

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

136/1

INFORMATION AND COMPUTER STUDIES I
(For School Candidates Only)

Time: 3 Hours

Tuesday, 18th November 2014 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) – (xi), choose the most correct answer among the alternatives provided and write its letter beside the item number in your answer booklet.
- (i) Data can be arranged in ascending or descending order by using sort command from
A. Table menu C. Tools menu E. Format menu
B. Data menu D. Sort menu
- (ii) A file created using plain texts using note pad or DOS editor will have a file extension ending with
A. .Doc C. .html E. .txt
B. .Dat D. .exe
- (iii) System programs which provides a useful service to the user of the computer by providing facilities for performing common tasks are known as
A. user programs C. utility programs E. software programs
B. simple programs D. computer programs
- (iv) Databases with fields or records arranged in groups resembling a family tree are called
A. hierarchical C. distributed E. non-relational
B. relational D. non-hierarchical
- (v) The computer generation which is characterized by electronic devices called integrated circuits (ICs) is known as
A. Fifth generation C. Second generation E. Fourth generation
B. First generation D. Third generation
- (vi) The internal hardware parts of a computer are often referred to as
A. Insiders C. Devices E. Internal devices
B. Components D. Peripheral devices
- (vii) A mouse that uses radio or infrared waves to detect movement is called
A. a trackball mouse C. an optical mouse E. a traditional mouse
B. a cordless mouse D. a standard mouse
- (viii) First generation computers were very large physically and used thousands of electronic gadgets called
A. Transistors C. Thermionic valves E. Electronic integrator
B. Silicon chips D. Integrated circuits
- (ix) The device that performs the function of signal modulation and demodulation is called a
A. demodulator C. repeater E. codec
B. modulator D. modem
- (x) The fastest, most powerful, and most expensive category of computers is the
A. Laptop C. Minicomputer E. Microcomputer
B. Mainframe D. Supercomputer

Match the meanings in List A with their corresponding terminologies in List B by writing the letter of the correct option beside the item number in your answer booklet

List A	List B
(i) The process of converting data signal by superimposing to an analogue carrier for transmission via a telephone line	A Attenuation B Bandwidth
(ii) The process used in the receivers to recover the original signal coming from the sender end in modulation form	C Baseband transmission D Broadband transmission
(iii) The technique of combining several analog signal messages or digital message streams into one signal for transmission as a single message	E Demultiplexing F Full duplex transmission
(iv) The maximum amount of data that a transmission medium can carry at any given time	G Half duplex transmission H Multiplexing
(v) A digital signal that is generated and applied to the transmission medium directly without modulation	I Signal demodulation J Signal interference
(vi) Transmission of data over an analog medium by using frequency differences to represent different data signals	K Signal modulation L Signal retransmission
(vii) Data communication that occurs only in one direction of the communication medium	M Simplex transmission N Data transmission
(viii) Data communication that allows a two way flow of data but one direction at a time.	O Duplex transmission P Network transmission
(ix) Data communication that allows simultaneous transmission of data in both direction of the communication medium.	
(x) The weakening of data signal over a communication medium with increasing distance	

1. To the following items, write (T) for True statement and (F) for False statement
- (i) Action query is the most common type of query used for searching and analyzing data in one or more tables. _____
 - (ii) A spreadsheet has three main components namely, worksheets, databases and cells. _____
 - (iii) A peer to peer network does not depend on a central server. _____
 - (iv) Online storage means that stored data is directly accessible for processing. _____
 - (v) Auto content wizard include animations, transitions and builds. _____
 - (vi) Optical Character Recognition converts scanned image into text that can be edited. _____
 - (vii) Ink jet printer is an example of an impact printer. _____
 - (viii) Data is entered into the computer by using keying devices only. _____
 - (ix) The operating system allocates RAM among programs that are running. _____
 - (x) Network users can open shared files but they cannot change those files. _____

SECTION B (50 Marks)

Answer **all** questions in this section

4. (a) Briefly explain three (3) slide viewing options in PowerPoint. (6 marks)
 (b) Mention four ways which can be used in creating a new presentation in PowerPoint. (2 marks)
5. The figure below shows data entered into a spreadsheet application

	A	B	C	D
1	Month	Feb	Mar	Apr
2	Oranges	656	766	500
3	Apples	322	770	123
4	Bananas	57	55	154
5	Pineapples	75	566	860
6	Other fruits	24	233	621
7	Total	1134	2390	2258

- (a) What is the cell reference of the active cell? (0.5 mark)
 (b) Which cell will become the active cell if the Home button on the key board is pressed? (1 mark)
 (c) Write the formula used in cell B7 to calculate the total for February. (2 marks)

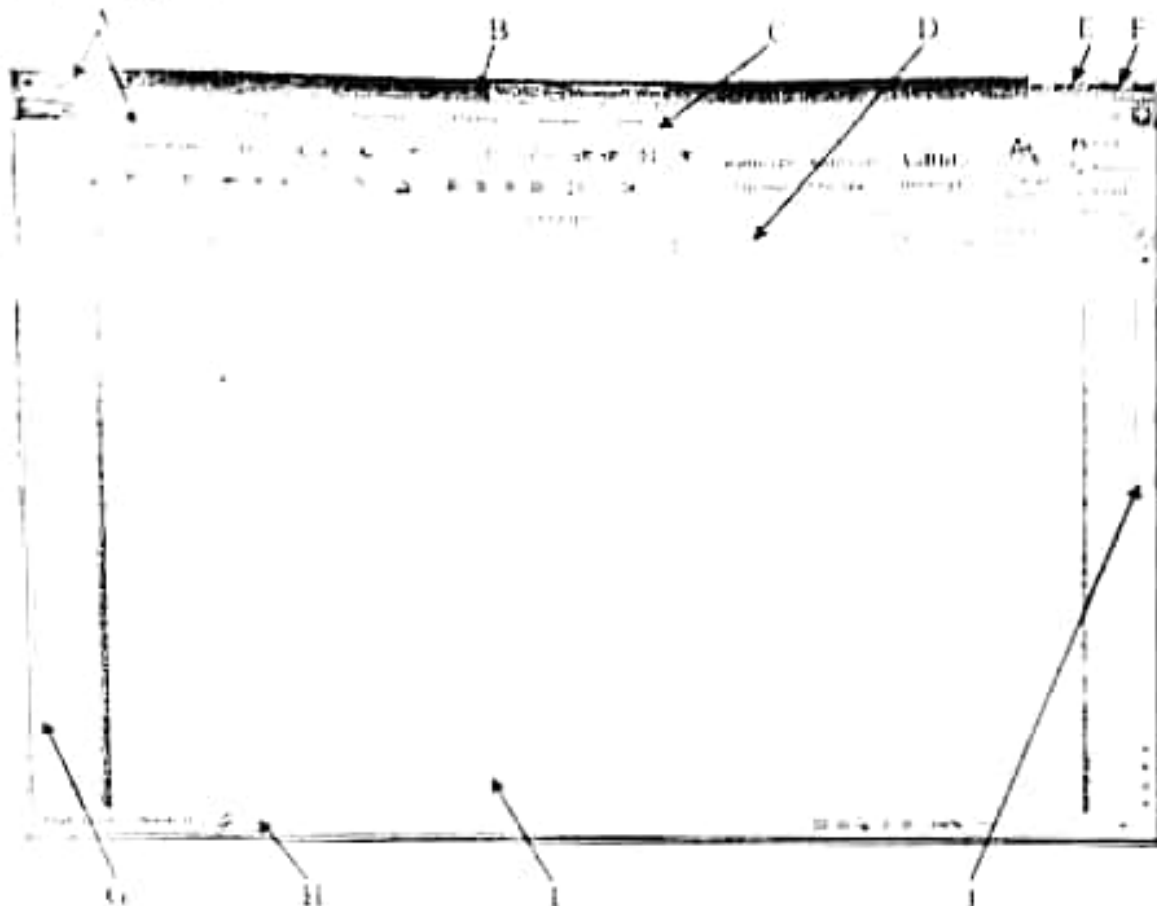
Apart from performing calculations, state any other two functions of spreadsheet

(2 marks)

- (e) Give two advantages of renaming (redefining) cell range references

(2 marks)

6. (a) The snapshot below shows the features of electronic word processor. Label all features indicated by arrows



(5 marks)

- (b) Explain the functions of C, A, B and H features

(4 marks)

7. (a) Explain why is there a concern on the disposal of Nickel-cadmium batteries? (2 marks)

- (b) Describe five advantages of automation

(5 marks)

8. (a) What are the three main purposes of desktop publishing software? (1.5 mark)

(1.5 mark)

- (b) You have been requested as an expert in DTP, to design a five (5) pages school magazine. The magazine layout should display the school logo at the top of every page. Explain how you would do this

(6 marks)

9. (a) (i) What is the purpose of a database? (1 mark)

(1 mark)

- (ii) Describe any two principal ways of organizing a database

(4 marks)

- (iii) Write down the criteria you would use to display employees' details from a payroll database who earn between 9000 and 18000.

(1 mark)

- (b) Outline three benefits that Computer networks provide to the users

(3 marks)

- (c) Identify four types of wireless media that are used to link networks

(2 marks)

SECTION C (20 Marks)

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

10. Elaborate how data recovery, data compression, back up and file defragmentation utility programs functions (10 marks)
11. Why should a school/Institution have a website? Describe by giving four reasons (10 marks)
12. With examples, give a detailed elaboration of the classification of operating systems based on number of users and number of tasks. (10 marks)