**Correct Answer:** key phrase extraction

**Reasoning:** Key phrase extraction is used to identify the main talking points or important phrases within a collection of documents, summarizing their content or topics effectively.

2. **Q No: 2** 

**Correct Answer:** speech recognition

**Reasoning:** Speech recognition converts spoken language into written text, as seen in transcribing spoken words into subtitles for a presentation.

3. **Q No: 3** 

**Correct Answer:** Speech

**Reasoning:** The Speech service in Azure, with its speech recognition and synthesis capabilities, supports reading recipe instructions aloud for users with reduced vision.

4. \*\*Q



#### You

include question also

#### ChatGPT

#### **ChatGPT**

Certainly! Here's the detailed breakdown including each question:

#### 1. **Q No: 1**

**Question:** You are developing a solution that uses the Text Analytics service. You need to identify the main talking points in a collection of documents. Which type of natural language processing should you use?

**Correct Answer:** key phrase extraction

**Reasoning:** Key phrase extraction is the natural language processing task aimed at identifying the main talking points or important phrases within a collection of documents, effectively summarizing their content.

2. **Q No: 2** 

**Question:** While presenting at a conference, your session is transcribed into subtitles for the audience. This is an example of \_\_\_\_\_

**Correct Answer:** speech recognition

**Reasoning:** Speech recognition involves converting spoken language into written text. In this context, it transcribes the presenter's speech into subtitles, aiding audience comprehension.

3. **Q No: 3** 

**Question:** You need to build an app that will read recipe instructions aloud to support users who have reduced vision. Which service should you use?

**Correct Answer:** Speech

**Reasoning:** The Speech service provides advanced capabilities for speech recognition and synthesis, suitable for reading text aloud, thus aiding users with visual impairments.

4. **Q No: 4** 

**Question:** 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 Al workload should you use?

**Correct Answer:** natural language processing

**Reasoning:** Natural language processing enables the chatbot to understand and analyze customer text input, identifying emotions and sentiments to detect upset customers.

5. **Q No: 5** 

**Question:** You are building a knowledge base by using QnA Maker. Which file format can you use to populate the knowledge base?

**Correct Answer: PDF** 

**Reasoning:** PDF files can be ingested by QnA Maker to populate a knowledge base, leveraging structured documents for creating a responsive Q&A system.

6. **Q No: 6** 

**Question:** In which scenario should you use key phrase extraction?

**Correct Answer:** identifying which documents provide information about the same topics

**Reasoning:** Key phrase extraction helps summarize the content of documents by identifying main topics, making it ideal for finding documents with similar information.

7. **Q No: 7** 

**Question:** You have insurance claim reports that are stored as text. You need to extract key terms from the reports to generate summaries. Which type of AI workload should you use?

**Correct Answer:** natural language processing

**Reasoning:** Natural language processing is adept at analyzing text to extract key terms and generate summaries, making it suitable for handling text-based insurance claim reports.

8. **Q No: 8** 

**Question:** Natural language processing can be used to \_\_\_\_\_?

**Correct Answer:** classify email messages as work-related or personal

**Reasoning:** NLP techniques enable the classification of emails based on their content, distinguishing between work-related and personal messages.

9. **Q No: 9** 

**Question:** Which Al service can you use to interpret the meaning of a user input such as "Call me back later?"

**Correct Answer:** Language Understanding (LUIS)

**Reasoning:** LUIS is designed to understand natural language user inputs, interpreting their intent and meaning, suitable for processing requests like "Call me back later."

10. **Q No: 10** 

**Question:** You need to make the written press releases of your company available in a range of languages. Which service should you use?

**Correct Answer:** Translator

**Reasoning:** The Translator service is specifically designed for translating text between languages, ideal for making content accessible in multiple languages.

Would you like to continue with more questions or need details on a specific one?



You

continue

#### ChatGPT

# ChatGPT

Continuing with the remaining questions:

**Question:** You are developing a natural language processing solution in Azure. The solution will analyze customer reviews and determine how positive or negative each review is. This is an example of which type of natural language processing workload?

**Correct Answer:** sentiment analysis

**Reasoning:** Sentiment analysis is used to analyze text and determine the sentiment expressed, such as assessing the positivity or negativity of customer reviews.

12. **Q No: 12** 

**Question:** You are authoring a Language Understanding (LUIS) application to support a music festival. You want users to be able to ask questions about scheduled shows, such as: "Which act is playing on the main stage?" The question "Which act is playing on the main stage?" is an example of which type of element?

Correct Answer: an utterance

**Reasoning:** In LUIS, an utterance is a user's input or question, such as inquiring about a scheduled show at a music festival, making "Which act is playing on the main stage?" a clear example.

13. **Q No: 13** 

**Question:** You build a QnA Maker bot by using a frequently asked questions (FAQ) page. You need to add professional greetings and other responses to make the bot more user-friendly. What should you do?

Correct Answer: Add chit-chat

**Reasoning:** Adding chit-chat to a QnA Maker bot enhances the interaction by incorporating professional greetings and casual conversation elements, making the bot more engaging and personable.

14. **Q No: 14** 

**Question:** You need to develop a chatbot for a website. The chatbot must answer users' questions based on the information in the following documents: - A product troubleshooting guide in a Microsoft Word document - A frequently asked questions (FAQ) list on a webpage. Which service should you use to process the documents?

Correct Answer: QnA Maker

**Reasoning:** QnA Maker is designed to process documents and create a knowledge base, making it ideal for developing a chatbot that can answer questions based on specified documents.

15. **Q No: 15** 

**Question:** You are building a Language Understanding model for an e-commerce business. You need to ensure that the model detects when utterances are outside the intended scope of the model. What should you do?

Correct Answer: Add utterances to the None intent

**Reasoning:** Adding utterances to the None intent in a Language Understanding model helps in recognizing inputs that don't match any of the defined intents, ensuring the model can handle out-of-scope queries effectively.

16. **Q No: 16** 

Question: Which of these can be used to create conversational AI?

Correct Answer: Q&A Maker

**Reasoning:** Q&A Maker facilitates the creation of conversational AI by enabling the development of bots that can answer questions based on existing content, such as FAQs or documents.

17. **Q No: 17** 

**Question:** Which is not one of the resources that can be created using Azure Machine

Learning Studio?

**Correct Answer:** Compute Balancers

**Reasoning:** Azure Machine Learning Studio allows the creation of resources like Compute Instances and Clusters for machine learning tasks, but it does not support the creation of Compute Balancers.

18. **Q No: 18** 

Question: Which would be used to predict the category an item belongs to?

**Correct Answer:** Classification

**Reasoning:** Classification is a machine learning task aimed at predicting the category or class of an item based on its features, suitable for categorizing items into predefined groups.

19. **Q No: 19** 

**Question:** Which technique is used to group similar entities based on features?

**Correct Answer:** Clustering

**Reasoning:** Clustering groups similar entities together based on their features, organizing data into clusters where items in the same cluster are more similar to each other than to those in other clusters.

20. **Q No: 20** 

**Question:** What are the resource types available as Computer Vision service?

**Correct Answer:** Computer Vision and Computer Services

**Reasoning:** The Computer Vision service includes resources like Computer Vision for image analysis and Computer Services for additional functionalities related to managing vision solutions.

Shall we proceed with the remaining questions?



You

yes

#### **ChatGPT**

#### **ChatGPT**

Continuing with the final set of questions:

21. **Q No: 21** 

**Question:** Which is not a supported image format in the Face Service?

Correct Answer: Al

**Reasoning:** The Face Service supports common image formats like JPEG, PNG, and BMP for facial recognition tasks but does not support the AI (Adobe Illustrator) format.

22. **Q No: 22** 

**Question:** The OCR API returns hierarchical information consisting of all of the following, except:

**Correct Answer:** Areas

**Reasoning:** The OCR (Optical Character Recognition) API returns information in a hierarchy of regions, lines, and words, but does not use "areas" as a category for organizing text data.

23. **Q No: 23** 

**Question:** Which Computer Vision feature can you use to generate automatic captions for digital photographs?

**Correct Answer:** Describe the images

**Reasoning:** The "Describe the images" feature in Computer Vision generates automatic captions for photographs by analyzing their content and summarizing the key elements and objects present.

24. **Q No: 24** 

**Question:** Translation Text uses which model for translation?

**Correct Answer:** Neural Machine Translation

**Reasoning:** Translation Text employs Neural Machine Translation (NMT), a deep learning-based approach that uses neural networks for direct text translation between languages, offering improvements in translation quality over traditional methods.

#### SET 2

1. **Q No: 1** 

**Question:** Which is not a machine learning algorithm category?

**Correct Answer:** Normalization

**Reasoning:** Normalization is a technique for data preprocessing to scale feature values to a standard range, not a machine learning algorithm category.

2. **Q No: 2** 

Question: Which is a multiclass classification algorithm?

**Correct Answer:** Decision Forest

**Reasoning:** Decision Forest is an ensemble learning technique for multiclass classification, building multiple decision trees to output the class mode of individual trees' outputs.

3. **Q No: 3** 

**Question:** Which of these is used to highlight the strongest pattern in a dataset?

**Correct Answer:** Principal Component Analysis (PCA)

**Reasoning:** PCA reduces dataset dimensionality while preserving variability, identifying the principal components that capture the strongest patterns.

4. **Q No: 4** 

**Question:** Which of these is not a supported file format in Azure ML?

**Correct Answer:** XML

**Reasoning:** XML is not supported for data ingestion and processing in Azure Machine Learning, which primarily supports formats like Excel, CSV, and TSV.

5. **Q No: 5** 

**Question:** You need to build an image tagging solution for social media that tags images of your friends automatically. Which Azure Cognitive Services service should you use?

Correct Answer: Face

**Reasoning:** The Azure Cognitive Services Face API is suitable for detecting

faces in images and recognizing individuals, enabling automatic tagging based on facial recognition.

6. **Q No: 6** 

**Question:** What is the goal of feature engineering? **Correct Answer:** Match data against the question

**Reasoning:** Feature engineering aims to create features that enhance the machine learning model's ability to solve the specific problem, matching the data with the problem's requirements.

7. **Q No: 7** 

**Question:** Which of these confirms how often the model is correct:

**Correct Answer:** Precision

**Reasoning:** Precision measures the accuracy of positive predictions made by the model, indicating the model's correctness in positive predictions.

8. **Q No: 8** 

**Question:** Which value identifies how much the model finds all there is to find?

**Correct Answer:** Recall

**Reasoning:** Recall measures the model's ability to identify all relevant instances, showing how much of the total relevant data the model can find.

9. **Q No: 9** 

**Question:** Which one of these regression types uses counts instead of data values?

**Correct Answer:** Poisson

**Reasoning:** Poisson regression is suitable for count data, modeling the count-dependent variable's relationship with independent variables using a Poisson distribution.

10. **Q No: 10** 

Question: Statistical analysis can be broken down into these three processes:

**Correct Answer:** Transformation, Visualization, Modeling

**Reasoning:** The statistical analysis process involves transforming data for analysis, visualizing insights, and modeling to make predictions or inferences.

11. **Q No: 11** 

**Question:** Which of these is not true about hyperparameters?

**Correct Answer:** Used to normalize data

**Reasoning:** Hyperparameters control the learning process's aspects and are not used directly for data normalization, which is a preprocessing step.

12. **Q No: 12** 

Question: Which of these is not a metric for clustering models?

**Correct Answer:** Mean Absolute Error

**Reasoning:** Mean Absolute Error (MAE) is a regression metric, not suitable for evaluating clustering models which use metrics like cluster center distances.

**Question:** Which of these is not an offering of Cognitive Services?

Correct Answer: 3D

**Reasoning:** Cognitive Services provides AI capabilities like speech recognition, vision, and language processing, but not 3D processing or recognition.

# 14. **Q No: 14**

**Question:** Which of these is a feature of Computer Vision?

**Correct Answer:** Tagging Images

**Reasoning:** Computer Vision includes image tagging among its capabilities, identifying and labeling objects in images.

### 15. **Q No: 15**

**Question:** According to which principle of responsible AI should AI solutions empower everyone and engage people?

**Correct Answer:** Inclusiveness

**Reasoning:** The principle of inclusiveness ensures AI solutions are accessible and beneficial to everyone, engaging diverse user groups.

### 16. **Q No: 16**

**Question:** You need to convert receipts into transactions in a spreadsheet. Which Azure Al service should you use?

**Correct Answer:** Azure Al Document Intelligence

**Reasoning:** Azure Al Document Intelligence is designed to process documents and extract key information, suitable for converting receipt data into structured spreadsheet transactions.

# 17. **Q No: 17**

**Question:** You need to create a clustering model and evaluate it using Azure Machine Learning designer. What should you do?

**Correct Answer:** Split the original dataset into a dataset for training and a dataset for testing. Use the testing dataset for evaluation.

**Reasoning:** Splitting data into training and testing sets allows for model training on one subset and evaluation on unseen data, assessing generalization performance.

### 18. **Q No: 18**

**Question:** You have an Azure Machine Learning model that uses clinical data to predict whether a patient has a disease. What should you do next to ensure the model's accuracy?

**Correct Answer:** Validate the model by using the clinical data.

**Reasoning:** Validating the model's performance with clinical data ensures its effectiveness in making accurate predictions.

# 19. **Q No: 19**

**Question:** You need to make the written press releases of your company available in a range of languages. Which service should you use?

**Correct Answer:** Translator

**Reasoning:** The Translator service is designed for translating text, making it suitable for converting press releases into various languages.

### 20. **Q No: 20**

**Question:** Your company is exploring the use of voice recognition technologies in its smart home devices. This is an example of which Microsoft guiding principle for responsible AI?

**Correct Answer:** inclusiveness

**Reasoning:** Inclusiveness ensures AI technologies are accessible to all user groups, addressing barriers that might exclude specific demographics.

# 21. **Q No: 21**

**Question:** You are working for a car dealership and need to predict the success of a new car model. What should you do in the pre-processing data stage?

**Correct Answer:** Feature selection

**Reasoning:** Selecting relevant features like engine improvements, seat comfort, and the presence of a sunroof is crucial for predicting the new model's success.

# 22. **Q No: 22**

**Question:** When creating a Clustering Model, what common ML algorithm are you using?

Correct Answer: K-means

**Reasoning:** K-means is a widely used algorithm for clustering, partitioning data into clusters based on similarity.

#### 23. **Q No: 23**

**Question:** You create a regression model with low RMSE. Where on the Residual histogram should the most frequently occurring residual values cluster?

Correct Answer: 0

**Reasoning:** Residuals close to 0 indicate a low error, expected in a well-performing regression model.

### 24. Q No: 24

Question: What service provides a user interface for a Conversation Al agent?

**Correct Answer:** Azure Bot Service

**Reasoning:** Azure Bot Service offers a user interface for developing, testing, and deploying conversational AI agents or chatbots.

# SET 3

#### 1. **Q No: 1**

**Question:** In which two scenarios can you use speech recognition?

**Correct Answers:** 

- Providing closed captions for recorded or live videos.
- Creating a transcript of a telephone call or meeting.
  Reasoning: Speech recognition is ideal for transcribing spoken content into text, aiding in accessibility through closed captions and record-keeping via meeting transcripts.

**Question:** You plan to develop a bot that will enable users to query a knowledge base using natural language processing. Which two services should you include in the solution?

# **Correct Answers:**

- Azure Bot Service.
- QnA Maker.

**Reasoning:** Azure Bot Service allows bot development and integration with other services, while QnA Maker specifically provides the ability to create a conversational Q&A bot from knowledge bases.

# 3. **Q No: 3**

**Question:** In which two scenarios can you use a speech synthesis solution? **Correct Answers:** 

- An Al character in a computer game that speaks audibly to a player.
- An automated voice that reads back a credit card number entered into a telephone using a numeric keypad.

**Reasoning:** Speech synthesis is used to generate spoken dialogue for interactive applications like games or to provide auditory feedback for telephonic services, enhancing user experience and accessibility.

#### 4. **Q No: 4**

**Question:** What are two tasks that can be performed by using computer vision?

### **Correct Answers:**

- Detect the color scheme in an image.
- Detect brands in an image.

**Reasoning:** Computer vision enables the analysis and understanding of images, including identifying color schemes and recognizing brands within images.

# 5. **Q No: 5**

**Question:** Which two scenarios are examples of a natural language processing workload?

# **Correct Answers:**

- A smart device in the home that responds to questions such as, "What will the weather be like today?"
- A website that uses a knowledge base to interactively respond to users' questions.

**Reasoning:** These scenarios involve understanding and generating

natural language responses, a key application of natural language processing.

### 6. **Q No: 6**

**Question:** You need to provide content for a business chatbot to help answer simple user queries. What are three ways to create question and answer text using QnA Maker?

# **Correct Answers:**

- Import chit-chat content from a predefined data source.
- Manually enter the questions and answers.
- Generate the questions and answers from an existing webpage.
  Reasoning: QnA Maker facilitates the creation of a conversational knowledge base through these methods, leveraging existing content and manual customization.

# 7. **Q No: 7**

**Question:** Select all options that are NOT key elements of Artificial Intelligence.

#### **Correct Answers:**

- Object Detection.
- Automated Machine Learning.

**Reasoning:** Object Detection and Automated Machine Learning are components or tasks within larger Al frameworks, not standalone key elements of Al.

# 8. **Q No: 8**

**Question:** You created a Custom Vision model. What information will you get about each object using an object detection model?

#### **Correct Answers:**

- Class name.
- Bounding box.
- Probability score.

**Reasoning:** Object detection models provide these pieces of information, identifying what the object is, its location in the image, and the confidence level of the detection.

### 9. **Q No: 9**

**Question:** What are the three types of entities you can create during the authoring of the LUIS Application?

# **Correct Answers:**

- List.
- RegEx.
- Machine-Learned.

**Reasoning:** LUIS allows for the creation of these entity types to improve natural language understanding by recognizing specific patterns, lists of items, and learning from examples.

**Question:** What are the main features and capabilities of Azure Machine Learning?

#### **Correct Answers:**

- Automated machine learning.
- Pipelines.

**Reasoning:** Azure Machine Learning's core capabilities include automating the model building process and creating pipelines for efficient data workflows and machine learning tasks.

#### 11. Q No: 11

**Question:** What are the two typical steps of data transformation for model training?

# **Correct Answers:**

- Feature selection.
- Finding and removing data outliers.

**Reasoning:** Effective data preparation for model training involves selecting relevant features and cleaning the data by removing outliers to improve model accuracy.

# 12. **Q No: 12**

**Question:** What are three key fields that Form Recognizer service extracts from common receipts?

### **Correct Answers:**

- Merchant information.
- Taxes paid.
- Time of transaction.

**Reasoning:** Form Recognizer is adept at extracting detailed information from receipts, including merchant details, tax amounts, and transaction times, to automate data entry and analysis.

### 13. **Q No: 13**

**Question:** What services are involved in live speech translation?

#### **Correct Answers:**

- Speech Correction.
- Speech-to-Text.

**Reasoning:** Live speech translation involves converting spoken language into text (speech-to-text) and may involve correcting the transcribed text for accuracy before translation.

#### 14. **Q No: 14**

**Question:** You created a Personal Virtual Assistant. Select all responsible Al principles that your solution must follow.

### **Correct Answers:**

- Privacy and security.
- Inclusiveness.

Reliability and safety.

**Reasoning:** These principles ensure that AI solutions are secure, accessible to all users, and reliable, essential considerations for personal virtual assistants.

# 15. **Q No: 15**

**Question:** You are creating a pipeline in Azure ML Designer. You need to add a module to execute programming code. What languages can you use for code execution in Azure ML Designer?

### **Correct Answers:**

- Python.
- R

**Reasoning:** Azure ML Designer supports code execution in Python and R, allowing for custom data processing and modeling steps within ML pipelines.

# 16. **Q No: 16**

Question: Select all models that are part of Supervised ML.

# **Correct Answers:**

- Classification Model.
- Regression model.

**Reasoning:** Supervised machine learning involves training models on labeled data, and classification and regression are primary tasks where models predict discrete labels or continuous values, respectively.

# 17. **Q No: 17**

**Question:** What are the three main authoring tools on the Azure ML Studio home screen?

#### **Correct Answers:**

- Notebooks.
- Automated ML.
- Designer.

**Reasoning:** Azure ML Studio features these tools for developing machine learning solutions, from code-based environments to automated model building and graphical design interfaces.

#### 18. **Q No: 18**

**Question:** You are using Text Analytics Entity Recognition API to analyze a sentence. How many entities with the category "Location" should you expect in the API response?

**Correct Answer:** 3

**Reasoning:** The given sentence contains three entities classified as "Location," demonstrating the Entity Recognition API's capability to identify and categorize location-related information from text.

#### 19. **Q No: 19**

**Question:** The customer service of your company spends a lot of time

answering the same questions. What service will you use to create a knowledge base from a Microsoft Excel document?

Correct Answer: QnA Maker

**Reasoning:** QnA Maker specializes in converting documents like Excel files into interactive Q&A bots, automating the response process to frequently asked questions.

### 20. **Q No: 20**

**Question:** Please select all examples of Classification models.

#### **Correct Answers:**

- Monitoring time-series data for supervised anomaly detection.
- Bank's assessment of the customer ability to pay back the loan.
- Reading text in images.

**Reasoning:** These examples involve classifying or categorizing data, a hallmark of classification models in supervised learning.

#### 21. Q No: 21

**Question:** You are creating a Compute cluster for the production environment. You set the maximum number of nodes to 5. What should be the value for the minimum number of nodes?

Correct Answer: 0

**Reasoning:** Setting the minimum number of nodes to 0 allows the cluster to scale down completely when not in use, optimizing cost and resource usage.

#### 22. **Q No: 22**

**Question:** What markup language will you use for the control of Speech Synthesis output for your phone auto attendant?

**Correct Answer: SSML** 

**Reasoning:** SSML (Speech Synthesis Markup Language) is used to control the output of speech synthesis systems, providing fine-tuned control over aspects like pronunciation and intonation.

#### 23. **Q No: 23**

**Question:** You need to create a Web Bot using the Azure portal. What are two SDK languages you can select for the bot template?

# **Correct Answers:**

- Node.js.
- C#.

**Reasoning:** Azure supports building bots using Node.js and