



Vendor: Microsoft

Exam Code: AI-901

Exam Name: Microsoft Azure AI Fundamentals

Version: DEMO

QUESTION 1

You need to build an AI solution that produces new product images based on written descriptions provided by users. Which AI workload should you use?

- A. image analysis
- B. image generation
- C. object detection
- D. optical character recognition (OCR)

Answer: B

Explanation:

An AI workload that creates entirely new visual content based on written natural language descriptions is defined as image generation, which is a core capability of Generative AI. In the Microsoft Azure ecosystem, this task is primarily handled by generative models like DALL-E or GPT-image via Azure OpenAI Service and Azure AI Foundry.

Reference:

<https://learn.microsoft.com/en-us/azure/architecture/data-guide/ai-services/image-video-processing>

QUESTION 2

Hotspot Question

Select the answer that correctly completes the sentence.

Answer Area

Information extraction solutions that detect and read text
in scanned documents and images rely on

	▼
computer vision	
image generation	
sentiment analysis	
speech synthesis	

Answer:

Answer Area

Information extraction solutions that detect and read text
in scanned documents and images rely on

	▼
computer vision	
image generation	
sentiment analysis	
speech synthesis	

QUESTION 3

You have a Microsoft Foundry project that has a generative AI model deployment.

You need to ensure that responses generated by the model minimize costs and remain within a defined length.

Which parameter should you configure?

- A. Top P
- B. Temperature
- C. Max Completion Tokens
- D. Model version settings

Answer: C

Explanation:

The Max Completion Tokens (or max_tokens / max_output_tokens in the API) parameter is exactly the tool you use to enforce a fixed length on AI-generated responses and keep costs predictable.

How the Parameter Works

What it does: It sets a strict upper bound on the number of output tokens the model can generate for your completion. Once this number is reached, the model will stop generating (cut off) regardless of whether it finished its thought.

What it doesn't do: It does not set a minimum length or force the model to write exactly that amount. It only acts as a ceiling.

Reference:

<https://learn.microsoft.com/en-us/answers/questions/5828812/reasoning-models-like-5-1-fails-with-500-error-cod>

QUESTION 4

Hotspot Question

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

NOTE: Each correct selection is worth one point.

Answer Area

Statements	Yes	No
Human-in-the-loop practices provide accountability for AI-generated decisions.	☐	☐
Deploying an AI system to a production environment eliminates the need for ongoing monitoring.	☐	☐
Disclosing the team that designed and deployed an AI system provides accountability for the system's output.	☐	☐

Answer:

Answer Area

Statements	Yes	No
Human-in-the-loop practices provide accountability for AI-generated decisions.	☒	☐
Deploying an AI system to a production environment eliminates the need for ongoing monitoring.	☐	☒
Disclosing the team that designed and deployed an AI system provides accountability for the system's output.	☒	☐

QUESTION 5

Your company processes customer support emails.

You need to implement an AI solution that automatically identifies mentions of people, organizations, and locations in the emails.

Which text analysis technique should you use?

- A. Named Entity Recognition (NER)
- B. key phrase extraction
- C. sentiment analysis
- D. summarization

Answer: A

Explanation:

The adequate text analysis feature is Named Entity Recognition (NER), which is a core prebuilt capability of the Azure AI Language service.

Prebuilt Categorization: The prebuilt NER feature automatically parses unstructured text (like emails) to identify and group elements into standard classes, including Person, Organization, and Location.

No Training Required: Because it relies on state-of-the-art pretrained transformer models, it can be deployed immediately out-of-the-box without requiring data labeling or custom model training.

High Extensibility: If your emails contain highly specialized terms (such as proprietary product IDs or industry-specific roles), you can easily scale to Custom NER within the same architecture.

Reference:

<https://learn.microsoft.com/en-us/azure/ai-services/language-service/named-entity-recognition/overview>

QUESTION 6

Your company has thousands of recorded customer support calls in multiple languages stored as audio files in Azure Storage.

You need to generate text transcripts of all the recordings.

Which Azure Speech in Foundry Tools capability should you use?

- A. speech to text batch transcription
- B. speech to text real-time transcription
- C. text to speech
- D. speech translation

Answer: A

Explanation:

For this scenario, you should use the Speech-to-Text Batch Transcription feature in Azure AI Speech. It is specifically built to asynchronously transcribe large volumes of prerecorded audio files from Azure Blob Storage concurrently, reducing your overall turnaround time.

To address the requirement for multiple languages without knowing the language of each call in advance, you should configure the service to use an Automatic Multilingual Configuration (a multilingual model). This allows the Speech service to automatically detect and transcribe multiple spoken languages without requiring you to split files or submit language-specific requests.

Reference:

<https://learn.microsoft.com/en-us/azure/ai-services/content-understanding/audio/overview>

QUESTION 7

You need to compare the costs of large language models (LLMs) for a generative AI solution. What should you use in the Microsoft Foundry portal?

- A. Compliance
- B. Evaluator catalog
- C. Tools
- D. Model leaderboard

Answer: D

Explanation:

To compare the costs, capabilities, and performance of large language models (LLMs) in the Foundry portal, you should use the Model leaderboard.

Why Use the Model Leaderboard

The leaderboard allows you to:

Compare models side-by-side: Evaluate multiple LLMs simultaneously for trade-offs regarding estimated costs, throughput, safety, and quality.

Make informed decisions: Select the most cost-effective model for specific workloads before committing to deployments, reducing the risk of expensive errors or overspending.

Reference:

<https://learn.microsoft.com/en-us/azure/foundry/concepts/manage-costs>

QUESTION 8

Which Azure OpenAI model can be used to develop code?

- A. microsoft-swinv2-base-patch4-window12-192-22k
- B. Whisper
- C. DALL-E
- D. GPT-4-32k

Answer: A

Explanation:

The GPT-4 32k model can be used to develop programming code. It has a large context window, allowing it to process more information and generate more complex code. The model has shown strong performance in coding tasks, even surpassing its predecessor, o3-mini, in some domains.

Reference:

<https://vivekupadhyay1.medium.com/openai-chat-gpt-4-32k-detailed-document-ce3486e4786e>

QUESTION 9

You have an Azure subscription that uses Azure OpenAI.

You need to create an original image of a rural scene to use on a website.

What should you do?

- A. From GitHub Copilot, provide instructions to create the image of the rural scene.
- B. From Azure AI Foundry, deploy a GPT-3.5 Turbo model and provide instructions to create the image of the rural scene.
- C. From Azure AI Foundry, deploy a DALL-E model, and provide instructions to create the rural scene.
- D. From Microsoft Bing, search the term 攢rural scene?and download the results.

Answer: C

Explanation:

Azure OpenAI in Azure AI Foundry Models

Image generation models

The image generation models generate images from text prompts that the user provides. GPT-image-1 is in limited access public preview. DALL-E 3 is generally available for use with the REST APIs. DALL-E 2 and DALL-E 3 with client SDKs are in preview.

Reference:

<https://learn.microsoft.com/en-us/azure/ai-services/openai/concepts/models>

QUESTION 10

What are two common use cases for generative AI solutions? Each correct answer presents a complete solution.

NOTE: Each correct selection is worth one point.

- A. classifying email messages as spam or non-spam
- B. generating draft responses for customer service agents
- C. predicting sales revenue based on historical data
- D. creating original artwork from textual descriptions

Answer: BD

Explanation:

B: Generative AI tools can assist customer service agents by automatically drafting responses to customer inquiries, providing personalized and context-aware solutions. This helps agents improve efficiency, reduce workload, and enhance customer satisfaction.

D: DALL·E3, developed by OpenAI, is a cutting-edge generative AI model designed to create images from text descriptions.

Reference:

<https://medium.com/@eastgate/top-7-generative-ai-models-tools-for-text-image-and-video-creation-237a0de231b1>

QUESTION 11

You are creating an app to help employees write emails and reports based on user prompts. What should you use?

- A. Azure AI Vision
- B. Azure Machine Learning studio
- C. Azure OpenAI Service
- D. Azure AI Speech

Answer: C

Explanation:

Azure OpenAI Service can generate text based on user prompts. It leverages GPT (Generative Pre-trained Transformer) models that are trained to understand and generate human-like text. Users interact with these models by providing a prompt, and the model attempts to produce the most likely continuation or completion of that text.

Reference:

<https://learn.microsoft.com/en-us/azure/ai-services/openai/concepts/models>

Thank You for Trying Our Product

Lead2pass Certification Exam Features:

- ★ More than **99,900** Satisfied Customers Worldwide.
- ★ Average **99.9%** Success Rate.
- ★ **Free Update** to match latest and real exam scenarios.
- ★ **Instant Download** Access! No Setup required.
- ★ Questions & Answers are downloadable in **PDF** format and **VCE** test engine format.
- ★ Multi-Platform capabilities - **Windows, Laptop, Mac, Android, iPhone, iPod, iPad**.
- ★ **100%** Guaranteed Success or **100%** Money Back Guarantee.
- ★ **Fast**, helpful support **24x7**.



View list of all certification exams: <http://www.lead2pass.com/all-products.html>



10% Discount Coupon Code: ASTR14