**National University of Computer and Emerging Sciences, CFD Campus**

**Course: Artificial Intelligence Quiz No: 01**

**Total Marks: 25 Total Time: 30 minutes**

**Roll No: \_\_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_\_\_\_\_**

**Note:** Provide your answers within the space provided on the sheet. No extra sheet allowed.

**Q1: Fill in the following environment parameters for the agents to perform accurately. (12 marks)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Environments** | **Observable** | **Deterministic** | **Episodic** | **Static** | **Discrete** | **Agents** |
| Image analysis |  |  |  |  |  |  |
| Chess with a clock |  |  |  |  |  |  |
| Taxi driving |  |  |  |  |  |  |
| Medical diagnosis |  |  |  |  |  |  |
| Robot part picking |  |  |  |  |  |  |
| Interactive English Tutor |  |  |  |  |  |  |

**Q2: Give one example for each type of the agent. (05 marks)**

1. Simple Reflex Agent
2. Model-based Agent
3. Goal-based Agent
4. Utility-based Agent
5. Learning Agent

**Q3: For each of the following problems, specify the problem formulation: (08 marks)**

1. Vacuum Problem
2. 8-Puzzle Problem
3. Robotic Assembly
4. Airline Travel Problem

Best of Luck!