

Department of Computer Science

**Course: Artificial Intelligence**

**Quiz-01 (Total Marks: 03)**

Student Name: Student ID:

**Q. Write the AI Agent Task Environment for the below examples. Give proper explanation.**

Sharing/Copy-Paste will get Zero marks.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1. Playing Soccer | | | | | |
| Deterministic vs Stochastic | **Static vs Dynamic** | **Episodic vs Sequential** | **Discrete vs Continuous** | **Single agent vs Multi-agent** | **Fully observable vs Partially observable** |
|  |  |  |  |  |  |

**Explanation/Reason:** (If Playing Soccer Task Environment is Deterministic, or Stochastic then Why? Write reason/explanation for every task environment that you choose.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 2. Deciding what items to take at the dinner | | | | | |
| Deterministic vs Stochastic | **Static vs Dynamic** | **Episodic vs Sequential** | **Discrete vs Continuous** | **Single agent vs Multi-agent** | **Fully observable vs Partially observable** |
|  |  |  |  |  |  |

**Explanation/Reason:** (Write reason/explanation for every task environment that you choose.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 3. Brushing your teeth | | | | | |
| Deterministic vs Stochastic | **Static vs Dynamic** | **Episodic vs Sequential** | **Discrete vs Continuous** | **Single agent vs Multi-agent** | **Fully observable vs Partially observable** |
|  |  |  |  |  |  |

**Explanation/Reason:** (Write reason/explanation for every task environment that you choose.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 4. Playing a tennis match | | | | | |
| Deterministic vs Stochastic | **Static vs Dynamic** | **Episodic vs Sequential** | **Discrete vs Continuous** | **Single agent vs Multi-agent** | **Fully observable vs Partially observable** |
|  |  |  |  |  |  |

**Explanation/Reason:** (Write reason/explanation for every task environment that you choose.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5. Playing tennis against the wall | | | | | |
| Deterministic vs Stochastic | **Static vs Dynamic** | **Episodic vs Sequential** | **Discrete vs Continuous** | **Single agent vs Multi-agent** | **Fully observable vs Partially observable** |
|  |  |  |  |  |  |

**Explanation/Reason:** (Write reason/explanation for every task environment that you choose.)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 6. Performing a high jump | | | | | |
| Deterministic vs Stochastic | **Static vs Dynamic** | **Episodic vs Sequential** | **Discrete vs Continuous** | **Single agent vs Multi-agent** | **Fully observable vs Partially observable** |
|  |  |  |  |  |  |

**Explanation/Reason:** (Write reason/explanation for every task environment that you choose.)