



UGANDA BUSINESS AND TECHNICAL EXAMINATIONS BOARD

PAPER CODE TDIT 113	PROGRAMME NATIONAL DIPLOMA IN INFORMATION AND COMMUNICATION TECHNOLOGY YEAR I SEMESTER I	DATE TUESDAY, 20 TH DECEMBER 2022
SERIES NOV/DEC 2022	PAPER NAME COMPUTER APPLICATIONS	TIME ALLOWED 3 HOURS
YOU SHOULD HAVE THE FOLLOWING FOR THIS EXAMINATION Computer Installed with Microsoft Office and CD burning software Compact Disk (CD) Printer and Printing papers		

INSTRUCTIONS TO CANDIDATES

1. This paper consists of **five** practical questions in **two** sections **A** and **B**.
2. Answer **all** questions in section **A** and **one** question from section **B**.
3. Create a folder on the desktop in your names and registration number and save all your work in it before transferring to the compact disk (CD).
4. All questions carry equal marks.
5. **Do not** write anywhere on this question paper.
6. **Do not** move out of the examination room with this question paper unless you are told to do so.

SECTION A – (75 MARKS)

Questions in this section are compulsory

Question One (Word Processor)

You are the class coordinator of computational mathematics in your class and you have been requested to organize the following content for a lecture.

- (a) Using Microsoft word processor application, typeset the following text and format it the way it appears. (15 marks)

Method One: Elimination Method

In this method, we first arrange the coefficients of the equations in order.

For example, if $2y + 3x = 7$ and $5x - y = 3$; we solve as follows:

$$3x + 2y = 7 \dots\dots (eq\ i)$$

$$5x - y = 3 \dots\dots (eq\ ii)$$

Multiply both sides of (eq ii) by 2 and add:

$$3x + 2y = 7 \dots\dots (eq\ i)$$

$$10x - 2y = 6 \dots\dots (eq\ ii)$$

$$13x = 13$$

$$\therefore x = \frac{13}{13} = 1 \text{ and from (eq ii) } y = 5x - 3 = 2$$

Method Two: Matrix Method

Let's use the same example as above:

$$3x + 2y = 7 \dots\dots (eq\ i)$$

$$5x - y = 3 \dots\dots (eq\ ii)$$

$$\Rightarrow \begin{pmatrix} 3 & 2 \\ 5 & -1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} 7 \\ 3 \end{pmatrix}$$

$$\Rightarrow \begin{pmatrix} -1 & -2 \\ -5 & 3 \end{pmatrix} \begin{pmatrix} 3 & 2 \\ 5 & -1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} -1 & -2 \\ -5 & 3 \end{pmatrix} \begin{pmatrix} 7 \\ 3 \end{pmatrix}$$

$$\Rightarrow \begin{pmatrix} -13 & 0 \\ 0 & -13 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} -13 \\ -26 \end{pmatrix}$$

$$\Rightarrow \begin{pmatrix} -13x \\ -13y \end{pmatrix} = \begin{pmatrix} -13 \\ -26 \end{pmatrix}$$

Thus $x = 1$ and $y = 2$ as before.

- (b) Copy the typed text and paste it on the next page. (02 marks)
- (c) Format your document to **font type** "Comic Sans MS" with **font size** "11.5". (02 marks)
- (d) Insert **Footer** with page number and an automatic date. (02 marks)
- (e) Save your file as your name in the folder created on the desktop. (02 marks)
- (f) Print your work. (02 marks)

Question Two (Microsoft Excel)

Table 1 shows sales records for each Sales Executive of Mbiko Company limited. Use the provided data to answer questions below it.

Table 1: Quarter 1 Sales Record

Name	Jan	Feb	Mar	Total	Average
Maliko	555,000	670,000	650,000		
Jumba	800,000	455,000	360,000		
Connie	760,000	950,000	450,000		
Gumbya	650,000	660,000	385,000		
Kaine	450,000	590,000	650,000		
Niko	980,000	850,000	754,000		

Required:

- (a) Load MS Excel application and enter data as it appears above. (05 marks)
- (b) Copy the typed sheet, paste it to sheet 2 and name it "Computed". (02 marks)
- (c) Using excel formulae and functions, compute the following:
 - (i) Total sales for each street vendor (03 marks)
 - (ii) Average sales for each street vendor (03 marks)
- (d) Sort the names of street vendors in ascending order. (03 marks)
- (e) Create a **Column Chart** using "Name", "Total" and "Average" displaying "Data Table" below the chart. (05 marks)
- (f) Save your work as your "names" in the folder created on the desktop. (02 marks)
- (g) Print a hard copy of your work. (02 marks)

Question Three (Microsoft Access)

Your Country is about to hold a national census and Uganda bureau of statistics is looking for a good Database Administrator to manage population database.

Table 2: BS_Table

Voter_Id	Name	Sex	DOB	Constituency	Salary_Ugx
U001	Mafabi	M	19- Nov – 80	Mbale North	560,000
U002	Mufulusi	M	02- Apr-72	Kyegegwa	760,000
U003	Wambede	M	13- Jul- 84	Masaka Central	990,000
U004	Atheino	F	01- June- 69	Soroti Central	450,000
U005	Katunguka	M	11- Dec- 81	Mbarara East	390,000
U006	Kayanja	F	12- Jan -79	Wobulenzi South	685,000

- Using MS Access, create a database named as "Data_Center". (02 marks)
- Create a table in design view and name it as "BS_Table". (02 marks)
- Create a form for populating the data and name it as "BS_Form" (06 marks)
- Use form footer to insert your names and registration number. (03 marks)
- Create a query that calculates the "PAYE" which is deducted from salary at the rate of 5% and name it as "Salary_Query". (04 marks)
- Create a query displaying voters whose sex is "F" and earn a salary below 500,000/=. Name the query as "PaidLF_Query". (04 marks)
- Generate a report from the "PaidLF_Query". (04 marks)

SECTION B – (25 MARKS)

Answer only **one** question in this section

Question Four (PowerPoint Presentations)

Load MS PowerPoint and prepare a presentation of five slides about Computer hardware as guided below;

Slide one: **Heading:** Computer hardware
Components of computer hardware
Your names as a presenter

Slide two: Table showing **three** examples of input devices and roles.

S/N	DEVICE	ROLE
1)	Keyboards	Entering text and numbers into a computer
2)	Mouse	pointing device
3)	Digital Pens	Writing, drawing, or tapping on a screen, electronic signature.
4)	Scanners	change images into codes that the computer accepts

Slide Three: **Examples of output devices.**

- Monitor
- Projectors
- Printers
- Speakers

Slide four: **Ways of maintaining hardware devices.**

- Regular maintenance service (dusting, polishing etc)
- Power regulation checks.

Required:

- (a) Prepare a **four** slide presentation covering the above points. (08 marks)
- (b) In slide two, design a table with "Light Style 3". (03 marks)
- (c) Apply "Float In" **Animation** in your slides. (03 marks)
- (d) Use a "Wipe" and 5 second **Transition** for all your slides. (03 marks)
- (e) Insert **Slide Number** and automatic "Date & Time" update. (04 marks)

- (f) Save your presentation as your "name" in the folder created on the desktop. (02 marks)
- (g) Print a hardcopy of your work on a single sheet. (02 marks)

Question Five (Microsoft Publisher)

Using Microsoft Publisher, design a Business card with dimensions of 4 × 6cm on a Paper Size "A4" covering the following information. (07 marks)

- (a) Name of the Business : NorthEast Publishers
 Title : Manager
 Names : Your names
 Contact address : Kilak Rd, Plot No 24A P.O Box 234, Masindi.
 Tel. No. 0776223344/0751556677
- (b) Make all text boxes to **Line weight** "1½pt". (04 marks)
- (c) Apply a background of "Accent 2 Horizontal Gradient" and a scheme of built-In (Classic) "Alpine" type. (04 marks)
- (d) Set a gap of "0.5cm" after each card. (02 marks)
- (e) Insert your name and registration number in a text box as a **Footer**. (04 marks)
- (f) Save your publication as your "name" in the folder created on the desktop. (02 marks)
- (g) Make a printout of the business cards on one page. (02 marks)

END