1. What is View? What are the benefits of using views?

view is a virtual table based on the result-set of an SQL statement.In a database, a view is the result set of a stored query on the data, which the database users can query just as they would in a persistent database collection object. This pre-established query command is kept in the database dictionary.

2. Can data be modified through views?

Yes. Requires UPDATE, INSERT, or DELETE permissions on the target table, depending on the action being performed.

3. What is stored procedure and what are the benefits of using it?

The stored procedure is SQL statements wrapped within the CREATE PROCEDURE statement. The stored procedure may contain a conditional statement like IF or CASE or the Loops. The stored procedure can also execute another stored procedure or a function that modularizes the code.

Reduce the Network Traffic: Multiple SQL Statements are encapsulated in a stored procedure. When you execute it, instead of sending multiple queries, we are sending only the name and the parameters of the stored procedure

Easy to maintain: The stored procedure are reusable. We can implement the business logic within an SP, and it can be used by applications multiple times, or different modules of an application can use the same procedure. This way, a stored procedure makes the database more consistent. If any change is required, you need to make a change in the stored procedure only

Secure: The stored procedures are more secure than the AdHoc queries. The permission can be granted to the user to execute the stored procedure without giving permission to the tables used in the stored procedure. The stored procedure helps to prevent the database from SQL Injection

4. What is the difference between view and stored procedure?

A view represents a virtual table. You can join multiple tables in a view and use the view to present the data as if the data were coming from a single table.

A stored procedure uses parameters to do a function... whether it is updating and inserting data, or returning single values or data sets.

5. What is the difference between stored procedure and functions?

The function must return a value but in Stored Procedure it is optional. Even a procedure can return zero or n values.

Functions can have only input parameters for it whereas Procedures can have input or output parameters.

Functions can be called from Procedure whereas Procedures cannot be called from a Function.

6. Can stored procedure return multiple result sets?

Yes. Most stored procedures return multiple result sets. Such a stored procedure usually includes one or more select statements. The consumer needs to consider this inclusion to handle all the result sets.

7. Can stored procedure be executed as part of SELECT Statement? Why?

Yes. Stored procedures are typically executed with an EXEC statement.
However, you can execute a stored procedure implicitly from within a SELECT statement, provided that the stored procedure returns a result set.

8. What is Trigger? What types of Triggers are there?

A trigger is a special type of stored procedure in database that automatically invokes/runs/fires when an event occurs in the database server. A trigger uses the special table to keep a copy of the row which we have just inserted, deleted or modified.In SQL Server we can create four types of triggers Data Definition Language (DDL) triggers, Data Manipulation Language (DML) triggers, CLR triggers, and Logon triggers.

9. What are the scenarios to use Triggers?

DDL Triggers

The DDL triggers are fired in response to DDL (Data Definition Language) command events that start with Create, Alter and Drop, such as Create_table, Create_view, drop_table, Drop_view and Alter_table.

DML Triggers

The DML triggeres are fired in response to DML (Data Manipulation Language) command events that start with with Insert, Update and Delete. Like insert_table, Update_view and Delete_table.

10. What is the difference between Trigger and Stored Procedure?

A stored procedure is a user defined piece of code written in the local version of PL/SQL, which may return a value (making it a function) that is invoked by calling it explicitly. A trigger is a stored procedure that runs automatically when various events happen (eg update, insert, delete).