1.	Which statement best describes the pretraining process of a Generative AI model?	it learns patterns in unstructured data without requiring labeled training data
2.	What is the purpose of the hidden layer in an artificial neural network?	This layer is optional, and it processes and transforms inputs from the networks weights and activation functions
3.	How does Select AI enhance the interaction with Oracle Autonomous Database?	By enabling natural language prompts instead of SQL code
4.	Which of these summarizes the three guiding principles for AI to be trustworthy?	AI should be lawful, ethical and robust
5.	You need a suitable GPU for massive-scale HPC AI training and inference workloads. Which NVIDIA GPU are you most likely to use	GB200
6.	What is the primary limitation of Recurrent Neural Networks when processing long sequences?	RNN struggle with long-range dependencies due to the vanishing gradient problem.
7.	How does normalization improve the readability of transcriptions in OCI speech?	It converts elements like numbers, dates, and URLs into standard readable formats
8.	What role do tokens play in Large Language Models (LLMs)?	They are individual units into which a piece of text is divided during processing by the model
9.		Recurrent Neural Network (RNN)

	You are writing poems. You need your computer to help you complete your lines by suggesting right words. Which deep learning model is best suited for this task?	
10.	What is the role of the loss function in supervised learning algorithms	It measures the similarity between predictions and actual targets
11.	A streaming service wants to recommend TV shows based on user behavior. Which machine learning approach should be used?	Supervised Learning
12.	What technique is used to predict the price of a house based on its feautres	Regression
13.	How does Select AI generate SQL queries from natural language questions?	It connects to an LLM, infers the query intent, and formulates the SQL command
14.	A company wants to automate its email filtering system to reduce spam. Which AI technique would you recommend?	Machine Learning
15.	Which algorithm is a non-parametric approach for supervised learning	K-nearest Neighbors (KNN)
16.	A self driving car needs to detect pedestrians and make safe lane changes. Which AI concept is being applied here?	Artificial intelligence

17.	What is the primary goal of fine-tuning a large language model (LLM)	To adjust the pretrained model's parameters using a smaller, task-specific dataset, improving its performance on specific tasks
18.	John has successfully trained a machine learning model using OCI. He now needs to deploy it for real-tie predictions where it can process user inputs and generate responses. Which OCI service should he use for deployment	OCI Data Science
19.	Which statement best describes the primary difference between Large Language Models (LLMs) and traditional machine learning (ML) Models	LLMs are pretrained on a large test corpus whereas ML models need to be trained on custom data
20.	What is the role of a target variable in supervised learning?	It contains the desired output or class labels
21.	Which of these is NOT a common application of unsupervised machine learning	Spam Detection
22.	Which technique involves providing explicit examples in a prompt to guide an LLMs reponse?	Few-shot prompting
23.	T-few fine tuning in OCI generative AI service reduces cost and training time as compared to traditional fine-tuning. Which statement correctly explains the reason behind it?	It selectively updates only a fraction of the model''s weights

24.	What is the primary function of the inference process in machine learning?	Predicting outcomes from new data points
25.	How does Oracle database 23ai allow the use of pretrained AI models for vector search?	By loading ONNX models directly into the database
26.	John needs to analyze the accuracy of OCI speech transcriptions for a legal case. he wants to evaluate how sure the model is about each word in the transcription. Which feature should he use?	Confidence scoring
27.	John works in a news aggregation platform and want to automatically categorize articles into topics like "politics" "technology" and "sports". Which feature of OCI language would help him	Text classification
28.	Which OCI vision feature is useful for identifying whether a document is an invoice, receipt or resume based on its appearance and keywords?	Document Classification
29.	You are training a deep learning model to recognize faces. what type of neural network is best suited for this task?	Convolutional neural Network (CNN)
30.		OCI Vault

Which of these components is NOT a part of OCI AI infrastructure

31.	Emma works for a media company that produces video content for online platforms. She needs to add closed captions to their videos for accessibility. Which OCI speech feature should Emma use?	SRT file support
32.	You need a suitable GPU for a small or medium scale AI training and inference workloads. Which NVIDIA GPU are you most likely to choose?	A100
33.	What is the purpose of the model catalog in OCI Data science	It serves as a repository for storing, tracking, and managing machine learning models
34.	What type of data is most likely to be used with deep learning algorithms	Complex data with non-human interpretable features
35.	Lisa runs an automated security system that monitors parking lots using cameras. She wants to locate and label vehicles and license plates in each frame. Which OCI Vision feature should she use	Object Detection
36.	Mark is analyzing customer receipts and wants to automatically find and save details such as merchant name, transaction date, and total amount	Key- Value extraction

for record keeping. Which OCI Vision feature should he use?

37.	David is transcribing a customer support call using OCI speech. The call contains some profane language, and he wants to retain the original words but mark them as inappropriate rather than discarding the,.. Which profanity filtering should David use?	Tagging
38.	You're developing an image classification software that can identify specific objects. Which AI subset would you use?	Deep Learning
39.	You are training a deep model to predict the stock prices. What type of data is this an example of?	Sequential data
40.	You are working on a deep learning project to generate music. Which type of neural network is best suited for this task?	Recurrent Neural Network (RNN)
41.	What is the purpose of the Model Catalog in OCI data science	It serves as a repository for storing, tracking and managing machine learning models.
42.	What task is a generative AI task	Writing a poem based on a given theme. Generative AI refers to AI system that can generate creative content, such as text, images, music.

43.	Which task is an example of Speech related AI tasks	Speech-to-text conversion
44.	Which type of Machine learning is used in autonomous car driving?	Reinforcement learning
45.	Which is NOT an example of vision or image-related AI task?: Classify images, identify objects in images, facial recognition, Repair damaged images	Repair damage images
46.	Which type of machine learning algorithms extracts trends from data?	Unsupervised Machine Learning
47.	Which type of machine learning algorithm learns from outcomes to make decisions?	Reinforcement Learning
48.	What type of machine learning algorithm is used when we want to predict the resale price on a residential property	Regression
49.	What type of function is used in a logistic regression to predict a loan defaulter?	Sigmoidal Function
50.	Which application does NOT require a machine learning solution?	Password Validation
51.	Which algorithm is used for predicting continuous numerical values	Linear regression

52.	Which type of Recurrent Neural Network (RNN) architecture is used for machine translation	Many-to-many
53.	Which essential component of artificial neural network performs weighted summation and applies activation function on input data to produce an output?	Neuron
54.	Which Neural Network has a feedback loop and is designed to handle sequential data?	Recurrent Neural Network
55.	How do hidden layers in neural networks help with character recognition	Enabling the network to learn complex features like edges and shapes
56.	Which sequence model can maintain relevant information over long sequences?	Long short-term memory neural networks
57.	Sequence models are used to solve problems involving sequentially ordered data points or events. Which is NOT the best use case for sequence models?	Image classification and object recognition
58.	What is "in-context learning" in the context of large language models?	Providing a few examples of a target task via the input prompts
59.	Which statement accurately describes generative AI?	Creates new content without making predictions

60.	What aspect of Large Language Models significantly impacts their capabilities, performance, and resource requirements??	Model size and parameters including number of tokens and weights
61.	Fine-tuning is unnecessary for Large Language Models (LLMs) if your application does not involve which specific aspect?	Task specific adaptation
62.	Which OCI Data science feature allows you to use catalogued models as HTTP endpoints on fully manage infrastructure?	Model Deployments
63.	What is the advantage of using OCI Superclusters for AI workloads?	deliver exceptional performance and scalability for complex AI tasks
64.	Which data type is used in Oracle Database 23ai to compare documents?	Vector
65.	Which OCI Data science feature enables you to define and run repeatable machine learning tasks on fully managed infrastructure?	Jobs
66.	Which is NOT and Oracle Cloud Infrastructure AI service?	Translator
67.	Artificial Intelligence	Machines imitate human intelligencce
68.	Machine Learning	Algorithms learn from past data and predict outcome on new data or to identify trends from past data

69.	Deep Learning	Algorithms learn from complex data using neural networks and predict outcomes or generate new data
70.	Reinforcement Learning	Learn by reward. It learns to make decisions by trying different actions and receiving feedback
71.	Classification	A supervised ML technique used to categorize or assign data points into predefined classes based on their features or attributes ex) Spam classifier for emails
72.	Logistic Regression	Helps in predicting something is true or false
73.	Supervised Learning	Classify data or make predictions (disease detection, weather forecasting, spam detection, credit scoring). Learns from labeled data
74.	Unsupervised Learning	understand relationships within datasets (Fraudulent transactions detection, customer segmentation, outlier detection, targeted marketing campaigns). No labelled outputs, algorithm learn the patterns in data and group similar data items
75.	Reinforcement	Make decisions or choices (automated robots, autonomous cars, video games)
76.	Classification	Spam Detector (categorical)
77.	regression	Continuous (House Price Predictor)
78.	Deep Learning	Subset of machine learning that focuses on training artificial neural networks (ANNs) with multiple layers.

		Allows them to automatically learn and extract intricate representations from data
79.	**Recurrent Neural Network (RNN)**	Handles sequential data, maintains a hidden state or memory, allows information to persist using a feedback loop, captures dependencies
80.	**Long Short--Term memory**	Works by using specialized memory cell and gating mechanisms to capture long-term dependencies in sequential data. Selectively remembers or forgets info over time
81.	**Convolution Neural Network (CNN)**	A type of deep learning model designed for processing grid-like data. Reduces images into an easier-to-process form
82.	**Gen AI**	Learns the underlying patterns in a given data set and uses that knowledge to create new data that shares those patterns
83.	**Large Language model**	Probabilistic model of text
84.	**Tokens**	Language model understand tokens rather than words. One token can be a part of a word, an entire word, or punctuation. Number of tokens/word depend on the complexity of the text
85.	**Embeddings**	Numerical representations of a piece of text converted to number sequences
86.	**Encoders**	Model that convert a sequence of words to an embedding (primary uses - embedding tokens, sentences and documents)

87.	Decoder	Take a sequence of words and output next word (primary use: text generation, chat-style models)
88.	encoder-decoder	encoder encodes a sequence of words to a set of vectors and the decoder generates the output sequence from the set of vectors. Ideal for sequence to sequence tasks like machine translation
89.	Hallucination	model generated text that is non-factual and or ungrounded