

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

036/1

**INFORMATION AND COMPUTER STUDIES I**  
(For Both School and Private Candidates)

Time: 3 HoursFriday, 10<sup>th</sup> November 2017 p.m.

**Instructions**

1. This paper consists of sections A, B and C, with a total of **twelve (12)** questions.
2. Answer **all** questions of sections A and B and **two (2)** questions from section C.
3. Cellular phones and any unauthorized materials are **not** allowed in the examination room.
4. Write your **Examination Number** on every page of your answer booklet(s).



## SECTION A (30 Marks)

Answer **all** questions in this section

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

- (i) The following are the types of data that can be used in the computer **except**
- |                |            |
|----------------|------------|
| A text         | D physical |
| B numeric      | E texture  |
| C audio visual |            |
- (ii) Which one of the following is **not** an input device?
- |            |              |
|------------|--------------|
| A Keyboard | D Microphone |
| B Mouse    | E Projector  |
| C Scanner  |              |
- (iii) Which one among the following is **not** a modern way of disseminating information?
- |              |            |
|--------------|------------|
| A Journal    | D Internet |
| B Television | E Banner   |
| C Whistle    |            |
- (iv) The following are examples of malicious codes **except**
- |                  |            |
|------------------|------------|
| A Computer Virus | D Firmware |
| B Trojan Horse   | E Malware  |
| C Worms          |            |
- (v) The use of internet for selling and buying commodities is termed as
- |                        |                |
|------------------------|----------------|
| A e-mail accounting    | D e-accounting |
| B e-commerce           | E e-business   |
| C e-selling and buying |                |
- (vi) Which one of the following is an example of a browser?
- |                 |         |
|-----------------|---------|
| A AltaVista     | D Yahoo |
| B Google chrome | E MSN   |
| C Google        |         |
- (vii) Which one of the following functions can return the sum of values in spreadsheet?
- |               |               |
|---------------|---------------|
| A =sum(C2:C6) | D =sum(C2.C6) |
| B =sum(C2+C6) | E =sum(C2.C6) |
| C =sum(C2.C6) |               |
- (viii) A point of intersection between a row and a column in spreadsheet is known as
- |                  |               |
|------------------|---------------|
| A cell           | D address bar |
| B cell reference | E label       |
| C cell address   |               |

- (ix) The device that performs the function of signal modulation and demodulation is called  
 A demodulator C repeater E codec  
 B modulator D modem
- (x) Which of the following structure is used to store data items in relational database?  
 A forms C tables E labels  
 B macros D reports

2 Match the following descriptions of computer peripherals in **List A** to their corresponding computer hardware in **List B** by writing the letter of the correct answer beside the item number in the answer booklet provided.

| List A                                                                                                                       | List B                |
|------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| (i) A device that converts printed documents into electronic text without having to retype them.                             | A Daisy wheel printer |
| (ii) A printer which has removable flower-like wheel consisting of spokes with embossed characters.                          | B Digital camera      |
| (iii) A printer that is expensive to buy but cheap to run.                                                                   | C Dot matrix printer  |
| (iv) Printers which are used in the point of sale terminals to print receipts and bar codes.                                 | D Inkjet printer      |
| (v) A printer which is very expensive to run due to the higher cost of replacing the cartridges.                             | E Joystick            |
| (vi) A device which look like lever used to control a pointer on the screen.                                                 | F Laser printer       |
| (vii) A device that is used to enter data in form of speech in the computer.                                                 | G Microphone          |
| (viii) A type of printer grouped into the impact printer that prints by striking its pins on the ribbon placed on the paper. | H Mouse               |
| (ix) An input device which is usually found in a laptop computer.                                                            | I Photo printer       |
| (x) Printers which are used to print geographical, architectural and engineering drawings.                                   | J Plotters            |
|                                                                                                                              | K Scanner             |
|                                                                                                                              | L Thermal printer     |
|                                                                                                                              | M Touch pad           |

3. In the following items, write **TRUE** for a correct statement and **FALSE** for incorrect statement.
- (i) Data manipulation is a new opportunity that the internet has made possible. \_\_\_\_\_
  - (ii) Hypertext markup language is a set of rules that control how data travels between server and client. \_\_\_\_\_
  - (iii) In Microsoft Word, it is **not** possible to perform Mathematical calculations. \_\_\_\_\_
  - (iv) Graphic-based and Layout-based are types of desktop publishing software. \_\_\_\_\_
  - (v) Computers and transmission media requires communication devices for the network to be fully operated. \_\_\_\_\_
  - (vi) A www is the world's largest library with billions of pages of materials to read. \_\_\_\_\_
  - (vii) Action query **cannot** insert new data in data table. \_\_\_\_\_
  - (viii) Justification is a processing technique of adding extra spacing between words so that text fills the line length. \_\_\_\_\_
  - (ix) Thesaurus is an editing tool that helps the user to find words or phrases with similar meaning. \_\_\_\_\_
  - (x) Mail merge is a process of producing individual letters from a standard letter and data. \_\_\_\_\_

### SECTION B (50 Marks)

Answer **all** questions in this section

4. (a) By giving two examples, explain the term function. (2 marks)
- (b) Describe three parts of the function defined in part (a) above. (3 marks)
- (c) The formula listed in one of the cell is = B4 X \$C\$4 Name and give the difference between the two types of cell references used in this formula (4 marks)

- Write html codes that will display the webpage given below:

**Please provide the following information**

Name \_\_\_\_\_

Gender    Female    Male

Married    Yes    No

Comments \_\_\_\_\_

Submit information    Send

(8 marks)

6. (a) Explain the following terms as used in presentation:
  - (i) Presentation program
  - (ii) Custom animation
  - (iii) Slide transition

(3 marks)
- (b) Write steps required in printing a presentation hand out which contains six slides in a page. (2 marks)
- (c) Describe two importances of using electronic presentation. (2 marks)
7. (a) Give two characteristics of a multimedia system. (2 marks)
- (b) Explain the importance of text, image and sound in the presentation. (6 marks)
8. (a) Define the term database query. (2 marks)
- (b) By using a diagram, explain three types of relationship between tables in a relational database. (3 marks)
- (c) A Garage specialized in selling second hand cars uses an electronic database to store information as shown below:

**Product - Details**

| Eng No | Model | No. Doors |
|--------|-------|-----------|
| 001    | NADIA | 05        |
| 002    | GENI  | 05        |
| 003    | NOA   | 04        |
| 004    | HEACE | 06        |

**Sales - Table**

| Sales ID | Eng No | Price  | Discount |
|----------|--------|--------|----------|
| S01      | 001    | \$ 500 | 20%      |
| S02      | 002    | \$ 600 | 10%      |
| S03      | 003    | \$ 400 | 15%      |
| S04      | 004    | \$ 700 | 20%      |

- (i) Identify the primary key for each table. (1 mark)
  - (ii) Which field is a foreign key? (1 mark)
  - (iii) What type of relation exists between the two tables? (1 mark)
  - (iv) Write the data type for each field in sales table. (2 marks)
9. (a) State four major categories of computer network elements (components). (2 marks)
- (b) Explain the function of Gateway and Repeater devices in computer network. (2 marks)
- (c) Describe four importances of computer networks in an organization. (4 marks)

### SECTION C (20 Marks)

Answer two (2) questions from this section

10. Explain four functions of Operating System (OS) in a computer. (10 marks)
11. The introduction of computers to the society reveals many benefits; explain four advantages acquired by developing countries such as Tanzania. (10 marks)
12. Describe five components needed by the organisation to have the internet connection. (10 marks)