

# Microsoft Azure AI Fundamentals

## Microsoft AI-900 Dumps Available Here at:

<https://www.certification-questions.com/microsoft-exam/ai-900-dumps.html>

Enrolling now you will get access to 111 questions in a unique set of AI-900 dumps

### Question 1

For a machine learning progress, how should you split data for training and evaluation?

#### Options:

- A. Use features for training and labels for evaluation.
- B. Randomly split the data into rows for training and rows for evaluation.
- C. Use labels for training and features for evaluation.
- D. Randomly split the data into columns for training and columns for evaluation.

**Answer: B**

#### Explanation:

The Split Data module is particularly useful when you need to separate data into training and testing sets. Use the Split Rows option if you want to divide the data into two parts. You can specify the percentage of data to put in each split, but by default, the data is divided 50-50. You can also randomize the selection of rows in each group, and use stratified sampling.

Reference:

<https://docs.microsoft.com/en-us/azure/machine-learning/studio-module-reference/split-data>

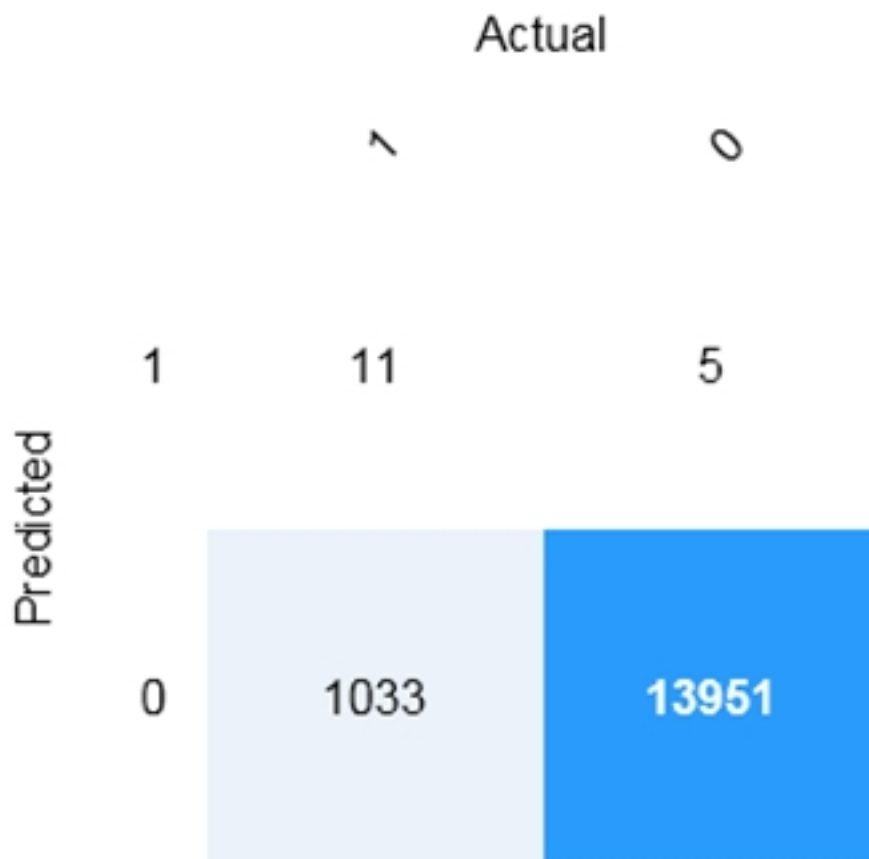
### Question 2

#### HOTSPOT

You are developing a model to predict events by using classification.

You have a confusion matrix for the model scored on test data as shown in the following exhibit.

<https://www.certification-questions.com>



Use the drop-down menus to select the answer choice that completes each statement based on the information presented in the graphic.

NOTE:

Each correct selection is worth one point.

**Options:**

A.

## Answer Area

There are **[answer choice]** correctly predicted positives.

5

11

1,033

13,951

There are **[answer choice]** false negatives.

5

11

1,033

13,951

Answer: A

Explanation:

Box 1: 11

	Predicted	
	Positive	Negative
Actual True	TP	FN
Actual False	FP	TN

TP = True Positive.

The class labels in the training set can take on only two possible values, which we usually refer to as positive or negative. The positive and negative instances that a classifier predicts correctly are called true positives (TP) and true negatives (TN), respectively. Similarly, the incorrectly classified instances are called false positives (FP) and false negatives (FN).

Box 2: 1,033

FN = False Negative

Reference:

<https://docs.microsoft.com/en-us/azure/machine-learning/studio/evaluate-model-performance>

### Question 3

You build a machine learning model by using the automated machine learning user interface (UI).

You need to ensure that the model meets the Microsoft transparency principle for responsible AI.

What should you do?

**Options:**

- A. Set Validation type to Auto
- .
- B. Enable Explain best model.
- C. Set Primary metric to accuracy
- .
- D. Set Max concurrent iterations to 0
- .

**Answer: B**

**Explanation:**

Model Explain Ability.

Most businesses run on trust and being able to open the ML “black box” helps build transparency and trust. In heavily regulated industries like healthcare and banking, it is critical to comply with regulations and best practices. One key aspect of this is understanding the relationship between input variables (features) and model output. Knowing both the magnitude and direction of the impact each feature (feature importance) has on the predicted value helps better understand and explain the model. With model explain ability, we enable you to understand feature importance as part of automated ML runs.

Reference:

<https://azure.microsoft.com/en-us/blog/new-automated-machine-learning-capabilities-in-azure-machine->

## Question 4

### HOTSPOT

For each of the following statements, select Yes if the statement is true. Otherwise, select No.

NOTE:

Each correct selection is worth one point.

Options:

A.

### Answer Area

Statements	Yes	No
Forecasting housing prices based on historical data is an example of anomaly detection.	<input type="radio"/>	<input checked="" type="radio"/>
Identifying suspicious sign-ins by looking for deviations from usual patterns is an example of anomaly detection.	<input checked="" type="radio"/>	<input type="radio"/>
Predicting whether a patient will develop diabetes based on the patient's medical history is an example of anomaly detection.	<input type="radio"/>	<input checked="" type="radio"/>

Answer: A

Explanation:

Anomaly detection encompasses many important tasks in machine learning:

Identifying transactions that are potentially fraudulent.

Learning patterns that indicate that a network intrusion has occurred.

Finding abnormal clusters of patients.

Checking values entered into a system.

Reference:

<https://docs.microsoft.com/en-us/azure/machine-learning/studio-module-reference/anomaly-detection>

## Question 5


### HOTSPOT

To complete the sentence, select the appropriate option in the answer area.

**Options:**

A.

### Answer Area

The handling of unusual or missing values provided to an AI system is a consideration for the Microsoft  principle for responsible AI.

**Answer: A**

**Explanation:**

Reliability and safety:

AI systems need to be reliable and safe in order to be trusted. It is important for a system to perform as it was originally designed and for it to respond safely to new situations. Its inherent resilience should resist intended or unintended manipulation. Rigorous testing and validation should be established for operating conditions to ensure that the system responds safely to edge cases, and A/B testing and champion/challenger methods should be integrated into the evaluation process.

An AI system's performance can degrade over time, so a robust monitoring and model tracking process needs to be established to reactively and proactively measure the model's performance and retrain it, as necessary, to modernize it.

Reference:

<https://docs.microsoft.com/en-us/azure/cloud-adoption-framework/innovate/best-practices/trusted-ai>

### Question 6

You are designing an AI system that empowers everyone, including people who have hearing, visual, and other impairments.

This is an example of which Microsoft guiding principle for responsible AI?

**Options:**

- A. fairness
- B. inclusiveness
- C. reliability and safety
- D. accountability

**Answer: B**

**Explanation:**

Inclusiveness: At Microsoft, we firmly believe everyone should benefit from intelligent technology, meaning it must incorporate and address a broad range of human needs and experiences. For the 1 billion people with disabilities around the world, AI technologies can be a game-changer.

Reference:

<https://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles>

## Question 7

HOTSPOT

To complete the sentence, select the appropriate option in the answer area.

**Options:**

A.

When developing an AI system for self-driving cars, the Microsoft for responsible AI should be applied to ensure consistent operation system during unexpected circumstances.



inclusiveness
accountability
reliability and safety
fairness

principle  
of the

**Answer: A**

**Explanation:**

Reliability and safety: To build trust, it's critical that AI systems operate reliably, safely, and consistently under normal circumstances and in unexpected conditions. These systems should be able to operate as they were originally designed, respond safely to unanticipated conditions, and resist harmful manipulation.

Reference:

<https://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles>

## Question 8

A company employs a team of customer service agents to provide telephone and email support to customers.

The company develops a webchat bot to provide automated answers to common customer queries.

Which business benefit should the company expect as a result of creating the webchat bot solution?

**Options:**

- A. increased sales
- B. a reduced workload for the customer service agents
- C. improved product reliability

**Answer: B**

## Question 9

You are building an AI system.

Which task should you include to ensure that the service meets the Microsoft transparency principle for responsible AI?

**Options:**

- A. Ensure that all visuals have an associated text that can be read by a screen reader.
- B. Enable autoscaling to ensure that a service scales based on demand.
- C. Provide documentation to help developers debug code.
- D. Ensure that a training dataset is representative of the population.

**Answer: C**

**Explanation:**

[tps://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles](https://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles)

## Question 10

Your company is exploring the use of voice recognition technologies in its smart home devices. The company wants to identify any barriers that might unintentionally leave out specific user groups.

This an example of which Microsoft guiding principle for responsible AI?



**Options:**

- A. accountability
- B. fairness
- C. inclusiveness
- D. privacy and security

**Answer: C**

**Explanation:**

[tps://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles](https://docs.microsoft.com/en-us/learn/modules/responsible-ai-principles/4-guiding-principles)

**Would you like to see more? Don't miss our AI-900 PDF file at:**

<https://www.certification-questions.com/microsoft-pdf/ai-900-pdf.html>

