## Which of the following is an example of a computer vision workload?

- A. Predicting house prices
- B. Translating text between languages
- C. Detecting faces in an image
- D. Analyzing customer sentiment from reviews

Answer: C. Detecting faces in an image

Explanation: Computer Vision involves interpreting visual input like images and videos.

# What is a primary goal of machine learning?

- A. To write rule-based logic
- B. To develop hard-coded algorithms
- C. To allow systems to learn from data and improve over time
- D. To translate programming languages

Answer: C. To allow systems to learn from data and improve over time

Explanation: ML enables models to make predictions or decisions based on past data.

#### Which Azure service would you use to create a chatbot?

- A. Azure Cognitive Services
- B. Azure Bot Service
- C. Azure Logic Apps
- D. Azure Functions

Answer: B. Azure Bot Service

Explanation: Azure Bot Service is designed specifically to build and deploy bots.

#### What is the purpose of Natural Language Processing (NLP)?

A. Detecting objects in images

- B. Recognizing spoken language
- C. Understanding and processing human language
- D. Recommending products

Answer: C. Understanding and processing human language

Explanation: NLP helps machines interpret human language in context.

#### Which scenario best represents a classification machine learning model?

- A. Predicting next week's weather temperature
- B. Grouping customers by purchase behavior
- C. Identifying whether an email is spam or not
- D. Summarizing a document

Answer: C. Identifying whether an email is spam or not

Explanation: Classification assigns items into categories, like spam or not spam.

## What type of machine learning is used when the model is trained with labeled data?

- A. Unsupervised learning
- B. Reinforcement learning
- C. Supervised learning
- D. Deep learning

Answer: C. Supervised learning

Explanation: Supervised learning uses labeled data to train the model to predict outcomes.

# You want to group customers based on purchasing behavior without labeled data. What type of ML is best?

- A. Regression
- B. Classification

- C. Supervised learning
- D. Unsupervised learning

Answer: D. Unsupervised learning

Explanation: Unsupervised learning is used to find hidden patterns in data without labels (e.g., clustering).

## Which Azure service provides a drag-and-drop interface to build ML models without coding?

- A. Azure ML Designer
- B. Azure Cognitive Services
- C. Azure Functions
- D. Azure Bot Service

Answer: A. Azure ML Designer

Explanation: Azure ML Designer allows you to build and deploy models visually with pre-built components.

# What is the main advantage of Automated ML (AutoML) in Azure?

- A. You must write custom code for all models
- B. It predicts customer behavior without any model
- C. It automates model selection and tuning
- D. It builds web apps for ML

Answer: C. It automates model selection and tuning

Explanation: AutoML helps identify the best model and parameters for your dataset automatically.

#### In machine learning, what is 'overfitting'?

- A. The model is too simple and can't learn
- B. The model performs well on training data but poorly on new data
- C. The model performs equally well on all data
- D. The model cannot be trained

Answer: B. The model performs well on training data but poorly on new data

Explanation: Overfitting occurs when a model memorizes training data instead of generalizing patterns.

## Which Azure service is used to extract text from images and documents?

- A. Azure Speech
- B. Form Recognizer
- C. QnA Maker
- D. Azure Bot Service

Answer: B. Form Recognizer

Explanation: Form Recognizer extracts structured text and key-value pairs from forms and documents.

## What is the purpose of the Custom Vision service?

- A. Translate text to different languages
- B. Extract sentiment from text
- C. Build a custom image classifier
- D. Identify intent from user queries

Answer: C. Build a custom image classifier

Explanation: Custom Vision lets you train a model with your own images for object detection or classification.

#### What type of problem is object detection solving?

- A. Classifying entire images into categories
- B. Finding and labeling objects within an image
- C. Extracting data from forms
- D. Converting speech to text

Answer: B. Finding and labeling objects within an image

Explanation: Object detection identifies both the location and category of objects in an image.

# You want to verify someone's identity using facial features. Which service do you use?

- A. Text Analytics
- B. Face API
- C. Translator
- D. Azure ML Studio

Answer: B. Face API

Explanation: Face API can detect and compare facial features for identification and verification.

#### What is a common use case of OCR (Optical Character Recognition)?

- A. Predicting product sales
- B. Translating spoken words
- C. Converting scanned documents to text
- D. Sentiment analysis on text

Answer: C. Converting scanned documents to text

Explanation: OCR technology is used to extract machine-readable text from scanned images or documents.

#### Which Azure service helps extract key phrases, entities, and sentiment from text?

- A. Azure Bot Service
- B. Text Analytics API
- C. Translator
- D. Form Recognizer

Answer: B. Text Analytics API

Explanation: It provides insights like sentiment, key phrases, named entities, and language detection from

text.

You want to translate customer feedback from multiple languages into English. Which service should you use?

- A. Translator
- B. Face API
- C. Azure Machine Learning
- D. Azure Bot Service

Answer: A. Translator

Explanation: Translator service automatically translates text between languages.

## What is the purpose of Language Understanding (LUIS)?

- A. To analyze images
- B. To identify user intents and extract entities from natural language queries
- C. To extract text from scanned documents
- D. To convert speech to text

Answer: B. To identify user intents and extract entities from natural language queries

Explanation: LUIS helps build conversational AI that understands user input.

#### Which of the following is an example of sentiment analysis?

- A. Determining if a tweet is positive, negative, or neutral
- B. Translating text from Spanish to English
- C. Recognizing faces in a photo
- D. Classifying an email as spam or not spam

Answer: A. Determining if a tweet is positive, negative, or neutral

Explanation: Sentiment analysis classifies the emotion or opinion in text.

Which Azure service provides a unified platform for NLP tasks such as translation,

# summarization, and entity recognition?

- A. Azure Al Language
- B. Azure Bot Service
- C. Azure Functions
- D. Azure Cognitive Search

Answer: A. Azure Al Language

Explanation: Azure AI Language integrates multiple NLP capabilities in one service.

# What Azure service is primarily used to build and deploy chatbots?

- A. Azure Cognitive Services
- B. Azure Bot Service
- C. Azure Functions
- D. Azure Logic Apps

Answer: B. Azure Bot Service

Explanation: Azure Bot Service provides an integrated environment to develop, test, and deploy chatbots.

#### What is the role of QnA Maker in conversational Al?

- A. To recognize speech and convert it to text
- B. To create a question-and-answer knowledge base from FAQs
- C. To translate conversations in real-time
- D. To perform sentiment analysis on chats

Answer: B. To create a question-and-answer knowledge base from FAQs

Explanation: QnA Maker lets you build a simple FAQ bot using existing content.

#### Which of the following is a key feature of the Bot Framework?

A. Drag-and-drop ML model building

- B. SDK and tools for developing conversational AI bots
- C. Automated text translation
- D. Facial recognition for authentication

Answer: B. SDK and tools for developing conversational AI bots

Explanation: Bot Framework provides a rich SDK and tools for building complex bots.

## How can you integrate an Azure chatbot into Microsoft Teams?

- A. By exporting it as a PowerPoint file
- B. By registering the bot and adding it as a Teams app
- C. By sending an email to Microsoft support
- D. By enabling Face API on the chatbot

Answer: B. By registering the bot and adding it as a Teams app

Explanation: Bots must be registered and configured for Teams integration.

# Which service helps your chatbot understand user intent and extract important information from conversations?

- A. Azure Functions
- B. Language Understanding (LUIS)
- C. Azure Machine Learning
- D. Form Recognizer

Answer: B. Language Understanding (LUIS)

Explanation: LUIS processes natural language queries to understand intent and entities.