Teradata Certification – Analytics Exam

Exam Objectives

The Analytics Exam covers the features and functionality of Vantage 1.1 including the Advanced SQL Engine through release 16.20.

This document now LINKS directly to the free web-based training course that supports each objective as well as to the full curriculum above.

Data Management and Governance - 21%

- Given a graphic representation of data, identify a description of the distribution, skew, and outliers.
- Given a table from various univariate statistics functions in a normal distribution, identify assumptions about the population.
- Given a graphic or a set of numbers, identify data quality issues.
- Given a description of a quality issue, identify the SQL statement that could be used to correct the problem.
- Given two views of a data set, one before and one after a data transformation function was applied, identify the function that was used.
- Given a data set that was transformed and the data transformation function that was used, identify the original data set.
- Given a data set and a SQL code snippet, identify the output.
- <u>Identify the consequence of not normalizing or not scaling.</u>
- Given a scenario including a task, identify the CASE WHEN statement that should be used to accomplish the task.
- Given a scenario including the need to connect to an external data source, identify the SQL code snippet that should be used.
- Given a data set, identify the higher performing SQL statement to create a table.
- Given the output from EXPLAIN, identify query performance issues.

Data Visualization and Presentation – 20%

- Given a connection, identify the appropriate configuration settings and/or SQL functions that leads to optimal performance.
- Match a graphic of a visualization type with its name.
- Given a graphic, identify the visualization issue.
- Given an analytic output, identify the visualization type that should be used to most effectively represent the meaning.

Statistical Techniques - 19%

- Given a histogram or scatter plot, identify the type of graph and the correlation.
- Given multiple result sets created from univariate statistics, identify the measures of standard deviation, spread, or dispersion.
- Given a p-value, identify the effects on the results of the hypothesis tests.
- Given the outcome of a model, the p-values, and coefficients, identify the statistical significance.



• Given a model and its coefficient outputs, identify the relationships between the independent variables and the dependent variable.

Data Analytics Methods and Algorithms – 23%

- Given a text mining task, identify the function that should be used to complete the task.
- Given a sentence before and after a function was applied, identify the function syntax that was used.
- Identify the available options the Sentiment extractor offers.
- Given a task, identify the syntax in Named Entity Recognition (NER) that should be used to accomplish the task.
- Given an npath statement, identify how the function will operate.
- Given an output, identify the npath statement that created the output.
- Identify how the TimeOut parameter affects the Sessionize function.
- Identify the purpose of a Time Series table.
- Given a data set and a result set, identify the SQL code snippet that performed the aggregation.
- Identify the behavior of windowing functions.
- Identify the characteristics of traditional and Time Series aggregations.
- Interpret the meaning of the LIFT metric that is output by the CFilter function.
- Interpret the meaning of the CFilter function result set.

Validation and Evaluation – 17%

- Given a ROC chart, interpret the results.
- Identify the characteristics of ROC, AUC, and GINI values.
- Match the definition of specificity, sensitivity, prevalence, and precision with their name.

