KCSE TRIAL 2019

COMPUTER STUDIES PAPER 1 QUESTIONS

SECTION A (40 Marks)

1. 1. Describe the purpose of each of the following computer functional units:

    (a) control ....
    ....

    (b) storage ....
    ....

2. State two functions of a UPS?

    ....
    ....

3. Threats to the safety of computer systems take many forms such as: White-collar crime, natural disasters, vandalism and carelessness.

    Give one way as to how each of these forms of threats can be controlled.

    ....
    ....
    ....
    ....

4. Explain the following terms as used in word-processing:

    (a) Indenting

    ....
    ....

    (b) Alignment

    ....
    ....

    (c) Word wrap

    ....
    ....

5. Okwiri has a hardware shop and lately, she is finding the task of managing daily sales in the shop overwhelming.

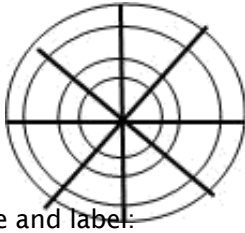   (a) State an information system that she should acquire. (1mark)
    ....

    (b) State two input devices that are used in retail systems. (1 mark)
    ....
    ....

    (c) Apart from enhancing the speed of operation, state two other benefits that Okwiri will gain from using such a system. (2 marks)

6. The diagram below shows a formatted plate surface of a storage disk.

Shade and label:

(a) a sector (1 mark)

(b) a track (1 mark)

7. Give two differences between high-level and low-level languages.
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   ....
   ....
   ....

8. Worksheet cells are referenced using the column letter and row number e.g. D2 is cell in column D and row 2. Use the sample worksheet provided to answer the questions below. A B C D E F

   1 Month Jan. Feb. Mar. April. Total

   2 Fees 460 460 460 460

   3 Food 300 350 305 270

   4 Electricity 100 100 100 100

   5 Fuel 150 150 150 150

   6 Transport 380 270 150 300 7 Total

   (a) Write down the data type that is stored in cell C5. (1 mark)
   ....

   (b) What cell contains the data item representing transport for the month of February? (1 mark)
   ....

   (c) Write down the formula that may be used to compute the total in cell F6. (1 mark)
   ....
   ....

9. State what is meant by each of the following and give an example of where each is used.

   (a) Magnetic Ink Character Recognition (MICR) (1 mark)
   ....
   ....
   ....

   (b) Optical mark reader (OMR) (1 mark)
   ....
   ....
   ....

10. (a) Describe the term data integrity. (2 marks)
    ....
    ....
    ....

(b) State four situations in which data may lose integrity. (2 marks)
....
....
....
....

11. State two advantages of using robots in manufacturing of goods.
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....

12. (a) Name the two files commonly used in mail merge. (1 mark)
....
....

(b) Name and explain the two types of drop caps. (2 marks)

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....
....

13. State three ways in which ICT can be used in shipping control.
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....

14. . A firm operates an order system that coordinates orders, raw materials and inventory across its three factories.

Currently the orders are processed manually at each factory and communicated to the others over the phone.

The management intends to computerize their operations.

State the first two computer professionals who will be required and their roles.
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15. A water company sends out clerks to read water meters. The data collected by the clerks is then fed into the computer and

then all the bills are processed at a particular time.

(a) State the name of this data processing mode and state one advantages of this approach.
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....
....
....

SECTION B (60 Marks)
16.   (a) Use the flowchart below to answer the questions that follow
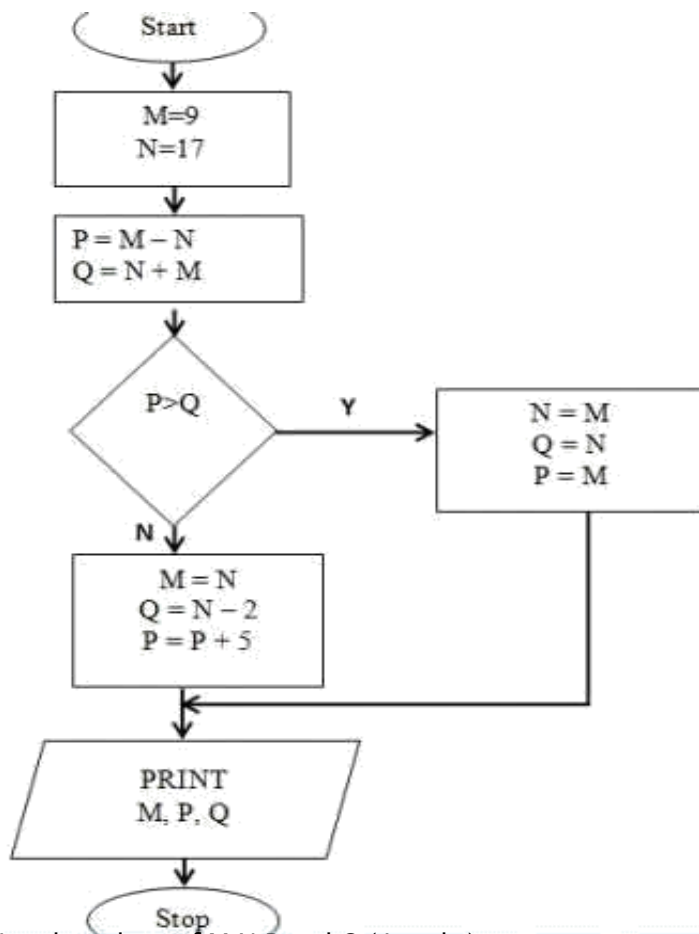
i. Determine the values of M,N,P and Q (4marks)

....
....
....

ii. Name the control structure used in the above flowchart. (2 marks)
....
....

iii. Write the pseudo code for the above flowchart. (9marks)

17.   . (a) A principal keeps the following student details in a database: Name, Address, Admission number, Date of birth, Marks scored, Fees paid.

(i) Name the most appropriate primary key. Give a reason. (2 marks)

....
....
....
....

(ii) For each item in the student's details above, indicate its most appropriate data type as used in the database. (3 marks)
....
....

....
....

(iii) Explain why forms are better data entry designs than entering data directly to a table. (2 marks) ....
....
....
....

b. List four features that are found in a standard DBMS application (2 marks)
....
....
....
....

(d) Differentiate between:
(i) Mouse pointer and insertion point. (2 marks)

....
....
....

(ii) Modules and Macros (2 marks)

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....
....

(iii) Relation and Relationship (2 marks)

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....
....

18. . (a)The following are some of the phases in the systems development life cycle (SDLC): system analysis,
system design, system implementation, system review and maintenance. State four activities that are carried

out during the system implementation phase. (4 marks)
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....
....
....

(b) Give three reasons why system maintenance phase is necessary in SDLC. (3 marks)
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....
....

(c) State two instances where observation is not a viable method of gathering information during system analysis stage. (2 marks)
....
....
....
....

(c) Various considerations should be made during input design and output design. State two considerations for each case. (4 marks)
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....

(d) State two reasons why an organization may use other strategies of software acquisition other than developing their own. (2 marks)
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20. (a) List three advantages and three disadvantages of wired communication over wireless communication. (6 marks)

Advantages

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....
....
....

Disadvantages

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....
....
....

(b) Describe the following signals and state where each is applied in network communication: (4 marks)

(i) Analog;

....
....
....
....

(ii) Digital.

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....
....

(c) Name the two types of coaxial cables. (2 marks)
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(d) (i) Define the term network protocol. (1 mark)
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(e) List four internet protocols (2 marks)

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