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 Advanced Predictive Modeling

Question 1

What is a linear Perceptron?

- A. A linear Perceptron is a general linear model.
- B. A linear Perceptron is a generalized linear model.
- C. A linear Perceptron is a non-parametric model.
- D. A linear Perceptron is a nonlinear model.

```
correct_answer = "B"
```

Question 2

Consider a Generalized Additive Neural Network (GANN) with 3 continuous inputs and 2 hidden nodes for each input.

How many parameters do you need to estimate when training the neural network?

- A. 19
- B. 21
- C. 22
- D. 25

```
correct answer = "C"
```

Question 3

A predictive model uses a data set that has several variables with missing values.

What two problems can arise with this model? (Choose two.)

- A. The model will likely be overfit.
- B. There will be a high rate of collinearity among input variables.
- C. Fewer observations will be used in the model building process.
- D. New cases with missing values on input variables cannot be scored without extra data processing.

```
correct answer = "C & D"
```

Question 4

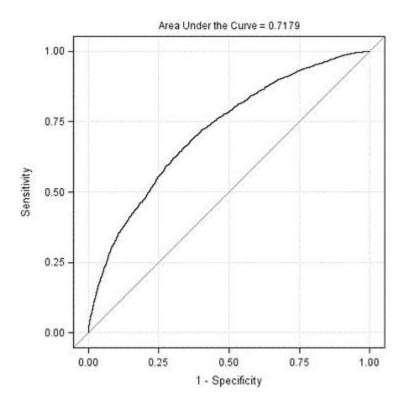
When mean imputation is performed on data after the data is partitioned for honest assessment, what is the most appropriate method for handling the mean imputation?

- A. The sample means from the validation data set are applied to the training and test data sets.
- B. The sample means from the training data set are applied to the validation and test data sets.
- C. The sample means from the test data set are applied to the training and validation data sets.
- D. The sample means from each partition of the data are applied to their own partition.

correct answer = "B"

Question 5

Refer to the exhibit:



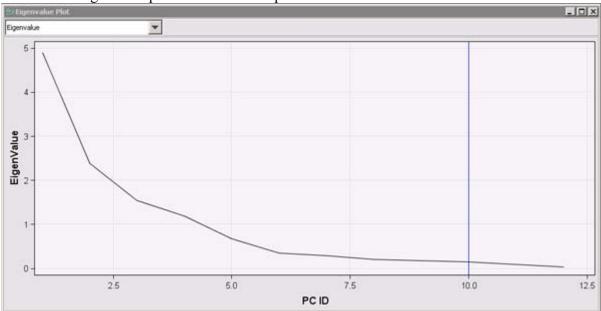
For the ROC curve shown, what is the meaning of the area under the curve?

- A. percent concordant plus percent tied
- B. percent concordant plus (.5 * percent tied)
- C. percent concordant plus (.5 * percent discordant)
- D. percent discordant plus percent tied

correct answer = "B"

Question 6

Refer to the Eigenvalue plot from SAS Enterprise Miner shown below.



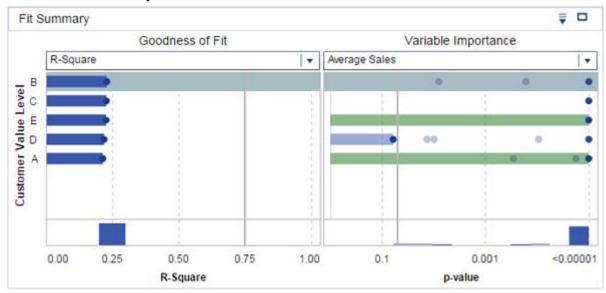
According to the Kaiser-Guttman method, how many principal components should be retained?

- A. 6
- B. 4
- C. 10
- D. 1

correct_answer = "B"

Question 7

Refer to the fit summary from SAS Visual Statistics in the exhibit below.



What can be concluded from the fit summary?

- A. Customer Value Level is not a significant predictor in this model.
- B. Customer Value Level C has no important variables associated with it.
- C. Average Sales is a significant predictor when Customer Value Level = E.
- D. Average Sales is an important predictor when Customer Value Level = C.

```
correct answer = "C"
```

Question 8

What is the maximum number of response variables that SAS Visual Statistics allows for a decision tree?

Enter your numeric answer in the space below.

correct_answer = "1"

Question 9

Which statement is true for negative binomial and Poisson regression models?

- A. Poisson regression models are used for count data, and negative binomial models are used for binary responses.
- B. The canonical link function for Poisson regression is the log, while for negative binomial it is the logit.
- C. Negative binomial models accommodate negative integers while Poisson regression does not.
- D. Poisson regression is a special case of negative binomial regression.

correct answer = "D"

Question 10

Which software does the SAS Enterprise Miner Open Source Integration node use to execute R programs?

- A. SAS/IML
- B. SAS/STAT
- C. SAS/ACCESS
- D. SAS/OR

correct answer = "A"