

Sample Questions

The following sample questions are not inclusive and do not necessarily represent all of the types of questions that comprise the exams. The questions are not designed to assess an individual's readiness to take a certification exam.

SAS® Viya® Forecasting and Optimization Exam

Question 1:

Which is an example of time series forecasting?

- A. A dried fruit company sends out marketing postcards and models who will respond.
- B. A glue manufacturer wants to know how long it will take for its glue to dry.
- C. A fire department wants to know how many fires it will likely need to fight during the holidays, so that it can staff accordingly.
- D. A hospital wants to know how long its patients will survive after open heart surgery so that adverse effects can be caught early.

Correct Answer: C

Question 2:

Attribute variables are primarily useful to do what in a Model Studio Forecasting project?

- A. Visualize the data and operate on generated forecasts outside the hierarchy defined by the project's BY variables.
- B. Define the project's data hierarchy, and visualize the level data contained in the attribute variable.
- C. Visualize the project's data hierarchy, and operate on generated forecasts inside the hierarchy.
- D. Augment the project's BY variables to define the data hierarchy for modeling and overrides.

Correct Answer: A

Question 3:

An ARIMA model forecast for two months past the end of the current month for a monthly time series is an example of which action?

- A. Extrapolation
- B. Accumulation
- C. Aggregation
- D. Seasonal adjustment

Correct Answer: A

Question 4:

Weighted performance measures like WAPE (weighted absolute percent error) are primarily useful for which task in a Model Studio forecasting project?

- A. summarizing model performance for selecting a Champion pipeline for the project
- B. correcting the bias found in unweighted performance measures in the process of selecting a champion pipeline for the project
- C. selecting the champion model for an individual series in a pipeline for a project
- D. choosing which series require overrides prior to choosing the champion pipeline for the project

Correct Answer: A

Question 5:

Which sampling method is preferred for forecasting holdout assessment?

- A. Draw simple random sample **without** replacement of about 25% of the series.
- B. Draw simple random sample **with** replacement of about 50% of the series.
- C. Sample first observations in the series, **with** at least four observations in the holdout data.
- D. Sample last observations in the holdout data, **with** at least 4 observations in the fit data.

Correct Answer: D

Question 6:

A company's goal is to generate best forecasts. Their focus is widget sales for the next thirty days from the current time interval.

Typically, what is the preferred accumulation method and time interval for the data?

- A. Weekly average
- B. Weekly total
- C. Monthly average
- D. Monthly total

Correct Answer: D

Question7:

Which situation will result in an override conflict in SAS Visual Forecasting?

- A. Two or more overrides cannot be reconciled for the same time period.

- B. An override affects a combined model forecast.
- C. An override is applied to an aggregated forecast, and one or more components of the aggregated forecast come from models having events or independent variables.
- D. Two or more overrides exceed 100% APE.

Correct Answer: A

Question 8:

Which scenario can generate an Override conflict?

- A. Underlying series with very different scales.
- B. Two or more Overrides on a given series.
- C. A log transformation of the statistical forecasts.
- D. Two adjacent series that don't nest within the data hierarchy.

Correct Answer: B

Question 9:

The number of Lagrangian multipliers (dual values) in a given linear programming problem is equal to the number of what?

- A. decision variables
- B. objective functions
- C. index sets
- D. constraints

Correct Answer: D

Question 10:

Which elements are in the NEW set?

```
set FRUITS=/'Apple' 'Banana' 'Cherry'/;
```

```
set PIES=/'Apple' 'Pecan' 'Cherry'/;
```

```
set NEW = FRUITS symdiff PIES;
```

- A. Apple, Banana, Pecan, Cherry
- B. Apple, Cherry
- C. Banana, Pecan
- D. Apple, Apple, Banana, Pecan, Cherry, Cherry

Correct Answer: C