

# SOFTWARE TESTING ASSIGNMENT

## (MODULE -3 TESTING ON LIVE APPLICATION)

**Que: What is RDBMS?**

**Ans:** **RDBMS** stands for Relational Database Management system. It is a software used to store, manage, query and retrieve data stored in a relational database. It provides an interface between users and applications and the database. It also stored or manage only the data that are in the form of Tables.

Basically, it is a more advanced version of DBMS i.e Database Management system that allows access to data in a more efficient way.

**Que: What is SQL?**

**Ans:** **SQL** stands for Structured Query language. It is a standard language for storing, manipulating and retrieving data in the database. It allows you to access and manipulate the database.

**Que: Write SQL commands?**

**Ans:** The SQL commands are:

- i) Data Definition Language (DDL)
- ii) Data Query language (DQL)
- iii) Data Manipulation Language (DML)
- iv) Data Control Language (DCL)
- v) Transaction Control Language (TCL)

**Que: What is Join**

**Ans:** A join is a way used to combine rows from two or more tables, based on a related column between them.

The join keyword merges two or more tables and create a temporary image of the merged table. Then according to the conditions provided, it extracts the required data from the image table, and once data is fetched, the temporary image of the merged tables is dumped.

**Que: Write type of joins?**

**Ans:** Types of joins are:

i) INNER JOIN

The INNER JOIN keyword selects records that have matching the values in both tables. The INNER JOIN keyword selects all rows from the tables as long as a join condition satisfies. This keyword will create a result set made up of combined rows from both tables where a column field exists.

ii) LEFT JOIN

It is also known as LEFT OUTER JOIN. This join, returns all the records from the left table, and the matched record from the right table of the join. For the rows for which there is no matching row on the left side, the result-set will contain "null".

iii) RIGHT JOIN

It is also known as RIGHT OUTER JOIN. This join returns all records from the right table, and the matched record from the left table of the join. For the rows for which there is no matching row on the left side, the result-set will contain "null".

iv) FULL JOIN

This join returns all records when there is a match in either left or right table. It creates the result-set by combining results of both LEFT JOIN and RIGHT JOIN. The result-set will contain all the rows from the tables. For the rows for which there is no matching, the result-set will contain null values.

**Que: How many Constraint and describes itself?**

**Ans:** The following constraint are:

i) NOT NULL

By default, a column can hold NULL values. This constraint tells that we cannot store a NULL value in a column. That is, if a column is specified as NOT NULL then we will not be able to store null in this particular column any more.

Syntax: CREATE TABLE <table name> (ID int NOT NULL, Last name varchar(20) NOT NULL, First name varchar (20) NOT NULL, Age int);

ii) UNIQUE

This constraint helps to uniquely identify each row in the table. i.e for a particular column, all the rows should have unique values. We can have more than one UNIQUE column in a table.

**Syntax:** CREATE TABLE <Table name> (ID int NOT NULL UNIQUE, Last name varchar(30) NOT NULL, First name varchar(30), age int);

iii) **PRIMARY KEY**

PRIMARY KEY is a field which uniquely identifies each row in the table. If a field in a table as primary key, then the field will not be able to contain NULL values as well as all the rows should have unique values for this field. So, in other words we can say that this is the combination of NOT NULL and UNIQUE constraints.

Basically, Primary keys must contain UNIQUE values and cannot contain NULL values.

**Syntax:** CREATE TABLE <Table name> (ID int NOT NULL PTIMARY KEY, Last name varchar(30) NOT NULL, First name varchar(30), age int);

v) **FOREIGN KEY**

A 'Foreign key' is a field (or collection of fields) in one table, that refers to the PRIMARY KEY in another Table.

It built the relationship between tables.

The table with the foreign key is called the child table and the table with the primary key is called the reference or parent table.

**Syntax:** CREATE TABLE <Table name> (stud\_id int, stud\_name varchar(30), city ID int, PRIMARY KEY (stud\_id), FOREIGN KEY (city\_id) references city (city\_id));

vi) **SQL CHECK Constraint**

The "CHECK" constraint is used to limit the value range that can be placed in a column.

Using the CHECK constraint we can specify a condition for a field, which should be satisfied at the time of entering values for the field.

**Syntax:** CREATE TABLE persons (ID int NOT NULL, LastName varchar (30) NOT NULL, FirstName varchar(30), Age int CHECK(Age>=18));

vii) **SQL DEFAULT Constraint**

The "DEFAULT" constraint is used to set a default value for a column.

The default value will be added to all new records, if no other value is specified.

**Syntax:** CREATE TABLE Student(ID int(6) NOT NULL, Name varchar(30) NOT NULL, AGE int DEFAULT 18);

**Que: What is the full form of .ipa and .apk?**

**Ans:** The full form of .ipa and .apk are:

.ipa: international Phonetic Alphabet

.apk: Android Application Package

**Que: Difference between RDBMS vs DBMS?**

**Ans:** The difference between RDBMS vs DBMS are:

RDBMS	DBMS
i) RDBMS stands for Relational Database Management System.	i) DBMS stands for Database Management System.
ii) In RDBMS, data is stored in the Table format.	ii) In DBMS, data is stored in the file format.
iii) Data is stored in a large amount	iii) Data is stored in a small quantity
iv) RDBMS supports multiple users	iv) DBMS supports single users.
v) The software and hardware requirements are higher.	v) The software and hardware requirements are low.
vi) Data fetching is faster because of rational approach	vi) Data fetching is slower for the large amount of data.
vii) Examples: MySQL, PostgreSQL, SQL server, oracle, Microsoft Access etc.	vii) Examples: XML, Window Registry, Forxpro, dbaseIIplus etc.

**Que: What is API Testing?**

**Ans:** An **API** stands for Application Programming Interface. It is a software testing type that verify and validate Application programming interface (APIs). The purpose of API Testing is to check the functionality, reliability, performance, and security of the programming interfaces.

In API Testing, instead of using standard user inputs(keyboard) and outputs, you use software to send calls to the API, get output, and note down the system's response

**Que: Types of API Testing?**

**Ans:** Types of API Testing are:

- i) [Open APIs](#): These types of APIs are publically available to use like Oauth APIs from google. It has also not given any restriction to use them. So, they are also known as Public APIs.
- ii) [Partner APIs](#): Specific rights or licenses to access this type of APIs because they are not available to the public.
- iii) [Internal APIs](#): Internal or Private, This APIs are developed by companies to use in their internal systems. It helps you to enhance the productivity of your teams.

**Que: What is Responsive Testing?**

**Ans:** Responsive Testing is a process that checks how a website or a web-based application works on different devices such as Desktops, smartphones and Tablets. It ensures that the website or application adapts to various screen sizes and resolution, and provides a good user experience.

Responsive Testing is a form of functional UI testing that evaluates the website or application's behaviour under different form factors.

**Que: Which types of tools are available for responsive testing?**

**Ans:** There are several tools available for responsive testing. Some of them are:

- i) [Lambda Test](#): A cross-browser compatibility testing tool that also offers website testing on multiple devices of different dimensions and resolutions.
- ii) [Google resizer](#): Goggle resizer is basically an interactive viewer which helps you to view your website in various design breakpoint across devices like Desktop, Mobile , Tablet.
- iii) [Pixel tuner](#): The tool shows only 6 screen sizes but they are a good selection. With these 6 sizes, you can be pretty sure that you have covered all the bases. The only one missing are the larger screen sizes above 1500 pixels.
- iv) [Ghostlab](#): A tool that synchronizes testing across multiple browsers and devices.
- v) [BrowserStack](#): A cloud-based platform that enables you to test your website on real devices and browsers.
- vi) [Am I Responsive](#): A tool that shows how your website looks on four common devices.

**Que:** How to create for to open the developer option mode ON?

**Ans:** To open the developer option mode ON are:

- i) Open the settings App on your Android Device.
- ii) Scroll down and tap on About phone.
- iii) Find the build number option and tap it seven times.
- iv) You will see a message that says “You are now a developer!”.
- v) Return to the previous screen to find Developer options at the bottom.
- vi) Tap on Developer options to option it.