

Started on	Monday, 10 November 2025, 12:09 PM
State	Finished
Completed on	Monday, 10 November 2025, 12:16 PM
Time taken	6 mins 44 secs
Marks	15.00/20.00
Grade	75.00 out of 100.00

Question 1

Complete

Mark 0.00 out of 1.00

Claude models are designed by Anthropic with a focus on:

- ☐ a. Vision-language learning
- ☒ b. Code generation only
- ☐ c. Safety, helpfulness, and harmlessness
- ☐ d. Reinforcement learning optimization

Question 2

Complete

Mark 1.00 out of 1.00

GitHub Copilot integrates most deeply with which IDE?

- ☐ a. Eclipse
- ☐ b. IntelliJ
- ☐ c. PyCharm
- ☒ d. VS Code

Question 3

Complete

Mark 0.00 out of 1.00

GitHub Copilot is primarily powered by which model?

- ☐ a. Codex
- ☐ b. Claude Instant
- ☒ c. GPT-3.5
- ☐ d. Llama 2

Question 4

Complete

Mark 1.00 out of 1.00

In neural networks, ReLU activation is preferred over Sigmoid because:

- ☐ a. It's linear and always differentiable
- ☐ b. It uses softmax normalization
- ☒ c. It's nonlinear and avoids vanishing gradients
- ☐ d. It produces binary output

Question 5

Complete

Mark 1.00 out of 1.00

The architecture behind GPT and Claude is based on:

- ☐ a. Autoencoders
- ☐ b. RNNs
- ☒ c. Transformers
- ☐ d. CNNs

Question 6

Complete

Mark 1.00 out of 1.00

The gradient descent algorithm minimizes which function?

- ☐ a. Learning rate
- ☒ b. Cost or loss function
- ☐ c. Regularization term
- ☐ d. Activation function

Question 7

Complete

Mark 0.00 out of 1.00

What distinguishes OpenAI GPT models from Anthropic Claude?

- ☐ a. Claude is rule-based
- ☐ b. Claude emphasizes constitutional AI for safer responses
- ☐ c. GPTs use diffusion models
- ☒ d. GPTs use smaller context windows

Question 8

Complete

Mark 1.00 out of 1.00

What does the term embedding refer to in modern AI?

- ☐ a. Compressing datasets
- ☐ b. Creating new hidden layers
- ☐ c. Storing models in memory
- ☒ d. Representing words or data as continuous numeric vectors

Question 9

Complete

Mark 1.00 out of 1.00

What is a system prompt in LLM usage (like OpenAI's API)?

- ☐ a. Batch loader
- ☒ b. The initial instruction defining model behavior
- ☐ c. A shell command for API setup
- ☐ d. Token encoder

Question 10

Complete

Mark 1.00 out of 1.00

What is overfitting in ML?

- ☐ a. When there are too many features in the dataset
- ☒ b. When the model memorizes training data and fails to generalize
- ☐ c. When the model fits unseen data better than training data
- ☐ d. When model training takes too long

Question 11

Complete

Mark 1.00 out of 1.00

What is the role of tokenization in LLMs?

- ☐ a. Generating embeddings
- ☒ b. Splitting text into smaller subunits for processing
- ☐ c. Reducing overfitting
- ☐ d. Encrypting data

Question 12

Complete

Mark 1.00 out of 1.00

What is transfer learning?

- ☐ a. Transferring models between GPUs
- ☒ b. Using a pre-trained model for a new but related task
- ☐ c. Sharing weights between layers
- ☐ d. Re-training from scratch using same data

Question 13

Complete

Mark 1.00 out of 1.00

Which fine-tuning technique aligns LLM responses with human preferences?

- ☐ a. Unsupervised pretraining
- ☐ b. Transfer learning
- ☐ c. Regularization
- ☒ d. RLHF (Reinforcement Learning from Human Feedback)

Question 14

Complete

Mark 1.00 out of 1.00

Which of the following best describes "context window" in an LLM?

- ☐ a. Batch size
- ☐ b. Number of layers in model
- ☐ c. GPU memory used
- ☒ d. Amount of tokens model can process at once

Question 15

Complete

Mark 1.00 out of 1.00

Which of the following best describes the difference between AI and ML?

- ☐ a. Both are identical fields
- ☐ b. ML is broader than AI
- ☒ c. ML is a subset of AI
- ☐ d. AI is a subset of ML

Question 16

Complete

Mark 0.00 out of 1.00

Which of the following is NOT a likely limitation of AI coding assistants like Copilot?

- ☐ a. Dependency on context quality
- ☐ b. Guaranteed correctness
- ☐ c. Code suggestion errors
- ☒ d. Security vulnerability propagation

Question 17

Complete

Mark 1.00 out of 1.00

Which of the following models is primarily unsupervised?

- ☐ a. Random Forest
- ☐ b. Decision Trees
- ☐ c. Logistic Regression
- ☒ d. K-Means Clustering

Question 18

Complete

Mark 1.00 out of 1.00

Which of the following OpenAI models is multimodal (supports image and text)?

- ☐ a. DALL-E 2
- ☒ b. GPT-4o
- ☐ c. Codex
- ☐ d. GPT-3

Question 19

Complete

Mark 1.00 out of 1.00

Which of the following techniques enables LLMs to attend to different words contextually?

- ☐ a. Recurrent feedback
- ☐ b. Convolution
- ☒ c. Self-attention
- ☐ d. Reinforcement learning

Question 20

Complete

Mark 0.00 out of 1.00

Why do LLMs often hallucinate?

- ☐ a. They lack mathematical grounding
- ☐ b. They overfit on large datasets
- ☒ c. They have insufficient training data
- ☐ d. They predict likely text without factual verification