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

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. Auto-reclustering (with clustering keys)
- ☐ c. Requires data export and import
- ☐ d. Manual re-partitioning

Question 4

Complete

Mark 1.00 out of 1.00

Micro-partitions store data in which format?

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

Question 5

Complete

Mark 1.00 out of 1.00

What information does Snowflake store for each micro-partition?

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

Question 6

Complete

Mark 1.00 out of 1.00

What is a Micro-Partition in Snowflake?

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

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. Reduced storage cost
- ☐ d. Improved write performance

Question 8

Complete

Mark 1.00 out of 1.00

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

- ☐ a. 1 KB to 5 MB
- ☒ b. 1 MB to 10 MB (compressed)
- ☐ c. 100 MB to 1 GB
- ☐ 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. CSV indexes
- ☐ d. JSON

Question 10

Complete

Mark 1.00 out of 1.00

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

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

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

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. Querying without WHERE clauses
- ☐ c. Using semi-structured data
- ☒ d. Using well-designed clustering keys

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. `SYSTEM$CLUSTERING_INFORMATION` function
- ☐ c. Information Schema
- ☐ 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. Failover regions
- ☐ b. Materialized Views
- ☒ c. Automatic Clustering
- ☐ d. Query Result Caching

