INDIVIDUAL EXERCISE (I1)

Duration: 15 mins
Date: 16/05/2018
Score: ........../3

Student ID:........................Student name:.............................................

**Question 1. (0.5pt)** What are the goals of Artificial Intelligence (AI)?

- To make computers more useful by letting them take over dangerous or tedious tasks from human.
- Understand principles of human intelligence.

**Question 2. (0.5pt)** Give an example of RATIONAL behavior.

A self-driving car slows down and raises an alert to driver when its camera detects a passenger crossing the street.

**Question 3. (1.0pt)** Give a PEAS description of the task Performing a high jump

- Performance measure: Height jumped
- Environment: Measuring stick
- Actuators: Spring
- Sensors: Balance
- Characteristics: Fully observable, single agent, deterministic, episodic, static, continuous, known

**Question 4. (1.0pt)** Distinguish between rational agent and omniscient agent.

- **Omniscient agent:** Knows the actual outcome of its actions in advance. No other possible outcomes. However, impossible in real world.
- **Rational agent:** Maximize performance measure given the percepts sequence to date and prior knowledge.