**INT426 (Gen AI)**

**Section: CA-1 Set 5 Roll No:**

**Max Marks: 30 Duration: 40 mins**

Choose the correct answer and write in the cell given below.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Q1** |  | **Q6** |  | **Q11** |  | **Q16** |  | **Q21** |  | **Q26** |  |
| **Q2** |  | **Q7** |  | **Q12** |  | **Q17** |  | **Q22** |  | **Q27** |  |
| **Q3** |  | **Q8** |  | **Q13** |  | **Q18** |  | **Q23** |  | **Q28** |  |
| **Q4** |  | **Q9** |  | **Q14** |  | **Q19** |  | **Q24** |  | **Q29** |  |
| **Q5** |  | **Q10** |  | **Q15** |  | **Q20** |  | **Q25** |  | **Q30** |  |

**1. What is the primary focus of Generative AI?**

- A. Image classification

- B. Text summarization

- C. Data clustering

- D. Code optimization

**2. Which term is commonly associated with the process of refining prompts in Generative AI?**

- A. Encoding

- B. Prompting

- C. Iterating

- D. Compiling

3. **What is the main goal of AI?**

- A. Implement generative models

- B. Understand prompt engineering

- C. Develop image classifiers

- D. Code optimization techniques

4**. How does Generative AI differ from Discriminative AI models?**

- A. Discriminative AI focuses on generating new data.

- B. Generative AI aims to distinguish between different classes.

- C. Discriminative AI models create content based on prompts.

- D. Generative AI is primarily used for classification tasks.

**5. In prompt engineering, what role does iteration play?**

- A. Repeating the same prompt for better results.

- B. Gradually refining prompts to achieve desired outcomes.

- C. Ignoring the prompt after the initial attempt.

- D. Using pre-defined prompts without modifications.

**6. Which generative model is commonly used for text generation tasks?**

- A. Support Vector Machines (SVM)

- B. Recurrent Neural Networks (RNN)

- C. K-Means Clustering

- D. Principal Component Analysis (PCA)

**7. What practical skill does prompt engineering aim to develop?**

- A. Image recognition

- B. Refining prompts for language models

- C. Data clustering techniques

- D. Code optimization in generative models

**8. In the context of Generative AI, what does the term "prompt" refer to?**

- A. A set of instructions given to the model

- B. A type of generative algorithm

- C. The output generated by the model.

- D. The training data for the model

**9. Explain one foundational principle behind generative models.**

- A. They optimize for discriminative accuracy.

- B. They learn to generate new data similar to the training set.

- C. They focus on classifying input data.

- D. They prioritize feature extraction.

**10. How does prompt engineering contribute to the effectiveness of generative models?**

- A. By minimizing model complexity

- B. By providing clear instructions for desired outputs

- C. By eliminating the need for training data

- D. By speeding up the model training process

**11. What are some potential challenges in prompt engineering for language models?**

- A. Lack of computational power

- B. Over-reliance on generative algorithms

- C. Difficulty in generating diverse prompts

- D. Ignoring the importance of discriminative models

**12. Critically assess the impact of prompt quality on the performance of generative models.**

- A. High-quality prompts have minimal impact.

- B. Prompt quality is irrelevant in generative models.

- C. The quality of prompts significantly influences model outputs.

- D. Generative models are not affected by the quality of prompts.

**13. Evaluate the ethical considerations related to using generative models in real-world applications.**

- A. Ethical considerations are irrelevant in AI.

- B. Generative models have no ethical implications.

- C. Ethical considerations are crucial, especially regarding biases.

- D. Ethical concerns only apply to discriminative models.

Certainly! Here are two additional MCQs:

**14. Which technique is commonly employed for fine-tuning prompts in generative language models?**

- A. Gradient Descent

- B. Random Sampling

- C. Reinforcement Learning

- D. Naive Bayes Classification

**15. What is the primary objective of prompt engineering in language models?**

- A. To confuse the model and test its robustness

- B. To generate random outputs for creativity

- C. To guide the model toward desired outputs

- D. To minimize the impact of training data on the model