

Valid Dumps CT-AI Book - Reliable CT-AI Dumps Questions



P.S. Free 2025 ISTQB CT-AI dumps are available on Google Drive shared by BraindumpStudy: <https://drive.google.com/open?id=1gmr-vBaTp9VSrtHjF9cYAApIxjigKEAq>

To maintain relevancy and top standard of ISTQB CT-AI exam questions, the BraindumpStudy has hired a team of experienced and qualified ISTQB CT-AI exam trainers. They work together and check every CT-AI exam practice test question thoroughly and ensure the top standard of CT-AI Exam Questions all the time. So you do not need to worry about the relevancy and top standard of ISTQB CT-AI exam practice test questions.

ISTQB CT-AI Exam Syllabus Topics:

Topic	Details
Topic 1	ML: Data: This section of the exam covers explaining the activities and challenges related to data preparation. It also covers how to test datasets create an ML model and recognize how poor data quality can cause problems with the resultant ML model.
Topic 2	Testing AI-Based Systems Overview: In this section, focus is given to how system specifications for AI-based systems can create challenges in testing and explain automation bias and how this affects testing.
Topic 3	systems from those required for conventional systems.
Topic 4	Quality Characteristics for AI-Based Systems: This section covers topics covered how to explain the importance of flexibility and adaptability as characteristics of AI-based systems and describes the vitality of managing evolution for AI-based systems. It also covers how to recall the characteristics that make it difficult to use AI-based systems in safety-related applications.
Topic 5	Testing AI-Specific Quality Characteristics: In this section, the topics covered are about the challenges in testing created by the self-learning of AI-based systems.
Topic 6	Methods and Techniques for the Testing of AI-Based Systems: In this section, the focus is on explaining how the testing of ML systems can help prevent adversarial attacks and data poisoning.
Topic 7	Test Environments for AI-Based Systems: This section is about factors that differentiate the test environments for AI-based

Topic 8	ML Functional Performance Metrics: In this section, the topics covered include how to calculate the ML functional performance metrics from a given set of confusion matrices.
Topic 9	Neural Networks and Testing: This section of the exam covers defining the structure and function of a neural network including a DNN and the different coverage measures for neural networks.
Topic 10	Using AI for Testing: In this section, the exam topics cover categorizing the AI technologies used in software testing.

>> Valid Dumps CT-AI Book <<

Reliable CT-AI Dumps Questions & CT-AI Sample Test Online

They work closely and check all CT-AI exam practice test questions step by step and ensure the top standard of CT-AI exam questions all the time. So rest assured that with the CT-AI Exam Dumps you will get everything that you need to prepare and pass the ISTQB CT-AI certification exam with good scores.

ISTQB Certified Tester AI Testing Exam Sample Questions (Q59-Q64):

NEW QUESTION # 59

A transportation company operates three types of delivery vehicles in its fleet. The vehicles operate at different speeds (slow, medium, and fast). The transportation company is attempting to optimize scheduling and has created an AI-based program to plan routes for its vehicles using records from the medium-speed vehicle traveling to selected destinations. The test team uses this data in metamorphic testing to test the accuracy of the estimated travel times created by the AI route planner with the actual routes and times.

Which of the following describes the next phase of metamorphic testing?

- A. The team uses the same AI route planner to create routes that are longer and shorter but follow the same track. Finally, by driving the fast vehicles on the long routes and slow vehicles on the short routes and vice versa, the AI system will have enough information to infer travel times for all vehicles on all routes.
- B. The team decomposes each route into the relevant components that affect the travel time, such as traffic density and vehicle power. The team then uses statistical analysis to characterize the influence of each component to calculate the fast and slow vehicle route times.
- C. The team tests the time required for the fast and slow vehicles to travel the same route as the medium vehicle. Then, by calculating the speed difference, they then predict how much faster or slower the vehicles will travel. That information is then used to verify that the arrival time of the vehicles meets the expected result.
- D. The team uses an AI system to select the most dissimilar routes. With this information, any of the AI routes can be metaphorically transformed into a fast or slow route.

Answer: C

Explanation:

The syllabus describes metamorphic testing as:

"Testing involves defining metamorphic relations and then applying those relations to check that the transformations result in expected outcomes, even when the expected output of the system is unknown or not well-defined." In this scenario, applying the metamorphic relation (speed differences) and checking the transformed outcome (arrival times) fits the definition of metamorphic testing. (Reference: ISTQB CT-AI Syllabus v1.0, Section 9.5, page 69 of 99)

NEW QUESTION # 60

A wildlife conservation group would like to use a neural network to classify images of different animals. The algorithm is going to be used on a social media platform to automatically pick out pictures of the chosen animal of the month. This month's animal is set to be a wolf. The test team has already observed that the algorithm could classify a picture of a dog as being a wolf because of the similar characteristics between dogs and wolves. To handle such instances, the team is planning to train the model with additional images of wolves and dogs so that the model is able to better differentiate between the two.

What test method should you use to verify that the model has improved after the additional training?

- A. Pairwise testing using combinatorics to look at a long list of photo parameters
- B. Metamorphic testing because the application domain is not clearly understood at this point
- C. Adversarial testing to verify that no incorrect images have been used in the training
- **D. Back-to-back testing using the version of the model before training and the new version of the model after being trained with additional images**

Answer: D

Explanation:

The syllabus defines back-to-back testing as a method to compare a modified AI system to the previous version, which is ideal in this scenario:

"Back-to-back testing is performed by comparing the outputs of two systems that are supposed to provide the same outputs, one being a known and trusted system and the other being the test system. This approach can be used to test ML systems after re-training to verify that improvements have not introduced regressions." (Reference: ISTQB CT-AI Syllabus v1.0, Section 9.3, page 67 of 99)

NEW QUESTION # 61

Which ONE of the following options BEST DESCRIBES clustering?

SELECT ONE OPTION

- A. Clustering is classification of a continuous quantity.
- **B. Clustering is done without prior knowledge of output classes.**
- C. Clustering is supervised learning.
- D. Clustering requires you to know the classes.

Answer: B

Explanation:

Clustering is a type of machine learning technique used to group similar data points into clusters. It is a key concept in unsupervised learning, where the algorithm tries to find patterns or groupings in data without prior knowledge of output classes. Let's analyze each option:

A . Clustering is classification of a continuous quantity.

This is incorrect. Classification typically involves discrete categories, whereas clustering involves grouping similar data points. Classification of continuous quantities is generally referred to as regression.

B . Clustering is supervised learning.

This is incorrect. Clustering is an unsupervised learning technique because it does not rely on labeled data.

C . Clustering is done without prior knowledge of output classes.

This is correct. In clustering, the algorithm groups data points into clusters without any prior knowledge of the classes. It discovers the inherent structure in the data.

D . Clustering requires you to know the classes.

This is incorrect. Clustering does not require prior knowledge of classes. Instead, it aims to identify and form the classes or groups based on the data itself.

Therefore, the correct answer is C because clustering is an unsupervised learning technique done without prior knowledge of output classes.

NEW QUESTION # 62

Which ONE of the following options describes a scenario of A/B testing the LEAST?

SELECT ONE OPTION

- A. A comparison of two different offers in a recommendation system to decide on the more effective offer for same users.
- B. A comparison of two different websites for the same company to observe from a user acceptance perspective.
- C. A comparison of the performance of two different ML implementations on the same input data.
- **D. A comparison of the performance of an ML system on two different input datasets.**

Answer: D

Explanation:

A/B testing, also known as split testing, is a method used to compare two versions of a product or system to determine which one performs better. It is widely used in web development, marketing, and machine learning to optimize user experiences and model

performance. Here's why option C is the least descriptive of an A/B testing scenario:

- * Understanding A/B Testing:

- * In A/B testing, two versions (A and B) of a system or feature are tested against each other. The objective is to measure which version performs better based on predefined metrics such as user engagement, conversion rates, or other performance indicators.

- * Application in Machine Learning:

- * In ML systems, A/B testing might involve comparing two different models, algorithms, or system configurations on the same set of data to observe which yields better results.

- * Why Option C is the Least Descriptive:

- * Option C describes comparing the performance of an ML system on two different input datasets.

This scenario focuses on the input data variation rather than the comparison of system versions or features, which is the essence of A/B testing. A/B testing typically involves a controlled experiment with two versions being tested under the same conditions, not different datasets.

- * Clarifying the Other Options:

- * A. A comparison of two different websites for the same company to observe from a user acceptance perspective: This is a classic example of A/B testing where two versions of a website are compared.

- * B. A comparison of two different offers in a recommendation system to decide on the more effective offer for the same users: This is another example of A/B testing in a recommendation system.

- * D. A comparison of the performance of two different ML implementations on the same input data: This fits the A/B testing model where two implementations are compared under the same conditions.

References:

- * ISTQB CT-AI Syllabus, Section 9.4, A/B Testing, explains the methodology and application of A/B testing in various contexts.

- * "Understanding A/B Testing" (ISTQB CT-AI Syllabus).

NEW QUESTION # 63

A neural network has been designed and created to assist day-traders improve efficiency when buying and selling commodities in a rapidly changing market. Suppose the test team executes a test on the neural network where each neuron is examined. For this network the shortest path indicates a buy, and it will only occur when the one-day predicted value of the commodity is greater than the spot price by 0.75%. The neurons are stimulated by entering commodity prices and testers verify that they activate only when the future value exceeds the spot price by at least 0.75%.

Which of the following statements BEST explains the type of coverage being tested on the neural network?

- A. Sign-change coverage
- B. Neuron coverage
- C. Threshold coverage
- D. Value-change coverage

Answer: C

Explanation:

Threshold coverage is a specific type of coverage measure used in neural network testing. It ensures that each neuron in the network achieves an activation value greater than a specified threshold. This is particularly relevant to the scenario described, where testers verify that neurons activate only when the future value of the commodity exceeds the spot price by at least 0.75%.

- * Threshold-based activation: The test case in the question is explicitly verifying whether neurons activate only when a certain threshold (0.75%) is exceeded. This aligns perfectly with the definition of threshold coverage.

- * Common in Neural Network Testing: Threshold coverage is used to measure whether each neuron in a neural network reaches a specified activation value, ensuring that the neural network behaves as expected when exposed to different test inputs.

- * Precedent in Research: The DeepXplore framework used a threshold of 0.75% to identify incorrect behaviors in neural networks, making this coverage criterion well-documented in AI testing research.

- * (B) Neuron Coverage#

- * Neuron coverage only checks whether a neuron activates (non-zero value) at some point during testing. It does not consider specific activation thresholds, making it less precise for this scenario.

- * (C) Sign-Change Coverage#

- * This coverage measures whether each neuron exhibits both positive and negative activation values, which is not relevant to the given scenario (where activation only matters when exceeding a specific threshold).

- * (D) Value-Change Coverage#

- * This coverage requires each neuron to produce two activation values that differ by a chosen threshold, but the question focuses on whether activation occurs beyond a fixed threshold, not changes in activation values.

- * Threshold coverage ensures that neurons exceed a given activation threshold. Full threshold coverage requires that each neuron in the neural network achieves an activation value greater than a specified threshold. The researchers who created the DeepXplore framework suggested neuron coverage should be measured based on an activation value exceeding a threshold, changing based on

the situation." Why is Threshold Coverage Correct? Why Other Options are Incorrect? References from ISTQB Certified Tester AI Testing Study Guide Thus, option A is the correct answer, as threshold coverage ensures the neural network's activation is correctly evaluated based on the required condition (0.75%).

NEW QUESTION # 64

.....

You may have been learning and trying to get the CT-AI certification hard, and good result is naturally become our evaluation to one of the important indices for one level. You need to use our CT-AI exam questions to testify the knowledge so that you can get the CT-AI Test Prep to obtain the qualification certificate to show your all aspects of the comprehensive abilities, and the CT-AI exam guide can help you in a very short period of time to prove yourself perfectly and efficiently.

Reliable CT-AI Dumps Questions: https://www.braindumpstudy.com/CT-AI_braindumps.html

- Free PDF Quiz 2025 ISTQB CT-AI: Certified Tester AI Testing Exam – Trustable Valid Dumps Book □ Search for > CT-AI □ and download it for free on > www.prep4sures.top < website □ Free CT-AI Download Pdf
- Pass Guaranteed ISTQB - CT-AI – The Best Valid Dumps Book □ Search for □ CT-AI □ and obtain a free download on “www.pdfvce.com” □ Latest CT-AI Dumps Files
- ISTQB CT-AI Practice Exams Questions □ Go to website > www.examcollectionpass.com < open and search for 《 CT-AI 》 to download for free □ Latest CT-AI Exam Cost
- Get Special Discount on ISTQB CT-AI Exam Dumps □ ➡ www.pdfvce.com □ □ □ is best website to obtain { CT-AI } for free download □ Latest CT-AI Exam Cost
- Fast Download Valid Dumps CT-AI Book - Guaranteed ISTQB CT-AI Exam Success with Excellent Reliable CT-AI Dumps Questions □ Copy URL 【 www.prep4sures.top 】 open and search for ✓ CT-AI □ ✓ □ to download for free □ Latest CT-AI Exam Cost
- Pass Guaranteed Quiz 2025 ISTQB CT-AI: High Hit-Rate Valid Dumps Certified Tester AI Testing Exam Book □ Enter ➡ www.pdfvce.com □ and search for (CT-AI) to download for free □ CT-AI Unlimited Exam Practice
- Get Professional Valid Dumps CT-AI Book and Pass Exam in First Attempt □ Search for > CT-AI < and obtain a free download on [www.vceengine.com] □ CT-AI Unlimited Exam Practice
- Reliable CT-AI Dumps Files □ Latest CT-AI Exam Cost □ Latest CT-AI Exam Cost □ Search on □ www.pdfvce.com □ for ☀ CT-AI □ ☀ □ to obtain exam materials for free download □ Latest CT-AI Training
- Pass Guaranteed ISTQB - CT-AI – The Best Valid Dumps Book □ Enter ➡ www.pass4leader.com □ and search for > CT-AI < to download for free □ Latest CT-AI Dumps
- Latest CT-AI Dumps Ebook □ Latest CT-AI Dumps Ppt □ Latest CT-AI Dumps Ebook □ Simply search for [CT-AI] for free download on 「 www.pdfvce.com 」 □ Latest CT-AI Dumps Ebook
- Free PDF Quiz 2025 ISTQB CT-AI: Certified Tester AI Testing Exam – Trustable Valid Dumps Book □ Download 「 CT-AI 」 for free by simply entering > www.prep4pass.com □ website □ CT-AI Reliable Dumps Ppt
- study.stcs.edu.np, www.stes.tyc.edu.tw, daliteresearch.com, ceta-ac.com, winningmadness.com, volo.tec.br, myportal.utt.edu.tt, myportal.utt.edu.tt, myportal.utt.edu.tt, myportal.utt.edu.tt, myportal.utt.edu.tt, myportal.utt.edu.tt, myportal.utt.edu.tt, www.stes.tyc.edu.tw, ntc-israel.com, shortcourses.russellcollege.edu.au, Disposable vapes

P.S. Free & New CT-AI dumps are available on Google Drive shared by BraindumpStudy: <https://drive.google.com/open?id=1gmr-vBaTp9VSrtHjF9cYAApIxxigKEAq>