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#1 Online Certification Guide

IBM C1000-177

IBM Foundations of Data Science using IBM watsonx Certification Questions & Answers

Exam Summary – Syllabus –Questions

C1000-177

IBM Certified watsonx Data Scientist - Associate

61 Questions Exam – 70% Cut Score – Duration of 90 minutes

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Know Your C1000-177 Certification Well:

The C1000-177 is best suitable for candidates who want to gain knowledge in the IBM Data, Analytics, and AI. Before you start your C1000-177 preparation you may struggle to get all the crucial Foundations of Data Science using IBM watsonx materials like C1000-177 syllabus, sample questions, study guide.

But don't worry the C1000-177 PDF is here to help you prepare in a stress free manner.
The PDF is a combination of all your queries like-

- What is in the C1000-177 syllabus?
- How many questions are there in the C1000-177 exam?
- Which Practice test would help me to pass the C1000-177 exam at the first attempt?

Passing the C1000-177 exam makes you IBM Certified watsonx Data Scientist - Associate. Having the Foundations of Data Science using IBM watsonx certification opens multiple opportunities for you. You can grab a new job, get a higher salary or simply get recognition within your current organization.

IBM C1000-177 Foundations of Data Science using IBM watsonx Certification Details:

Exam Name	IBM Certified watsonx Data Scientist - Associate
Exam Code	C1000-177
Exam Price	$200 (USD)
Duration	90 mins
Number of Questions	61
Passing Score	70%
Books / Training	IBM Certified watsonx Data Scientist - Associate
Schedule Exam	Pearson VUE
Sample Questions	IBM Foundations of Data Science using watsonx Sample Questions
Practice Exam	**IBM C1000-177 Certification Practice Exam**

C1000-177 Syllabus:

Topic	Details	Weights
Evaluate the Business Problem	- Translate business objectives into Data Science/ML/AI solutions - Formulate the hypothesis to be tested - Identify appropriate tools for analysis	16%
Perform Exploratory Data Analysis	- Visually examine the data for data understanding - Assess data characteristics to guide future processing - Conduct statistical analysis of data - Visualize data to identify patterns/trends - Deselect features that have minimal predictive value	21%
Development Tools and Techniques	- Assess which modeling and statistical techniques are best suited - Select the appropriate environment and libraries	13%
Pre-Processing and Feature Engineering	- Integrate data from different sources and formats - Normalize data - Mitigate imbalanced data - Handle data anomalies and missing values - Identify the Best Categorical Data Encoding Techniques - Transform Features - Select Relevant Features	33%
Model Selection, Training, Evaluation, and Presentation	- Identify adequate Machine Learning Model - Split the data to support model evaluation - Choose appropriate model metrics to assess model performance	17%

IBM C1000-177 Sample Questions:

Question: 1

When is z-score normalization most useful?

a) When the data falls between 0 and 1.
b) When the data contains many outliers.
c) When the original range of the data needs to be retained.
d) When data is normally distributed.

Answer: d

Question: 2

A customer needs a model to identify fraud by flagging transactions with either a 0 or 1. Which type of model should they choose?

a) k-means
b) Linear Regression
c) Logistic Regression
d) Multi-class Decision Tree

Answer: c

Question: 3

Which statement describes covariance?

a) A measure of association between two variables.
b) A measure of model performance.
c) A measure of the distribution of values within a variable.
d) A measure of overall predictive power of a set of variables.

Answer: a

Question: 4

What is the repository of statistic libraries called that is used by the R programming language?

a) scikit-learn
b) R Package Manager (RPM)
c) MLlib (Machine Learning library)
d) Comprehensive R Archive Network (CRAN)

Answer: d

Question: 5

If the goal of the model is to predict whether a user will churn, which feature will cause data leakage if included in the training set?

a) Subscribe date
b) Unsubscribe date
c) Last payment date
d) Last suspension date

Answer: b

Question: 6

Which statement describes sample variance and standard deviation?

a) Variance is the square root of the average squared deviations from the mean, while standard deviation is the sum of these squared deviations.
b) Variance is the average distance of each data point from the mean, while standard deviation is the total distance of all points from the mean divided by the number of points.
c) Variance is the average of all squared differences from the mean, while standard deviation is the square root of the variance, showing how spread out the data is from the mean.
d) Variance measures the total variability within a dataset without normalization, while standard deviation is calculated by dividing the variance by the number of data points minus one.

Answer: c

Question: 7

How should k-fold cross validation be performed when data is split into test and train sets?

a) Split the train set on k folds. Train the model on each fold and validate on test data.
b) Split the train set on k folds. For each fold perform training using other k-1 folds and validate on this fold.
c) Split the entire dataset on k folds. For each fold train the model on this fold and validate on the rest k-1 folds.
d) Split the entire dataset on k folds. For each fold perform training using other k-1 folds and validate on the entire dataset.

Answer: b

Question: 8

What is the standard approach in evaluating the performance of classification models using supervised machine learning?

a) Confusion matrix
b) Cross-validation
c) Regularization
d) Principal component analysis (PCA)

Answer: a

Question: 9

Which statement is true about a categorical feature that has 998 unique values in a dataset of 1000 records?

a) Unless some categories could be split, this feature should be excluded from the model since some of its values are not unique.
b) This feature could be included into the model without any transformations since it has enough categories relative to the total number of records.
c) Unless some categories could be grouped, this feature should be excluded from the model since it has too many categories relative to the total number of records.
d) This feature could be included into the model since the number of rows with non - unique values is small, which means they could be safely deleted during preprocessing.

Answer: c

Question: 10

What does a stratified train test split ensure?

a) The split is random without any additional conditions.
b) The positive to negative cases ratio is the same in train and test sets.
c) The train and test sets have the same absolute number of positive cases.
d) The positive to negative cases ratio in the train set is as close to 1 as possible.

Answer: b

Study Guide to Crack IBM Foundations of Data Science using IBM watsonx C1000-177 Exam:

- Getting details of the C1000-177 syllabus, is the first step of a study plan. This pdf is going to be of ultimate help. Completion of the syllabus is must to pass the C1000-177 exam.
- Making a schedule is vital. A structured method of preparation leads to success. A candidate must plan his schedule and follow it rigorously to attain success.
- Joining the IBM provided training for C1000-177 exam could be of much help. If there is specific training for the exam, you can discover it from the link above.
- Read from the C1000-177 sample questions to gain your idea about the actual exam questions. In this PDF useful sample questions are provided to make your exam preparation easy.
- Practicing on C1000-177 practice tests is must. Continuous practice will make you an expert in all syllabus areas.