

Name _____ Index No. _____ / _____

2920/102A
COMPUTER APPLICATIONS I (THEORY)
Paper 1
November 2015
Time: 2 hours

Candidate's Signature _____

Date _____



THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE I

COMPUTER APPLICATIONS I (THEORY)

Paper 1

2 hours

INSTRUCTIONS TO CANDIDATES

Write your name and index number in the spaces provided above.

Sign and write the date of examination in the spaces provided above.

*Answer any **FOUR** of the **SIX** questions in the spaces provided on this question paper.*

Candidates should answer the questions in English.

For Examiner's Use Only

| Question | 1 | 2 | 3 | 4 | 5 | 6 | Total Score |
|-------------------|---|---|---|---|---|---|-------------|
| Candidate's Score | | | | | | | |

This paper consists of 11 printed pages.

Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

1. (a) Explain the function of each of the following features of a word processing software:

(i) gutter margin; (2 marks)

(ii) hyphenation. (2 marks)

(b) Outline **three** advantages of using a database management system instead of the conventional computer filing system. (3 marks)

(c) Explain the function of macros as used in spreadsheet programs. (2 marks)

- (d) Joel intends to design a data entry form using a database software. Explain **three** categories of controls he could use to achieve his objective. (6 marks)

2. (a) A government ICT officer has recommended the installation of wireless LAN over wired LAN. Outline **three** reasons that may have formed his decision. (3 marks)

- (b) Differentiate between *smartart* and *clipart* as used in presentation software. (4 marks)

- (c) Figure 1 shows part of a spreadsheet extract. Use it to answer the questions that follow.

| | A | B | C |
|---|----------|------------|---|
| | PROPERTY | | |
| 1 | VALUE | COMMISSION | |
| 2 | 100000 | 7000 | |
| 3 | 200000 | 14000 | |
| 4 | 300000 | 21000 | |
| 5 | 400000 | 28000 | |
| 6 | | | |

Figure 1

- (i) Using the AVERAGEIF() function, write a formula which could be used to calculate the average of commissions whose property value is greater than Kshs. 230,000. (3 marks)

- (ii) Using an appropriate function, write a formula that could be used to extract the largest commission. (1 mark)

- (iii) Suppose a user entered the formula `SUMIF(B2:B5,"<25,000",A2:A5)` in cell C6. State the expected output. (2 marks)

- (d) A database of an estate agency stores details of all the queries made. For each query, the following fields are held in the file:

- name the of the customer
- the number of bedrooms requested
- the date on which the query was made
- whether the customer asked for details of a property or not

State a suitable data type for each of the fields.

(2 marks)

3. (a) Differentiate between *magnetic* and *optical* storage media, giving **two** examples in each case. (4 marks)

- (b) Outline **three** utility programs used in computer systems. (3 marks)

- (c) Joseph has been advised by his supervisor to **appropriately align** the text on a memo he was formatting using a word-processing software. Outline **four** types of alignments he could use. (4 marks)

(ii) notes page.

(2 marks)

(b) Differentiate between *portrait* and *landscape* print options used in desktop publishing.

(3 marks)

(c) Mary realized that the text she inserted into a text box while using desktop publishing program could not fit in the box. Describe **two** ways she could use to have the text fit.

(4 marks)

(d) Figure 2 shows a rehearsal toolbar in a presentation program. Use it to answer the question that follows.

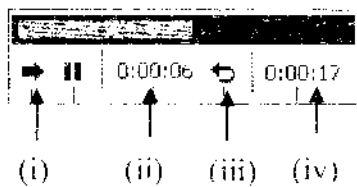


Figure 2

State the function of each of the parts labeled (i), (ii), (iii) and (iv). (4 marks)

5. (a) (i) Outline **three** types of user interfaces provided by an operating system. (3 marks)

(ii) Differentiate between *tailor made* and *off- the-shelf* programs as used in computer software. (3 marks)

(b) Explain the function of each of the following as used in computer systems:

(i) firewall; (1 mark)

(ii) search engine

(1 mark)

(c) Explain **two** circumstances under which a user would apply a cropping feature in a desktop publishing software. (4 marks)

(d) Given that cells B2, B3 and B4 of a spreadsheet program contain the formulas; =D3*E6, =A\$8 and =\$D\$5 respectively. State the formulas, as they would appear when copied into cells E2, E3 and E5 respectively. (3 marks)

6. (a) Outline **four** layout guides available in a desktop publishing program. (2 marks)

(b) Figure 3 is an extract of an object created in a desktop publishing program.

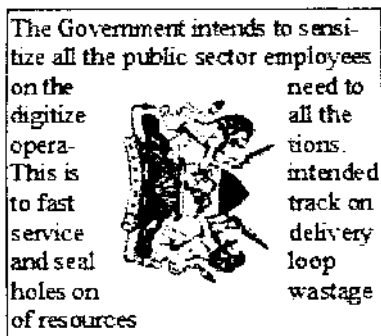


Figure 3

Explain **two** formatting features applied on the object.

(4 marks)

(c) Table 1 is an extract of field properties with the relative specifications entered during the design of a table in a database program. Use it to answer the question that follows

| Field properties | Specifications |
|------------------|-------------------|
| Default Value | 0 |
| Validation Rule | <4000 |
| Validation Text | Try again |
| Required | Yes |
| Indexed | Yes(Duplicate ok) |
| Text Align | Center |

Table 1

State the function of each specification for the given field properties.

(6 marks)

(d) Figure 3 is an extract of a formatting toolbar in a word processing program. Use it to answer the question that follows.

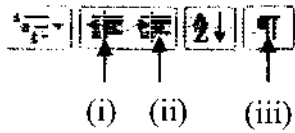


Figure 3

State the function of each tool labeled (i), (ii) and (iii).

(3 marks)

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