QUESTION 16
Which service should you use to extract text, key/value pairs, and table data automatically from scanned documents?

A. Form Recognizer
B. Text Analytics
C. Ink Recognizer
D. Custom Vision

Answer: A
Explanation:
Accelerate your business processes by automating information extraction. Form Recognizer applies advanced machine learning to accurately extract text, key/value pairs, and tables from documents. With just a few samples, Form Recognizer tailors its understanding to your documents, both on-premises and in the cloud. Turn forms into usable data at a fraction of the time and cost, so you can focus more time acting on the information rather than compiling it.
Reference:
https://azure.microsoft.com/en-us/services/cognitive-services/form-recognizer/

QUESTION 17
You use Azure Machine Learning designer to publish an inference pipeline.
Which two parameters should you use to consume the pipeline? Each correct answer presents part of the solution.
NOTE: Each correct selection is worth one point.

A. the model name
B. the training endpoint
C. the authentication key
D. the REST endpoint

Answer: AD
Explanation:
A: The trained model is stored as a Dataset module in the module palette. You can find it under My Datasets.
Azure Machine Learning designer lets you visually connect datasets and modules on an interactive canvas to create machine learning models.
D: You can consume a published pipeline in the Published pipelines page. Select a published pipeline and find the REST endpoint of it.
Reference:
https://docs.microsoft.com/en-us/azure/machine-learning/how-to-run-batch-predictions-designer
https://docs.microsoft.com/en-us/azure/machine-learning/concept-designer

QUESTION 18
A medical research project uses a large anonymized dataset of brain scan images that are categorized into predefined brain haemorrhage types.

You need to use machine learning to support early detection of the different brain haemorrhage types in the images before the images are reviewed by a person.
This is an example of which type of machine learning?

A. clustering
B. regression
C. classification

Answer: C
Explanation:
https://docs.microsoft.com/en-us/learn/modules/create-classification-model-azure-machine-learning-designer/introduction

QUESTION 19
When training a model, why should you randomly split the rows into separate subsets?

A. to train the model twice to attain better accuracy
B. to train multiple models simultaneously to attain better performance
C. to test the model by using data that was not used to train the model

Answer: C

QUESTION 20
You are evaluating whether to use a basic workspace or an enterprise workspace in Azure Machine Learning.
What are two tasks that require an enterprise workspace? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Use a graphical user interface (GUI) to run automated machine learning experiments.
B. Create a compute instance to use as a workstation.
C. Use a graphical user interface (GUI) to define and run machine learning experiments from Azure Machine Learning designer.
D. Create a dataset from a comma-separated value (CSV) file.

Answer: AC
Explanation:
Note: Enterprise workspaces are no longer available as of September 2020. The basic workspace now has all the functionality of the enterprise workspace.
Reference:
https://www.azure.cn/en-us/pricing/details/machine-learning/ https://docs.microsoft.com/en-us/azure/machine-learning/concept-workspace

QUESTION 21
You need to predict the income range of a given customer by using the following dataset.

First Name	Last Name	Age	Education Level	Income Range
Orlando	Gee	45	University	25,000-50,000
Keith	Harris	36	High school	25,000-50,000
Donna	Carreras	52	University	50,000-75,000
Janet	Gates	21	University	75,000-100,000
Lucy	Harrington	68	High school	50,000-75,000

Which two fields should you use as features? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Education Level

B. Last Name
C. Age
D. Income Range
E. First Name

Answer: AC
Explanation:
First Name, Last Name, Age and Education Level are features. Income range is a label (what you want to predict). First Name and Last Name are irrelevant in that they have no bearing on income. Age and Education level are the features you should use.

QUESTION 22
You need to develop a mobile app for employees to scan and store their expenses while travelling.
Which type of computer vision should you use?

A. semantic segmentation
B. image classification
C. object detection
D. optical character recognition (OCR)

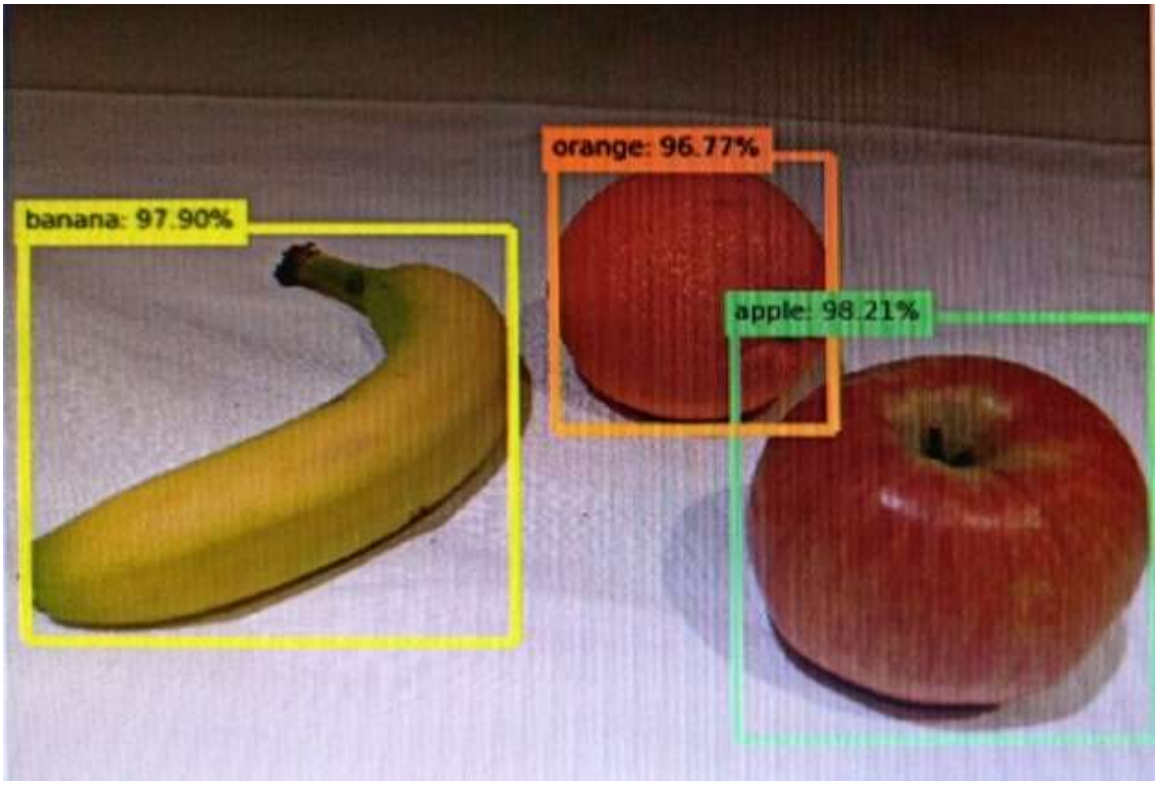
Answer: D
Explanation:
Azure's Computer Vision API includes Optical Character Recognition (OCR) capabilities that extract printed or handwritten text from images. You can extract text from images, such as photos of license plates or containers with serial numbers, as well as from documents -invoices, bills, financial reports, articles, and more.
Reference:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/concept-recognizing-text

QUESTION 23
You need to determine the location of cars in an image so that you can estimate the distance between the cars.
Which type of computer vision should you use?

A. optical character recognition (OCR)
B. object detection
C. image classification
D. face detection

Answer: B
Explanation:
Object detection is similar to tagging, but the API returns the bounding box coordinates (in pixels) for each object found. For example, if an image contains a dog, cat and person, the Detect operation will list those objects together with their coordinates in the image. You can use this functionality to process the relationships between the objects in an image. It also lets you determine whether there are multiple instances of the same tag in an image.
The Detect API applies tags based on the objects or living things identified in the image. There is currently no formal relationship between the tagging taxonomy and the object detection taxonomy. At a conceptual level, the Detect API only finds objects and living things, while the Tag API can also include contextual terms like "indoor", which can't be localized with bounding boxes.
Reference:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/concept-object-detection

QUESTION 24
You send an image to a Computer Vision API and receive back the annotated image shown in the exhibit.



Which type of computer vision was used?

A. object detection
B. semantic segmentation
C. optical character recognition (OCR)
D. image classification

Answer: A
Explanation:
Object detection is similar to tagging, but the API returns the bounding box coordinates (in pixels) for each object found. For example, if an image contains a dog, cat and person, the Detect operation will list those objects together with their coordinates in the image. You can use this functionality to process the relationships between the objects in an image. It also lets you determine whether there are multiple instances of the same tag in an image.
The Detect API applies tags based on the objects or living things identified in the image. There is currently no formal relationship between the tagging taxonomy and the object detection taxonomy. At a conceptual level, the Detect API only finds objects and living things, while the Tag API can also include contextual terms like "indoor", which can't be localized with bounding boxes.
Reference:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/concept-object-detection

QUESTION 25
What are two tasks that can be performed by using the Computer Vision service? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Train a custom image classification model.
B. Detect faces in an image.
C. Recognize handwritten text.
D. Translate the text in an image between languages.

Answer: BC

Explanation:
B: Azure's Computer Vision service provides developers with access to advanced algorithms that process images and return information based on the visual features you're interested in. For example, Computer Vision can determine whether an image contains adult content, find specific brands or objects, or find human faces.
C: Computer Vision includes Optical Character Recognition (OCR) capabilities. You can use the new Read API to extract printed and handwritten text from images and documents.
Reference:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/home

QUESTION 26
What is a use case for classification?

A. predicting how many cups of coffee a person will drink based on how many hours the person slept the previous night.
B. analyzing the contents of images and grouping images that have similar colors
C. predicting whether someone uses a bicycle to travel to work based on the distance from home to work
D. predicting how many minutes it will take someone to run a race based on past race times

Answer: B
Explanation:
Classification is a machine learning method that uses data to determine the category, type, or class of an item or row of data.
Reference:
https://docs.microsoft.com/en-us/azure/machine-learning/algorithm-module-reference/linear-regression
https://docs.microsoft.com/en-us/azure/machine-learning/studio-module-reference/machine-learning-initialize-model-clustering

QUESTION 27
What are two tasks that can be performed by using computer vision? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Predict stock prices.
B. Detect brands in an image.
C. Detect the color scheme in an image
D. Translate text between languages.
E. Extract key phrases.

Answer: BE
Explanation:
B: Azure's Computer Vision service gives you access to advanced algorithms that process images and return information based on the visual features you're interested in. For example, Computer Vision can determine whether an image contains adult content, find specific brands or objects, or find human faces.
E: Computer Vision includes Optical Character Recognition (OCR) capabilities. You can use the new Read API to extract printed and handwritten text from images and documents. It uses the latest models and works with text on a variety of surfaces and backgrounds. These include receipts, posters, business cards, letters, and whiteboards. The two OCR APIs support extracting printed text in several languages.
Reference:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/overview

QUESTION 28
Your company wants to build a recycling machine for bottles. The recycling machine must automatically identify bottles of the correct shape and reject all other items.
Which type of AI workload should the company use?

A. anomaly detection
B. conversational AI
C. computer vision
D. natural language processing

Answer: C
Explanation:
Azure's Computer Vision service gives you access to advanced algorithms that process images and return information based on the visual features you're interested in. For example, Computer Vision can determine whether an image contains adult content, find specific brands or objects, or find human faces.
Reference:
https://docs.microsoft.com/en-us/azure/cognitive-services/computer-vision/overview

QUESTION 29
In which two scenarios can you use the Form Recognizer service? Each correct answer presents a complete solution.
NOTE: Each correct selection is worth one point.

A. Extract the invoice number from an invoice.
B. Translate a form from French to English.
C. Find image of product in a catalog.
D. Identity the retailer from a receipt.

Answer: AD
Explanation:
https://azure.microsoft.com/en-gb/services/cognitive-services/form-recognizer/#features

QUESTION 30
Your website has a chatbot to assist customers.
You need to detect when a customer is upset based on what the customer types in the chatbot.
Which type of AI workload should you use?

A. anomaly detection
B. semantic segmentation
C. regression
D. natural language processing

Answer: D
Explanation:
Natural language processing (NLP) is used for tasks such as sentiment analysis, topic detection, language detection, key phrase extraction, and document categorization.
Sentiment Analysis is the process of determining whether a piece of writing is positive, negative or neutral.
Reference:
https://docs.microsoft.com/en-us/azure/architecture/data-guide/technology-choices/natural-language-processing