**THE UNITED REPUBLIC OF TANZANIA**
**NATIONAL EXAMINATIONS COUNCIL**
**FORM TWO SECONDARY EDUCATION EXAMINATION**

**0143          INFORMATION AND COMPUTER STUDIES**

<u>Time: 2:30 Hours</u>                    **Thursday, 04<sup>th</sup> December 2014 a.m.**

**Instructions**

1.  This paper consists of sections A, B and C.

2.  Answer **all** questions in sections A, B and C.

3.  All answers must be written in black or blue ink.

4.  Write your answers in the space provided.

5.  Cellular phones and calculators are **not** allowed in the examination room.

6.  Write your **Examination Number** at the top right corner of every page.

| FOR EXAMINERS' USE ONLY | | |
|---|---|---|
| **QUESTION NUMBER** | **SCORE** | **EXAMINERS' INITIALS** |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| **TOTAL** | | |

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## SECTION A (40 Marks)

Answer **all** questions in this section.

1.  For each of the following items (i) – (xx), choose the correct answer and write its letter in the box provided.

    (i)   Which one of the following is **not** a computer system specification?
          A   RAM
          B   Cost
          C   Processor speed
          D   Hard disk capacity

    (ii)  The output produced by computers after processing the input is known as
          A   data
          B   information
          C   hardcopy
          D   softcopy

    (iii) Which one of the following is **not** an example of an input device?
          A   OCR
          B   MICR
          C   OMR
          D   LCD

    (iv)  A computer program which used to display information on the internet is called
          A   gopher
          B   internet explore
          C   google
          D   browser

    (v)   One of the most useful features of the spreadsheets is the ability to
          A   perform normal calculations
          B   create tables
          C   perform statistical analysis
          D   create worksheet

    (vi)  On the keyboard, the key that is used to exit some programs is called
          A   special key
          B   delete key
          C   escape key
          D   function key

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(vii)   A communication device which forwards a packet directly to the address node without broadcasting is called
A    gateway
B    repeaters
C    switches
D    bridges

(viii)  Which one of the following computer generation were characterised by Very Large Scale Integrated circuits (VLSI)?
A    Fourth generation
B    Third generation
C    Second generation
D    First generation

(ix)    A computer program that controls the execution of user applications and enables the user to access hardware and software resources is known as
A    operating system
B    utility programs
C    special programs
D    application programs

(x)     An application software that enables a user to create, edit, format and print text document is called
A    spreadsheets
B    electronic word processor
C    electronic publisher
D    workbook

(xi)    One of the latest radio transmission technologies that enables people to use hand held communication devises to access the Internet is called
A    facebook
B    bluetooth
C    radio waves
D    blog

(xii)   Which one of the following is **not** a formatting attribute?
A    Bolding
B    Copying
C    Underlining
D    Italicising

(xiii)  Examples of transmission media used to connect devices to access internet are
A    radio waves and cables
B    telephone lines and radio waves
C    microwave and cables
D    telephone lines and cables

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(xiv) Which of the following is an example of secondary source of information?

A   Internet communication on e-mail
B   Audio recording
C   Diaries
D   Newspaper

(xv) A special programs that help the user to easily find any information on the internet is known as

A   browser
B   information locator
C   search programs
D   search engine

(xvi) Computers that process discrete data are called

A   hybrid computers
B   digital computers
C   general computers
D   super computers

(xvii) Which one of the following is **not** example of application software?

A   Microsoft window
B   Microsoft access
C   Microsoft word
D   Microsoft Excel

(xviii) The following are examples of physical topology **except**

A   ethernet topology
B   star topology
C   bus topology
D   mesh topology

(xix) Which one of the following are types of communication media?

A   Bound and unbound media
B   Wireless and unbound media
C   Bound and coaxial media
D   Unbound and microwave media

(xx) The editing tool that detects automatically wrongly spelled or capitalised word and replaces with the necessary word is known as

A   autocorrect
B   thesaurus
C   find and replace
D   autotext

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 response option below the item number in the table provided.

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

**ANSWERS**

| List A | (i) | (ii) | (iii) | (iv) | (v) | (vi) | (vii) | (viii) | (ix) | (x) |
|---|---|---|---|---|---|---|---|---|---|---|
| List B | | | | | | | | | | |

3. For each of the following statements, write **TRUE** if the statement is correct or **FALSE** if the statement is not correct.

   (i) A strong password should contain text only. ....................

   (ii) A highlighted text is copied by pressing Ctrl + C and pasted by pressing Ctrl + V. .....................

   (iii) Grammar checker and autocorrect are the basic tools for checking whether the document has typographical or grammatical error. ...................

   (iv) In Ms excel, if the formula "= B4*C4" is in the cell D4, the formula assigned to cell D5 is "= B5*C5". .......................

   (v) Installation of fibre optic cables is not difficult. .....................

(vi) The ALU of a computer responds to the commands coming from control section. ......................

(vii) A scanner is one of the examples of output devices. ........................

(viii) Increasing the computer memory exposes the computer virus infection. .....................

(ix) Cold booting is a process of turning on a computer, which has been completely shut down. ....................

(x) Voltage stabilizers help to protect computer against power scratches. ...................…....

## SECTION B (40 Marks)

Answer **all** questions in this section.

4. (a) Complete each of the following sentences using one item from the given list.

Twisted pair cables, Unshielded twisted pair, Coaxial cables, Fibre optic cable, line cables

(i) ........................................... are very stable even under high loads.

(ii) ........................................... are fast and supports high bandwidth.

(iii) ........................................... use cheap installation equipment and readily available.

(iv) ........................................... do not have a shield that prevents an electric noise.

(b) (i) Define the term computer.

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(ii) Describe two types of computers according to purpose or task.

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(c) Mention four factors that must be considered when preparing a computer laboratory.

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5. (a) (i) State three application areas of electronic spreadsheets.

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(ii) Give three advantages of electronic spreadsheets.

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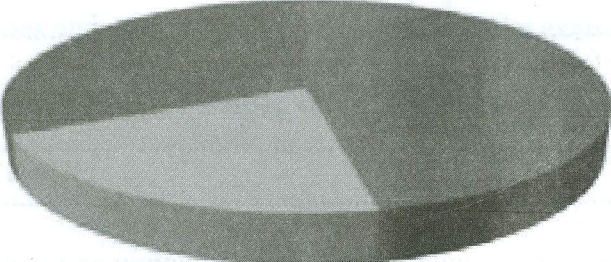
(b) Study the following snapshot and answer the questin that follow:

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | KILOMBERO SUGAR LIMITED EMPLOYEES' INFORMATION | | | | | | | |
| 2 | S/N | NAME | BASIC SALARY (TSH) | TRANSPORT ALLOWANCE | NATIONAL SOCIAL SECURITY FUND | GROSS PAY | NET PAY | |
| 3 | 1 | JESCA | 500000 | 50000 | 82500 | 550000 | 467500 | |
| 4 | 2 | MARY | 650000 | 50000 | 105000 | 700000 | 595000 | |
| 5 | 3 | JUMA | 520000 | 50000 | 85500 | 570000 | 484500 | |
| 6 | 4 | SALIM | 800000 | 50000 | 127500 | 850000 | 722500 | |

NET PAY

■ JESCA
■ MARY
■ JUMA
■ SALIM

(i) Give the name of the program used to create the snapshot above.

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(ii) State the type of the graph/ chart given in the snapshot above.

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(iii) Give the name of the heading of the graph stated in (ii) above.

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(iv) What format was done for the cells in row 1?

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(v) Write the function for calculating lowest gross pay.

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(vi) The national social security fund was calculated as 15% of the gross pay. Write the formula for calculating national social security fund.

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(vii)  Write the function for calculating the highest basic salary.

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(viii)  Write the formula required to calculate the total transport allowance.

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## SECTION C (20 Marks)

6.  Describe five advantages of Internet in the society.

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