. **(10 marks)**

12. Suppose you were given an opportunity to convince the headmaster to have the internet connection in your school, explain four benefits of internet applications that will convince the headmaster to pay for the schools' internet connection fee and bills. **(10 marks)**