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

036/1 **INFORMATION AND COMPUTER STUDIES 1**
(For both School and Private Candidates)

Time: 3 Hours **Friday, 22nd October 2010 p.m.**

Instructions

1. This paper consists of sections A, B, and C.
2. Answer **all** questions in sections A, and B and **two (2)** questions from section C.
3. Show all steps involved in arriving at the correct answer.
4. Calculators are **not** allowed in the examination room.
5. Cellular phones are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet (s).

This paper consists of 6 printed pages.

SECTION A (30 Marks)

Answer **all** questions in this section.

1. For each of the following items (i) – (x) choose the correct answer among the given alternatives and write its letter beside the item number.

(i) When one record in a database table can only be related to at least one record in other database table, the relationship is called
- A One – to - many relationship
- B One – to one relationship
- C Many - to - one relationship
- D Many - to - many relationship
- E Compound relationship.

(ii) An inkjet printer
- A can make multicolor output
- B is often used for photos
- C makes image by forcing ink droplets through nozzles
- D is relatively inexpensive compared to laser printers
- E is more delicate than laser printer.

(iii) All software are either
- A application or utility software
- B application or system software
- C system or utility software
- D anti-virus or system software
- E anti-virus or application software.

(iv) _____ is a single program that provides the functionality of a word processor, spreadsheet, and database manager and more.
- A general – purpose application
- B software suite
- C integrated package
- D program manager
- E operating system software.

(v) The single biggest drawback to the use of e-cash is that
- A the consumer does not yet believe that e-cash is safe to use
- B anyone can become an e-bank
- C e-cash is easy to loose
- D e-cash is impossible to replace
- E e-cash makes money laundering easy.

(vi) The ability to add visual or sound effects to any object in a presentation is referred to as:
- A transition
- B automation
- C animation
- D clip art
- E customize.

(vii) Which of the following characteristics affects the brightness of images that appear on a computer screen?
A colour screen
B dot pitch
C screen size
D type of printer
E refresh rate.

(viii) _____ allows you to reorganize, and add more effects to your digital video footage.
A Video editing software
B Audio editing software
C Paint program
D Browsers
E Animation

(ix) The school administration experiences irregular and frequent high power in their computer laboratory. What advice would you give them so that they can protect their computers?
A to install Voltage Regulator
B to install UPS
C to install firewall
D to install Surge Protector
E to have standby fire extinguisher.

(x) A device that connects computers into a network and segments it is called _____.
A a switch
B a home rooter
C a hub
D a GPS
E a modem.

2. Match the items or phrases in **List A** with the responses in **List B** by writing the letter of the correct response beside the item number.

List A		List B	
(i)	Topology	A	Input device used instead of a mouse.
(ii)	Font	B	Temporary high speed holding area between the memory and the CPU.
(iii)	Hyperlink	C	The process of queuing multiple print jobs.
(iv)	Optical disk	D	Volatile storage that holds the program and data being processed by CPU.
(v)	Stylus	E	Rules for exchanging data between computers.
(vi)	User Interface	F	An input device that resembles and works like a mouse.
(vii)	Template	G	Use laser technology and have great capacity of storage.
(viii)	Spooling	H	Set of characters in a particular type, style, and size.
(ix)	Cache memory	I	Topographical error in the connection of computers.
(x)	FTP	J	A preformatted document used to quickly create a standard document.
		K	Part of printer that deals with font of different colour.
		L	Pen-like device with which the user of digitizing tablet sketches an image.
		M	Rules of storing information that can not be exchanged between computers.
		N	Logical collection of files.
		O	Logical layout or shape of a local area network.
		P	Unique name for an entire website.
		Q	Acts like a document that connects to other documents.
		R	Link that is ready made and cannot be altered by the user of a network in any way.
		S	Part of the software program that presents in the screen the alternative commands.
		T	Tells how to use a software program.

3. In the following items, write **(T)** for **True** statements and **(F)** for **False** statements.
   (i) Encrypted data is not directly usable.
   (ii) Magnetic tape can handle sequential data storage and retrieval only.
   (iii) You can access the World Wide Web using the multimedia authoring software.
   (iv) A key field is used to uniquely identify a field.
   (v) Links on the web can be any amount of text but can not be images.
   (vi) A complete computer system has two parts which are hardware and software.
   (vii) The delete key erases characters to the right of the cursor.
   (viii) All computer viruses are destructive.
   (ix) Bar code readers use laser beams to convert patterns of printed bars into codes that a computer can understand.
   (x) Plug and play allows users to dispose off files and retrieve them later.

SECTION B (50 Marks)

Answer **all** questions in this section.

4. (a) Compare and contrast the operation of the **<Shift + Delete>** and **<Backspace>** keys on a keyboard. **(3 marks)**

   (b) Differentiate the following:
   (i) Double-click and drag
   (ii) Scrolling and Word wrap
   (iii) Icon and Dialog box
   (iv) Cracker and Hacker
   (v) Webpage and Website **(5 marks)**

5. (a) Explain what is meant by the term 'electronic office.' **(1 mark)**

   (b) Describe any three (3) principle features of an electronic mail system within an organization. **(6 marks)**

   (c) Explain what is meant by EFT? **(1 mark)**

6. (a) Explain what a local area network is and give any two advantages obtained from its use. **(3 mark)**

   (b) With the aid of diagrams describe briefly each of the following;
   (i) A bus network
   (ii) A ring network
   (iii) A star network **(6 marks)**

7. Describe the characteristics and purposes of the following:
   (a) A Pointer
   (b) A graphics display
   (c) A mouse
   (d) A pull-down menu **(8 marks)**

8. A company which has been in existence for some time has accumulated a number of files for its business. They are now considering replacing these data files with a database.
   (a) Explain what is meant by a term database. **(2 marks)**
   (b) Mention any three characteristics that must be met in order to have an efficient database. **(3 marks)**
   (c) Give two reasons why a database might be preferred to data files. **(2 marks)**
   (d) A database Management system is a program that provides an interface between the operating system and the user and simplifies access to the data. Give two other functions provided by the DBMS. **(2 marks)**

9. Explain how the following operations can be done on a computer with a keyboard but without a mouse

(a) Copying a document
(b) Paste the copied document
(c) Navigate through the document
(d) Save a created document
(e) Print a document
(f) Open the saved document
(g) Open new document
(h) Close the opened document **(8 marks)**

SECTION C (20 Marks)

Answer **two (2)** questions from this section

10. (a) A software company sends information to its customers by personalized letter. These letters are created using mail merging.
(i) Describe the processes involved in mail merging. **(2 marks)**
(ii) The company is considering using electronic mail to send information to its customers. Describe the process of sending and receiving electronic mail. **(2 marks)**

(b) You have a friend who wants to buy a word-processing package. He has asked for your advice. Assume that all word-processing packages will allow you to enter, edit, save and print text and change margins.
(i) Give four other features your friend might need in his new word processing package. **(2 marks)**
(ii) Explain why he might need each of the features. **(4 marks)**

11. The widespread use of IT had a great impact on today's society. One benefit that the increased use of IT has brought is the creation of some new jobs.

(a) Give six examples of jobs that have been created by the introduction of IT. **(3 marks)**

(b) Describe briefly three other possible benefits of this increased use of IT has brought. **(3 marks)**

(c) Personal information stored electronically, is potentially easier to misuse than that kept in paper files. Give two (2) reasons. **(4 marks)**

12. (a) With DTP packages, texts can be inputted from a word-processing package.
(i) What is DTP? **(2 marks)**
(ii) Explain, in simple terms, what the above sentence means. **(2 marks)**

(b) Students in your school are going to produce a school newsletter which will be produced using DTP.
(i) Give three items of hardware which they might use apart from the computer (i.e. apart from the CPU, Keyboard, VDU and mouse). **(3 marks)**
(ii) Give reasons for your choice of the three items in (b)(i) above. **(3 marks)**