

PRACTICE QUESTIONS

Microsoft

AI-901

Microsoft Certified: Azure AI Fundamentals

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EDITION Free Set 2

QUESTIONS 10

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EXAM Microsoft AI-901, Microsoft Certified: Azure AI Fundamentals

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10 practice questions for the Microsoft AI-901 exam, Microsoft Certified: Azure AI Fundamentals, each followed by its answer and a short explanation. More free sets and the full practice exam:

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1. Which Azure Machine Learning feature trains and compares many models automatically for a dataset?

- A Data labeling project
- B Azure AI Vision custom model
- C Prompt flow
- D Automated machine learning (automated ML)

Answer: D

Automated machine learning tries algorithms and settings automatically and ranks the results. Prompt flow is the tempting choice when the word automated comes up, but it builds generative AI workflows and does not train predictive models. A data labeling project only attaches labels to examples.

2. Image classification returns the location of each object in an image as a bounding box.

- A True
- B False

Answer: B (False)

Image classification labels the image as a whole, while object detection returns the location of each object. The tempting mistake is to think the two differ only in how many labels they produce.

3. Which responsible AI principle means an AI system should perform consistently and safely under expected conditions?

- A Transparency
- B Reliability and safety
- C Inclusiveness
- D Accountability

Answer: B

Reliability and safety means the system performs as designed and handles failures without causing harm. Accountability is the tempting principle when thinking about failures, but it assigns responsibility to people and organizations. Transparency and inclusiveness address other concerns.

4. Supplying clear instructions and examples in the input to guide a model's output is called prompt _____.

Answer: engineering (also accepted: design, prompting)

Prompt engineering shapes outputs through clear instructions, context, and examples. Fine-tuning is the tempting alternative for changing behavior, but it trains new model weights and is a heavier change than editing a prompt.

5. Which two capabilities belong to Azure AI Language? (Choose two.)

- A Generating images from text prompts
- B Recognizing faces in photos
- C Extracting key phrases from text
- D Converting text to speech
- E Answering questions from a knowledge base

Answer: C, E

Key phrase extraction and question answering are Azure AI Language capabilities. Text to speech is the tempting confusion because it also starts with text, but it belongs to Azure AI Speech. Image generation and face recognition are not language features.

6. A team has labeled photos of cats and dogs and wants a model that assigns each new photo to one of those two groups. Which approach fits?

- A Clustering
- B Regression
- C Reinforcement learning
- D Classification

Answer: D

Classification predicts a known category for each input, learned from labeled examples. Clustering is the tempting choice because it also groups photos, but it works without labels and finds its own groups. Regression predicts numbers, and reinforcement learning learns from rewards.

7. A bank wants to remove names, phone numbers, and account numbers from text before storing it. Which Azure AI Language capability fits?
- A PII detection
 - B Sentiment analysis
 - C Speech translation
 - D Image tagging

Answer: A

PII detection finds personal information in text so it can be redacted. Sentiment analysis is the tempting choice because it reads the same text, but it scores opinion rather than finding personal data. Speech translation and image tagging do not handle this task.

8. Retrieval-augmented generation helps reduce hallucinations by putting relevant source text into the prompt.
- A True
 - B False

Answer: A (True)

Grounding the answer in retrieved text gives the model facts to rely on, which reduces invented content. The tempting belief is that retrieval eliminates hallucinations entirely, but it reduces them rather than removing them.

9. Which AI workload suggests products to a shopper based on past purchases and browsing?
- A Computer vision
 - B Recommendation
 - C Speech synthesis
 - D Optical character recognition

Answer: B

Recommendation systems predict what a user is likely to want from patterns in past behavior. Computer vision is the tempting label for shopping apps with product photos, but these suggestions come from purchase history rather than images. Speech synthesis and OCR do not fit the scenario.

10. Which Azure AI Vision capability returns tags and a one-sentence caption describing a photo?

- A Image analysis
- B Document translation
- C Speaker diarization
- D Text summarization

Answer: A

Image analysis returns tags and a descriptive caption for a photo. Document translation is the tempting choice for multilingual content, but it translates documents rather than analyzing pictures. Speaker diarization and text summarization work on audio and text.