AWS Database & SQL – Multiple Choice Questions

1. Amazon RDS

1. Which of the following is a primary benefit of using Amazon RDS?
   A) Manual hardware management
   B) Automated backups and patching
   C) No need for SQL knowledge
   D) Free unlimited storage

2. Amazon RDS supports which of the following database engines?
   A) MySQL, PostgreSQL, Oracle, SQL Server, MariaDB
   B) MongoDB only
   C) DynamoDB only
   D) Redis only

3. In Amazon RDS, high availability is primarily achieved by:
   A) Using Multi-AZ deployments
   B) Increasing CPU
   C) Using a single EC2 instance
   D) Disabling backups

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2. Amazon Aurora

4. Aurora is a type of:
   A) NoSQL database
   B) Relational database compatible with MySQL and PostgreSQL
   C) Graph database
   D) Data warehouse

5. Which feature makes Aurora faster than standard MySQL?
   A) Serverless architecture
   B) Storage is distributed across multiple availability zones
   C) Manual scaling
   D) No replication

3. Amazon DynamoDB

6. DynamoDB is classified as a:
   A) Relational database
   B) Key-Value and Document NoSQL database
   C) Graph database
   D) Time-series database

7. In DynamoDB, a partition key:
   A) Must be unique for every table
   B) Determines the physical storage of items
   C) Can only be a string
   D) Cannot be part of a primary key

8. Which of the following operations can DynamoDB perform?
   A) Query and Scan
   B) Join tables
   C) Execute stored procedures
   D) Index foreign keys

9. Which of the following is true about DynamoDB?
   A) It automatically scales throughput
   B) It uses SQL for queries
   C) It requires manual sharding
   D) It doesn't support indexes

4. Amazon Neptune

10. Neptune is designed primarily for which type of data?
    A) Graph data
    B) Tabular relational data
    C) Key-value pairs
    D) Flat files

11. Neptune supports which query languages?
    A) Gremlin and SPARQL

B) SQL only
C) MongoDB queries
D) JSONPath

12. Which Neptune feature ensures durability and fault tolerance?
    A) Replication across multiple AZs
    B) Storing data on a single EC2 instance
    C) No replication
    D) Using manual backups only

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5. SQL Conditional Operators

13. Which SQL operator is used to compare a column to multiple values?
    A) IN
    B) BETWEEN
    C) LIKE
    D) EXISTS

14. Which operator is used to filter rows that are within a certain range?
    A) BETWEEN … AND …
    B) IN
    C) LIKE
    D) IS NULL

15. Which operator is used to check for NULL values?
    A) IS NULL
    B) = NULL
    C) LIKE NULL
    D) EXISTS

16. Which operator is used to match a pattern in a column?
    A) LIKE
    B) IN
    C) BETWEEN
    D) EXISTS

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6. SQL Functions

17. Which SQL function returns the number of rows in a table?
    A) COUNT()
    B) SUM()
    C) AVG()
    D) MAX()

18. Which function calculates the average value of a column?
    A) AVG()
    B) SUM()
    C) COUNT()
    D) MIN()

19. Which function returns the maximum value in a column?
    A) MAX()
    B) MIN()
    C) SUM()
    D) AVG()

20. Which SQL function converts all letters in a string to uppercase?
    A) UPPER()
    B) LOWER()
    C) CONCAT()
    D) LENGTH()

21. Which function removes leading and trailing spaces from a string?
    A) TRIM()
    B) LTRIM()
    C) RTRIM()
    D) REPLACE()

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7. SQL Data Retrieval & Syntax

22. Which keyword is used to remove duplicate rows in a SELECT query?
    A) DISTINCT
    B) UNIQUE
    C) DIFFERENT

D) FILTER

23. Which clause is used to sort query results?
    A) ORDER BY
    B) GROUP BY
    C) SORT
    D) HAVING

24. Which clause is used to filter results after grouping?
    A) HAVING
    B) WHERE
    C) FILTER
    D) SORT

25. Which statement retrieves all columns from a table called "Employees"?
    A) SELECT * FROM Employees;
    B) GET ALL FROM Employees;
    C) SHOW ALL Employees;
    D) FETCH * Employees;

26. Which operator is used to combine multiple conditions in SQL?
    A) AND / OR
    B) + / -
    C) THEN / ELSE
    D) JOIN / ON

27. How do you rename a column in a SQL query output?
    A) SELECT column_name AS new_name
    B) SELECT column_name RENAME new_name
    C) SELECT column_name TO new_name
    D) SELECT column_name NAME new_name

28. Which SQL statement is used to count all records where salary > 5000?
    A) SELECT COUNT() *FROM Employees WHERE salary > 5000;*
    B) *SELECT COUNT(ALL) FROM Employees salary > 5000;*
    C) *COUNT salary FROM Employees WHERE salary > 5000;*
    D) *SELECT TOTAL()* FROM Employees salary > 5000;

29. Which JOIN type returns all records from the left table and matching records from the right table?

A) LEFT JOIN
B) RIGHT JOIN
C) INNER JOIN
D) FULL OUTER JOIN

30. Which SQL clause limits the number of returned rows?
    A) LIMIT
    B) TOP
    C) ROWS
    D) FETCH

Answers:

Answer Key

1. B

2. A

3. A

4. B

5. B

6. B

7. B

8. A

9. A

10. A

11. A

12. A

13. A

14. A

15. A

16. A

17. A

18. A

19. A

20. A

21. A

22. A

23. A

24. A

25. A

26. A

27. A

28. A

29. A

30. A