

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, 10th 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

(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)