✅ **Congratulations! You passed!**

Grade	**Latest Submission**	To pass 80% or
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39m**

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item**

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1. In which phase of the database lifecycle does the database administrator determine the purpose and scope of the
database?

1 / 1 point

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

[↗ **Expand**]

✅ **Correct**
In the requirements analysis stage, database administrators determine the purpose and scope of the
database by interviewing data users and producers, examining the data, and creating samples.

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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

- ◯ Alias
- ◯ Trigger
- ⦿ Index
- ◯ Key

[↗ **Expand**]

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

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

1 / 1 point

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

[↗ **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.

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4. Database partitions store subsets of data from very large databases. Which of the following environments
commonly use partitions?

1 / 1 point

- ◯ Users' personal storage
- ◯ Classroom grades
- ⦿ Data analysis for BI
- ◯ Customer directories

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

1 / 1 point

○ Logical backups are useful for large databases that require fast recovery times.

○ Logical backups create copies of all the data files and directories.

○ Logical backups are often smaller and quicker.

◉ Logical backups allow you to recreate the database on another system.

Expand

6. Transaction logs typically have which of the following characteristics?

1 / 1 point

○ Plain text

○ Human readable

◉ Binary format

○ No encryption

Expand

7. Which type of backup is simple to create and restore, but can be slow to run and results in large files?

1 / 1 point

○ Point-in-time

◉ Full

○ Incremental

○ Differential

Expand

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

○ Alerts

○ Reports

◉ Notifications

Expand

9. Together authentication, authorization, encryption, and auditing provide system and data security. Which security method provides information that you can analyze to determine and find weak spots?

1 / 1 point

- ⦿ Auditing
- ○ Encryption
- ○ Authentication
- ○ Authorization

↗ **Expand**

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?

1 / 1 point

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

↗ **Expand**

11. When you first create a database user, how many permissions will the user generally have by default?

1 / 1 point

- ○ The user will have just one permission.
- ○ The user will have up to five permissions.
- ⦿ The user will have few or no permissions.
- ○ The user will have all existing permissions.

↗ **Expand**

12. Which of the following statements can you use to remove privileges granted to a user?

1 / 1 point

- ○ GRANT
- ○ DELETE
- ○ UPDATE
- ⦿ REVOKE

↗ **Expand**

13. Which of these is NOT a common command for managing storage engines in MySQL?

`1 / 1 point`

○ CREATE TABLE

○ SHOW ENGINES

○ ALTER TABLE

◉ CREATE ENGINE

[↗ Expand]

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

`1 / 1 point`

○ Enable full-scale encryption of all database files.

◉ Attach actions to events that occur in the database.

○ Run an SQL injection string on your database.

○ Use a user validation function built into the database system.

[↗ Expand]

15. What is used to encrypt data into an unreadable string, called a cyphertext?

`1 / 1 point`

○ Security templates

○ Keys

◉ Algorithms

○ Deciphers

[↗ Expand]

16. In which form of encryption is encryption and decryption invisible to users because the database handles both tasks?

`1 / 1 point`

◉ Transparent data encryption

○ Asymmetric encryption

○ Advanced encryption

○ Symmetric encryption

[↗ Expand]

17. What is one reason that you need to monitor database performance at different levels?

`0 / 1 point`

- ○ Maintaining service agreements
- ○ Verifying data masking
- ● Ensuring proper authorization
- ○ Recovering lost data

[Expand]

⊗ **Incorrect**
Refer to the Monitoring Usage and Performance – Part 1 video.

18. To specify the type of information that an error log will store, database administrators use the log_err_verbosity option to set the server verbosity level to 1, 2, or 3. What type of information will an error log store at a server verbosity level of 3?

`1 / 1 point`

- ○ Warnings and notes only
- ○ Errors and warnings only
- ● Errors, warnings, and notes
- ○ Errors only

[Expand]

⊘ **Correct**
If the server verbosity level is set to 3, an error log will store errors, warnings, and notes.

19. Which tool can you use to monitor your database in real-time?

`0 / 1 point`

- ○ System monitors
- ○ Monitoring tables
- ● Monitoring snapshots
- ○ Event monitors

[Expand]

⊗ **Incorrect**
Refer to the Overview of Database Monitoring video.

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

`1 / 1 point`

- ○ Schema object check
- ○ Database configuration check
- ● Database health check
- ○ Trace file cleanup

[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

● Unique, non-nullable, clustered

○ Non-unique, non-nullable, clustered

○ Non-unique, nullable, non-clustered

○ Unique, nullable, clustered

[Expand]

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

23. Which of the following actions might resolve basic connectivity issues?

1 / 1 point

○ Changing database buffering or database indexing

○ Adding more physical RAM or physical disk space to the server

● Verifying that the database can be reached from the client

○ Defragmenting the hard disk on which the data resides

[Expand]

✓ **Correct**
One common step in resolving a connectivity issue is to verify that the database can be reached from the client. A typical way to perform this verification is to use the PING command from the client to communicate with the server's IP address or host name.

24. Which of the following SQL server logs shows informational and error events?

1 / 1 point

○ Error log

○ Trace log

○ Object log

● Event log

[Expand]

✓ **Correct**
The event log shows informational and error events.

25. Which of the following are basic ethical concepts that support good data security practices? Select the three choices that apply.

1 / 1 point

☑ Transparency

✓ **Correct**

When you collect data, you should be transparent about what data you will collect, what you will do with the data, who will have access to the data, how you will store the data, and how you will dispose of the data when finished with it.

☑ Integrity

✓ **Correct**

Be clear about your procedures and policies and follow them consistently. As far as you can, ensure that others in your organization also follow the correct procedures and policies.

☐ Efficiency

☑ Consent

✓ **Correct**

You should get clear consent from data owners before you collect their data. This agreement should detail what data you will be allowed to collect and how you will be allowed to use it.

⤢ **Expand**

⊘ **Correct**

Great, you got all the right answers.