1. Explain what's the purpose of the **PUBLIC** role, which privileges has it and which users have this role?

Purpose of the Public Role: See all the data that nullify the security process itself. You cannot see from the DBA\_ROLES view that the role exists.

Public Role Privileges: By default, it has numerous concessions.

This role has the minimum privileges necessary to work with a database.

Users assigned to the Public Role: The public role is automatically assigned to all roles created in the system.

1. Explain the difference between these views: **DBA\_SYS\_PRIVS**, **DBA\_TAB\_PRIVS** and **DBA\_ROLE\_PRIVS**

DBA\_SYS\_PRIVS: Describes the system privileges granted to users and roles, but does not show the USERNAME column. It contains 3 columns; GRANTEE, PRIVILEGE, ADMIN\_OPTION.

DBA\_TAB\_PRIVS: Describes all concessions of objects in the database. It contains 3 columns; GRANTEE, TABLE\_NAME, PRIVILEGE.

DBA\_ROLE\_PRIVS: Describes the roles granted to all users and the roles in the database, that is; It comprises the two previous views.

1. When we talk about privileges in Oracle, we find three main categories of privileges, which are: **SYSTEM priveleges**, **OBJECT privileges** and **Privilege hierarchy**, define what is the purpose of each category and provide some examples of privileges which belong to each one of them.

System privileges

A privilege of the system is the right granted to perform an action on any object of a particular type; such as: Tables, views, materialized views, synonyms, indexes, sequences, functions, procedures and packages, among others. Users who can grant or revoke system privileges are the instance administrator or a user with administrator privileges.

Object privileges

An object privilege is the right granted to perform a particular action on an object itself or to be able to access the object of another user, such as: tables, views, materialized views, sequences, procedures and packages, cache groups, among others. The privileges granted to the owner of the object cannot be revoked, however; It is the admin user who can grant and revoke object privileges to users who do not own that object.

Hierarchy of privileges.

The privilege hierarchy is given when a privilege grants other privileges.

Example:

The ADMIN privilege confers all other privileges.

The CREATE ANY TABLE privilege confers the CREATE TABLE object privilege.