CERT-PASS

Microsoft AI-102 Azure AI Engineer Associate

Free Practice Questions Preview

Here are 35 sample questions to help you get started. Unlock the full exam to access all 1008+ questions with detailed explanations.

Question 1 : Plan and manage an Azure AI solution

Blue Yonder plans to deploy an Azure AI container at an edge site with intermittent internet. What should be considered before choosing this design?

A. Containers always support every Azure AI feature

B. Containers require Azure Kubernetes Service only

C. The container must still meet licensing, billing, and connectivity requirements for the selected service

D. Containers eliminate all Azure billing requirements

Answer: C
Azure AI containers can support edge scenarios, but they have service-specific licensing, metering, and connectivity requirements. The best wrong choice is tempting because AKS can run containers, but it is not the only possible runtime, but it does not meet the stated requirement.

Question 2 : Plan and manage an Azure AI solution

Woodgrove Bank, a travel company, needs one Azure AI resource that can call multiple Azure AI services from a single endpoint and key. The solution must support role-based access control. What should you create?

A. A separate single-service resource for each capability

B. A multi-service Azure AI services resource

C. An Azure Machine Learning workspace only

D. An Azure Storage account with a system-assigned identity

Answer: B
A multi-service Azure AI services resource provides a unified endpoint/key for several Azure AI services. The best wrong choice is tempting because single-service resources can be useful for isolation, but they do not provide one shared endpoint for multiple Azure AI services, but it does not meet the stated requirement.

Question 3 : Plan and manage an Azure AI solution

You must reduce blast radius between two unrelated production AI workloads that require different access policies and quotas. What should you provision? The implementation must follow current Microsoft guidance.

A. One shared key in all applications

B. A single prompt template for both workloads

C. Separate Azure AI resources with separate identities, keys, and RBAC scopes

D. A single knowledge store table

Answer: C
Separate resources improve isolation for security, quota, and lifecycle management. The best wrong choice is tempting because a shared key increases blast radius and makes access harder to separate, but it does not meet the stated requirement.

Question 4 : Plan and manage an Azure AI solution

A team needs to track failed requests, latency, and quota usage for an Azure AI resource. Which Azure capability should they enable first? The solution will be deployed to production next quarter.

A. Azure Bastion on the resource group

B. Diagnostic settings to send metrics and logs to Azure Monitor or Log Analytics

C. A lifecycle management policy on storage

D. A custom vision training project

Answer: B
Diagnostic settings and Azure Monitor/Log Analytics are the standard way to collect operational telemetry. The best wrong choice is tempting because Bastion is for secure VM access, not AI resource monitoring, but it does not meet the stated requirement.

Question 5 : Plan and manage an Azure AI solution

A company wants a governance framework for AI solutions. Which activity best aligns with Responsible AI before production release? The exam question focuses on the best Azure-native choice.

A. Use only the largest available model

B. Define risk controls, human review paths, monitoring, and content safety policies

C. Increase temperature to make answers more creative

D. Disable logging to avoid operational overhead

Answer: B
Responsible AI governance includes risk management, oversight, monitoring, and safety controls. The best wrong choice is tempting because larger models can improve capability, but model size alone is not a governance framework, but it does not meet the stated requirement.

Question 6 : Plan and manage an Azure AI solution

You need to prevent harmful user prompts from reaching a generative AI application and detect prompt injection attempts. Which capability should you include? The team is choosing the first service or feature to implement.

A. Prompt shields and content safety checks

B. Only speech-to-text

C. A custom translation model

D. A knowledge store projection

Answer: A
Prompt shields and content safety controls are used to reduce prompt attacks and harmful content. The best wrong choice is tempting because speech-to-text changes audio into text but does not moderate prompt attacks, but it does not meet the stated requirement.

Question 7 : Plan and manage an Azure AI solution

A solution architect must choose between Azure AI Vision, Azure AI Language, Azure AI Speech, Azure AI Search, and Azure Document Intelligence. The requirement is to extract fields from invoices and receipts. Which service is most appropriate?

A. Azure AI Vision object detection

B. Azure AI Speech transcription

C. Azure AI Language sentiment analysis

D. Azure AI Document Intelligence in Foundry Tools

Answer: D
Document Intelligence is designed for form and document field extraction, including prebuilt invoice/receipt scenarios. The best wrong choice is tempting because Vision can perform OCR, but it does not provide the same document field extraction workflow, but it does not meet the stated requirement.

Question 8 : Plan and manage an Azure AI solution

An application must choose a default endpoint when using an Azure AI resource from SDK code. What information is generally required along with authentication?

A. The service endpoint URI for the Azure AI resource

B. The local file path of the model card

C. The Azure subscription display name only

D. The user interface language of the Azure portal

Answer: A
SDK clients typically require the service endpoint plus a credential. The best wrong choice is tempting because the subscription display name does not tell the SDK where to send requests, but it does not meet the stated requirement.

Question 9 : Plan and manage an Azure AI solution

A regulated workload requires only approved users to call an Azure AI resource. Which control is the strongest fit?

A. Use a public endpoint without authentication

B. Assign least-privilege Azure RBAC roles and use Microsoft Entra authentication where supported

C. Rely only on file naming conventions

D. Share an admin key with all developers

Answer: B
RBAC with Microsoft Entra authentication supports least privilege and auditable access. The best wrong choice is tempting because sharing an admin key weakens auditability and least privilege, but it does not meet the stated requirement.

Question 10 : Plan and manage an Azure AI solution

Your CI/CD pipeline must deploy AI resources consistently across dev, test, and prod. Which approach best supports repeatable deployment? The implementation must follow current Microsoft guidance.

A. Create each resource manually in the portal

B. Export the browser session cookies

C. Copy keys from dev into prod

D. Use infrastructure as code such as Bicep or ARM templates with environment-specific parameters

Answer: D
Infrastructure as code supports repeatable, reviewable deployments across environments. The best wrong choice is tempting because manual portal creation is possible but error-prone and not ideal for CI/CD, but it does not meet the stated requirement.

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Question 12 : Plan and manage an Azure AI solution

A solution architect must choose between Azure AI Vision, Azure AI Language, Azure AI Speech, Azure AI Search, and Azure Document Intelligence. The requirement is to extract fields from invoices and receipts. Which service is most appropriate? The architect wants to avoid unnecessary custom services.

A. Azure AI Language sentiment analysis

B. Azure AI Speech transcription

C. Azure AI Vision object detection

D. Azure AI Document Intelligence in Foundry Tools

Answer: D
Document Intelligence is designed for form and document field extraction, including prebuilt invoice/receipt scenarios. The best wrong choice is tempting because Vision can perform OCR, but it does not provide the same document field extraction workflow, but it does not meet the stated requirement.

Question 13 : Plan and manage an Azure AI solution

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Question 14 : Plan and manage an Azure AI solution

An application receives 429 responses from an Azure AI service during traffic spikes. What is the best immediate client-side design response?

A. Disable authentication for the endpoint

B. Store the endpoint in Key Vault

C. Switch all requests to synchronous batch processing

D. Implement retry with exponential backoff and review quota/throughput limits

Answer: D
429 indicates throttling, so retry/backoff and capacity planning are appropriate. The best wrong choice is tempting because Key Vault secures secrets, but it does not address throttling, but it does not meet the stated requirement.

Question 15 : Plan and manage an Azure AI solution

You must reduce blast radius between two unrelated production AI workloads that require different access policies and quotas. What should you provision? The architect wants to avoid unnecessary custom services.

A. A single knowledge store table

B. A single prompt template for both workloads

C. One shared key in all applications

D. Separate Azure AI resources with separate identities, keys, and RBAC scopes

Answer: D
Separate resources improve isolation for security, quota, and lifecycle management. The best wrong choice is tempting because a shared key increases blast radius and makes access harder to separate, but it does not meet the stated requirement.

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Question 17 : Plan and manage an Azure AI solution

Blue Yonder plans to deploy an Azure AI container at an edge site with intermittent internet. What should be considered before choosing this design?

A. The container must still meet licensing, billing, and connectivity requirements for the selected service

B. Containers require Azure Kubernetes Service only

C. Containers eliminate all Azure billing requirements

D. Containers always support every Azure AI feature

Answer: A
Azure AI containers can support edge scenarios, but they have service-specific licensing, metering, and connectivity requirements. The best wrong choice is tempting because AKS can run containers, but it is not the only possible runtime, but it does not meet the stated requirement.

Question 18 : Plan and manage an Azure AI solution

You are deploying an Azure AI service into a locked-down environment. The service must be reachable only through a private address in a virtual network. Which feature should you configure?

A. Public endpoint with CORS

B. Private endpoint

C. Shared access signature

D. Azure Front Door caching

Answer: B
A private endpoint exposes the resource through a private IP in the virtual network. The best wrong choice is tempting because CORS controls browser origins but does not make a public service private, but it does not meet the stated requirement.

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You are deploying an Azure AI service into a locked-down environment. The service must be reachable only through a private address in a virtual network. Which feature should you configure?

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D. Private endpoint

Answer: D
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Question 20 : Plan and manage an Azure AI solution

A developer stores an Azure AI key in application settings and the key appears in a source-control scan. You need the most appropriate production pattern. What should you recommend?

A. Store the key in Azure Key Vault and retrieve it using managed identity

B. Rotate the key once and keep it in the repository

C. Place the key in a prompt template

D. Encode the key with Base64 before committing

Answer: A
Key Vault with managed identity removes secrets from code and centralizes secret management. The best wrong choice is tempting because rotating a key helps after exposure, but keeping it in source control repeats the same risk, but it does not meet the stated requirement.

Question 21 : Plan and manage an Azure AI solution

You are deploying an Azure AI service into a locked-down environment. The service must be reachable only through a private address in a virtual network. Which feature should you configure?

A. Public endpoint with CORS

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Question 23 : Plan and manage an Azure AI solution

A team wants to estimate costs for Azure AI calls and detect unusual spending. Which approach is most appropriate? The architect wants to avoid unnecessary custom services.

A. Use Azure Cost Management budgets and monitor resource metrics/usage

B. Train a custom image classifier

C. Disable diagnostic logs permanently

D. Use only the client retry policy

Answer: A
Cost Management budgets and usage monitoring help track and control spend. The best wrong choice is tempting because retry policy helps reliability, but it does not provide budgeting or cost visibility, but it does not meet the stated requirement.

Question 24 : Plan and manage an Azure AI solution

Litware plans to deploy an Azure AI container at an edge site with intermittent internet. What should be considered before choosing this design? The team wants the least operational risk.

A. The container must still meet licensing, billing, and connectivity requirements for the selected service

B. Containers eliminate all Azure billing requirements

C. Containers require Azure Kubernetes Service only

D. Containers always support every Azure AI feature

Answer: A
Azure AI containers can support edge scenarios, but they have service-specific licensing, metering, and connectivity requirements. The best wrong choice is tempting because AKS can run containers, but it is not the only possible runtime, but it does not meet the stated requirement.

Question 25 : Plan and manage an Azure AI solution

A solution architect must choose between Azure AI Vision, Azure AI Language, Azure AI Speech, Azure AI Search, and Azure Document Intelligence. The requirement is to extract fields from invoices and receipts. Which service is most appropriate? The workload will be used by an internal application.

A. Azure AI Speech transcription

B. Azure AI Language sentiment analysis

C. Azure AI Vision object detection

D. Azure AI Document Intelligence in Foundry Tools

Answer: D
Document Intelligence is designed for form and document field extraction, including prebuilt invoice/receipt scenarios. The best wrong choice is tempting because Vision can perform OCR, but it does not provide the same document field extraction workflow, but it does not meet the stated requirement.

Question 26 : Plan and manage an Azure AI solution

You need to prevent harmful user prompts from reaching a generative AI application and detect prompt injection attempts. Which capability should you include? The exam question focuses on the best Azure-native choice.

A. A knowledge store projection

B. Prompt shields and content safety checks

C. Only speech-to-text

D. A custom translation model

Answer: B
Prompt shields and content safety controls are used to reduce prompt attacks and harmful content. The best wrong choice is tempting because speech-to-text changes audio into text but does not moderate prompt attacks, but it does not meet the stated requirement.

Question 27 : Plan and manage an Azure AI solution

An application must choose a default endpoint when using an Azure AI resource from SDK code. What information is generally required along with authentication?

A. The Azure subscription display name only

B. The service endpoint URI for the Azure AI resource

C. The local file path of the model card

D. The user interface language of the Azure portal

Answer: B
SDK clients typically require the service endpoint plus a credential. The best wrong choice is tempting because the subscription display name does not tell the SDK where to send requests, but it does not meet the stated requirement.

Question 28 : Plan and manage an Azure AI solution

An application receives 429 responses from an Azure AI service during traffic spikes. What is the best immediate client-side design response?

A. Switch all requests to synchronous batch processing

B. Implement retry with exponential backoff and review quota/throughput limits

C. Disable authentication for the endpoint

D. Store the endpoint in Key Vault

Answer: B
429 indicates throttling, so retry/backoff and capacity planning are appropriate. The best wrong choice is tempting because Key Vault secures secrets, but it does not address throttling, but it does not meet the stated requirement.

Question 29 : Plan and manage an Azure AI solution

An application must choose a default endpoint when using an Azure AI resource from SDK code. What information is generally required along with authentication? The implementation must follow current Microsoft guidance.

A. The Azure subscription display name only

B. The local file path of the model card

C. The service endpoint URI for the Azure AI resource

D. The user interface language of the Azure portal

Answer: C
SDK clients typically require the service endpoint plus a credential. The best wrong choice is tempting because the subscription display name does not tell the SDK where to send requests, but it does not meet the stated requirement.

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You need to prevent harmful user prompts from reaching a generative AI application and detect prompt injection attempts. Which capability should you include? The solution will be deployed to production next quarter.

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B. Only speech-to-text

C. A custom translation model

D. Prompt shields and content safety checks

Answer: D
Prompt shields and content safety controls are used to reduce prompt attacks and harmful content. The best wrong choice is tempting because speech-to-text changes audio into text but does not moderate prompt attacks, but it does not meet the stated requirement.

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Answer: D
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Question 32 : Plan and manage an Azure AI solution

An application must choose a default endpoint when using an Azure AI resource from SDK code. What information is generally required along with authentication? The design must be explainable to security reviewers.

A. The local file path of the model card

B. The Azure subscription display name only

C. The service endpoint URI for the Azure AI resource

D. The user interface language of the Azure portal

Answer: C
SDK clients typically require the service endpoint plus a credential. The best wrong choice is tempting because the subscription display name does not tell the SDK where to send requests, but it does not meet the stated requirement.

Question 33 : Plan and manage an Azure AI solution

A regulated workload requires only approved users to call an Azure AI resource. Which control is the strongest fit?

A. Share an admin key with all developers

B. Use a public endpoint without authentication

C. Rely only on file naming conventions

D. Assign least-privilege Azure RBAC roles and use Microsoft Entra authentication where supported

Answer: D
RBAC with Microsoft Entra authentication supports least privilege and auditable access. The best wrong choice is tempting because sharing an admin key weakens auditability and least privilege, but it does not meet the stated requirement.

Question 34 : Plan and manage an Azure AI solution

You are deploying an Azure AI service into a locked-down environment. The service must be reachable only through a private address in a virtual network. Which feature should you configure? The workload will be used by an internal application.

A. Private endpoint

B. Public endpoint with CORS

C. Azure Front Door caching

D. Shared access signature

Answer: A
A private endpoint exposes the resource through a private IP in the virtual network. The best wrong choice is tempting because CORS controls browser origins but does not make a public service private, but it does not meet the stated requirement.

Question 35 : Plan and manage an Azure AI solution

A team needs to track failed requests, latency, and quota usage for an Azure AI resource. Which Azure capability should they enable first? The design must be explainable to security reviewers.

A. Diagnostic settings to send metrics and logs to Azure Monitor or Log Analytics

B. A custom vision training project

C. A lifecycle management policy on storage

D. Azure Bastion on the resource group

Answer: A
Diagnostic settings and Azure Monitor/Log Analytics are the standard way to collect operational telemetry. The best wrong choice is tempting because Bastion is for secure VM access, not AI resource monitoring, but it does not meet the stated requirement.