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next  
item**

1. Which of the database life cycle phases is typically where DBAs check for authorized user access to databases?

1 / 1 point

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

↗ Expand

✔ **Correct**

DBAs ensure that only authorized users are allowed to access the system in this phase.

2. Which of the following database objects defines a set of actions performed in response to an insert, update, or delete on a specified table?

1 / 1 point

- ☐ Event
- ☐ Constraint
- ☐ Index
- ☒ Trigger

↗ Expand

✔ **Correct**

A trigger defines a set of actions performed in response to an insert, update, or delete on a specified table.

3. What is the first step to modify the configuration of an on-premises relational database?

1 / 1 point

- ☒ Stop the database service.
- ☐ Monitor the configuration settings.
- ☐ Modify the configuration file.
- ☐ Start the database service.

↗ Expand

✔ **Correct**

To modify the configuration of an on-premises relational database, you stop the database service, modify the configuration file, and then restart the database service.

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. What is one advantage of logical backups over physical backups?

1 / 1 point

- ☒ Logical backups allow you to recreate the database on another system.
- ☐ Logical backups are often smaller and quicker.
- ☐ Logical backups are useful for large databases that require fast recovery times.
- ☐ Logical backups create copies of all the data files and directories.

↗ Expand

🔍 Expand

✓ Correct

A logical backup creates a file containing DDL and DML commands that recreate the objects and data in the database. With this file, you can recreate the database on the same or another system.

6. What does a database management system (DBMS) use transaction logs to do?

1 / 1 point

- ☐ Monitor other logs in the system
- ☐ Record system or hardware failures
- ☐ Keep track of all the users that access the database
- ☒ Keep track of all transactions that change or modify the database

🔍 Expand

✓ Correct

A database management system (DBMS) uses transaction logs to keep track of all transactions that change or modify the database.

7. What happens if you store backup data outside the RDBMS?

1 / 1 point

- ☐ Complicates backup/restore
- ☐ Difficult to access
- ☒ Must secure backup copy
- ☐ 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, such as extremely low drive space, would require your urgent attention should it occur. Which automated database feature should you use to inform you when this issue occurs?

0 / 1 point

- ☐ Alerts
- ☒ Notifications
- ☐ Reports
- ☐ Traces

🔍 Expand

✗ Incorrect

Refer to the Automating Reports and Alerts video.

9. Which security method ensures that each user has the appropriate level of access to objects and data?

1 / 1 point

- ☐ Encryption
- ☐ Auditing
- ☒ Authorization
- ☐ Authentication

🔍 Expand

✓ Correct

Through authorization, you grant each user the appropriate permissions, or privileges, to access objects and data.

10. When creating a backup and restore policy, you must determine an appropriate schedule. Which of the following factors should impact your decision regarding this schedule?

0 / 1 point

- ☒ Impact of data loss on your business
- ☐ Use of manual or automated backup
- ☐ Sensitivity and proprietary nature of the data
- ☐ Time of day that users commonly access the data

🔍 Expand


 **Incorrect**  
Refer to 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

- ☐ Separate accounts with fewer privileges
- ☐ Multiple, more granular groups or roles
- ☒ 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

- ☐ BLACKHOLE
- ☒ InnoDB
- ☐ MyISAM
- ☐ CSV

 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?

0 / 1 point

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

 Expand

 **Incorrect**  
Refer to the Auditing Database Activity video.

15. What is the simplest form of encryption?

1 / 1 point

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

 Expand

 **Correct**  
The simplest form of encryption is symmetric encryption because in symmetric encryption, the same key is used to encrypt and decrypt the data.

16. What is the main difference between symmetric and asymmetric encryption?

1 / 1 point

- ☐ Data encryption standard
- ☐ Shared keys
- ☒ Number of keys
- ☐ Advanced encryption

[Expand](#)

✓ **Correct**

Symmetric encryption uses the same key for encryption and decryption. Asymmetric encryption uses a public key for encryption and a private key for decryption.

17. Which level of database monitoring is often the most misleading?

1 / 1 point

- ☐ Platform
- ☒ User
- ☐ Infrastructure
- ☐ Query

[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

- ☒ General query log
- ☐ Error log
- ☐ Slow query log
- ☐ Relay log

[Expand](#)

✓ **Correct**

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

19. Database performance baselines are recorded performance metrics taken at regular intervals for a given time period. Which of the following can be determined by using a database performance baseline?

1 / 1 point

- ☐ Cost of cloud services
- ☐ Average number of users
- ☐ Time of backups
- ☒ Average response time for queries and batch commands

[Expand](#)

✓ **Correct**

Performance baselines help you find typical response times for running queries and processing batch commands.

20. What is the automated database task that determines how efficient the database system is?

1 / 1 point

- ☒ Database health check
- ☐ Trace file cleanup
- ☐ Database configuration check
- ☐ Schema object check

[Expand](#)

✓ **Correct**

The database health check is the process of inspecting a database system to determine the system's health and efficiency.

21. In PostgreSQL, what does the VACUUM command do?

1 / 1 point

- ☒ Reclaims lost storage space on a table
- ☐ Reorganizes physical storage of table data
- ☐ Reconstructs table rows and compacts data
- ☐ Reports statistics about a table

 Expand

 **Correct**

VACUUM reclaims lost storage space consumed by “dead” tuples. These tuples are not physically removed from their database tables after being deleted or made obsolete by an update during routine PostgreSQL operations.

22. A primary key always has which of the following characteristics?

1 / 1 point

- ☐ Non-unique, nullable, non-clustered
- ☒ Unique, non-nullable, clustered
- ☐ Non-unique, non-nullable, clustered
- ☐ Unique, 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
- ☒ Bugs in OS or RDBMS
- ☐ Out of disk space
- ☐ Improper storage configuration

 Expand

 **Correct**

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

24. In an SQL server, when is an error log created?

1 / 1 point

- ☐ When the SQL server experiences an error
- ☐ When the SQL server shuts down
- ☐ When the SQL server receives an administrator request
- ☒ When the SQL server starts

 Expand

 **Correct**

The error log is created every time that SQL is started.

25. What is compliance?

1 / 1 point

- ☒ Making sure your database practices follow all applicable laws, regulations, and industry standards
- ☐ Using secure archiving
- ☐ Making sure your data will fit into your planned database
- ☐ Adhering to transparent practices

 Expand

 **Correct**

Failure to comply can result in data insecurity, professional censure for your organization, and even legal action.