Assignment Module-3

Q.1 What is RDBMS?

Ans: - RDBMS stands for Relational Database Management System. RDBMS is the basis for SQL and for all modern database systems like MS SQL, server, Microsoft etc. An RDBMS is a database management system that is based on the relational model. It is called a relational database because tables are related (joined) based on common fields.

Q.2 What is SQL?

Ans: - SQL stands for Structured Query Language which is a computer language for storing, manipulating and retrieving data stored in a relation al database. SQL is a great example of declarative programming language, where the user declares what they want and Database engine figures out how.

Q.3 Write SQL commands.

Ans: - There are Four categories in which SQL commands can be divided

- **DDL** Data Definition Language.
- **DML** Data Manipulation Language.
- DCL- Data Control Language.
- **DQL** Data Query Language.

Data Definition Language		
Command	Description	
Create	Creates new table, a view of a table, or other object in a DB.	
Alter	Modifies an existing database, such as a table.	
Drop	Deletes an entire table, a view of table or other objects in database.	

Data Manipulation Language		
Command	Description	
Insert	Create a record.	
Update	Modify a record.	
Delete	Deletes records.	

Data Control Language		
Command	Description	
Grant	Gives privilege to user.	
Revoke	Takes back the privileges grated to the user.	

Data Query Language			
Command	Description		
Select	Retrieves certain records from one or more tables.		

Q.4 What is joint?

Ans: - SQL join statement is used to combine data from two or more tables based on a common field between them.

Q.5 Write types of joints.

Ans: - <u>Inner Join</u>- This join selects records that have matching values in both tables as long as the condition is satisfied. It returns the combination of all rows from both the tables where the condition satisfies.

Syntax- SELECT table1.column1, table1.column2, table2.column1,... from table1 INNERJOIN table2 on table1.common field = table2.common field.

<u>Left Join</u>- The SQL left join returns all the values from the left table and matching value from the right table. If there are no matching values, it will return NULL.

Syntax- SELECT table1.column1, table1.column2, table2.column1, table2.column2,... from table1 LEFT JOIN table2 on table1.common_field= table2.commonfield.

<u>Right Join</u>- The SQL right join returns all the value from the right table and matching field from the left table. If there are no matching values, it will return NULL.

Syntax- SELECT table1.column1, table1.column2, table2.column1, table2.column2,... from table1 RIGHT JOIN table2 on table1.common_field= table2.common_field.

<u>Full Join</u>- The SQL FULL JOIN will return all the values from both the tables. It will put NULL in those places for which there are no common field.

Syntax- SELECT table1.column1, table1.column2, table2.column1, table2.column2,... from table1 FULL JOIN table2 on table1.common_field= table2.common_field.

Q.6 How many constraints and describe them.

Ans: - Constraints are used to limit the type of data that can be put inside the table. Types of constraints are listed below-

NOT NULL- This ensures that the field can not have a null value.

UNIQUE- This ensures that all the values in the fields are different.

<u>PRIMARY KEY-</u> A primary key is a field which can uniquely identify each row in a table. And this constraint is used to specify a field in a table as primary Key.

<u>FOREIGN KEY-</u> A foreign key is a field that uniquely identifies each row in another table.

Q.7 Difference between RDBMS and DBMS.

Ans: -

DBMS	RDBMS
It is used a software that is used to define, create	It is a software that is used for storing,
and maintain a database and provides	manipulating and retrieving data stored in
controlled access to the data.	relational database.
No relation between the data.	Data is stored in the form of tables which are
	related to each other.
It deals with small quantity of data.	It deals with large database.

It supports single user.	It can support multiple users.
Low software and hardware necessities.	Higher software and hardware necessities.
Data fetching is slower for large amount of data.	Data fetching is faster because of relational approach.
Data redundancy is common in this model.	Data redundancy is not possible because of Keys and indexes.

Q.8 What is API testing?

Ans: - Application Programming interface is a software interface that allows two applications to interact with each other without any user intervention. The purpose of API testing is to check the functionality, reliability, performance and security of the programming interface. API tests are different from GUI tests as they do not focus on look and feel of the application.

Q.9 Types of API testing.

Ans: - Open APIs- These types of APIs are free and publicly available for use. They do not have any restriction for using them. For example- OAuth APIs from Google.

<u>Partner APIs-</u> These APIs are not available publicly, but they require specific license or right to use them.

<u>Internal APIs-</u> These are internal or Private APIs developed internally for the organization to be used inside the organization.

Q.10 What is responsive testing?

Ans: - A responsive web design involves creating a flexible web page that determines the device in which it is accessed and is displayed accordingly, may it be a mobile device, tablet or a desktop. A responsive web page design improves users browsing experience. Considering this from a quality assurance point of view, a responsive web design requires thorough evaluation using a variety of devices before it is ready to go live.

Q.11 Which types of tools are available for responsive testing?

Ans: - The following types of tools are used to perform Responsive Testing-

- LT Browser
- Lembda Testing
- Google Resizer
- I am responsive
- Pixel Tuner

Q.12 What is the full form of .ipa, .apk?

Ans: -

- .ipa- iOS App Storage Package.
- .apk- Android Application Package.

Q.13 How to create step to open developer option mode ON?

Ans: - Steps to open Developer option mode ON for Android phone-

- Go to "Settings"
- Go to "About Phone"
- Go to "Software information"
- G to "Build number" and tap seven times on build number. Then we will see a pop-up message "You are now a developer"