UGANDA NATIONAL EXAMINATIONS BOARD

Uganda Certificate of Education

COMPUTER STUDIES PRACTICAL

Paper 2

2 hours 15 minutes

INSTRUCTIONS TO CANDIDATES:

The paper consists of **two** *sections,* **A** *and* **B**

Section **A** *contains* **one** *compulsory question that takes 40 marks.*

Section **B** *contains* **three** *questions. Answer any* **two** *questions from this section.*

Any additional question(s) answered will **not** *be marked*

Each candidate is provided with a **new flash disk"** *or a* **blank compact -disc rewritable**.

Candidates should continuously save their work

Each candidate **must** *produce a* **hard copy** *for each of their work to accompany the*

diskette or compact disc.

Software wizards must not be used.

Create a folder on the desktop with all your names and save your work there

This section is compulsory
(You are expected to spend 25 minutes on this question)
1. (a) Using word processing software, type the text and apply the instructions at the end
(05 marks)

STORAGE CAPACITIES

Storage devices: These hold data or information on file when it is needed for processing. Storage refers to the media on which data, instructions and information are kept. Storage is also known as backing storage or secondary storage. Most Computer systems have memory and backing storage.

Backing storage is necessary because memory is volatile and usually limited. Backing storage cannot be directly addressed by the CPU therefore data and programs in backing storage must be read into memory before they can be processed.

A storage medium is the physical material on which a computer keeps data, instructions, and information for future use. Capacity is the number of bytes (*i.e. characters*) that a storage medium can hold. Four common types of storage media are:-

- Floppy disk
- Hard disk
- Compact disk
- Tape
- Zip drive

Other types of storage media include:

- ❖ PC card
- ❖ Smart Card
- ❖ Microfilm and microfiche
- ❖ Online storage

NO.	MEDIUM	CAPACITY	QTY	PRICE	AMOUNT
1.	CD-ROM R/W	700MB	250	2,500	
2.	Hard disks	80GB	450	100,000	
3.	Flash disks	2GB	45	35,000	
4.	DVDs	4GB	100	50,000	
5.	External Hard disk	250GB	120	200,000	
6.		**Total Amount**			

Instructions:

(a) Copy this work and paste it onto page two of your document and take out the following instructions. (01 mark)

(b) Center, bold and capitalize the title of the document with font size as 18.5 with a border surrounding it. (02 marks)

(c) Change the font style of the whole text to Bookman Old Style with font size 12 for work on the pasted page (01 mark)

(d) Use a word generated formula to calculate the Amount and the Total Amounts for QTY Bought Price and Amounts. (03 marks)

(e) Include your name as a text water mark diagonal in blue color and small caps (01 mark)

(f) Include a **3-D 6PT** page border. (01 mark)

(g) Apply a Preset Rainbow background color. (01 mark)

(h) Drop cap every First letter in each paragraph with an indent of 0.5cm to the right. (02 marks)

(i) Include your name and personal number as a centered footer (01 mark)

(j) Include page numbers in the format of Page X of Y in the header. (01 mark)

(k) Save your work on the desktop as "**Computer Storage**" and make a print out of your two pages. (01 mark)

(You are expected to spend 25 minutes on this question)

(b) Below is a spreadsheet showing employees record Blue Print Ltd in Mukono District. You are required to;

i) Open a suitable application program and enter the data below exactly as it appears maintaining the respective cell addresses. (03 marks)

Save it as **Absolute Day Book** on the Desktop in a folder. (01 mark)

A	B	C	D	E	F	G	H	I	J
			Blue Print Ltd Employees Records						
2	**Name**	**Basic Pay**	**Transport Allowance**	**Night Duty Allowance**	**Gross Pay**	**Revenue Tax**	**Net Pay**	**Rank**	**Employee Category**
3	Timothy	800000	4100	2000					
4	Titus	600000	6000	2000					
5	Theresa	160000	2500	2000					
6	Twaha	120000	9000	2000					
7	Swabulah	150000	10000	2000					
8	Tobias	200000	5000	2000					
9									
10									
11	Revenue tax =		10%						
12									

Additional information:

-**Gross pay** is the equivalent of **basic pay** plus **all allowances**

-**Net pay** is a function of **gross pay** minus **tax**

i. Using absolute cell referencing, calculate the Revenue Tax for all employees having in mind that it is 10% of basic pay. (02 marks)

ii. Calculate the Gross Pay. (01 mark)

iii. Calculate the Net Pay. (01 mark)

iv. Determine the highest tax payer by use of a function (01 mark)

v. Add the name Hood between Twaha and Swabulah. By use of functions determine his gross pay, revenue tax and net pay. (01 mark)

vi. Rank all the employees basing on their basic pay. (02 marks)

vii.   All employees whose revenue tax is less than 20,000/= are categorized as "**Form**" while others are categorized as "**Substance**". Use a simple if function to determine the category to which each of employee.   (02 marks)

viii.   Insert a thick border around your work with grids inside.   (01 mark)

ix. Put the Rank sub title only at an angle of 45^0 and Make the Title "Blue Print……." In a Green Background   (01 mark)

x. Select the Names column and Revenue Tax Column and generate a Pie Chart with the following attributes.   (02 marks)

  ➤ **Title:**

  ➤ Category Name

  ➤ Percentages

xi. Let all your columns of Basic Pay, All Allowances, Gross Pay, Revenue Tax and Net Pay be formatted to   UGX currency symbol, with commas and No decimal place value.

                                                            (01 mark)

(Adjust the column width for values to fit in their respective columns.)

xii.   Using COUNTIF in cell B10, calculate those who earn basic salary above 300000.

                                                            (01 mark)

xiii.   Use the auto filter function to filter out employees whose Basic Pay is above 300,000. Save this work as **"Above 300,000"** in your folder on the desktop and close the file.

                                                            (02 marks)

xiv.   Print Your Work   (01mark)

SECTION B (60 MARKS)

Attempt any two questions

(You are supposed to spend 40 minutes on this number)

2. Pollution is becoming rampant and a problem in Uganda and the whole World at large.
   You are required, using presentation software to educate Ugandans about pollution.
   Create Six slides as indicated in parts (i) – (vi).

Every slide should: (06 marks)

- Use minimal graphical effects to make the presentation entertaining.
- Be able to convey the appropriate message to the community
- Run with a click of the mouse
- Apply sound where necessary to enhance your presentation
- Have your name and index number as a footer

(a) **Slide I** – Should include a suitable title for your presentation   (03 marks)

(b) **Slide II** – Should include the different types of pollution   (03 marks)

(c) **Slide III** – should include the general causes of pollution.   (03 marks)

(d) **Slide IV** – The table below shows pollution rates between 2015 and 2017. Use it to
generate the **chart** that will appear on this slide.   (05 marks)

District	2015	2016	2017
Jinja	2050	330	520
Iganga	1000	150	750
Ibanda	180	240	600
Mbale	500	100	110
Kapchorwa	50	150	360

(e) **Slide V** – should include the effects and problems of pollution to the environment on a
two column slide. Include a verticle 8pt dark blue line between the columns. (03 marks)

(f) **Slide VI** – should include the solutions to the problems   (03 marks)

(g) Save the presentation as **pollution**   (01 mark)

(h) Link your slides to one another with a word NEXT on every button used.
                                                                                                            (02 marks)

(i) Make a **print out** of your work.   (01 mark)

3. The table below gives information on some students in a certain Secondary School about their Registration numbers, names, class, age, sex and names of houses where they reside.

Load a database program of your choice and name it **REGISTRATION EXERCISE** in a folder bearing your names on the Desktop.   (01 Mark)

Table 1: Register

REG. No.	NAMES	CLASS	AGE	SEX	HOUSE
001	Lule S	S.2	15	M	Bikunya
002	Kizza V	S.2	14	M	Lumumba
003	Omeda A	S.4	16	F	Red
004	Sempebwa S	S.3	16	M	Winyi
005	Kibuuka D	S.2	13	M	Bikunya
006	Amita J	S.1	12	F	Blue
007	Onen L	S.3	17	M	Keneddy
008	Semuli M	S.5	17	F	Yellow
009	Sendi J	S.1	11	M	Black
010	Kasanya D	S.4	15	M	Bikunya

Table 2: Details

REG.NO.	DATE OF BIRTH	CITY	VILLAGE	ADDRESS
001	4-june-1996	Masindi	Pakanyi	123 Toungue street
002	6-feb-1994	Kampala	Nateete	45 Kampala
003	24-april-1996	Hoima	Bujumbura	345 Kikuubo lane
004	16-may-1996	Kampala	Wandegaya	20 Kampala
005	30-aug-1998	Mbarara	Rwampala	23 Kabale Rd
006	06-mar-1996	Kabale	Bubaale	001 Kisoro Rd
007	20-sept-1994	Rukungiri	Nyakinoni	48 Kebissoni
008	14-july-1996	Kampala	Mulago	90 Kampala
009	28-feb-1992	Nakasongola	Mijeera	78 Nakasongola
010	5-oct-1996	Luwero	Buwama	54 Luweero

You are required to:

(i) Create a table called **Register** with fields; reg no. names, class, age, sex, house having appropriate data types. Note (for sex use the look up wizard). (04 marks)

Create another table called **Details** with fields; Reg no., date of birth, city, village, address. (04 marks)

(ii) Create a **One to One** Relationship between Register and Details (01 mark)

(iii) Create a query for Bikunya and Winyi. Save it as **Hardliners** with fields Reg No, Names, Class, Age, Sex, House, Date of Birth and Address. (02 marks)

(iv) Create a query from Register Table to return all Houses Excluding Bikunya. Save it as **Exclusion Query.** (02 marks)

(v) Create another query with fields; Reg No, Names, Date of Birth, Sex and House that will display all Females born in 1996. Save it as **1996 Females**. (02 marks)

(vi) Create a parameter Query based on House that will display student information when the User types in a House. Name it **Parameter Query** (02 marks)

(vii) Use your Query above to create a form and save it as **Form Two.** (02 marks)

(viii) Use the Form above to find out how old each of the students is! (02 marks)

(ix) Provide a formatted header **REGISTRATION FORM** (color-Blue; size 24; font-Comic Sans Ms and Bold it. (02 marks)

(x) Add two command buttons of your choice and lock your Form. (01 mark)

(xi) Interrogate your table and get out those members born between February 1996 and September 1996. Save it as **Young** (02 marks)

(xii) Create a report using Table1 (**Register Table)** save it as **My Report**. (02 marks)

(xiii) Insert a footer of Your Name and Personal Number in Your Report. (01 mark)

4. You have been awarded the contract of designing a site made up of **four pages** for JICO F.M., a school radio station. The station president gives you the following information to be included on the website. (**Note all your pages should have a yellow background**)

Page One: Index Page   *(08 marks)*

a) Should be a homepage with a shared banner with the page name **JICOHOME**, title, "**JICO F.M**" and the station motto "*Your life*. *Your music*. *Your Info*"

b) A marquee with words "Welcome to JICO F.M Online" slightly after the page banner. (Give it black color, Bookman Old Style font, size 24pt).

c) Active links to other pages of the site.

d) Message about the radio of about three sentences including

- When the radio station was started (The date it first went on air)

- Mission statement of the radio (to develop significant radio signals that will enhance development and social mobilization in Equatorial College).

- Why the station was established (suggest your own reason but ideal for this station)

Page two: Program Lineup   *(08 marks)*

- *Add a Heading Program Lineup and Subheading "Should be the Motto"*

- *Add a horizontal line after the Links with Pink color and height=5*

e) Add a table and think of your own programs with the times at which they are on air. Eg News, sports, Music countdown, e.t.c

Page three: Photo Gallery   *(04 marks)*

f) Add about 10 well organized photos from the clip art collection to represent how this page will be used. They should be arranged in two rows ie 4 on top and 6 in the second row with words describing each or some photos

Page four: Contact us   *(06 marks)*

g) Add on this page in a bulleted format

- Telephone Contact (Office)
- Telephone contact (Studio Line)
- Location of the radio station.
- Postal Address of the station.

Feedback link which a visitor to the website can follow to send an email, include a form

h) Insert your name in the right bottom corner on each webpage.   *(02 marks)*

i) Save it Radio Website and Print all your four pages.   (02 marks)

END
Success in Your Mock Exams