2920/102A
COMPUTER APPLICATIONS I (THEORY)
Paper 1
November 2022
Time: 2 hours

THE KENYA NATIONAL EXAMINATIONS COUNCIL

DIPLOMA IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE I

COMPUTER APPLICATIONS I (THEORY)

Paper 1

2 hours

INSTRUCTIONS TO CANDIDATES

This paper consists of SIX questions.
Answer any FOUR of the SIX questions in the answer booklet provided.
Candidates should answer the questions in English.

This paper consists of 4 printed pages.

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

Turn over

1. (a) Outline **three** advantages that an organization would get for using email for their communication. (3 marks)

 (b) Describe each of the following terms as used in desktop publishing applications:

 (i) bleed;

 (ii) crop. (4 marks)

 (c) Distinguish between *device drivers* and *firmware* as used in computers. (4 marks)

 (d) Nancy was tasked to design a database for data storage. Outline **four** properties she could apply to fields during the design. (4 marks)

2. (a) Outline the meaning of each of the following database concepts:

 (i) data security;

 (ii) data quality;

 (iii) data integrity. (3 marks)

 (b) Rose was tasked to design a database for an organizations' data storage. Outline **four** types of keys she may use while creating the database fields. (4 marks)

 (c) A company's technician was required to design a network operating system. Explain **two** types of operating system design he could apply. (4 marks)

 (d) Joel was tasked to source for an Internet service provider to supply his college with Internet. Outline **fours** factor other than cost that he should consider during the selection. (4 marks)

3. (a) Outline the function of each of the following formula in a spreadsheet program:

 (i) IF;

 (ii) Len;

 (iii) Concatenate. (3 marks)

 (b) Explain **one** circumstance in each case, that would necessitate the use of the following features in a word processing program:

 (i) split window;

 (ii) zoom. (4 marks)

 (c) Distinguish between *ruler guides* and *column guides* as applied in desktop publishing programs. (4 marks)

 (d) Agnes intends to align text in a slide created using a presentation program. Outline **four** text alignment options she could apply. (4 marks)

4. (a) State **three** reasons for using queries in a database management system. (3 marks)

 (b) Explain **one** function of each of the following database objects:

 (i) forms;

 (ii) reports. (4 marks)

(c) Lydia intends to use tab stop feature to align text in a document created using a word processing program. Outline **four** examples of tab stops that she could apply. (4 marks)

(d) Ann inserted two graphics in a desktop publishing publication and they appeared as shown in Figure 1. Explain **two** tools she could use to have the graphics appear as shown in Figure 2. (4 marks)

Figure 1   Figure 2

5. (a) Outline the function of each of the following data types in a database:
   (i)   AutoNumber;
   (ii) Memo;
   (iii) LookUp Wizard. (3 marks)

   (b) Distinguish between *rotate* and *flip* operations as used in desktop publishing applications. (4 marks)

   (c) Figure 1 is a spreadsheet extract showing the revenue and expenditure for a company for a period of 5 years. Use it to answer the questions that follow.

	A	B	C	D	E	F	G
1		2014	2015	2016	2017	2018	Total
2	Revenue	150,000	165,000	181,000	199,650	219,000	
3	Expenditure	180,000	160,000	170,000	201,000	210,000	
4							
5	Comment						
6							

Figure 1

   (i)   Using cell addresses, write a formula that would be used to compute the total revenue for the five years in cell G2. (1 mark)

   (ii) Use the IF function to write a formula in cell B5 that would display the comment "PROFIT" if the revenue exceeds the expenditure otherwise to displays "LOSS" for the five years. (3 marks)

   (d) Patrick created a presentation which he wishes to print. Outline **four** types of print layout options he could use to print the presentation. (4 marks)

6.   (a)   Explain each of the following features as used in a spreadsheet program:

        (i)   sort;   (2 marks)

        (ii)   filter.   (2 marks)

    (b)   David intends to include speaker notes in slides created using a presentation program.

        (i)   Outline **three** items that he may include as speaker notes.   (3 marks)

        (ii)   Outline **two** ways he could access the speaker notes during a presentation.   (2 marks)

    (c)   With the aid of a sketch in each case, describe the following components of an entity data model in databases:

        (i)   attribute;   (3 marks)

        (ii)   relationship.   (3 marks)

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