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**Course Title: Artificial Intelligence**

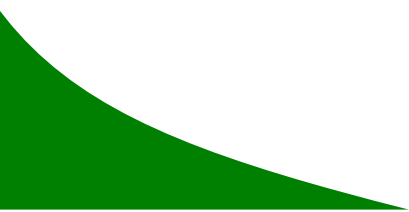
**Assignment topic: Solution of Exercise 1**

**Assignment No: 02**

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## Chapter 1 Exercise Solutions

Q 1: Define in your own words : i intelligence , ii artificial intelligence , iii agent , iv rationally ,v logical reasoning .

Answers:

**Intelligence:** Intelligence means IQ or alertness in details the ability to comprehend to understand and profit for experience.

**Artificial Intelligence:** Contrived by art rather than nature. Using human mind to preformed specific task and introduce new innovations for example robots that's performed a specific task and easy to manage system.

**Rationality:** The prosperity of system which perform does right thing or having a relation and being related.

**Logical reasoning:** Logical reasoning is a process of deriving new sentence from old such that new sentence is necessarily true. Not refer a specific syntax.

Q2: Loebner prize awarded what does it technique it use? How does it advance state in AI?

Answers:

First we have made sufficient investment in artificial actors to create very best change.

Using machine learning and artificial intelligence to manage whole systems.

Q3: Are reflex action rational? Are they intelligent?

Answers:

Yes they are rational because it is slower deliberative that can be tend to result in more damage the hand.it means it is intelligent and does not require intelligence to make reflex action.

Q4: Some classes are intractably difficult for computer? Some classes are provably undecidable. Does it means AI is impossible?

No IQ test correlate well is certain other measures success in university. What they measure and what other aspects there are to be intelligence.

Q5: The neural structure has been wide studies most of them easily manipulated. How does computational power in terms of memory update per second compare with high end computer?

In order or terms of magnitude figure the computational of computers is hundreds (100) times larger.

Q6: How could introspection? Report on one's inner thought be inaccurate? Could I be wrong about what I am thinking?

Answers:

You are unaware of all steps that go make your heart beat also you are unaware of most what happened in your thought process majority remain opaque your conscious.

Q7: What extent the following computer system instance of AI?

- i. Supermarket barcode scanner
- ii. Voice activated telephone menu
- iii. Spelling and grammar correction feature in MS word
- iv. Internet router algorithm that response dynamically state the network

Answers:

- i. Barcode scanners is sense in computer vision that is not artificial intelligence system.
- ii. Voice activator is a problem natural language understanding for this web pages retrieve design in database to access the data on the other hand for this not Ai system design.
- iii. For spelling and grammar correction use billion of indexing and match the character at the starting for this we can design the database and fixed some restriction or constrain to control these errors.
- iv. This task is sophisticated and the information is available in partial and not grantee this is optimal.

The task is very far from normally carried out in human cognition.

Q8: Many of computational models of cognition activities. What sense does make say the system vision? Whereas actual no idea how do it?

Answers:

This operation on visual image and mechanism only accessible for particular purpose this task is cognition image processing. The actual person means that can do something but he cannot compute. The scope of this solution is manual.

Q10: Is artificial intelligence is a science? Or it is engineering? Or neither both?

Answers:

A science is a field that we study observation and give knowledge engineering field can thought of talking fixed base empirical knowledge AI is clearly empirical science called cognition science. Because it involves psychological experimentations and designs.

Q11: Are you sure computer cannot be intelligent? They can only do what their programmers tell them this statement is true?

Answers:

This is depend one intelligent and tell of your definition some time can say computer is intelligence and some time we can say computer is depend upon programmer because computer is a dump machine and it is always depend upon programmers. Computer performed a task that we give or programmer give the command and execute them.

Q12: Are your sure animal cannot be intelligent they can only do that gene tell them? This statement is true?

Answers:

This statement is absolutely False because this is depend upon animal behavior according to some quote human is also social animal but human are intelligent as compare to some others.

Q13: Are you sure animal human and computer is not intelligent? They can do what the constituent them? This statement is true?

Answers:

This statement is false it is depend upon situation computer can be intelligent if that give the command is intelligent way and human is also intelligence between he can sense every movement and situation and decide the final decision in intelligent way. Sometime animal can be intelligent way be or may not.

Q14: Examine artificial intelligence to do currently following tasks solved by computer

- i. Playing table tennis game
- ii. Driving the center of Cairo.
- iii. Buying weakly groceries in market.
- iv. Playing game of bridge of a level.
- v. Proof the mathematical theorems.
- vi. Writing the funny text intentionally.
- vii. Legal advice in specific area.
- viii. Translating spoken English to Swedish.
- ix. Perform complex surgery operation etc.

Answers:

- i. This proficiency was achieved by Anderson robot.
- ii. No it is currently not possible but in future these features can be adopted.
- iii. No in this time not robot can currently move in crowd environment.
- iv. Yes using pygame and machine learning it is easy to be possible.
- v. Yes it is possible for example Robbins algebra.
- vi. No because funny text or poetry are feelings to generate automatically but computer or robots cannot feel feelings.
- vii. Yes in some cases it is applicable
- viii. Yes it is already implemented and many translators are available in play store.
- ix. Yes increase using rate of robots in complex surgeries and operations.

Q15: Subfields of artificial intelligence defining the standard tasks for example DAPRA state the arts of artificial intelligence? What do new degrees for new ideas?

Answers:

Impacts of progress matter of opinions

DARPA:

In 2004 grade challenge for robots car 240 km race the Mojave Desert. The steering is control 98% automatically works.

International planning Competition:

1998 five planners completed. Name are Black box, HSP, IPP, SGP and STAN. Most plans are found in 30 to 40 steps. Field is most mature and stronger

Thank You