

Started on Thursday, 24 April 2025, 12:09 PM**State** Finished**Completed on** Thursday, 24 April 2025, 12:18 PM**Time taken** 9 mins 20 secs**Marks** 15.00/15.00**Grade** **100.00** out of 100.00**Question 1**

Complete

Mark 1.00 out of 1.00

Are micro-partitions user-configurable in Snowflake?

- ☒ a. No
- ☐ b. Yes

Question 2

Complete

Mark 1.00 out of 1.00

How does Snowflake determine which micro-partitions to scan during a query?

- ☐ a. Uses clustering keys
- ☐ b. Applies machine learning
- ☒ c. Uses metadata filters based on pruning
- ☐ d. Scans all micro-partitions

Question 3

Complete

Mark 1.00 out of 1.00

How does Snowflake handle changes in data distribution (e.g., skewed data)?

- ☐ a. Rewrites old partitions
- ☐ b. Requires data export and import
- ☒ c. Auto-reclustering (with clustering keys)
- ☐ d. Manual re-partitioning

Question 4

Complete

Mark 1.00 out of 1.00

Micro-partitions store data in which format?

- ☐ a. Row-based format
- ☒ b. Columnar format
- ☐ c. Proprietary Snowflake log
- ☐ d. JSON

Question 5

Complete

Mark 1.00 out of 1.00

What information does Snowflake store for each micro-partition?

- ☐ a. Min/Max values per column
- ☐ b. Count of NULLs per column
- ☐ c. Data skew distribution
- ☒ d. All of the above

Question 6

Complete

Mark 1.00 out of 1.00

What is a Micro-Partition in Snowflake?

- ☐ a. A user-defined partition of data
- ☐ b. A block of storage used to store metadata only
- ☐ c. A query optimization technique
- ☒ d. An automatically created contiguous storage unit

Question 7

Complete

Mark 1.00 out of 1.00

What is the advantage of smaller micro-partitions in Snowflake?

- ☒ a. More granular pruning and faster queries
- ☐ b. Better support for transactions
- ☐ c. Improved write performance
- ☐ d. Reduced storage cost

Question 8

Complete

Mark 1.00 out of 1.00

What is the typical size range of a Snowflake micro-partition?

- ☒ a. 1 MB to 10 MB (compressed)
- ☐ b. 100 MB to 1 GB
- ☐ c. 1 KB to 5 MB
- ☐ d. 10 GB and above

Question 9

Complete

Mark 1.00 out of 1.00

What kind of data structure is used to store metadata about micro-partitions?

- ☒ a. Column statistics and ranges
- ☐ b. B-Trees
- ☐ c. JSON
- ☐ d. CSV indexes

Question 10

Complete

Mark 1.00 out of 1.00

When you insert new data into a table, how are micro-partitions affected?

- ☐ a. Existing partitions are overwritten
- ☐ b. All data is re-partitioned
- ☐ c. Partitions stay unchanged
- ☒ d. New micro-partitions are automatically created

Question 11

Complete

Mark 1.00 out of 1.00

Which of the following best describes "partition pruning" in Snowflake?

- ☒ a. Skipping micro-partitions that don't match query filters
- ☐ b. Rewriting partitions
- ☐ c. Caching frequent partitions
- ☐ d. Dropping unused partitions

Question 12

Complete

Mark 1.00 out of 1.00

Which of the following best describes the immutability of micro-partitions?

- ☐ a. They are recreated on each insert
- ☐ b. They are mutable but updated in batches
- ☐ c. They are deleted after every query
- ☒ d. They are read-only after creation

Question 13

Complete

Mark 1.00 out of 1.00

Which of the following can improve the effectiveness of micro-partition pruning?

- ☐ a. Writing to the same table continuously
- ☒ b. Using well-designed clustering keys
- ☐ c. Using semi-structured data
- ☐ d. Querying without WHERE clauses

Question 14

Complete

Mark 1.00 out of 1.00

Which of the following tools can help monitor micro-partition behavior in Snowflake?

- ☐ a. Storage Usage Dashboard
- ☐ b. Information Schema
- ☒ c. SYSTEM\$CLUSTERING_INFORMATION function
- ☐ d. Query Profiler

Question 15

Complete

Mark 1.00 out of 1.00

Which Snowflake feature heavily relies on micro-partition metadata for optimization?

- ☒ a. Automatic Clustering
- ☐ b. Failover regions
- ☐ c. Query Result Caching
- ☐ d. Materialized Views

