

CSE140: Introduction to Intelligent Systems

Quiz 1

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All questions are mandatory and you have 60 minutes to submit your solution sheet via email.

1. Which among Artificial general intelligence (AGI) and Artificial super intelligence (ASI) is on par with human capabilities, and why? 2 Points

AGI

2. State the Focus of AI and which among of these is generally followed by a machine or a human.
Hint: Recall Lecture 3 2 + 1 Points

Think Like Human, Think Rationally, Act Like Human, Act Rationally

3. (a) State the Turing Test.
(b) Human behaviour and intelligent behaviour are not exactly the same thing, thus the Turing test fails to accurately measure intelligence. State the two behavioural paradigms which are not covered by the Turing test. 1 + 2 Points

Human behaviour that is not intelligent. Intelligent behaviour not displayed by humans

4. Using just three terms explain the difference between AI and Automation? 1 Points

Sense - Plan/Learn - Act

5. State the three characteristics of AI 3 Points

Knowledge, Reasoning, Learning. Implicit/Explicit sub-categories.

6. State the broad categories of knowledge which can be considered for building an AI system? Which among these is the most important one? 3 Points

Explicit (documented), Implicit (applied), and Tacit (understood)

7. What are components of a declarative program? 1 Points

Facts, Rules and Queries

8. Evaluate if the expressions unify

- (a) $p(b, X, f(g(Z)))$ and $p(Z, f(Y), f(Y))$
(b) $p(f(a), g(Y))$ and $p(X, X)$
(c) $\text{knows}(\text{Richard}, x)$ and $\text{knows}(\text{Richard}, \text{John})$

(d) $P(x, f(y, z))$, $P(x, a)$ and $P(x, g(h(k(x))))$

4 Points

Yes, NO, Yes, Yes

9. Which ones are declarative or non-declarative statements

- (a) Never hate a person who teaches you.
- (b) Read more to write well.
- (c) I would like to know if you are being honest.
- (d) The dogs which run away are not properly trained.
- (e) It's a girl!

5 Points

ND, D, ND, D, ND
