

2920/102A  
COMPUTER APPLICATIONS I (THEORY)  
Paper 1  
November 2016  
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.*

*All questions carry equal marks.*

*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.**

1. (a) Define each of the following terms as used in DTP programs.
- (i) master pages; (2 marks)
  - (ii) thumbnails. (2 marks)
- (b) Explain each of the following terms as used in spreadsheet programs.
- (i) what-if analysis; (2 marks)
  - (ii) template. (2 marks)
- (c) Lucie intends to present her statistical data using charts.
- (i) Outline **three** types of charts she could use to achieve her objective. (3 marks)
  - (ii) Explain **two** reasons that could have led to her intention. (4 marks)
2. (a) Outline the function of each of the following features as used in a DTP program:
- (i) watermark; (1 mark)
  - (ii) index; (1 mark)
  - (iii) pasteboard. (1 mark)
- (b) Differentiate between the functions of *autocorrect* and *autocomplete* features as used in a word processing program. (4 marks)
- (c) With the aid of a diagram in each case, explain the following database models.
- (i) network; (2 marks)
  - (ii) hierarchical. (2 marks)
- (d) State the function of each of the following tools as used in a DTP program.
- (i) text frame; (1 mark)
  - (ii) cropping; (1 mark)
  - (iii) constrained; (1 mark)
  - (iv) zoom. (1 mark)
3. (a) (i) Describe the type of files that have the following file extensions:
- I. .dat (1 mark)
  - II. .dbf (1 mark)
- (ii) Ann intends to use each of the following operating system tools:
- User accounts;
  - Device management.
- Explain the function of each of the system tools. (4 marks)
- (b) Josh intends to include a header in the notes and handouts prepared using a presentation software. Outline **three** items that he could include in the header. (3 marks)

(c) Moses created a table in the database for a video library with the following fields.

*CD\_Code, Title, supplier, buyingPrice, Quantity, DateBought.*

- (i) Identify the appropriate data type for each field. (3 marks)
- (ii) State the appropriate field that he could use as a primary key, justifying your answer. (2 marks)
- (iii) Assume Moses captures *caption* as the field property for the *DateBought* field. Explain the reason for his action. (1 mark)

4. (a) (i) Outline **two** print page alignment options that can be applied when printing a spreadsheet document. (2 marks)
- (ii) State in full each of the following abbreviations as used in internet connections.
- I. Wi-Fi; (1 mark)
  - II. GPRS; (1 mark)
  - III. GSM. (1 mark)

(b) Leah has created the company's database that holds information about the employees' payroll with the following fields: *employee no, employee name, age, basic salary, date of birth* and *department*. She intends to search the following information from the database.

- (i) details of employees whose salaries are over 10,000 but less than 20,000;
- (ii) details of employees whose ages are equal to or more than 45 years.

State the criteria that she could use for each search to achieve her objective. (4 marks)

(c) Khan wishes to design an office floor using a computer application. State a suitable application program that he could use to achieve his objective justifying your choice. (2 marks)

(d) Lilly intends to design a brochure for her college using a DTP program. Explain **two** *character spacing* options that she could use when typing text. (4 marks)

5. (a) Explain each of the following terms as used in databases.
- (i) referential integrity; (2 marks)
  - (ii) relationship; (2 marks)
  - (iii) normalization. (2 marks)

(b) Figure 1 shows part of a worksheet. Use it to answer the questions that follow.

	A	B	C	D	E

Figure 1

Assume that the pointer is at cell F3, state the effect of pressing each of the following key combinations.

- (i) Shift + Tab; (1 mark)
- (ii) Ctrl + Home. (1 mark)
- (c) Mbaruk Company intends to computerize the management of its accounting records. Explain **two** advantages the company will achieve from this move. (4 marks)
- (d) Figure 2 shows different options of text wrapping a picture using a DTP program. Use it to answer the question that follows.




(i)	(ii)	(iii)
Today, the computer is  used in every field and has made our day to day tasks very easy	Today, the computer is used in every field and  made our day to day tasks very easy	Today, the computer is used in every field and  has made our day to day tasks very easy

Figure 2

- Identify the *text wrap* effects applied in (i), (ii) and (iii). (3 marks)
- 6. (a) Outline **three** types of data that could be entered in a worksheet cell. (3 marks)
  - (b) Catherine has recommended the use of a *word processing* program over the *type-writer* currently being used for processing the company's text-based documents. Outline **four** reasons for her recommendation. (4 marks)
  - (c) With the aid of a sketch, differentiate between *stroke* and *fill* as used in DTP programs. (4 marks)
  - (d) Winnie prepared a progress report of her research project using a presentation program and used both *slide sorter* and *notes page* design views. Outline **two** ways in which she could use each view (4 marks)

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