

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 Text Analytics, Time Series, Experimentation and Optimization

Question 1

After creating a data source within the SAS Code node, which macro is used to modify the metadata of the data source (specifically changing the roles and levels for each variable)?

- A. %EM_REGISTER
- B. %EM_DECDATA
- C. %EM_PROPERTY
- D. %EM_METACHANGE

correct_answer = "D"

Question 2

What is a primary value of text mining as applied to forensic linguistics analysis?

- A. Determining the native language of a suspect can help identify where a suspect may reside.
- B. Word frequencies of written or spoken communication can help discriminate between suspects.
- C. The usage of certain emotion-based nouns, verbs, and adjectives indicate criminal pathology.
- D. Determines if the written or spoken communication is the subject's second language.

correct_answer = "B"

Question 3

In the Text Topic node, the Singular Value Decomposition (SVD) dimensions are rotated. What is the purpose of this rotation?

- A. To interpret each dimension with a set of terms.
- B. To determine the number of topics that are discovered.
- C. To ensure the topics are relevant to your interests.
- D. To avoid producing topics that are too similar

correct_answer = "A"

Question 4

What 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 5

Which measure assesses predictive accuracy?

- A. AIC
- B. SBC
- C. MAE
- D. Ljung-Box

correct_answer = "C"

Question 6

What distinguishes a deterministic linear trend from other local linear trends?

- A. A deterministic linear trend is always linear; other local linear trends are only linear over certain intervals.
- B. A deterministic linear trend does not contain a seasonal component; other local linear trends do contain a seasonal component.
- C. A deterministic trend has a predetermined slope; other local linear trends do not have a predetermined slope.
- D. A deterministic linear trend shows the same slope at all time periods; other local linear trends do not show the same slope at all time periods.

correct_answer = "D"

Question 7

What is desirable in experimental design?

- A. Replication for individual factors.
- B. Removal of nuisance terms from the model.
- C. Randomization across covariates levels.
- D. More levels for each factor.

correct_answer = "A"

Question 8

Refer to the exhibit below from an Incremental Response node from SAS Enterprise Miner.

Revenue Calculation	
Use Constant Revenue	No
Revenue Per Response	10.0
Use Constant Cost	Yes
Cost	0.5

What can be inferred from the properties above?

- A. The expected revenue for individual customers is \$10.
- B. The expected revenue for individual customers is \$9.50.
- C. The expected revenue for individual customers is the estimated outcome from the model.
- D. The input data set contains an expected revenue variable, with values for individual customers.

correct_answer = "C"

Question 9

You have just built an optimization model with two constraints, Con1 and Con2. Below is partial code and output.

```
solve with LP;  
print Con1.dual Con2.dual;
```

Con1.DUAL	Con2.DUAL
8	0

A binding constraint is a constraint that is equal to its limit. Which statement is true regarding Con1 and Con2?

- A. Both Con1 and Con2 are binding constraints.
- B. Both Con1 and Con2 are non-binding constraints.
- C. Con1 is a non-binding constraint and Con2 is a binding constraint.
- D. Con1 is a binding constraint and Con2 is a non-binding constraint.

correct_answer = "D"

Question 10

Why are iterative search algorithms used for solving non-linear programming (NLP) problems?

- A. NLP are not convex.
- B. A unique, optimal solution is not guaranteed.
- C. The gradient of the objective is un-bounded.
- D. NLP have only one local optimum.

correct_answer = "B"