

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

036/1

**INFORMATION AND COMPUTER STUDIES 1
(For School Candidates Only)**

Time: 3 Hours

Tuesday, 15th November 2016 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. Cellular phones 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 alternatives provided and write its letter beside the item number in your answer booklet.

(i) A network hardware device that communicates with computers using telephone lines is called

- | | | |
|-----------|----------|-------|
| A Switch | C Modem | E NIC |
| B Gateway | D Router | |

(ii) Computer specialists working in software houses are known as

- | | | |
|---------------|--------------|------------------|
| A Hackers | C Engineers | E Administrators |
| B Programmers | D Technician | |

(iii) Which of the following keyboard keys executes the function of 'Save as' command in most programs?

- | | | |
|-------|-------|------|
| A F10 | C F12 | E F8 |
| B F11 | D F9 | |

(iv) The process of restarting a computer is called

- | | | |
|------------------|---------------------|----------------|
| A Cold booting | C Warm booting | E Hard booting |
| B Simple booting | D Permanent booting | |

(v) The equivalent formula for =SUM(A10:A13) without the use of function is

- | | |
|----------------|---------------------|
| A =A11+A12+A13 | D = A10+A11+A12+A13 |
| B =A10+A13 | E =A10+A12+A13 |
| C =A10:A13 | |

(vi) A software program that enables a user to locate and retrieve specific information on the WWW is known as

- | | |
|-----------------|------------------------|
| A Internet | D Google |
| B Search engine | E Application software |
| C Yahoos | |

(vii) Calculations, comparison and logical operations in the CPU are performed by

- | | |
|-----------------------|--------------------------------|
| A Calculation unit | D Arithmetic and logical unit |
| B Computer calculator | E Calculation and logical unit |
| C Arithmetic unit | |

(viii) What is the meaning of the term workbook as used in spreadsheet?

- | | |
|-------------------------------|-----------------------------------|
| A Collection of worksheets. | D Collection of sheets. |
| B Collection of spreadsheets. | E Collection of rows and columns. |
| C Collection of cells. | |

(ix) Computers which are characterized by superior hardware and software were developed in the

- | | |
|---------------------|---------------------|
| A First generation | D Fourth generation |
| B Second generation | E Fifth generation |
| C Third generation | |

(x) On a personal computer all processing functions are contained on a single electronic chip called

- | | |
|---------------------------|-----------------------|
| A Arithmetic logical unit | D Transistor |
| B Microprocessor | E Integrated circuits |
| C Silicon chip | |

2. Match the following responsibilities in List A with their corresponding career opportunities in List B by writing the letter of the correct option beside the item number in your answer booklet.

List A	List B
(i) Maintain and troubleshoot network related problems.	A Computer operator
(ii) Answer user inquiries regarding computer software or hardware operation to resolve problems.	B Computer technician
(iii) Sets up security measures needed to control access to information.	C System analyst
(iv) Monitors access and use of internet connection by enforcing security measures.	D Computer programmer
(v) Keep up-to-date Computer records (log files) of all information processing activities.	E Computer trainer
(vi) Troubleshoots computer hardware and software related problems.	F Information system manager
(vii) Customize commercial application packages to suite the organizations needs.	G Database administrator
(viii) Maintain and update software to meet day-to-day requirements while overcoming challenges.	H Webmaster
(ix) Create daily backup files, test page- navigation links and moderate blog comments.	I Network administrator
(x) Makes sure that all tasks in the IT department are done correctly and on time.	J Administrator
	K Software engineer
	L Website administrator
	M Computer administrator
	N Internet administrator

3. In the following items, write (T) for a True statement and (F) for a False statement.

- (i) Laser and ink jet printers are examples of non-impact printers. _____
- (ii) Slide show view is the default view from which you can manage your presentations slide order as well as edit specific slides. _____
- (iii) Processing speed in microprocessors is measured in hertz/MegaHertz. _____
- (iv) Utility software is a kind of system software designed to configure and maintain the computer. _____
- (v) In HTML, logical tags specify exactly how the text will look. _____
- (vi) The fastest, most powerful and most expensive category of computers is called microcomputer. _____
- (vii) Every Microsoft access table requires a primary key field. _____
- (viii) Cold temperatures are not as dangerous to a computer as overheating is. _____
- (ix) Word processors are not limited for working with text. _____
- (x) In any document, the left and right margins must be the same. _____

SECTION B (50 Marks)

Answer all questions in this section.

4. (a) Define the term database. (1 mark)
- (b) The database below contains data about items that have been ordered from various suppliers:

CODE	SUPPLIER	DELIVERY DATE	PRICE
2140	M512	10/6/2006	\$40.80
3023	OC53	6/6/2006	\$50.50
5620	DM81	2/10/2006	\$10.30
5620	OL44	11/8/2006	\$100.15
7210	PD21	6/6/2006	\$120.50
5620	PG30	9/9/2006	\$200.40

- (i) State the data types of the fields in the table given above. (4 marks)
- (ii) If the search condition (CODE=5620) AND (PRICE<100) is used; write down the output using only the supplier field. (1 mark)
- (iii) Write down a search condition that will search for all items with a price more than \$50 and delivered in June. (2 marks)

5. (a) What is a computer keyboard? (1 mark)
 (b) List five types of keys found on a computer keyboard. Give an example of each type. (5 marks)
 (c) With examples, describe two disadvantages of automated production. (4 marks)
6. (a) Mention three functional elements of the central processing unit and explain the function of each element. (6 marks)
 (b) Give four types of application software. (2 marks)
 (c) Explain two effects of disposing electronic equipments to the environment. (2 marks)
7. (a) Give four examples of desktop publishing software available in the market today. (2 marks)
 (b) Explain four reasons why Desktop publishing (DTP) is more preferred than a word processor? (4 marks)
8. The spreadsheet below describes telephone usage for accessing the internet and costs. The costs need to be calculated. The minutes are multiplied by tariff 1 to obtain the sub- total, The VAT is based on the sub-Total and the total is obtained by adding the Sub-Total to the VAT.

ID	A	B	C	D	E	F	G	H
1							Tariff 1	VAT
2							\$0.50	14%
3								
4		Minutes	Sub-Total	VAT	Total			
5	Monday	9	\$4.50	\$0.63	\$5.13			
6	Tuesday	5						
7	Wednesday	7						
8	Thursday	6						
9	Friday	10						
10								
11	Total	37						
12	Average	7.4						

- (a) What formula was used to find the total time spent on the Internet? (2 marks)
 (b) What formula was used to find the average time spent on the Internet? (2 marks)
 (c) Using absolute referencing, what formula was used to find sub-total? (2 marks)
 (d) Using absolute referencing, what formula was used to find VAT? (2 marks)
9. (a) Explain two stages of Multimedia application development. (4 marks)
 (b) Describe two categories of computer memory. (2 marks)
 (c) Explain how self employment can be achieved by using computer or other ICT devices. (2 marks)

SECTION C (20 Marks)

Answer two (2) questions from this section.

10. "The internet is a harmful tool to man". What are your opinions? Describe only four points.
(10 marks)
11. Analyze four strengths and four weaknesses of the cables used for configuring communication networks.
(10 marks)
12. With examples, explain three types of lists used in HTML including the definition of the term HTML.
(10 marks)