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Bengaluru

**Mid Term Examinations - October 2026**

**Date:** 06/10/2026 **Time:** 02:00 PM - 03:30 PM

**Course Code:** CAI3407 **Course Name:** Agentic AI

**Semester:** Seventh Semester **Max. Marks:** 50 **Weightage:** 50%

| CO - Levels | CO1 | CO2 |
|---|---|---|
| Marks | 92 | 88 |

**PART A: Answer Following Questions. 10 M**

| Q.N. | Questions | M | CO | BT |
|---|---|---|---|---|
| 1 | Label any two API functions commonly used to integrate LLMs into applications. | 2 | CO1 | BT1 |
| 2 | List the command to install the OpenAI Python library. | 2 | CO1 | BT1 |
| 3 | Explain tool-based autonomy in LLMs? | 2 | CO1 | BT2 |
| 4 | Explain the purpose of message passing in multi-agent architectures. | 2 | CO2 | BT2 |
| 5 | Describe the role of “memory” in an agentic system? | 2 | CO2 | BT1 |

**PART B : Answer Any 1 Following Questions. 10 M**

| Q.N. | Questions | M | CO | BT |
|---|---|---|---|---|
| 6 | Summarize the advantages and challenges of implementing multi-step reasoning in large language models (LLMs). Provide examples. | 10 | CO1 | BT2 |
| 7 | Explain the process of defining, calling, and executing external functions within LLMs. How does this enhance agentic intelligence? | 10 | CO1 | BT2 |

**PART C: Answer Any 1 Following Questions. 10 M**

| Q.N. | Questions | M | CO | BT |
|---|---|---|---|---|
| 8 | Demonstrate an agentic workflow that uses both sequential and parallel task execution for an AI-powered project assistant. Explain how it improves efficiency? | 10 | CO1 | BT3 |
| 9 | Compare and contrast environment setup for Agentic AI systems on Windows and Mac operating systems with respect to tools, dependencies, and API management. | 10 | CO1 | BT3 |

**PART D: Answer Any 1 Following Questions. 10 M**

| Q.N. | Questions | M | CO | BT |
|---|---|---|---|---|
| 10 | Illustrate the major components of CrewAI such as agents, tasks, tools, processes, and memory. | 10 | CO2 | BT3 |
| 11 | Apply the principles of CrewAI to design a workflow for a finance-based multi-agent system. | 10 | CO2 | BT3 |

**PART E: Answer Any 1 Following Questions. 10 M**

| Q.N. | Questions | M | CO | BT |
|---|---|---|---|---|
| 12 | Examine the interaction between agents, tasks, and tools in CrewAI during a complex process execution. | 10 | CO2 | BT3 |
| 13 | Sketch a conceptual model of a multi-agent CrewAI-based system for managing energy grids, detailing the roles of agents, message passing, and collaboration mechanisms. | 10 | CO2 | BT3 |