

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