



UGANDA INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY END OF SEMESTER EXAMINATIONS

ACADEMIC YEAR 2025/2026

PROGRAMME(S): DIPLOMA IN INFORMATION TECHNOLOGY FOR BUSINESS (DITB)

YEAR OF STUDY: ONE SEMESTER TWO

COURSE: DIGITAL LITERACY II (SECOND SHIFT)

COURSE CODE : ICT125

DATE: SATURDAY 27TH, JUNE 2026

TIME: 2:00 PM – 5:00 PM

DURATION: 3 HOURS

VENUE: LAB 1, LAB 2, LAB 3, SEMINAR ROOM, ITU, ELECTRONICS LAB, SMART IDEAS LAB (HUB)

INSTRUCTIONS:

This paper consists of two sections A and B.

Attempt all questions from section A and any ONE question from section B

SECTION A (COMPULSORY)

Question One

ABD is a company that assembles computers and employs a number of people (employees). Depending on one's salary amount, some employees are liable for bonuses at the end of the month while others are not. The company expects to open another branch in Kalino and so the number of employees is expected to increase. With the existing manual system, the human resource officer has detected a problem and she will not be able to handle her monthly payroll. ABD through their procurement officer has contacted you proposing that, as an ICT expert, develop them a software package to facilitate the monthly salary payments.

The table below shows a list of existing employees and their salaries. Employees with a salary that is above "**1.5 million**" are eligible for a **15% bonus** while the rest are eligible for only a **10% bonus** of their base salary. Use the data in the table below to answer the questions that follow:

Table 1: Salaries

Name	Position	Base Salary (UGX)	Bonus (%)	Eligible for Bonus?
Alice	Manager	1,950,000	15%	Yes
Ben	Technician	1,100,000	10%	No
Claire	HR Officer	1,850,000	15%	Yes
David	IT Specialist	1,180,000	10%	No
Emily	Administrator	1,900,000	15%	Yes

Required:

- (a) Open a Microsoft Excel worksheet and enter the data in the table above considering only the first three columns above. **(05 marks)**
- (b) Insert columns named **Bonus** and **Total Salary**. **(02 marks)**
- (c) Using an Excel formula, calculate the:
 - (i) Bonuses for each of the employees. **(04 marks)**
 - (ii) Salary for each employee, considering bonuses for all. **(04 marks)**
 - (iii) The company's expenditure (Total salaries). **(04 marks)**
 - (iv) Employees with the highest and lowest salaries. **(04 marks)**
- (d) Insert a **Bar graph** to display the salary earned by each of the employees. **(04 marks)**

(e) Filter and display employees whose salary is greater than **2,000,000 UGX** and copy them to a new sheet and name it **High Earners**. **(05 marks)**

(f) Save your work in the folder you created using your name and registration number. **(03 marks)**

Question Two

A friend of yours graduated with a national certificate in electronics four years and has embarked on starting an electronics shop in your home district. Being an ICT scholar, he has tasked you with developing a database system to help him manage the inventory of his local electronics shop from the several supplies available.

Use the information in the table below to answer the questions that follow:

Table 2: Products

Field Name	Data Type	Field Size	Constraints
ProductID	AutoNumber	-	Primary Key
ProductName	Long Text	50	
Category	Long Text	30	
UnitPrice	Currency		
StockQuantity	Number		

Table 3: Samples

ProductID	ProductName	Category	UnitPrice	StockQuantity
P001	Flat Iron	electronic	50,000	13
P002	Radio	solar	20,000	6
P003	Television	electronic	100,000	8
P004	Laptop	electronic	30,000	7
P005	Bulb	solar	10,000	10

Required:

(a) Open Microsoft Access and create a Database called **ElectronicsInventory**. **(05 marks)**

(b) With reference to the structure in Table 2 above, create a Table named **Products** using the correct data types for each column. **(04 marks)**

- (c) Create another Table named **Suppliers** with the fields indicated in the brackets (**SupplierID, SupplierName, and Contact**) assigning appropriate data types for each of the fields. **(05 marks)**
- (d) Create a Form named **ProductEntry** for adding new product details. **(04 marks)**
- (e) Populate at least five products using the **ProductEntry** Form as per the data in Table 3. **(04 marks)**
- (f) Create a Query and name it **LowProducts** to display products with stock quantities below 10. **(02 marks)**
- (g) Establish a relationship between the **Products** Table and **Suppliers** Table. **(04 marks)**
- (h) Create a Report named **ProductReport** displaying the product details grouped by **Category** and sorted by **UnitPrice** in descending order. **(04 marks)**
- (i) Save your work and print out the above report. **(03 marks)**

SECTION B (30MARKS)

Attempt any ONE question in this section

Question Three

An ICT lecturer at your college is not feeling well and has asked for a sick leave that is going to take him a week away from school. The college academic registrar has approved his leave request and advised that he should start his lectures immediately after the leave period. The challenge is that he will be starting class with the fresh men and has not prepared notes for the new curriculum.

You have therefore been tasked to prepare him a PowerPoint presentation on the topic "Emerging Trends in Information Technology" for the lesson since you are an ICT expert who is expected to support him to finish first year.

Required:

(a) Prepare a Six-slide presentation following the guidelines below:

Slide 1

The slide should include:

- Title
- Your name
- Registration number, and date

(03 marks)

Slide 2

Title and content slide should include:

- Overview of emerging trends in IT
- AI
- Block chain
- Quantum Computing

(03 marks)

Slide 3

Two content slides represented using a bulleted list of your choice.

Impacts of AI in different industry (Positive and negative)

- Loss of jobs

- Faster processing

Applications of Blockchain and its use cases

- Online purchases
- Air ticket reservation
- Tour reservations

(03 marks)

Slide 5

Future prospects in Quantum Computing

(03 marks)

Data is represented as linked qubits. These have the ability to represent all possible states simultaneously giving quantum computers the ability to operate exponentially faster than conventional computers as the word length is increased.

Slide 6: Conclusion

(02 marks)

Formatting Requirements

(b) Format all the slide content to a Font Style Century Gothic and Font size 12pt. All the other content except the title must be using numbered lists. **(02 marks)**

(c) Apply a suitable and clearly readable Theme to your presentation. **(02 marks)**

(d) Apply the Morph Transition to Slide 3 and Slide 5. **(04 marks)**

(e) Animate each of the bullet points on all slides using the Wipe, Fly In, Wheel animations with a delay of 1 second. **(04 marks)**

(f) Use SmartArt to create a diagram on Slide 6 that demonstrates a computer process. Include the input, processing and output stages. **(02 marks)**

(g) Insert your name and registration number as a Footer on all slides. **(02 marks)**

(h) Save your presentation. **(02 marks)**

Question 4: Microsoft Publisher Practical (30 Marks)

You have been hired by **UVTAB Training Institute** to design an advertisement flyer for a new ICT training program.

Using Microsoft Publisher:

1. Create an A4 portrait publication. (5 Marks)
2. Insert the title "**UVTAB ICT Training Program 2026**" at the top of the page. (5 Marks)
3. Include the following details:

Courses Offered:

- Computer Applications
 - Graphic Design
 - Web Development
 - Cybersecurity
- Duration: 3 Months
 - Venue: Kampala Campus
 - Contact: 0700 123456
- (4 Marks)
4. Insert at least one relevant image. (4 Marks)
 5. Apply an attractive color scheme and page border. (3 Marks)
 6. Use WordArt for the title. (2 Marks)
 7. Add a footer containing your name and registration number. (4 Marks)
 8. Save the publication as **PublisherExam.pub**. (3 Mark)

END