**INT426 (Gen AI) CA-3 Set 4**

1. In the context of Large Language Models (LLMs), what does "fine-tuning" specifically refer to?

a) Adjusting hyperparameters to improve model performance

b) Refining the model's architecture for better efficiency

c) Tailoring pre-trained models to suit specific tasks or domains

d) Increasing the number of layers in the neural network

\*\*Answer: c) Tailoring pre-trained models to suit specific tasks or domains\*\*

2. What is a significant challenge when fine-tuning Large Language Models (LLMs) for niche applications?

a) Limited availability of pre-trained models

b) Difficulty in acquiring labeled training data

c) High computational resource requirements

d) Incompatibility with popular deep learning frameworks

\*\*Answer: b) Difficulty in acquiring labeled training data\*\*

3. How do Large Language Models (LLMs) contribute to creative problem-solving compared to traditional algorithms?

a) By strictly adhering to predefined patterns

b) By providing limited output variations

c) By offering diverse and imaginative solutions

d) By eliminating the need for human input

\*\*Answer: c) By offering diverse and imaginative solutions\*\*

4. What is one primary limitation of Large Language Models (LLMs) in generating coherent text?

a) Limited vocabulary capacity

b) Inability to process structured data

c) Difficulty understanding context

d) High computational resource requirements

\*\*Answer: c) Difficulty understanding context\*\*

5. In AI application development, how does GPT-4 primarily contribute to enhancing user experiences?

a) By generating realistic images

b) By understanding and responding to natural language queries

c) By accurately predicting user preferences

d) By automating data processing tasks

\*\*Answer: b) By understanding and responding to natural language queries\*\*

6. Which AI model specializes in generating images based on textual descriptions and concepts?

a) ChatGPT

b) GPT-3.5

c) Dall-E

d) GPT-4

\*\*Answer: c) Dall-E\*\*

7. What advantage does learning to code with AI offer in developing interactive applications compared to traditional coding methods?

a) It reduces the need for understanding programming fundamentals

b) It provides more flexibility in application design

c) It speeds up the development process through automation

d) It ensures higher security standards in application deployment

\*\*Answer: c) It speeds up the development process through automation\*\*

8. How does ChatGPT contribute to beginners' learning experiences with Microsoft Excel?

a) By automating complex data analysis tasks

b) By providing interactive coding exercises

c) By offering real-time collaboration features

d) By offering contextual help and explanations

\*\*Answer: d) By offering contextual help and explanations\*\*

9. What is one specific way ChatGPT can assist beginners in Excel?

a) Generating advanced pivot table summaries

b) Debugging complex VBA macros

c) Providing personalized data visualization recommendations

d) Offering step-by-step formula explanations

\*\*Answer: d) Offering step-by-step formula explanations\*\*

10. How can understanding ChatGPT aid beginners in navigating Excel more efficiently?

a) By automating the creation of complex charts and graphs

b) By suggesting keyboard shortcuts for common tasks

c) By optimizing Excel formulas for better performance

d) By offering real-time collaboration features

\*\*Answer: b) By suggesting keyboard shortcuts for common tasks\*\*

11. Which AI model is typically used for automating text-based tasks in Excel, such as data entry and formatting?

a) Dall-E

b) GPT-3.5

c) GPT-4

d) ChatGPT

\*\*Answer: d) ChatGPT\*\*

12. What is the primary function of Dall-E in AI application development?

a) Generating text

b) Generating images from textual descriptions

c) Analyzing sentiment in text

d) Recognizing objects in images

\*\*Answer: b) Generating images from textual descriptions\*\*

13. What advantage does learning to code with AI offer in building applications like chatbots and recommenders?

a) It reduces the need for human input

b) It speeds up the development process

c) It guarantees error-free code

d) It eliminates the need for AI models

\*\*Answer: b) It speeds up the development process\*\*

14. How does fine-tuning contribute to enhancing the performance of Large Language Models (LLMs)?

a) By reducing the model size

b) By increasing the number of training epochs

c) By customizing the model for specific tasks

d) By using smaller datasets for training

\*\*Answer: c) By customizing the model for specific tasks\*\*

15. What is a significant advantage of using Large Language Models (LLMs) in generative AI?

a) They require minimal computational resources

b) They can generate text in one language only

c) They can generate diverse and coherent text

d) They are limited to specific domains

\*\*Answer: c) They can generate diverse and coherent text\*\*