UGANDA INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY

END OF SEMESTER II EXAMINATIONS

DEPARTMENT	:	**ICT**
YEAR	:	**ONE**
SEMESTER	:	**TWO**
PROGRAM	:	**DIPLOMA IN COMPUTER SCIENCE**
COURSE	:	**DIGITAL LITERACY SKILLS II**
COURSE CODE	:	**ICT1205**
DATE	:	**FRIDAY, JULY 5, 2024**
TIME	:	**09:00 AM – 12:00 NOON**
DURATION	:	**3 Hours**

INSTRUCTIONS

- The paper consists of two Sections A and B
- Answer **ALL** questions in Section A and **ANY THREE** questions in Section B
- Credit will be given to relevant examples and illustrations
- Don Not Write anything on this question paper

SECTION- A

Question 1 Compulsory

You are tasked with creating a database for a school to keep track of students, Subjects, and enrollments. Describe the tables you would create and their relationships. Save the created database in the created folder on the desktop under your name and registration number (**3MRKS**)

Create a new database called **StudInfo** to hold student information. **(2MRK).**

i. Create the following tables in design view. The table name is given on top.

STUDENT_MST (5mrks)

Field Name	Data Type	Field Size	Other Information for the **Field Properties**
STUDENT_ID	Text	10	Primary Key Input Mask A/99/999 Caption – Student ID
STUD_NAME	Text	50	Required Do not allow zero length Caption - Name
DOB	Date/Time		Format – Medium Date Required Caption – Date of Birth
STUD_SEX	Text	1	Required Do not allow zero length Default value - “M” Validation Rule – Allow only “M” or “F” Validation Text – “Invalid Sex” Indexed with duplicates Caption - Sex

SUBJECT_MST (4mrks)

Field Name	Data Type	Field Size	Other Information
SUBJECT_ID	AutoNumber	Long Integer	Primary Key Caption – Subject ID

SUBJECT_NAME	Text	50	Required Do not allow zero length Caption – Subject Name

ENROLMENT_MST (5mrks)

Field Name	Data Type	Field Size	Other Information
ENROLMENT_ID	AutoNumber	Long Integer	Primary Key Caption – Enrolment ID
STUDENT_ID	Text	10	Required Do not allow zero length Input Mask A/99/999 Indexed with duplicates Caption – Student ID
SUBJECT_ID	Number	Long Integer	Required Indexed with duplicates Caption – Subject ID
MARKS	Number	Integer	No decimal places Indexed with duplicates Validation Rule – Only marks less than or equal to 100 Validation Text – Invalid Marks Caption - Marks

ii. Enter the following data into the above tables. **(6mrks)**

STUDENT_MST

STUDENT_ID	STUDENT_NAME	DOB	STUD_SEX
A/00/045	Aruni	05-Jul-1980	F
E/00/230	Kumara	31-Mar-1979	M
A/99/156	Anura	02-Feb-1982	M

SUBJECT_MST

SUBJECT_ID	SUBJECT_NAME
1	Geography
2	History
3	Economics
4	Mathematics
5	Zoology

ENROLMENT_MST

ENROLMENT_ID	STUDENT_ID	SUBJECT_ID	MARKS
1	A/00/045	1	68
2	A/00/045	2	
3	A/00/045	3	85
4	E/00/230	4	76
5	A/99/156	2	
6	A/99/156	3	42

iii. Modify Kumara's date of birth to be 31-May-1979. **(2mrks)**

iv. Remove the Zoology subject from the SUBJECT_MST table. **(1mrks)**

v. Modify the table structure of STUDENT_MST to include a new column to indicate whether the student has passed out. The field name should be PASSED_OUT. It should be of type text and size 1. It should only allow values of "Y" or "N" and the default value should be "N". The caption should be "Passed Out". **(4mrks)**

vi. Use the relationships window to create a one-to-many relationship between the STUDENT_MST and ENROLMENT_MST tables using the STUDENT_ID field. The relationship should only include rows from both tables where the joined fields are equal. Enforce referential integrity. Specify to cascade update related fields and to cascade delete related records**.** **(4mrks)**

vii. Create a similar relationship between the SUBJECT_MST and ENROLMENT_MST tables using the SUBJECT_ID field. **(4mrks)**

Section B, Select any three questions of your choice among the set questions

Question 1

While your group is waiting for fame and fortune, especially the fortune part, they still need to make some money. One way struggling artist's do this is to help others who are struggling musically. Rather than take day jobs on the front line in the food service industry, your group has been inspired by the Ugandan musical industry and decided to open a "music academy". This institute of higher learning offers lessons to budding musical performers of all ages.

A brochure would be a simple but effective way to give potential customers all the information they need.

Use MS Desktop Publisher to create the Brochure. **(1mrk)**

Your task:

a) Create a business brochure promoting your music lesson business.

(2mrks)

b) Your layout should use two separate pages with three panels on each. Imagine that they will be photocopied back-to-back. **(3mrks)**

c) Along with the name, location and contact information be sure to include information on what services are offered, prices and some enticing information to attract these wannabe performers. **(2mrks)**

d) Planning your design will be important as you consider what information goes on which panel. Folding a piece of paper in three helps to give your ideas of the possibilities and where to place items. **(2mrks)**

e) Using a Landscape page orientation will provide the best design possibilities.

(2mrks)

f) Adjust the margins to the Minimum amount which will increase the space available on each divided page section (card panel). **(2mrks)**

g) Carefully using Text Boxes, Graphics, Horizontal Lines, Bullets and Drop Caps are all ways to add visual impact to a single column of text. **(4mrks)**

h) Carefully varying font style and size but maintaining consistency throughout the brochure.

i) Save the publication as brochure in your folder on the desktop. **(2mrks)**

Question 2

a) Create the table below as it is using spreadsheet program. Save your work as Employee payRoll_Q2 **(4 mrks)**

No.	First name	Surname	Basic pay (shs)	Utility	Housing	Transport	Gross Pay	PAYE	Net Pay
1	Bosco	Mukasa	560000						
2	David	Kabaale	235000						
3	Sarah	Mwesige	347000						
4	Patrick	Isabirye	642000						
5	Lillian	Nakuya	669000						
6	George	Akena	325000						
7	Susan	Nakimera	423000						
8	Stella	Kidega	260000						
9	Ambrose	Omio	463000						
10	Abraham	Ssensiti	180000						

Given the following information:

- Utility is 12% of Basic pay
- Housing and Transport allowances are uniform for all staff members at 60,000 and 80,000 respectively.
- PAYE is computed on Gross pay basing on the table below

Income bracket (Gross pay)	PAYE
0-210000	8% of gross pay
210001-420000	12% of the gross pay
420001-620000	18% of the gross pay
Above 620000	25% of the gross pay

(b) Using the information given above, insert the following columns in the worksheet and using excel functions and formulae, compute the following:

(i) Utility **(1 mrks)**

(ii) Housing **(1mrks)**

(iii) Transport **(1 mrks)**

(iv) Gross Pay (Basic pay plus utility and allowances) **(2 mrks)**

(v) PAYE **(2 mrks)**

(vi) Net Pay **(2 mrks)**

(c) Management intends to increase employee's basic pay by 15% in the following month, compute their new basic pay **(2 mrks)**

(d) Plot a line graph showing surname of employees and their gross pay in a different sheet called Gross Pay graph. The graph should have data labels, a title, a legend and labelled axes save the file in your created folder **(5mrks)**

Question 3

Create a 7-slide show presentation for your institution, with the following items:

NOTE: Your slides should:

(i) Use appropriate animation schemes to view your presentation.

(ii) Use appropriate transition for your show.

(iii) Apply clip and word Art where applicable.

(iv) Apply appropriate Design templates and background colour

(v) Have a header as your name and personal number.

(a) A title slide with the name of your institution. **(2mrks)**

(b) A text slide with the departments in the Institution. **(2mrks)**

(c) A text slide with the Course Units taught in your institution. **(2mrks)**

(d) A two-column slide with the names of the lecturers in your institution. **(2mrks)**

(e) A text slide with Co-curricular activities in the institution. **(2mrks)**

(f) A tabular slide with ten (10) imaginary Digital literacy skills students with their imaginary marks in the End of semester Digital literacy skills Test.**(5mrks)**

(g) A Line graph for analyzing performance of the students in (f) above. **(5mrks)**

Question 4

UICT training Institution has realized that the number of there trainees is rapidly increasing and its has become hard for the administrators to manage the information about these trainees manually. You are required to help them design a simple Database that can help them to handle their information.

a) Create a database for the institution and name it UICT_DB **(2Mrks).**

b) Create a table named UICT_table with an appropriate primary key **(6mrks)**.

STUDENT ID	FNAME	LNAME	DISTRICT	GENDER	COURSE	TUITION
B001	Harriet	Akelo	Kamuli	Female	NCIT	900000
B002	Sandra	Kisakye	Lira	Female	NCAF	800000
B003	Joy	Akoth	Gulu	Female	NCHIC	950000
B004	John	Opio	Kamuli	Male	NCAF	800000
B005	Alex	Akoniki	Kamuli	Male	NCIT	900000
B006	Andrew	Okello	Gulu	Male	NCIT	900000
B007	Micheal	Okumu	Kampala	Male	NCHIC	950000

c) Create a form called Student_form and use it to capture the information in the table above **(2Mrks)**

d) Create a query to show students from Kamuli district, name it Kamuli**.(2Mrks)**.

e) Create a query the display students that pay tuition which is greater than 800000 name it Class A. **(2Mrks).**

f) Generate a report from class A and name it Class A report **(2Mrks)**.

g) Generate a report with the data given in the table name it All **(2Mrks)**.

h) Create a folder on the desk top and save your Database in the folder created name it your first name and last name. **(2Mrks)**.