2920/102A
COMPUTER APPLICATIONS I (THEORY)
Paper 1
July 2019
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 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) Explain each of the following terms as used in desktop publishing:

    (i) autoflow;

    (ii) kerning. (4 marks)

    (b) Describe each of the following word processing features:

    (i) insertion-point;

    (ii) end-of-document marker. (4 marks)

    (c) Acacia College intends to connect all its computers to the Internet. Outline four hardware requirements to accomplish this task. (4 marks)

    (d) Figure 1 is a section of a master page set up options in a presentation program. Use it to answer the question that follows.
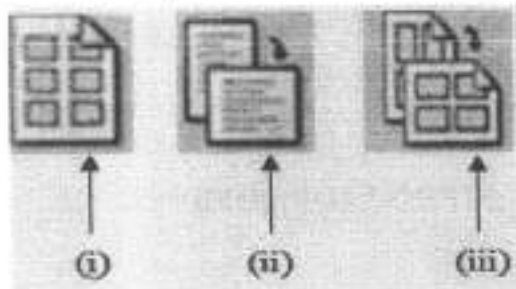

    Figure 1

    Explain each of the set up options labelled (i), (ii) and (iii). (3 marks)

2. (a) Explain three *transition effects* that could be applied to a slide during animation of objects in a presentation program. (3 marks)

    (b) Distinguish between *multi-user* and *single user* operating systems as used in computing. (4 marks)

    (c) Bidhaa Company has created a database file to store details of it's employees. The database contains the following details for each employee: Name, DOB, IDNo, Passport photo, Gender and residential area.

    (i) State an appropriate data type for each field; (3 marks)

    (ii) Write an expression that would be used to calculate the current age of an employee displayed in years only; (2 marks)

    (iii) Write an expression that would be used to extract employees whose age is between 22 and 50 years. (3 marks)

3. (a) Define each of the following terms as used in databases:

    (i) cardinality;

    (ii) referential integrity. (4 marks)

    (b) The operating system provides a standard interface between a computer user and the computer system for communication. Describe two types of such interfaces. (4 marks)

(c) Jonah used *fill* and *mask* commands while designing a publication using a DTP application. Explain each of these commands. (4 marks)

(d) Rose used a presentation program to display her progress on a project she carried out. Outline **three** ways in which she could have started the slide show. (3 marks)

4. (a) Explain **one** way in which a spreadsheet program could be used in each of the following areas:

   (i) accounting;

   (ii) forecasting. (4 marks)

(b) (i) Outline **two** types of views that could be used to display a publication in a DTP application. (1 mark)

   (ii) With the aid of a sketch in each case, distinguish between *drop cap* and *in margin cap* as used in word processing. (4 marks)

(c) Patrick used different types of *layout guides* to design a calendar for his company using a DTP program. Describe **three** types of guides that he could have used to accomplish the task. (6 marks)

5. (a) With the aid of a diagram, describe a *hierarchical database* model. (3 marks)

(b) Joseph used different types of data while creating a worksheet. Explain **three** types of such data he could have used. (6 marks)

(c) Explain **three** types of *Action Queries* used in a database stating their respective functions. (6 marks)

6. (a) Describe each of the following terms as used in DTP application:

   (i) snap;

   (ii) flip. (4 marks)

(b) Explain the function of the *clone stamp* tool as used in DTP programs. (2 marks)

(c) Table 1 is a section of a worksheet showing information about diseases in a certain hospital. Use it to answer the questions that follow.

	A	B	C
2	Disease	Number of Cases Reported	Consultation Amount
3	Malaria	800	
4	Pneumonia	650	
5	TB	460	
6	Measles	150	
7	Total Cases		
8	Consultation per case	1000	

Table 1

(i)   Using a function and cell addresses only, write a formula that would be used to compute total number of cases reported.   (2 marks)

(ii)   Write a formula that would be used to calculate consultation amount for malaria and subsequently used for all other disease, taking that ksh 1000 is the consultation fee for any reported case.   (3 marks)

(d)   Explain a circumstance that would require a designer to use each of the following DTP tools;

(i)   lasso tool;

(ii)   marquee tool.   (4 marks)

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