DATABASE SECTION A ANSWERS

Question1

1. Database refers to a collection of related tables storing data organized in rows and columns.
2. Database Management System refers to a software program that creates and maintains a database.
3. SQL stands for Standard Query Language which refers to an international standard language used to create and query a database.
4. Foreign Key refers to a candidate key connecting two different tables when referenced from one table to another.
5. Primary Key refers to a candidate key that uniquely identifies a tuple in a table.

Question2

Eliminates data redundancy.

This is in a way that data is modelled and similar data is categorized and stored in a table rather than storing data in a list where similar data about the same entity would repeated.

Allows for easy access of data and information

This is because information in a database is centrally managed within a single database and therefore it makes it easier and faster to get information needed by running a query.

Allows for easy updates and changes to be made on data.

This is because due central management of data in a database, a single change or update made entirely makes changes to the entire database.

Databases reduces incidences of data duplication.

This is because similar data about different entities are modelled and data about each entity is stored in table thus eliminating incidences similar data appearing more than once.

Database provides security for information or data stored in it.

This because users accessing the database must first know the database password before they can access it thereby limiting everyone from accessing the database.

Question3.

Students’ database Management System used mostly in education institutes.

Library database Management System applied in schools.

Hospital database Management System used in hospitals and clinics.

Grocery database Management System used in businesses mostly supermarkets.

An organization database Management System used by companies and organizations.

Question 4

Cyclic relationship. This refers to a one to one relationship where an entity participates in two roles.

Binary relationship

Ternary relationship

Quaternary relationship

Many to many relationship