Graded Quiz: Final Quiz

Quiz • 2h 5m

Submit your assignment

Due Jul 5, 11:59 PM EDT **Attempts** 3 every 24 hours

Receive grade

To Pass 80% or higher

Like Dislike Report an issue

Try again once you are ready

Grade received 76% **Latest Submission Grade** 76% **To pass** 80% or higher

Try again

1. In which phase of the database lifecycle does the database administrator work on logical and physical design? **1 / 1 point**

Try again

- Implementation
- Monitor and maintain
- Requirements analysis
- Design and plan

Your grade 76%

View Feedback
We keep your highest score

Expand

Correct
In the design and plan stage, database administrators work on logical and physical design.

2. Which of the following database objects is a set of pointers used to improve performance and ensure the uniqueness of the data? **1 / 1 point**

- Index
- Alias
- Key
- Trigger

Expand

Correct
An index is a set of pointers used to improve performance and ensure the uniqueness of the data.

3. Which of the following statements is correct about modifying the configuration of a cloud-based relational database? **1 / 1 point**

- You must use the command line to modify the configuration.
- You can safely discard the configuration files after modifying them.
- You need to modify the configuration files directly.
- You can modify the configuration while the service is running.

Expand

Correct
One advantage of cloud-based systems is that you can scale many configuration options through a graphical interface as the service is running. You don't have to edit configuration files.

4. A storage group is a grouping of storage paths or containers based on which of the following? **0 / 1 point**

- Performance
- Name
- Capacity
- Age

Expand

Incorrect
Refer to the Database Storage video.

5. Which of the following key considerations is perhaps the most important? **0 / 1 point**

- Backup scheduling
- Validate backups
- Secure back up files
- Storage level snapshots

Expand

Incorrect
Please review the Introduction to Backup and Restore video.

6. Transaction logs typically have which of the following characteristics? **1 / 1 point**

- Binary format
- Plain text
- No encryption
- Human readable

Expand

Correct
Many types of logs, such as diagnostic and error logs, are mostly in text format and are human readable. However, transaction logs are typically in binary formats that are sometimes encrypted and require specialized tools to format and display contents.

7. What happens if you store backup data outside the RDBMS? **1 / 1 point**

- Must secure backup copy
- Difficult to access
- Complicates backup/restore
- Difficulty restoring

Expand

Correct
If you store a complete copy of data outside of the RDBMS, then it must be secured so that it can't be accessed by unauthorized users.

8. Assume that a particular database issue, should it occur, is important but does not require your immediate attention. Which automated database feature should you use to inform you when this issue occurs? **1 / 1 point**

- Traces
- Notifications
- Reports
- Alerts

Expand

Correct
You should use notifications to inform you of an issue that is important but does not require your immediate attention such as failed login attempts.

9. Which security method verifies that users are who they say they are? **1 / 1 point**

- Encryption
- Authentication
- Authorization
- Auditing

Expand

Correct
Authentication is a process of verifying that users are who they claim to be. For example, an authentication system may validate credentials such as username and password.

10. Which of these is NOT a decision you must make about implementing a backup plan? **0 / 1 point**

- Encryption
- Who will be responsible for the plan
- Physical or logical backup
- Hot or cold backup

Expand

Incorrect
Please review the Backup Policies video.

11. The principle of least privilege should be followed for all users, groups, and roles. Which of the following describe this principle? **0 / 1 point**

- Multiple, more granular groups or roles
- Separate accounts with fewer privileges
- Fewer, granular groups and roles
- Groups and roles with same privileges

Expand

Incorrect
Please review the Users, Groups, and Roles video.

12. Which of the following statements can you use to override a user's permission for a certain object or action? **1 / 1 point**

- UPDATE
- DENY
- GRANT
- DELETE

Expand

Correct
You can use the DENY statement to override any previous permission that a user has for a certain object or action.

13. Which storage engine available in MySQL is suitable for most data storage needs? **1 / 1 point**

- InnoDB
- MyISAM
- CSV
- BLACKHOLE

Expand

Correct
InnoDB is suitable for most data storage needs and is MySQL's default storage engine.

14. Which of the following is a method you can use to audit database activity? **1 / 1 point**

- Use a user validation function built into the database system.
- Attach actions to events that occur in the database.
- Enable full-scale encryption of all database files.
- Run an SQL injection string on your database.

Expand

Correct
On some relational database systems, you can audit database activity by attaching actions to events that occur in the database.

15. Which type of encryption uses a public and a private key? **1 / 1 point**

- Symmetric encryption
- Transparent data encryption
- Full disk encryption
- Asymmetric encryption

Expand

Correct
Asymmetric encryption, also known as public key encryption, uses a public key and a private key. You encrypt the data with the public key and valid users have a unique matching private key to decrypt it.

16. What effect does encryption and decryption have on your database? **1 / 1 point**

- Increased longevity
- Decreased stability
- Decreased performance
- Increased capacity

Expand

Correct
Because of the time and effort that it takes the algorithm to process the data, any type of encryption and decryption will decrease the performance of your database.

17. Which level of database monitoring is often the most misleading? **1 / 1 point**

- Query
- User
- Platform
- Infrastructure

Expand

Correct
If users are not reporting any issues, you might assume everything is working properly. However, just because users aren't noticing or reporting an issue doesn't mean an issue doesn't exist or won't arise soon. Therefore, the user level is often misleading.

18. Which MySQL server log records connections and queries received from clients? **1 / 1 point**

- Relay log
- Error log
- General query log
- Slow query log

Expand

Correct
The general query log records connections and queries received from clients.

19. Which tool can you use to monitor your database in real-time? **0 / 1 point**

- System monitors
- Monitoring tables
- Event monitors
- Monitoring snapshots

Expand

Incorrect
Refer to the Overview of Database Monitoring video.

20. Database automation works best with which types of administrative tasks? **1 / 1 point**

- Time-consuming and repetitive tasks
- Quick and repetitive tasks
- Quick and varied tasks
- Time-consuming and varied tasks

Expand

Correct
Database automation works best with tasks that are time-consuming yet repetitive such as database health checks.

21. In Db2, what does the RUNSTATS command do? **1 / 1 point**

- Updates statistics in the system catalog
- Reorganizes physical storage of table data
- Frees up space on all tables
- Reconstructs and compacts table data

Expand

Correct
The RUNSTATS command updates statistics about the characteristics of a table, associated indexes, or statistical views.

22. A primary key always has which of the following characteristics? **1 / 1 point**

- Non-unique, nullable, non-clustered
- Unique, non-nullable, clustered
- Unique, nullable, clustered
- Non-unique, non-nullable, clustered

Expand

Correct
A primary key is always unique, non-nullable, and clustered.

23. Server configuration issues can severely effect performance and operations. Which of the following issues can require software patches? **1 / 1 point**

- Disk fragmentation
- Improper storage configuration
- Out of disk space
- Bugs in OS or RDBMS

Expand

Correct
Bugs can result in errors and crashes, so regularly apply software patches and security updates.

24. Which of the following SQL server logs shows informational and error events? **0 / 1 point**

- Error log
- Trace log
- Object log
- Event log

Expand

Incorrect
Refer to the Using Status Variables, Error Codes, and Documentation video.

25. Which of the following are factors you should consider to ensure that the data in your system is secure? Select the three choices that apply. **1 / 1 point**

- [x] Secure movement
  - Correct
    Data can be particularly vulnerable to interception when moved into or out of storage. Consider safe transfer methods as carefully as you plan the safety for the rest of your system.
- [ ] Efficiency of the transfer
- [x] Protection from malicious access
  - Correct
    Update cybersecurity software and scanning files frequently. You should also educate users about phishing and other ways that they can unwittingly enable malicious access.
- [x] Accurate access
  - Correct
    Establish a system of assigning and tracking privileges that assigns each user only the necessary privileges and controls what they can do with the data.

Expand

Correct
Great, you got all the right answers.