

KAMONYI DISTRICT

END TERM TWO COMPREHENSIVE ASSESSMENT ACADEMIC YEAR 2023-2024

SUBJECT: ICT

LEVEL: S4 ALL EXCEPT MCE AND MPC

DURATION: 2HOURS

MARKS:30 MARKS

ICT ANSWERSHEET FOR S6 ALL EXCEPT MCE AND MPC/ 30MARKS

1) Define:

a)Paper-based database is a collection of information kept on a paper making it more difficult to manage it. / **2marks**

b)Computerized database: is a collection of information structured, kept in a computer and use appropriate software to manage a database./**2 marks**

It can be a database about student marks, student payments, school or institutions assets, etc

2) What are 2 benefits that an institution can have once the computerized database is created? **(2Marks)**

3) **ANS:**

1. Is used to keep much data
2. It is very easy and fast to find a specific record meeting a specific criterion
3. It can be used to quickly data
4. Can be sorted by using different criteria (ascending, descending)
5. Data can be easily updated
6. Data can be secured by using passwords
7. Furthermore, this database is less costly.

4) Determine the possible problems faced by the university administration by using the paper-based database **(4Marks)**

ANS:

1. The storage space is small therefore the size of data kept is small
2. To find a specific record required running through all the document which makes it difficult to find a specific record
3. Analysis of data is slow and done manually

4. Difficult to sort especially when using many criteria
5. Updating data is done manually by scribbling out
6. The kind of security provided to data is using physical locks
- 5) Identify any four types of database models? **(4Marks)**

ANS:

1. Relational database model,
 2. Hierarchical model,
 3. Network model,
 4. Object oriented database model.
- 6) Enumerate (Arrange) database design steps: **(4Marks)**

ANS:

- a) Investigation / Analysis of Situation
 - b) Identification of Important Entities and their Attributes
 - c) Identification of relationship among entities
 - d) Representation of Entity Relationship (ER) Diagram with symbols
- 7) Discuss the role played by Structured Query Language (SQL) into Database management. **(4Marks)**

ANS:

The role played by SQL language into Database management are as follows:

1. Data definition: SQL allows a database administrator to define the organization and structure of stored data and the relationships amongst different stored data items.
 2. Data retrieval: SQL helps an application or user program to fetch stored data from a computer database and make use of it.
 3. Data manipulation: SQL helps an application or user program to update the computer database by removing old data, modifying hitherto stored data, and adding new data.
 4. Access control: SQL can also be deployed for restricting user permission for adding, retrieving or modifying stored data, thence protecting data from unauthorized access.
 5. Data sharing: SQL is used by concurrent users to coordinate data sharing to ensure the users don't interfere with one another.
- 8) The following are the main Data Manipulation Language (DML) statements, Choose True or False (2Marks)**

ANS:

- a) Insert: to insert data into a table (**True**)
- b) Select: to query data in the database (**True**)
- c) Update: to update data in a table (**True**)
- d) Delete: to delete data from a table (**True**)

9) Differentiate between Web Application and Desktop Application (**2Marks**)

Ans:

A web application is any computer program that performs a specific function by using a web browser while **Desktop Application** must be developed for and installed on a particular operating system

10) List at least any two roles of Graphical User Interface (GUI) (**2Marks**)

Ans:

Multitasking, Attractiveness, Shortcuts, Easy use, Easy understanding.