MODULE 3: SOFTWARE TESTING

# Q1 : What is RDBMS ?

ANS : A relational database management system (RDBMS) is a collection of programs and capabilities that enable IT teams and others to create, update, administer and otherwise interact with a relational database.

. A relational database management system (RDBMS) is a program used to create, update, and manage relational databases. Some of the most well-known RDBMSs include MySQL, PostgreSQL, MariaDB, Microsoft SQL Server, and Oracle Database.

# Q2 : What is SQL ?

ANS : Structured Query Language (SQL) is a standardized programming language that is used to manage relational databases and perform various operations on the data in them.

. SQL queries and other operations take the form of commands written as statements and are aggregated into programs that enable users to add, modify or retrieve data from database tables.

# Q3 : What is join ?

Ans : If you want to access more than one table through a select statement.

If you want to combine two or more table then SQL JOIN statement is used .it combines rows of that tables in one table and one can retrieve the information by a SELECT statement.

The joining of two or more tables is based on common field between them.

SQL INNER JOIN also known as simple join is the most common

# Q4 : Write type of join ?

Ans : INNER) JOIN : Returns records that have matching values in both tables. LEFT (OUTER) JOIN : Returns all records from the left table, and the matched records from the right table. RIGHT (OUTER) JOIN : Returns all records from the right table, and the matched records from the left table.

Cross join. A cross join returns all possible combinations of rows of two tables (also called a Cartesian product).

Join/inner join. An inner join, also known as a simple join, returns rows from joined tables that have matching rows. ...

Left outer join/left join.

Right outer join/right join.

Full outer join.

# Q5 : How Many constraint and describes it self ?

 Domain constraints.

 Key constraints.

 Entity Integrity constraints.

 Referential integrity constraints

## Q6 : Difference between RDBMS vs DBMS ?

Ans : Database Management System (DBMS) is a software that is used to define, create and maintain a database and provides controlled access to the data.

Relational Database Management System (RDBMS) is an advanced version of a DBMS. 

| **DBMS** | **RDBMS** |
| --- | --- |
| DBMS stores data as file. | RDBMS stores data in tabular form. |
| Data elements need to access individually. | Multiple data elements can be accessed at the same time. |
| No relationship between data. | Data is stored in the form of tables which are related to each other. |
| Normalization is not present. | Normalization is present. |
| DBMS does not support distributed database. | RDBMS supports distributed database. |
| It stores data in either a navigational or hierarchical form. | It uses a tabular structure where the headers are the column names, and the rows contain corresponding values. |
| It deals with small quantity of data. | It deals with large amount of data. |
| Data redundancy is common in this model. | Keys and indexes do not allow Data redundancy. |
| It is used for small organization and deal with small data. | It is used to handle large amount of data. |
| It supports single user. | It supports multiple users. |
| Data fetching is slower for the large amount of data. | Data fetching is fast because of relational approach. |
| The data in a DBMS is subject to low security levels with regards to data manipulation. | There exists multiple levels of data security in a RDBMS. |
| Low software and hardware necessities. | Higher software and hardware necessities. |
| Examples: XML, Window Registry, etc. | Examples: MySQL, PostgreSQL, SQL Server, Oracle, Microsoft Acces |

# Q7 : What is API Testing?

ANS : API testing is a type of software testing that analyzes an application program interface (API) to verify it fulfills its expected functionality, security, performance and reliability. The tests are performed either directly on the API or as part of integration testing.

API testing focuses on analyzing the business logic as well as the security of the application and data responses. An API test is generally performed by making requests to one or more API endpoints and comparing the response with expected results.

API testing is frequently automated and used by QA and development teams for continuous testing practices.

# Q8 : Types of API Testing ?

ANS:  Unit testing. Unit testing are tests that are written to automatically run with every build of the application. ...

 Integration Testing. Our APIs are no separated component of a system. ...

 Performance testing. ...

 Load testing. ...

 Runtime error detection. ...

 Security testing. ...

 Interoperability testing. ...

 Fuzz tests.

# Q9: What is Responsive Testing?

ANS : Responsive testing is a process that renders web pages on viewports of multiple devices using CSS media queries based on the user device where the website is accessed. In simple terms, responsive testing ensures how responsive web design is optimized well for all types of screen sizes and resolutions.

# Q10: Which types of tools are available for Responsive Testing?

ANS :

Emulators. ...

Responsinator. ...

ViewPort Resizer. ...

Screenfly. ...

BrowserStack.

Responsive design checker. ...

Cross Browser Testing. ...

Google Resizer.

# Q11 : How to create step for to open the developer option mode ON ?

ANS : On Android 4.1 and lower, the **Developer options** screen is available by default. On Android 4.2 and higher, you must enable this screen. To enable developer options, tap the **Build Number** option 7 times. You can find this option in one of the following locations, depending on your Android version:

Android 9 (API level 28) and higher: **Settings > About Phone > Build Number**

Android 8.0.0 (API level 26) and Android 8.1.0 (API level 26): **Settings > System > About Phone > Build Number**

Android 7.1 (API level 25) and lower: **Settings > About Phone > Build Number**