

## Part-A

In operating systems, what is the purpose of authentication?

- a) To create new users
- b) To verify user identities before granting access
- c) To update system software
- d) To monitor network traffic

In a profile, which parameter is used to define password expiration policy?

- a) PASSWORD\_MAX\_LENGTH
- b) PASSWORD\_LIFE\_TIME
- c) PASSWORD\_COMPLEXITY
- d) PASSWORD\_HISTORY

Remote users typically access the database via

- a) Direct login to the database server
- b) VPN or secure shell connections
- c) Local area network
- d) Physical presence in the server room

The primary role of a database link in Oracle is to

- a) Connect two different databases within the same server
- b) Link SQL Server databases
- c) Access data from a remote database
- d) Backup database tables

\_\_\_\_\_ users are created by the database management system by default

- a) Administrative
- b) Custom
- c) Default
- d) Remote

In SQL Server, which feature is used to implement column-level security?

- a) Row-Level Security (RLS)
- b) Transparent Data Encryption (TDE)
- c) Dynamic Data Masking
- d) Always Encrypted

Virtual Private Database (VPD) is primarily used to

- a) Encrypt data stored in the database
- b) Allow different users to view different data from the same table
- c) Compress database storage
- d) Enhance database performance

Application contexts in SQL Server are typically used for:

- a) Data encryption
- b) User authentication
- c) Defining session-specific information
- d) Indexing

In the context of application security, which of the following is an example of an application type?

- a) Web application
- b) Database server
- c) Operating system
- d) Network switch

VPD policies are often applied using which database feature to filter rows based on user identity?

- a) Database Link
- b) Oracle Label Security
- c) Fine-grained Access Control (FGAC)
- d) Materialized Views

Part-B

Answer any two questions

1. Discuss the role of profiles in managing database users. How are they used to enforce password policies?
2. Compare default users and remote users in a database system.
3. Describe the process of creating a new user in SQL Server.

#### Part-c

1. Explain the differences between full database encryption and column-level encryption.
2. Discuss the role of application contexts in managing security within an application.
3. Describe the process of implementing column-level security in SQL Server.

#### Part-D

- 1.(A) Describe the steps you would take to create, manage, and secure user accounts.

(OR)

- (B) Explain the process of granting and revoking privileges and roles. How does this process help in maintaining database security?

- 2.(A) Discuss the various application security models and how they help in securing enterprise applications.

(OR)

- (B) Explain how SQL Server's Policy Manager can be used to define and enforce row and column-level security. Provide examples of how policies can be granted and revoked.

