

1. In LISP, the function returns the list that results after the first element is removed (the rest of the list), is _____

- a) car
- b) last
- c) cons
- d) cdr

View Answer

Answer: d

Explanation: None.

2. Which of the following contains the output segments of Artificial Intelligence programming?

- a) Printed language and synthesized speech
- b) Manipulation of physical object
- c) Locomotion
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

3. LISP was created by?

- a) John McCarthy
- b) Marvin Minsky
- c) Alan Turing
- d) Allen Newell and Herbert Simon

View Answer

Answer: a

Explanation: None.

4. Expert Ease was developed under the direction of _____

- a) John McCarthy
- b) Donald Michie
- c) Lofti Zadeh
- d) Alan Turing

View Answer

Answer: b

Explanation: None.

5. An Artificial Intelligence system developed by Terry A. Winograd to permit an interactive dialogue about a domain he called blocks-world.

- a) SHRDLU
- b) SIMD
- c) BACON
- d) STUDENT

View Answer

Answer: a

Explanation: None.

6. MLMenu, a natural language interface for the TI Explorer, is similar to _____

- a) Ethernet
- b) NaturalLink
- c) PROLOG
- d) The Personal Consultant

View Answer

Answer: b

Explanation: None.

7. Strong Artificial Intelligence is _____

- a) the embodiment of human intellectual capabilities within a computer
- b) a set of computer programs that produce output that would be considered to reflect intelligence if it were generated by humans
- c) the study of mental faculties through the use of mental models implemented on a computer
- d) all of the mentioned

View Answer

Answer: a

Explanation: None.

8. The traditional way to exit and LISP system is to enter _____

- a) quit
- b) exit
- c) bye
- d) ok

View Answer

Answer: b

Explanation: None.

9. In which of the following situations might a blind search be acceptable?

- a) real-life situation
- b) complex game
- c) small search space
- d) all of the mentioned

View Answer

Answer: c

Explanation: None.

10. What is Artificial intelligence?

- a) Putting your intelligence into Computer
- b) Programming with your own intelligence
- c) Making a Machine intelligent
- d) Playing a Game

View Answer

Answer: c

Explanation: Because AI is to make things work automatically through machine without using human effort. Machine will give the result with just giving input from human. That means the system or machine will act as per the requirement.

11. Which search method takes less memory?

- a) Depth-First Search
- b) Breadth-First search
- c) Optimal search
- d) Linear Search

View Answer

Answer: a

Explanation: Depth-First Search takes less memory since only the nodes on the current path are stored, but in Breadth First Search, all of the tree that has generated must be stored.

12. A heuristic is a way of trying _____

- a) To discover something or an idea embedded in a program

- b) To search and measure how far a node in a search tree seems to be from a goal
- c) To compare two nodes in a search tree to see if one is better than the other is
- d) All of the mentioned

View Answer

Answer: d

Explanation: In a heuristic approach, we discover certain idea and use heuristic functions to search for a goal and predicates to compare nodes.

13. How do you represent "All dogs have tails"?

- a) $\forall x: \text{dog}(x) \rightarrow \text{tail}(x)$
- b) $\forall x: \text{dog}(x) \rightarrow \text{tail}(y)$
- c) $\forall x: \text{dog}(y) \rightarrow \text{tail}(x)$
- d) $\forall x: \text{dog}(x) \rightarrow \text{has_tail}(x)$

View Answer

Answer: a

Explanation: We represent the statement in mathematical logic taking 'x' as Dog and which has tail. We cannot represent two variable x, y for the same object Dog that has tail. The symbol " \forall " represent all.

14. Which is not a property of representation of knowledge?

- a) Representational Verification
- b) Representational Adequacy
- c) Inferential Adequacy
- d) Inferential Efficiency

View Answer

Answer: a

Explanation: There is nothing to go for Representational verification; the verification comes under Representational adequacy.

1. Which of the following is true related to 'Satisfiable' property?

- a) A statement is satisfiable if there is some interpretation for which it is false
- b) A statement is satisfiable if there is some interpretation for which it is true
- c) A statement is satisfiable if there is no interpretation for which it is true
- d) A statement is satisfiable if there is no interpretation for which it is false

View Answer

Answer: b

Explanation: 'Satisfiable' property is a statement is satisfiable if there is some interpretation for which it is true.

2. Two literals are complementary if _____

- a) They are equal
- b) They are identical and of equal sign
- c) They are identical but of opposite sign
- d) They are unequal but of equal sign

View Answer

Answer: c

Explanation: Two literals are complementary if They are identical but of opposite sign.

3. Consider a good system for the representation of knowledge in a particular domain. What property should it possess?

- a) Representational Adequacy
- b) Inferential Adequacy
- c) Inferential Efficiency

d) All of the mentioned

View Answer

Answer: d

Explanation: Consider a good system for the representation of knowledge in a particular domain. The properties should be Representational Adequacy, Inferential Adequacy, Inferential Efficiency and Acquisitional Efficiency.

4. What is Transposition rule?

a) From $P \rightarrow Q$, infer $\sim Q \rightarrow P$

b) From $P \rightarrow Q$, infer $Q \rightarrow \sim P$

c) From $P \rightarrow Q$, infer $Q \rightarrow P$

d) From $P \rightarrow Q$, infer $\sim Q \rightarrow \sim P$

View Answer

Answer: d

Explanation: Transposition rule- From $P \rightarrow Q$, infer $\sim Q \rightarrow \sim P$.

5. Third component of a planning system is to _____

a) Detect when a solution has been found

b) Detect when solution will be found

c) Detect whether solution exists or not

d) Detect whether multiple solutions exist

View Answer

Answer: a

Explanation: Third component of a planning system is to detect when a solution has been found.

6. Which of the following is true in Statistical reasoning?

a) The representation is extended to allow some kind of numeric measure of certainty to be associated with each statement

b) The representation is extended to allow 'TRUE or FALSE' to be associated with each statement

c) The representation is extended to allow some kind of numeric measure of certainty to be associated common to all statements

d) The representation is extended to allow 'TRUE or FALSE' to be associated common to all statements

View Answer

Answer: a

Explanation: Statistical reasoning is the representation is extended to allow some kind of numeric measure of certainty to be associated with each statement.

7. In default logic, which of the following inference rules of the form is allowed?

a) $(A : B) / C$

b) $A / (B : C)$

c) A / B

d) $A / B : C$

View Answer

Answer: a

Explanation: In default logic, we allow inference rules of the form: $(A : B) / C$.

8. In Bayes theorem, what is meant by $P(H_i|E)$?

a) The probability that hypotheses H_i is true given evidence E

b) The probability that hypotheses H_i is false given evidence E

c) The probability that hypotheses H_i is true given false evidence E

d) The probability that hypotheses H_i is false given false evidence E

View Answer

Answer: a

Explanation: In Bayes theorem, $P(H_i|E)$ is the probability that hypotheses H_i is true given evidence E .

9. What is another type of Default reasoning?

- a) Monotonic reasoning
- b) Analogical reasoning
- c) Bitonic reasoning
- d) Non-monotonic reasoning

View Answer

Answer: d

Explanation: Default reasoning is another type of non-monotonic reasoning.

10. Generality is the measure of _____

- a) Ease with which the method can be adapted to different domains of application
- b) The average time required to construct the target knowledge structures from some specified initial structures
- c) A learning system to function with unreliable feedback and with a variety of training examples
- d) The overall power of the system

View Answer

Answer: a

Explanation: Generality is the measure of the ease with which the method can be adapted to different domains of application.

1. The performance of an agent can be improved by _____

- a) Learning
- b) Observing
- c) Perceiving
- d) None of the mentioned

View Answer

Answer: a

Explanation: An agent can improve by saving the previous states on which it was earlier, hence in future it can learn to respond in the same situation better.

2. External actions of the agent is selected by _____

- a) Perceive
- b) Performance
- c) Learning
- d) Actuator

View Answer

Answer: b

Explanation: It depends on how you want to improve and what the performance measures are.

3. The action of the Simple reflex agent completely depends upon _____

- a) Perception history
- b) Current perception
- c) Learning theory
- d) Utility functions

View Answer

Answer: b

Explanation: These agents select actions based on the current perception, ignoring the rest of the perception history.

4. Which of the following could be the approaches to Artificial Intelligence?

- a) Strong Artificial Intelligence

- b) Weak Artificial Intelligence
- c) Applied Artificial Intelligence
- d) All of the mentioned

View Answer

Answer: d

Explanation: Strong Artificial Intelligence aims to build machines that can truly reason and solve problems.

Weak Artificial Intelligence deals with the creation of some form of computer-based artificial intelligence that cannot truly reason and solve problems, but can act as if it were intelligent.

Applied Artificial Intelligence aims to produce commercially viable “smart” systems.

In the Cognitive Artificial Intelligence approach, a computer is used to test theories about how the human mind works.

5. An Artificial Neural Network Is based on?

- a) Strong Artificial Intelligence approach
- b) Weak Artificial Intelligence approach
- c) Cognitive Artificial Intelligence approach
- d) Applied Artificial Intelligence approach

View Answer

Answer: c

Explanation: In the Cognitive Artificial Intelligence approach, a computer is used to test theories about how the human mind works, for example, theories about how we recognize faces and other objects, or about how we solve abstract problems.

6. The Face Recognition system is based on?

- a) Strong Artificial Intelligence approach
- b) Weak Artificial Intelligence approach
- c) Cognitive Artificial Intelligence approach
- d) Applied Artificial Intelligence approach

View Answer

Answer: d

Explanation: Applied Artificial Intelligence approach aims to produce commercially viable “smart” systems such as, for example, a security system that is able to recognize the faces of people who permitted to enter a particular building. Applied Artificial Intelligence has already enjoyed considerable success.

7. A completely automated chess engine (Learn from previous games) is based on?

- a) Strong Artificial Intelligence approach
- b) Weak Artificial Intelligence approach
- c) Cognitive Artificial Intelligence approach
- d) Applied Artificial Intelligence approach

View Answer

Answer: a

Explanation: Strong Artificial Intelligence aims to build machines that can truly reason and solve problems. These machines must be self-aware and their overall intellectual ability needs to be indistinguishable from that of a human being. Strong Artificial Intelligence maintains that suitably programmed machines are capable of cognitive mental states.

8. A basic line following robot is based on _____

- a) Strong Artificial Intelligence approach
- b) Weak Artificial Intelligence approach
- c) Cognitive Artificial Intelligence approach

d) Applied Artificial Intelligence approach

[View Answer](#)

Answer: b

Explanation: Weak Artificial Intelligence deals with the creation of some form of computer-based artificial intelligence that cannot truly reason and solve problems, but can act as if it were intelligent. Weak Artificial Intelligence holds that suitably programmed machines can simulate human cognition.

9. Which of the following task/tasks Artificial Intelligence could not do yet?

- a) Understand natural language robustly
- b) Web mining
- c) Construction of plans in real time dynamic systems
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: These are the areas in which need more focus for improvements.

10. What among the following is/are the example of the intelligent agent/agents?

- a) Human
- b) Robot
- c) Autonomous Spacecraft
- d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: Humans can be looked upon as agents. They have eyes, ears, skin, taste buds, etc. for sensors; and hands, fingers, legs, mouth for effectors. Robots are agents. Robots may have camera, sonar, infrared, bumper, etc. for sensors. They can have grippers, wheels, lights, speakers, etc. for actuators. Autonomous Spacecraft takes decision on its own based on perceptions.

1. What is Machine learning?

- a) The autonomous acquisition of knowledge through the use of computer programs
- b) The autonomous acquisition of knowledge through the use of manual programs
- c) The selective acquisition of knowledge through the use of computer programs
- d) The selective acquisition of knowledge through the use of manual programs

[View Answer](#)

Answer: a

Explanation: Machine learning is the autonomous acquisition of knowledge through the use of computer programs.

2. Which of the factors affect the performance of learner system does not include?

- a) Representation scheme used
- b) Training scenario
- c) Type of feedback
- d) Good data structures

[View Answer](#)

Answer: d

Explanation: Factors that affect the performance of learner system does not include good data structures.

3. Different learning methods does not include?

- a) Memorization
- b) Analogy
- c) Deduction

d) Introduction

[View Answer](#)

Answer: d

Explanation: Different learning methods does not include the introduction.

4. In language understanding, the levels of knowledge that does not include?

a) Phonological

b) Syntactic

c) Empirical

d) Logical

[View Answer](#)

Answer: c

Explanation: In language understanding, the levels of knowledge that does not include empirical knowledge.

5. A model of language consists of the categories which does not include?

a) Language units

b) Role structure of units

c) System constraints

d) Structural units

[View Answer](#)

Answer: d

Explanation: A model of language consists of the categories which does not include structural units.

6. What is a top-down parser?

a) Begins by hypothesizing a sentence (the symbol S) and successively predicting lower level constituents until individual preterminal symbols are written

b) Begins by hypothesizing a sentence (the symbol S) and successively predicting upper level constituents until individual preterminal symbols are written

c) Begins by hypothesizing lower level constituents and successively predicting a sentence (the symbol S)

d) Begins by hypothesizing upper level constituents and successively predicting a sentence (the symbol S)

[View Answer](#)

Answer: a

Explanation: A top-down parser begins by hypothesizing a sentence (the symbol S) and successively predicting lower level constituents until individual preterminal symbols are written.

7. Among the following which is not a horn clause?

a) p

b) $\emptyset p \vee q$

c) $p \rightarrow q$

d) $p \rightarrow \emptyset q$

[View Answer](#)

Answer: d

Explanation: $p \rightarrow \emptyset q$ is not a horn clause.

8. The action 'STACK(A, B)' of a robot arm specify to _____

a) Place block B on Block A

b) Place blocks A, B on the table in that order

c) Place blocks B, A on the table in that order

d) Place block A on block B

[View Answer](#)

Answer: d

Explanation: The action 'STACK(A,B)' of a robot arm specify to Place block A on block B

1. . What is the primary interactive method of communication used by humans?

- a) reading
- b) writing
- c) speaking
- d) all of the mentioned

View Answer

Answer: c

Explanation: None.

2. Elementary linguistic units that are smaller than words are?

- a) allophones
- b) phonemes
- c) syllables
- d) all of the mentioned

View Answer

Answer: d

Explanation: None.

3. In LISP, the atom that stands for "true" is _____

- a) t
- b) ml
- c) y
- d) time

View Answer

Answer: a

Explanation: None.

4. A mouse device may be _____

- a) electro-chemical
- b) mechanical
- c) optical
- d) both mechanical and optical

View Answer

Answer: d

Explanation: None.

5. An expert system differs from a database program in that only an expert system _____

- a) contains declarative knowledge
- b) contains procedural knowledge
- c) features the retrieval of stored information
- d) expects users to draw their own conclusions

View Answer

Answer: b

Explanation: None.

6. Arthur Samuel is linked inextricably with a program that played _____

- a) checkers
- b) chess
- c) cricket
- d) football

View Answer

Answer: a

Explanation: None.

7. Natural language understanding is used in _____

- a) natural language interfaces
- b) natural language front ends
- c) text understanding systems
- d) all of the mentioned

View Answer

Answer: d

Explanation: None.

8. Which of the following are examples of software development tools?

- a) debuggers
- b) editors
- c) assemblers, compilers and interpreters
- d) all of the mentioned

View Answer

Answer: d

Explanation: None.

9. Which is the first AI programming language?

- a) BASIC
- b) FORTRAN
- c) IPL(Inductive logic programming)
- d) LISP

View Answer

Answer: d

Explanation: None.

10. The Personal Consultant is based on?

- a) EMYCIN
- b) OPS5+
- c) XCON
- d) All of the mentioned

View Answer

Answer: d

Explanation: None.

1. Ambiguity may be caused by _____

- a) syntactic ambiguity
- b) multiple word meanings
- c) unclear antecedents
- d) all of the mentioned

View Answer

Answer: d

Explanation: None.

2. Which company offers the LISP machine considered “the most powerful symbolic processor available”?

- a) LMI
- b) Symbolics
- c) Xerox

d) Texas Instruments

View Answer

Answer: b

Explanation: None.

3. What of the following is considered a pivotal event in the history of Artificial Intelligence?

a) 1949, Donald O, The organization of Behavior

b) 1950, Computing Machinery and Intelligence

c) 1956, Dartmouth University Conference Organized by John McCarthy

d) 1961, Computer and Computer Sense

View Answer

Answer: c

Explanation: None.

4. What are the two subfields of Natural language processing?

a) symbolic and numeric

b) time and motion

c) algorithmic and heuristic

d) understanding and generation

View Answer

Answer: c

Explanation: None.

5. High-resolution, bit-mapped displays are useful for displaying _____

a) clearer characters

b) graphics

c) more characters

d) all of the mentioned

View Answer

Answer: c

Explanation: None.

6. A bidirectional feedback loop links computer modeling with _____

a) artificial science

b) heuristic processing

c) human intelligence

d) cognitive science

View Answer

Answer: c

Explanation: None.

7. Which of the following have people traditionally done better than computers?

a) recognizing relative importance

b) finding similarities

c) resolving ambiguity

d) all of the mentioned

View Answer

Answer: c

Explanation: None.

8. In LISP, the function evaluates both and is _____

a) set

b) setq

c) add

d) eva

View Answer

Answer: a

Explanation: None.

9. Which type of actuator generates a good deal of power but tends to be messy?

a) electric

b) hydraulic

c) pneumatic

d) both hydraulic & pneumatic

View Answer

Answer: b

Explanation: None.

10. Research scientists all over the world are taking steps towards building computers with circuits patterned after the complex interconnections existing among the human brain's nerve cells. What name is given to such type of computers?

a) Intelligent computers

b) Supercomputers

c) Neural network computers

d) Smart computers

View Answer

Answer: c

Explanation: None.

11. The integrated circuit was invented by Jack Kilby of _____

a) MIT

b) Texas Instruments

c) Xerox

d) All of the mentioned

View Answer

Answer: b

Explanation: None.

12. People overcome natural language problems by _____

a) grouping attributes into frames

b) understanding ideas in context

c) identifying with familiar situations

d) both understanding ideas in context & identifying with familiar situations

View Answer

Answer: d

Explanation: None.

13. The Cedar, BBN Butterfly, Cosmic Cube and Hypercube machine can be characterized as

a) SISD

b) MIMD

c) SIMD

d) MISD

View Answer

Answer: b

Explanation: None.

14. A series of AI systems, developed by Pat Langley to explore the role of heuristics in scientific discovery is _____

- a) RAMD
- b) BACON
- c) MIT
- d) DU

[View Answer](#)

Answer: b

Explanation: None.

1. When talking to a speech recognition program, the program divides each second of your speech into 100 separate _____

- a) Codes
- b) Phonemes
- c) Samples
- d) Words

[View Answer](#)

Answer: c

Explanation: None.

2. Which term is used for describing the judgmental or commonsense part of problem solving?

- a) Heuristic
- b) Critical
- c) Value based
- d) Analytical

[View Answer](#)

Answer: a

Explanation: None.

3. Which stage of the manufacturing process has been described as “the mapping of function onto form”?

- a) Design
- b) Distribution
- c) Project management
- d) Field service

[View Answer](#)

Answer: a

Explanation: None.

4. Which kind of planning consists of successive representations of different levels of a plan?

- a) hierarchical planning
- b) non-hierarchical planning
- c) project planning
- d) all of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

5. What was originally called the “imitation game” by its creator?

- a) The Turing Test
- b) LISP
- c) The Logic Theorist

d) Cybernetics

View Answer

Answer: a

Explanation: None.

6. Decision support programs are designed to help managers make _____

- a) budget projections
- b) visual presentations
- c) business decisions
- d) vacation schedules

View Answer

Answer: c

Explanation: None.

7. PROLOG is an AI programming language, which solves problems with a form of symbolic logic known as predicate calculus. It was developed in 1972 at the University of Marseilles by a team of specialists.

Can you name the person who headed this team?

- a) Alain Colmerauer
- b) Niklaus Wirth
- c) Seymour Papert
- d) John McCarthy

View Answer

Answer: a

Explanation: None.

8. Programming a robot by physically moving it through the trajectory you want it to follow be called _____

- a) contact sensing control
- b) continuous-path control
- c) robot vision control
- d) pick-and-place control

View Answer

Answer: b

Explanation: None.

9. To invoke the LISP system, you must enter _____

- a) AI
- b) LISP
- c) CL (Common Lisp)
- d) Both LISP and CL

View Answer

Answer: b

Explanation: None.

10. In LISP, what is the function (list-length <list>)?

- a) returns a new list that is equal to <list> by copying the top-level element of <list>
- b) returns the length of <list>
- c) returns t if <list> is empty
- d) all of the mentioned

View Answer

Answer: b

Explanation: None.

11. ART (Automatic Reasoning Tool) is designed to be used on _____

- a) LISP machines
- b) Personal computers
- c) Microcomputers
- d) All of the mentioned

[View Answer](#)

Answer: a

Explanation: None.

12. Which particular generation of computers is associated with artificial intelligence?

- a) Second
- b) Fourth
- c) Fifth
- d) Third

[View Answer](#)

Answer: c

Explanation: None.

13. Shaping teaching techniques to fit the learning patterns of individual students is the goal of _____

- a) decision support
- b) automatic programming
- c) intelligent computer-assisted instruction
- d) expert systems

[View Answer](#)

Answer: c

Explanation: None.

14. Which of the following function returns t if the object is a symbol in LISP?

- a) (* <object>)
- b) (symbolp <object>)
- c) (nonnumeric <object>)
- d) (constantp <object>)

[View Answer](#)

Answer: b

Explanation: None.

15. The symbols used in describing the syntax of a programming language are _____

- a) 0
- b) {}
- c) ""
- d) <>

[View Answer](#)

Answer: d

Explanation: None.

1. What is the action of task environment in artificial intelligence?

- a) Problem
- b) Solution
- c) Agent
- d) Observation

[View Answer](#)

Answer: a

Explanation: Task environments will pose a problem and rational agent will find the solution for the posed problem.

2. What is the expansion of PEAS in task environment?

- a) Peer, Environment, Actuators, Sense
- b) Perceiving, Environment, Actuators, Sensors
- c) Performance, Environment, Actuators, Sensors
- d) None of the mentioned

View Answer

Answer: c

Explanation: Task environment will contain PEAS which is used to perform the action independently.

3. What kind of observing environments are present in artificial intelligence?

- a) Partial
- b) Fully
- c) Learning
- d) Both Partial & Fully

View Answer

Answer: d

Explanation: Partial and fully observable environments are present in artificial intelligence.

4. What kind of environment is strategic in artificial intelligence?

- a) Deterministic
- b) Rational
- c) Partial
- d) Stochastic

View Answer

Answer: a

Explanation: If the environment is deterministic except for the action of other agent is called deterministic.

5. What kind of environment is crossword puzzle?

- a) Static
- b) Dynamic
- c) Semi Dynamic
- d) None of the mentioned

View Answer

Answer: a

Explanation: As the problem in crossword puzzle are posed at beginning itself, So it is static.

6. What kind of behavior does the stochastic environment possess?

- a) Local
- b) Deterministic
- c) Rational
- d) Primary

View Answer

Answer: a

Explanation: Stochastic behavior are rational because it avoids the pitfall of predictability.

7. Which is used to select the particular environment to run the agent?

- a) Environment creator
- b) Environment Generator

- c) Both Environment creator & Generator
- d) None of the mentioned

View Answer

Answer: b

Explanation: None.

8. Which environment is called as semi dynamic?

- a) Environment does not change with the passage of time
- b) Agent performance changes
- c) Environment will be changed
- d) Environment does not change with the passage of time, but Agent performance changes

View Answer

Answer: d

Explanation: If the environment does not change with the passage of time, but the agent performance changes by time.

9. Where does the performance measure is included?

- a) Rational agent
- b) Task environment
- c) Actuators
- d) Sensor

View Answer

Answer: b

Explanation: In PEAS, Where P stands for performance measure which is always included in task environment.

10. Which is used to provide the feedback to the learning element?

- a) Critic
- b) Actuators
- c) Sensor
- d) None of the mentioned

View Answer

Answer: a

Explanation: The learning element gets the feedback from the critic which is presented in the environment on how the agent is doing.

1. Which depends on the percepts and actions available to the agent?

- a) Agent
- b) Sensor
- c) Design problem
- d) None of the mentioned

View Answer

Answer: c

Explanation: The design problem depends on the percepts and actions available to the agent, the goals that the agent's behavior should satisfy.

2. Which were built in such a way that humans had to supply the inputs and interpret the outputs?

- a) Agents
- b) AI system
- c) Sensor
- d) Actuators

View Answer

Answer: b

Explanation: AI systems were built in such a way that humans had to supply the inputs and interpret the outputs.

3. Which technology uses miniaturized accelerometers and gyroscopes?

- a) Sensors
- b) Actuators
- c) MEMS
- d) None of the mentioned

View Answer

Answer: c

Explanation: Micro ElectroMechanical System uses miniaturized accelerometers and gyroscopes and is used to produce actuators.

4. What is used for tracking uncertain events?

- a) Filtering algorithm
- b) Sensors
- c) Actuators
- d) None of the mentioned

View Answer

Answer: a

Explanation: Filtering algorithm is used for tracking uncertain events because in this the real perception is involved.

5. What is not represented by using propositional logic?

- a) Objects
- b) Relations
- c) Both Objects & Relations
- d) None of the mentioned

View Answer

Answer: c

Explanation: Objects and relations are not represented by using propositional logic explicitly.

6. Which functions are used as preferences over state history?

- a) Award
- b) Reward
- c) Explicit
- d) Implicit

View Answer

Answer: b

Explanation: Reward functions may be that preferences over states are really compared from preferences over state histories.

7. Which kind of agent architecture should an agent use?

- a) Relaxed
- b) Logic
- c) Relational
- d) All of the mentioned

View Answer

Answer: d

Explanation: Because an agent may experience any kind of situation, So that an agent should use all kinds of architecture.

8. Specify the agent architecture name that is used to capture all kinds of actions.

- a) Complex
- b) Relational
- c) Hybrid
- d) None of the mentioned

View Answer

Answer: c

Explanation: A complete agent must be able to do anything by using hybrid architecture.

9. Which agent enables the deliberation about the computational entities and actions?

- a) Hybrid
- b) Reflective
- c) Relational
- d) None of the mentioned

View Answer

Answer: b

Explanation: Because it enables the agent to capture within itself.

10. What can operate over the joint state space?

- a) Decision-making algorithm
- b) Learning algorithm
- c) Complex algorithm
- d) Both Decision-making & Learning algorithm

View Answer

Answer: d

Explanation: Decision-making and learning algorithms can operate over the joint state space and thereby serve to implement and used to improve the computational activities.

1. Which search agent operates by interleaving computation and action?

- a) Offline search
- b) Online search
- c) Breadth-first search
- d) Depth-first search

View Answer

Answer: b

Explanation: In online search, it will first take an action and then observes the environment.

2. What is called an exploration problem?

- a) State and actions are unknown to the agent
- b) State and actions are known to the agent
- c) Only actions are known to agent
- d) None of the mentioned

View Answer

Answer: a

Explanation: Online search is a necessary idea for an exploration problem where the states and actions are unknown to the agent.

3. Which are necessary for an agent to solve an online search problem?

- a) Actions
- b) Step-cost function
- c) Goal-test
- d) All of the mentioned

View Answer

Answer: d

Explanation: An online search problem can be solved by an agent executing actions, So these functions are necessary.

4. When do we call the states are safely explorable?

- a) A goal state is unreachable from any state
- b) A goal state is denied access
- c) A goal state is reachable from every state
- d) None of the mentioned

View Answer

Answer: c

Explanation: None.

5. In which state spaces does the online-dfs-agent will work?

- a) Irreversible state spaces
- b) Reversible state spaces
- c) Searchable state spaces
- d) All of the mentioned

View Answer

Answer: b

Explanation: Online-DFS-Agent will work only state spaces where the actions are reversible.

6. Which of the following algorithm is online search algorithm?

- a) Breadth-first search algorithm
- b) Depth-first search algorithm
- c) Hill-climbing search algorithm
- d) None of the mentioned

View Answer

Answer: c

Explanation: Hill-climbing search algorithm will have only current state in memory, So it is an online search algorithm.

7. Which search algorithm will use limited amount of memory?

- a) RBFS
- b) SMA*
- c) Hill-climbing search algorithm
- d) Both RBFS & SMA*

View Answer

Answer: d

Explanation: RBFE and SMA* will solve any kind of problem that A* can't by using limited amount of memory.

8. What is meant by simulated annealing in artificial intelligence?

- a) Returns an optimal solution when there is a proper cooling schedule
- b) Returns an optimal solution when there is no proper cooling schedule
- c) It will not return an optimal solution when there is a proper cooling schedule
- d) None of the mentioned

View Answer

Answer: a

Explanation: None.

9. How the new states are generated in genetic algorithm?

- a) Composition
- b) Mutation

- c) Cross-over
- d) Both Mutation & Cross-over

View Answer

Answer: d

Explanation: New states are generated by mutation and by crossover, which combines a pair of states from the population.

10. Which method is effective for escaping from local minima?

- a) Updating heuristic estimate
- b) Reducing heuristic estimate
- c) Eliminating heuristic estimate
- d) None of the mentioned

View Answer

Answer: a

Explanation: Updating heuristic estimates from experience provides an effective method to escape from local minima.

1. What is Artificial intelligence?

- a) Putting your intelligence into Computer
- b) Programming with your own intelligence
- c) Making a Machine intelligent
- d) Playing a Game

View Answer

Answer: c

Explanation: Because AI is to make things work automatically through machine without using human effort. Machine will give the result with just giving input from human. That means the system or machine will act as per the requirement.

2. Which is not the commonly used programming language for AI?

- a) PROLOG
- b) Java
- c) LISP
- d) Perl

View Answer

Answer: d

Explanation: Because Perl is used as a script language, and not of much use for AI practice. All others are used to generate an artificial program.

3. Artificial Intelligence has its expansion in the following application.

- a) Planning and Scheduling
- b) Game Playing
- c) Diagnosis
- d) All of the mentioned

View Answer

Answer: d

Explanation: All sectors require intelligence and automation for its working.

4. What is an 'agent'?

- a) Perceives its environment through sensors and acting upon that environment through actuators
- b) Takes input from the surroundings and uses its intelligence and performs the desired operations
- c) A embedded program controlling line following robot

d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: An agent is anything that can be viewed as perceiving and acting upon the environment through the sensors and actuators. Mean it takes input from its environment through sensors, performs operation and gives output through actuators.

5. Agents behavior can be best described by _____

a) Perception sequence

b) Agent function

c) Sensors and Actuators

d) Environment in which agent is performing

[View Answer](#)

Answer: b

Explanation: An agent's behavior is described by the agent function that maps any given percept sequence to an action, which can be implemented by agent program. The agent function is an abstract mathematical description; the agent program is a concrete implementation, running on the agent architecture.

6. Rational agent is the one who always does the right thing.

a) True

b) False

[View Answer](#)

Answer: a

Explanation: Rational agent is the one who always does the right thing Right in a sense that it makes the agent the most successful.

7. Performance Measures are fixed for all agents.

a) True

b) False

[View Answer](#)

Answer: a

Explanation: As a general rule, it is better to design performance measures according to what one actually wants in the environment, rather than according to how one thinks the agent should behave.

8. What is rational at any given time depends on?

a) The performance measure that defines the criterion of success

b) The agent's prior knowledge of the environment

c) The actions that the agent can perform

d) All of the mentioned

[View Answer](#)

Answer: d

Explanation: For each possible percept sequence, a rational agent should select an action that is expected to maximize its performance measure, given the evidence provided by the percept sequence and whatever built-in knowledge the agent has.

9. An omniscient agent knows the actual outcome of its actions and can act accordingly; but omniscience is impossible in reality. Rational Agent always does the right thing; but Rationality is possible in reality.

a) True

b) False

[View Answer](#)

Answer: a

Explanation: Refer the definition of rational and omniscient agents.

10. The Task Environment of an agent consists of _____

- a) Sensors
- b) Actuators
- c) Performance Measures
- d) All of the mentioned

View Answer

Answer: d

Explanation: The task environment of an agent is described by four parts performance measures, sensors, actuators and environment, generally known as the PEAS descriptions.

11. What could possibly be the environment of a Satellite Image Analysis System?

- a) Computers in space and earth
- b) Image categorization techniques
- c) Statistical data on image pixel intensity value and histograms
- d) All of the mentioned

View Answer

Answer: d

Explanation: An environment is something which agent stays in.

12. Categorize Crossword puzzle in Fully Observable / Partially Observable.

- a) Fully Observable
- b) partially Observable
- c) All of the mentioned
- d) None of the mentioned

View Answer

Answer: a

Explanation: In crossword puzzle an agent knows the complete state of the environment through its sensors.

13. The game of Poker is a single agent.

- a) True
- b) False

View Answer

Answer: b

Explanation: The game of poker involves multiple player, hence its works in Multi-agent environment.

14. Satellite Image Analysis System is (Choose the one that is not applicable).

- a) Episodic
- b) Semi-Static
- c) Single agent
- d) Partially Observable

View Answer

Answer: d

Explanation: System knows the current status of the analysis through its inputs.

15. An agent is composed of _____

- a) Architecture
- b) Agent Function
- c) Perception Sequence
- d) Architecture and Program

View Answer

Answer: d

Explanation: An agent is anything that can be viewed as perceiving and acting upon the environment through the sensors and actuators.