

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.

- Function
- Oper
- Special
- Numbers

easy to exchange data
Requires working space
Easy to use

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

- bottom-up
 - right-left
 - up to down
 - left to right
2. (a) State **six** functions of an operating system software in a computer system. (3 marks)

- many manager
 - file management
 - error handling
 - process manager
 - error handling
 - file manager
- (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)

- outer
 - inside
 - outer
 - inside
 - margin
 - alignment
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)

- On the ribbon, click **create table**
 - click on insert tab
 - click insert table
 - click design table

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

| | A | B | C | D |
|---|-------------------------------|---------------|--------------|-----------------------|
| 1 | | | | Weighted Score |
| 2 | Subject | Weight | 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 addresses 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 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)

5. (a) State six effects that could be applied to the shapes created in a slide of a presentation program. *with 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.

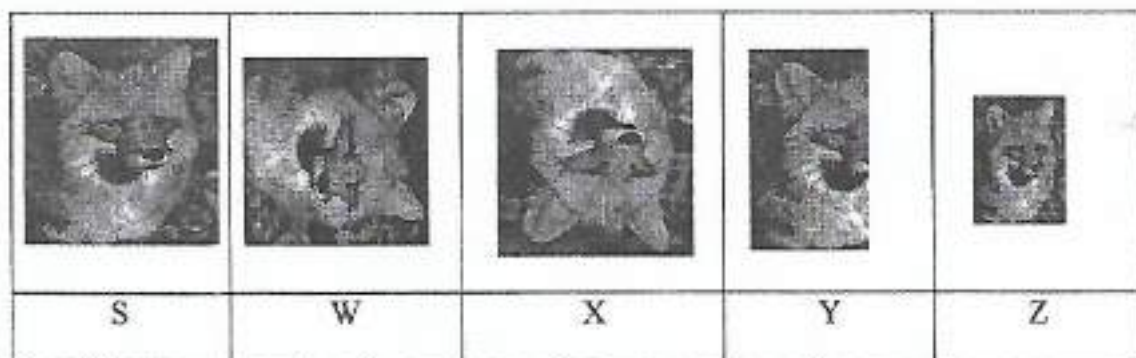


Figure 3

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 handouts
 - print as number of slides per page.
 - Print as slides

THIS IS THE LAST PRINTED PAGE.

Handwritten mark

easyvet.com