UNIVERSITY REGULAR EXAMINATIONS

2012 /2013 ACADEMIC YEAR

FOR THE CERTIFICATE IN INFORMATION TECHNOLOGY

COURSE CODE: ITC 012

COURSE TITLE: INTRODUCTION TO ICT

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INSTRUCTIONS

Answer question one and any other two

Q1. a) i) Define Database . **[2 marks]**

ii) State any four examples of Database Management Systems.

[2 marks]

b) A database of employees details has the following fields; Employee number, First Name, Last Name, Section, Sex, Date of employment, Address.

i. Define 'DBMS'. **[2 marks]**

ii. For each field, state the most suitable data type. **[4 marks]**

iii. It is proposed that a unique field be included in the table. Suggest a name for the field and explain its significance. **[4 marks]**

c) State **five** advantages of using Ms. Access in managing records to the traditional filing system. **[5 marks]**

d) Explain the following terms:

i. Relational Databases. **[3 marks]**

ii. Record **[2 Marks]**

iii. Field **[2 Marks]**

iv. Primary Key **[2 Marks]**

v. Entity **[2 marks]**

Q2. a)State any four features of "Database Management System". **[4 marks]**

b) Explain the difference between the following terms:

i. "Record" and "Database"

ii. "Field" and "Field value".

iii. Report and Label

iv. Table and query **[8marks]**

c) State any 4 data types of Ms. Access. **[4 marks]**

d) Briefly outline the procedure of creating a report in access using design view

[4 Marks]

Q3. A lecturer is about to create a database of students details. She needs to store Information about the following fields: First Name, Last Name, Age, Sex, Data of enrolment, Address.

a) For each field propose:-

i. The most suitable data types.

ii. The most appropriate field size. **[3 marks]**

b) Explain why the field 'Date of Birth' would be more suitable than 'Age'.

[1 marks]

c) What do QBE and SQL stand for (4mks)

d) What is the function of the following database tools?

   a) Table

   b) Form

   c) Report**[6 marks]**

   d) Explain the following table properties;

     i. Input mask.

     ii. Caption.

     iii. Field size.   **[6 marks]**

Q4. a) Differentiate between the design view and the data sheet view.   **[4 marks]**

   b) Data logic Ltd has set up the database as shown in Table 1. It wishes to analyse its sales using Database management system (Ms-Access).

Table

Product	Units	Cost per unit	Total cost	VAT	Commission
Keyboards	30	200			
Hard disks	15	900			
Floppy drives	10	500			
Ram-memory	21	950			
Casings	34	2,000			
Processors	18	12,000			

I) If it was calculating the student marks the query expression would be Total Marks = [cats]+ [exam marks].Using the information given determine the following:-

   i. A query expression that generates the total cost.

   ii. A query expression that generates VAT at 16% of the total cost.

   iii. A query that generates the commission calculated at 2% of the total cost.

   iv. The manager of Data Logic (K) Ltd would like to have the list of products whose units are greater than 20. Describe the procedure used to generate this list.   **[8 marks]**

II) Explain the following database management terms:

   i. Data Definition Language.

   ii. Data manipulation language.

   iii. Query language.

   iv. Report   **[8 marks]**

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P.O BOX 1699

BUNGOMA

DEPARTMENT OF INFORMATION TECHNOLOGY

FINAL SEMESTER EXAMS CCR 004

COMPUTER APPLICATIONS

SECTION A (30 MARKS)- Compulsory

Question 1
i) Define data the following terms as used in computer.**[10mks]**

a) Data

b) Program

c) Computer

d) Hardware

e) An operating system

ii) Differentiate between the following terminologies in computing environment**[10mks]**

a) RAM and ROM

b) Hardware and software

c) System software and application software

d) Softcopy and hardcopy

e) Scanner and a printer

iii) How are computers classified? Give example according to the classification**(6mks)**

iv) Explain using illustrations the data processing cycle**(4mks)**

SECTION B(40 MARKS)

Question 2
i) What is a computer system? Describe three basic components of a computer system
(8mks)

ii) State four functions of the operating system(**2mks**)

iii) John, a journalist has been at the scene of a crime name and give examples of the 3 forms in which he will enter data collected into the computer(**6mks**)

iv) Suppose you collected your data from the field, you have entered into the computer and been processed, give four examples of storage devices that you will use to store data for future references (**4mks**)

Question 3
    i)   What do you understand by the term CPU?(**2mks**)

    ii) Explain the functions of the units in the CPU(**6mks**)

    a) Control unit

    b) Arithmetic and Logic Unit

    c) Memory

    iii) Briefly describe the uses computer to deal with crimes (**10mks**)

    iv) Explain two types of users as a component of the computer system(**2mks**)

Question 4
    i)   What is an application software? Give four examples of application software?(**6mks**)

    ii) Explain the difference between input devices and output devices. Give two examples of each(**4mks**)

    iii) Highlight two types of memories and explain the difference between them(**4mks**)

    iv) Explain how computer software are applied in the following areas(**4mks**)

    a) Database management for records of finger prints photography

    b) Crime scene processing using the computers

    v) Give two examples of scanners (**2mks**)