

Exam AI-900: Microsoft Azure AI Fundamentals

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2020-09-24

Question1: You want to use the Computer Vision service to identify the location of individual items in an image. Which of the following features should you retrieve?

1: Objects

2: Tags

3: Categories

4: None of these

Correct Answer: 1

Question2: You want to train a model that classifies images of dogs and cats based on a collection of your own digital photographs. Which Azure service should you use?

- 1: Azure Bot Service
- 2: Custom Vision
- 3: Computer Vision
- 4: None of these

Correct Answer: 2

Question3: You use Azure Machine Learning designer to create a training pipeline for a clustering model. Now you want to use the model in an inference pipeline. Which module should you use to infer cluster predictions from the model?

1: Score Model

2: Assign Data to Clusters

3: Train Clustering Model

4: J = 0

Correct Answer: 2

Question4: You want to use the Computer Vision service to determine whether an image is back-and-white or color? What should you do?

- 1: Generate a thumbnail
- 2: Retrieve the Image Type feature
- 3: Retrieve the Color feature
- 4: None of these

Correct Answer: 3

Question5: Which of the following types of machine learning is an example of unsupervised machine learning?

1: Classification

2: Regression

3: Clustering

4: Time Series Forecasting

Correct Answer: 3

Question6: You plan to use Azure Machine Learning designer to create and publish a regression model. Which edition should you choose when creating an Azure Machine Learning workspace?

1: Basic

2: Enterprise

3: Standard

4: Premium

Correct Answer: 2

Question7: You are creating a training pipeline for a regression model, using a dataset that has multiple numeric columns in which the values are on different scales. You want to transform the numeric columns so that the values are all on a similar scale based relative to the minimum and maximum values in each column. Which module should you add to the pipeline?

1: Select Columns in a Dataset

2: Normalize Data

3: Clean Missing Data

4: Build Model

Correct Answer: 2

Question8: You use an Azure Machine Learning designer pipeline to train and test a binary classification model. You review the model's performance metrics in an Evaluate Model module, and note that it has an AUC score of 0.3. What can you conclude about the model?

- 1: The model can explain 30% of the variance between true and predicted labels.
- 2: The model predicts accurately for 70% of test cases.
- 3: The model performs worse than random guessing.
- 4: None of these

Correct Answer: 3

Question9: You are using an Azure Machine Learning designer pipeline to train and test a K-Means clustering model. You want your model to assign items to one of three clusters. Which configuration property of the K-Means Clustering module should you set to accomplish this?

- 1: Set Number of Centroids to 3
- 2: Set Random number seed to 3
- 3: Set Iterations to 3
- 4: None of these

Correct Answer: 1

Question10: You want to use the Computer Vision service to analyze images. You also want to use the Text Analytics service to analyze text. You want developers to require only one key and endpoint to access all of your services. What kind of resource should you create in your Azure subscription?

- 1: Computer Vision
- 2: Cognitive Services
- 3: Custom Vision
- 4: None of these

Correct Answer: **2**

Question11: You plan to use the Custom Vision service to train an image classification model. You want to create a resource that can only be used for model training, and not for prediction. Which kind of resource should you create in your Azure subscription?

- 1: Custom Vision
- 2: Cognitive Services
- 3: Computer Vision
- 4: None of these

Correct Answer: **1**

Explanation: When you create a Custom Vision resource, you can specify whether it is to be used for training, prediction, or both.

Question12: You use Azure Machine Learning designer to create a training pipeline and an inference pipeline for a regression model. Now you plan to deploy the inference pipeline as a real-time service. What kind of compute target should you create to host the service?

- 1: Compute Instance
- 2: Compute Cluster
- 3: Inference Cluster
- 4: Local Machine

Correct Answer: 3

Question:13 You use Azure Machine Learning designer to create a training pipeline for a classification model. What must you do before deploying the model as a service?

- 1: Create an inference pipeline from the training pipeline
- 2: Add an Evaluate Model module to the training pipeline
- 3: Clone the training pipeline with a different name
- 4: None of these

Correct Answer: **1**

Question14: You are designing an AI application that uses computer vision to detect cracks in car windshields, and warns drivers when a windshield should be repaired or replaced. When tested in good lighting conditions, the application successfully detects 99% of dangerously damaged glass. Which of the following statements should you include in the application's user interface?

1: When used in good lighting conditions, this application can be used to identify potentially dangerous cracks and defects in windshields. If you suspect your windshield is damaged, even if the application does not detect any defects, you should have it inspected by a professional.

2: This application detects damage in your windshield. If the application detects a defect, have the windshield replaced or repaired. If no defect is detected, you're good to go!

3: This application detects damage in any glass surface, but you must accept responsibility for using it only in appropriate lighting conditions.

4: None of these

Correct Answer: 1

Question15: An automobile dealership wants to use historic car sales data to train a machine learning model. The model should predict the price of a pre-owned car based on characteristics like its age, engine size, and mileage. What kind of machine learning model does the dealership need to create?

1: Classification

2: Regression

3: Clustering

4: Time Series Forecasting

Correct Answer: 2

Question16: A bank wants to use historic loan repayment records to categorize loan applications as low-risk or high-risk based on characteristics like the loan amount, the income of the borrower, and the loan period. What kind of machine learning model does the bank need to create?

1: Classification

2: Regression

3: Clustering

4: Time Series Forecasting

Correct Answer: 1

Question17: You are using Azure Machine Learning designer to create a training pipeline for a binary classification model. You have added a dataset containing features and labels, a Two-Class Decision Forest module, and a Train Model module. You plan to use Score Model and Evaluate Model modules to test the trained model with a subset of the dataset that was not used for training. Which additional kind of module should you add?

1: Join Data

2: Split Data

3: Select Columns in Dataset

4: None of these

Correct Answer: **2**

Question18: You have published an image classification model. What information must you provide to developers who want to use it?

1: Only the project ID.

2: The project ID, the model name, and the key and endpoint for the prediction resource

3: The project ID, iteration number, and the key and endpoint for the training resource.

4: None of these

Correct Answer: 2

Question19: Which of the following descriptions accurately describes Azure Machine Learning?

1: A Python library that you can use as an alternative to common machine learning frameworks like Scikit-Learn, PyTorch, and Tensorflow

2: An application for Microsoft Windows that enables you to create machine learning models by using a drag and drop interface.

3: A cloud-based platform for operating machine learning solutions at scale

4: None of these

Correct Answer: 3

Question20: You train an image classification model that achieves less than satisfactory evaluation metrics? How might you improve it?

- 1: Reduce the size of the images used to train the model.
- 2: Add a new label for "unknown" classes.
- 3: Add more images to the training set.
- 4: None of these

Correct Answer: 3