**Nicholas Ngeno -Database Assignment 1**

1. Define the following key terms related to databases:

**1.1.1. Database -**

It is the collection of related data or information that is stored electronically in computer.

**1.1.2. Table**

It is the object in a database that holds data

**1.1.3. Record**

It is a set of data stored in a table

**1.1.4. Field**

It is the attribute of a record in a table

**1.1.5. Primary Key**

It is the column with values used to identify a row uniquely

**1.1.6. SQL**

It is the programming language for storing and processing data in the database.

**1.1.7. Query**

It is the request for the data. You have to request data in the database if you need to update, access, or delete.

**1.1.8. Index**

It is simply the pointer of the data in the database.

**1.1.9. Normalization**

Normalization is the process of organizing data in the table so that it can be easily be retrieved, and stored.

**1.1.10. Database Management System (DBMS)**

It is software used to retrieve, store, manage, and query data in a database.

**2. Section B: Discussions**

**2.1.1. Describe the purpose of a primary key in a database table and provide an example.**

The primary key is a column that contains values that uniquely identify rows in the table. It is required to extract data in a table that is commonly used such as a child table that has more than one parent table.

**2.1.2. Explain the difference between a database management system (DBMS) and a database.**

DBMS is software used to retrieve, store, manage, and query the database while a database is the collection of related information of people or things.

**2.1.3. Discuss in short, the importance of normalization in database design and provide an example of how it can improve data integrity.**

By eliminating data redundancy normalization improves storage, which leads to reduced storage facilities, and improves database performance hence benefiting the business.

Normalization improves data integrity by eliminating inconsistent data in a database.