2920/102A
COMPUTER APPLICATIONS I (THEORY)
Paper 1
November 2021
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.

1. (a) Outline **three** features of a graphical user interface in operating systems. (3 marks)

(b) Describe each of the following types of operating system:

(i) distributed operating system;

(ii) multiprocessing operating system. (4 marks)

(c) Alice intends to create a document using a word processing program. Outline **four** types of computer keyboard keys she is likely to use during this process. (4 marks)

(d) Joab created slides using a presentation program. Outline **four** ways he could view the slides. (4 marks)

2. (a) State **six** functions of an operating system software in a computer system. (3 marks)

(b) Explain the function of each of the following data types as used in a database table.

(i) OLE object;

(ii) Hyperlink. (4 marks)

(c) Distinguish between *data source* and *main document* as used in word processing programs. (4 marks)

(d) Susan used master slides in a presentation she created. Outline **four** kinds of master slide she could have used. (4 marks)

3. (a) Karaha Ltd intends to connect its computers to the Internet. Outline **three** types of Internet services they would get from this connectivity. (3 marks)

(b) Distinguish between *a macro* and *a module* as used in databases. (4 marks)

(c) Figure 1 shows the errors generated when a wrong formula is entered in cell C1 and cell C2 in a worksheet.

	A	B	C
1	45	45	#NULL!
2	45	45	#NAME?

Figure 1

Write the formula that may have been entered in the cells to generate the errors in cell C1 and C2. (4 marks)

(d) Marion has been tasked to design wedding cards for her friend using a desktop publication application. Outline **four** types of layout guides that she could use while designing the cards. (4 marks)

4. (a) With the aid of **two** examples, explain the term *transition* as used in presentation programs. (3 marks)

(b) Julie intends to add a table in a database she created. Outline **four** ways she could achieve this. (4 marks)

(c) Figure 2 is a spreadsheet extract. Use it to answer the questions that follow.

	A	B	C	D
1	**Subject**	**Weight**	**Score**	**Weighted Score**
2	Mathematics	0.3	80	24
3	Operating system	0.4	70	28
4	ICT and Ethics	0.3	60	18
5				
6	Average Weighted Score			**22.66**

Figure 2

Using a function and cell addreses only, write a formula that may have been used to compute each of the following:

(i) Weighted score in cell D3; =D3((B2*C2)/100))

(ii) Average weighted score in cell D5. =D6((D2+D3+D4)/3)) 4 (4 marks)

(d) An organization has noted that the security of their data in the database is compromised. Explain two types of threats that the database could have been exposed to. (4 marks)

-Exposure ✓
-Data theft ✓ 4

5. (a) State six effects that could be applied to the shapes created in a slide of a presentation program. -shape fill. (3 marks)

(b) Distinguish between *tracking* and *leading* as used in desktop publishing applications. (4 marks)

(c) Joan entered the number **13000.8779** in cell A1 of a worksheet in a spreadsheet. Write a formula that would be used to round the number:

(i) to the nearest integer;

(ii) as a multiple of 5. (4 marks)

(d) Ruth inserted a picture labelled S in a publication she designed as shown in Figure 3. She applied different transformations to achieve the results labelled W, X, Y and Z.

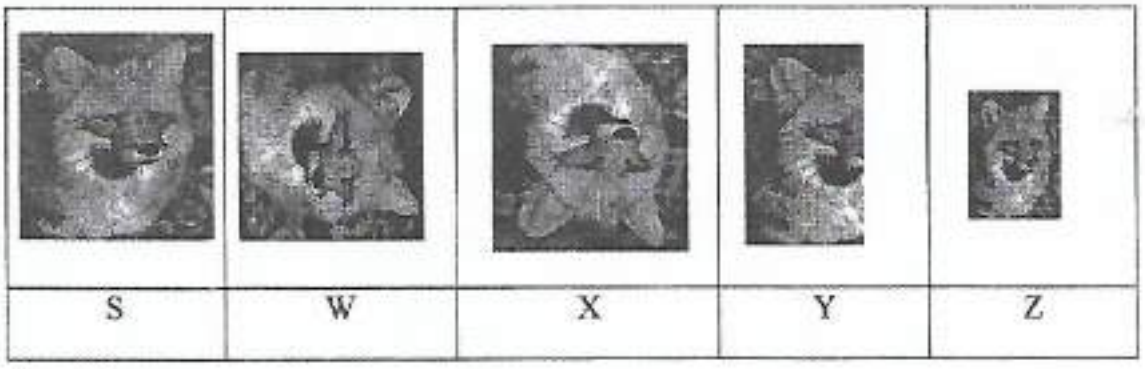

Figure 3

State the type of transformations she applied in each case. (4 marks)

- Center alignment.
- left alignment
- Right alignment
- Indent alignment.

3.

6. (a) Outline **three** ways that could be used to align text in a paragraph while designing a brochure in a desktop publishing application. (3 marks)

(b) Explain the circumstance that would necessitate the use of each of the following operators when querying a database.

(i) AND; ~~Multiplication~~ Addition

(ii) OR. ~~Multiplication~~ (4 marks)

(c) Sam intends to view a report created using a database program before printing. Explain **two** ways he could use to achieve this. (4 marks)

(d) Peter intends to print slides created using a presentation program. Outline **four** options he could use to print the slides. (4 marks)

- Print as handout
- print as number of slides per page
- Print as slides
-

THIS IS THE LAST PRINTED PAGE.

Worst