INT426 (Gen AI) CA1 Set 8

1. What is the primary goal of generative AI models?

a. Classify data

b. Generate new data

c. Enhance existing data

d. Delete irrelevant data

2. Which type of models focus on generating new content based on learned patterns?

a. Discriminative models

b. Supervised models

c. Generative models

d. Regression models

3. What do LLM models primarily excel at?

a. Image recognition

b. Natural language understanding

c. Speech synthesis

d. Reinforcement learning

4. What is a key aspect of understanding the foundations behind generative models?

a. Feature extraction

b. Probability distribution

c. Randomization techniques

d. Gradient descent

5. In the context of generative models, what does "crafting and refining prompts" refer to?

a. Adjusting model architecture

b. Tuning hyperparameters

c. Improving input instructions

d. Enhancing model evaluation metrics

6. Which hands-on exercises are essential for gaining practical experience with language models?

a. Building neural networks

b. Implementing sorting algorithms

c. Crafting and refining prompts

d. Solving differential equations

7. What is a characteristic of discriminative models?

a. They generate new data.

b. They focus on classification.

c. They mimic human behavior.

d. They optimize for reinforcement learning.

8. In the context of language models, what is the significance of prompt engineering?

a. Enhancing model training time

b. Improving model interpretability

c. Refining input instructions for desired outputs

d. Minimizing model complexity

9. What is a common use case for generative models?

a. Predicting stock prices

b. Image classification

c. Text summarization

d. Database management

10. Which term is associated with refining prompts to achieve specific language model outputs?

a. Hyperparameter tuning

b. Prompt engineering

c. Feature extraction

d. Reinforcement learning

11. What role do probability distributions play in generative models?

a. Define the likelihood of generating data

b. Determine the accuracy of classification

c. Establish the model architecture

d. Optimize hyperparameters

12. Which type of learning focuses on predicting an output based on input data?

a. Reinforcement learning

b. Unsupervised learning

c. Supervised learning

d. Semi-supervised learning

13. What is a primary advantage of generative models in creating diverse and novel content?

a. High interpretability

b. Robustness to noise

c. Creativity and variability

d. Low computational cost

14. What is the primary purpose of crafting prompts for language models?

a. Achieving memorization

b. Enhancing interpretability

c. Guiding model output

d. Minimizing training time

15. In the context of generative AI, what does "LLM" stand for?

a. Long-lasting models

b. Large language models

c. Learning language mechanisms

d. Linguistic logic models

\*\*Answer Key:\*\*

1. b, 2. c, 3. b, 4. b, 5. c, 6. c, 7. b, 8. c, 9. c, 10. b, 11. a, 12. c, 13. c, 14. c, 15. b