**2022/DCSE/026/SS**

**Question 1**

1. Database

A database is a collection of related tables

1. Database Management System

This is a software program that stores databases and enables running of queries like insert, update on the database

1. SQL

SQL is a structured query language that enables a database user perform various activities with the database

1. Foreign key

This is a candidate key in a relation with values that match values of a primary key in another relation

1. Primary key

This is a set of values in a relation that uniquely identifies each entity

**Question 2**

A database reduces data redundancy. This means when using a database, there will be minimal repetition of data.

Databases stores a lot of data. It is easy to store a lot of data for future reference

Databases enable data security. This is because some database require permission for a user to login.

Databases are easy to learn. It does not need complex languages to understand for example SQL

Databases minimizes referential constraints especially incase of showing the relationship of one table to another. This is done using foreign keys

Sql update

**Question 3**

Oracle

Postgres

MySQL

MariaDB

MongoDB

Microsoft access

**Question 4**

Zero-to-many

One-to-one

One-to-many

Many-to-many

One-to-one relationship is where there is a single existence of the relationship with two relations

One-to-many is where there one participant has a relationship to many participants in another relations

Many-to-many is where all participants have relationship to each other.

**SECTION B**

**Question 5(b)**

1. WHERE;

This SQL command enables you to find a specified category depending on your condition

For example

select \* from customers where gender=’male’

It will only return the customers of the male gender

1. GROUPBY

This SQL command enables you to arrange identical data into groups

1. DISTINCT

This returns the non-duplicated values from the table and any duplicate values will be ignored.

For example

select distinct country from customers.

It will only return the country names and will ignore repeated country names.

1. SELECT

This displays your data depending on what the user wants to return

For example

Select \* from users

It will display all details of users

1. ORDERBY

This return specified values in either ascending or descending order.

For example

select name, age from employees order by Age;

It will return the name and age but with age arranged from ascending order