



CS607- Artificial intelligence
Solved MCQS
From Final term Papers

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PSMD01

FINAL TERM EXAMINATION
Spring 2012
CS607- Artificial intelligence

Question No: 1 (Marks: 1) - Please choose one

Which one is NOT the feature of Robot?

- ▶ Reasoning, dealing with uncertainty
- ▶ Vision, learning
- ▶ Autonomy, physical Intelligence
- ▶ **None (Page 204)**

Question No: 2 (Marks: 1) - Please choose one

Robotics have active contributions from_____

- ▶ Biology
- ▶ Psychology
- ▶ Mathematics
- ▶ **All of the given (Page 204)**

Question No: 3 (Marks: 1) - Please choose one

In ANNs, MSE is known as

- ▶ Most squared error
- ▶ **Mean squared error (Page 189)**
- ▶ Medium squared error
- ▶ None of the given

دنیا میں سب سے مشکل کام اپنی اصلاح اور سب سے آسان کام دوسروں پر نکتہ چینی کرنا ہے

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Question No: 4 (Marks: 1) - Please choose one

Which one is the advantage of Neural Network.

► **Good for generalization (Page 187)**

- The power of ANNs lie in their parallel architecture
- Less defined rules to build a natural network
- Knowledge implicit

Question No: 5 (Marks: 1) - Please choose one

A single layer perceptron cannot perform pattern classification on linearly separable patterns.

- True

► **False (Page 186)**

Question No: 6 (Marks: 1) - Please choose one

The soma and the enclosed nucleus in neuron play a significant role in the processing of incoming and outgoing data.

- True

► **False (Page 181)**

Question No: 7 (Marks: 1) - Please choose one

The Entropy is 1 when the collection contains number of positive examples _____ to/than negative examples.

► **Equal (Page 177)**

- Greater
- Less
- None of the given

Question No: 8 (Marks: 1) - Please choose one

In all calculations involving Entropy we define _____ to be _____

► **$0 \log 0, 0$ (Page 177)**

- $0 \log 10, 1$
- $0 \log 0, 1$
- $1 \log 1, 1$

بري صحبت سے تنہائی بہتر ہے اور تنہائی سے نيك صحبت بہتر ہے

Question No: 9 (Marks: 1) - Please choose one

If the true output of a concept $[c(x_i)]$ is 1 or 0 for an instance, then the output by our hypothesis $[h(x_i)]$ is 1 or 0 as well, respectively.

▶ True (Page 177)

▶ False

Question No: 10 (Marks: 1) - Please choose one

Inductive learning is based on the knowledge that if something happens a lot it is likely to be generally

▶ True (Page 160)

▶ False

▶ Ambiguous

▶ None of the given

Question No: 11 (Marks: 1) - Please choose one

Machine learning typically follows _____ phases according to Finlay.

▶ 2

▶ 3 (Page 160)

▶ 4

▶ 5

Question No: 12 (Marks: 1) - Please choose one

Which statement about learning is true:

▶ Learning is constructing or modifying representations of what is being experienced

▶ Learning denotes changes in a system that enables a system to do the same task more efficiently the next time.

▶ Learning is making useful changes in our minds.

▶ All of the given (Page 159)

Question No: 13 (Marks: 1) - Please choose one

The most popular defuzzification method is the centroid calculation.

▶ True (Page 158)

▶ False

اللہ کا خوف سب سے بڑی دانائی ہے

Question No: 14 (Marks: 1) - Please choose one

_____ is the process by which the fuzzy sets that represent the outputs of each rule are combined into a single fuzzy set.

► **Aggregation (Page 157)**

- Fuzzification
- Implication
- None of the given

Question No: 15 (Marks: 1) - Please choose one

If there are multiple parts to the antecedent, apply fuzzy logic _____ and resolve the antecedent to a single number between 0 and 1.

► **Operators (Page 153)**

- Rules
- Conditions
- None of the given

Question No: 16 (Marks: 1) - Please choose one

Usually a _____ graph is chosen to represent a fuzzy set.

► **Triangular (Page 151)**

- Circular
- Conical
- None of the given

Question No: 17 (Marks: 1) - Please choose one

Reasoning in fuzzy logic is just a matter of generalizing the familiar _____ logic.

► **Boolean (Page 147)**

- Complex
- Coognitive
- Supervised

Question No: 18 (Marks: 1) - Please choose one

_____ is a subfield of _____.

► **Computer vision, Artificial Intelligence (Page 203)**

- Robotics, Artificial Intelligence
- Soft computing, Artificial Intelligence
- None of these

Question No: 19 (Marks: 1) - Please choose one

Each neuron in the hidden layer is responsible for a different _____.

► **Line (Page 186)**

- Layer
- Phase
- None of these

Question No: 20 (Marks: 1) - Please choose one

_____ is the process of formulating the mapping from a given input to an output using Fuzzy logic.

► **FIS (Page 153)**

- PIS
- Fuzzy logic
- None of these

Question No: 21 (Marks: 1) - Please choose one

Fuzzy logic is a superset of _____ logic.

► **conventional (Page 147)**

- positive
- negative
- None of these

Question No: 22 (Marks: 1) - Please choose one

It was Aristotle who came up with the 'Law of the Excluded Middle'.

► **True (Page 145)**

- False

ایماندار کو غصہ دیر سے آتا ہے اور جلدی دور ہو جاتا ہے

FINAL TERM EXAMINATION
Spring 2011
CS607- Artificial intelligence

Question No: 1 (Marks: 1) - Please choose one

We can get optimal solution given some parameters using Genetic Algorithm.

▶ **True (Page 79)**

▶ False

Question No: 2 (Marks: 1) - Please choose one

_____ reasoning is based on forming, or inducing a ‘generalization’ from a limited set of observations.

▶ Deductive

▶ Abductive

▶ Analogical

▶ **Inductive (Page 102)**

Question No: 3 (Marks: 1) - Please choose one

_____ is the process of deriving logical conclusions from given facts.

▶ Representation

▶ Execution

▶ **Reasoning (Page 102)**

▶ Planning

Question No: 4 (Marks: 1) - Please choose one

Identify the correct step used to start design of an expert system.

▶ **Feasibility study (Page 129)**

▶ Problem reorganization

▶ Scope study

▶ Rapid prototyping

Question No: 5 (Marks: 1) - Please choose one

Any statement can be fuzzy

▶ **True (Page 147)**

▶ False

Question No: 6 (Marks: 1) - Please choose one

If the antecedent is only partially true, then the output fuzzy set is truncated according to the _____ method

- ▶ Intrinsic
- ▶ **Implication (Page 153)**
- ▶ Boolean
- ▶ None of the given

Question No: 7 (Marks: 1) - Please choose one

Choose the fields in which Fuzzy inference systems have been successfully applied:

- ▶ automatic control
- ▶ data classification
- ▶ decision analysis
- ▶ **All of the given (Page 153)**

Question No: 8 (Marks: 1) - Please choose one

Fuzzy logic is actually a superset of conventional Boolean logic

- ▶ **TRUE (Page 150)**
- ▶ FALSE

Question No: 9 (Marks: 1) - Please choose one

A classical set is a container, which wholly includes or wholly excludes any given element.

- ▶ **TRUE (Page 145)**
- ▶ FALSE

Question No: 10 (Marks: 1) - Please choose one

The degree of truth that we have been talking about is specifically driven out by a function called the _____ function.

- ▶ **Membership (Page 149)**
- ▶ Ordinary
- ▶ Fuzzy
- ▶ Inline

Question No: 11 (Marks: 1) - Please choose one

The tractable problems are further divided into structured and _____ problems

- ▶ Non-structured
- ▶ **Complex (Page 166)**
- ▶ Simple

CS607 – Final Term Quizzes

CS607 – Quiz No.2 (18 June 2013)

Question # 1 of 10 (Total Marks: 1)

Please Select One

Expert system can be expressed as:

- i. It provides tools for the management, delivery, tracking, and assessment of various types of employee learning and training
- ii. The set of business processes, culture, and behavior required to obtain value from investments in information systems
- iii. Used for finding the optimal solution for a specific problem by examining a very large number or possible solutions for that problem

iv. Intelligent technique for capturing tacit knowledge in a very specific and limited domain of human expertise, this knowledge is converted to rules that can be used throughout the entire organization

[Click here for detail](#)

Question # 2 of 10 (Total Marks: 1)

Please Select One

Clips command for adding two numbers 3 and 4 is.

- i. CLIPS> (+ 3 4) (Page 133)**
- ii. CLIPS> (3 4 +)

Question # 3 of 10 (Total Marks: 1)

Please Select One

Reasoning in forward chaining is known as:

Data-driven reasoning (Page 123)

- Rule-driven reasoning
- Intelligence-driven reasoning
- Goal-driven reasoning

Question # 4 of 10 (Total Marks: 1)

Please Select One

Sequence wise main phases of Linear model used in developing expert systems are given below.

Planning, Know ledge acquisition and analysis , System evaluation

Planning, Know ledge acquisition and analysis , .Know ledge design (Page 129)

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Question # 5 of 10 (Total Marks: 1) Please Select One

Identify the step involved in planning phase.

1. Knowledge acquisition from expert
2. Coding
3. **Resource allocation (Page 129)**
4. Identify concrete knowledge element

Question # 6 of 10 (Total Marks: 1) Please Select One

Identify the correct definition of linear model given below.

1. **A linear sequence of steps is applied repeatedly in an iterative fashion to develop the software models. (Page 129)**
2. Non sequential sequence of steps is applied repeatedly in an iterative fashion to develop the expert systems.
3. A non linear sequence of steps is applied repeatedly in an iterative fashion to develop the expert systems.

Question # 7 of 10 (Total Marks: 1) Please Select One

_____ is the part of the system that controls the process of deriving conclusions.

1. A knowledge base
2. A database of facts
3. **An interpreter or inference engine (Page 117)**
4. None of the given

Question # 8 of 10 (Total Marks: 1) Please Select One

A rule, which takes a set of inputs and gives advice, as a result, is called

1. Recommendation Rule
2. **Directive Rule (Page 96)**
3. Relation Rule
4. None of the given options

Question # 9 of 10 (Total Marks: 1) Please Select One

IF temperature is below 0 THEN weather is cold The above rule is used to represent _____

- Recommendations
- Directives
- **Relations (Page 96)**
- None of the given options

دنیا کی سب سے بڑی فتح نفس پر قابو رکھنا ہے

Question # 10 of 10 (Total Marks: 1)**Please Select One**

Within an expert system, the _____ contains facts about a specific subject area and rules that express the reasoning procedures of an expert on the subject.

- ▶ Inference engine
- ▶ Knowledge engineer
- ▶ **Knowledge base** [click here for detail](#)
- ▶ None of the given options

Question # 1 of 10 (Total Marks: 1)**Please Select One**

Using deduction to reach a conclusion from a set of antecedents is called:

- a. Forward chaining
- b. Backward chaining

Question # 2 of 10 (Total Marks: 1)**Please Select One**

Expert system technique where a hypothesis is given at the beginning and the inference engine proceeds to ask the user questions about selected facts until the hypothesis is either confirmed or denied

- a. Network Knowledge
- b. Data mining
- c. **Backward chaining** [Click here for detail](#)
- d. Forward chaining

Question # 3 of 10 (Total Marks: 1)**Please Select One**

In some cases, the rules provide more definite actions such as “move left” or “close door”, in which case the rules are being used to represent _____.

- ▶ Recommendations
- ▶ **Directives** (Artificial Intelligence, 3/E) [Click here for detail](#)
- ▶ Relations
- ▶ None of the given options

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Quiz No.3(Fall 2012)

Question # 1 of 10 (Marks: 1) - Please choose one

Semantic networks are graphs, with nodes representing _____ and arcs representing _____ between objects.

► objects, relationships (Page 97)

- relationships, distance
- objects, distance
- distance, relationships

Question # 2 of 10 (Marks: 1) - Please choose one

What is the correct order for solving a problem using GA

- I. Choose the best individuals from the population for crossover
- II. Choose initial population
- III. Evaluate the fitness of each individual

- I,II,III
- I,III,II
- II,I,III

► II,III,I (Page 84)

Question # 3 of 10 (Marks: 1) - Please choose one

A statement in conjunctive normal form (CNF) consists of _____

► ANDs of Ors. (Page 107)

- ANDs
- Ors
- Ors of ANDs

Question # 4 of 10 (Marks: 1) - Please choose one

In adversarial search there may occur such a scenario where two opponents also called _____ are searching for goal.

► Adversaries (Page 62)

- Friend
- Players
- Intruders

عقل مند کہتا ہے میں کچھ نہیں جانتا جبکہ بے وقوف کہتا ہے کہ میں سب کچھ جانتا ہوں

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Question # 5 of 10 (Marks: 1) - Please choose one

In GA, the random process is repeated until an individual with required _____ level is found.
Select correct option:

- ▶ Higher
- ▶ Lower
- ▶ **Fitness (Page 86)**
- ▶ Logical

Question # 6 of 10 (Marks: 1) - Please choose one

A function by which we can tell which board position is nearer to our goal is called

- ▶ Alternative function
- ▶ Recursive function
- ▶ Best function
- ▶ **Fitness function (Page 83)**

Question # 7 of 10 (Marks: 1) - Please choose one

Mutation can be as simple as just flipping a bit at random or any number of bits

- ▶ **True (Page 79)**
- ▶ False

Question # 8 of 10 (Marks: 1) - Please choose one

In Depth First Search the node with the largest value of height will be at the _____ priority to be picked.

- ▶ Minimum
- ▶ **Maximum (Page 25)**
- ▶ Zero
- ▶ Both Minimum and maximum

Question # 9 of 10 (Marks: 1) - Please choose one

A proposition is the statement of a _____.

- ▶ **Fact (Page 98)**
- ▶ Equation
- ▶ Action
- ▶ Theorem

Question # 10 of 10 (Marks: 1) - Please choose one

A drawback of FIND-S is that, it assumes the consistency within the training set.

- ▶ **True (Page 173)**
- ▶ False

Question # 1 of 10 (Marks: 1) - Please choose one

Decision trees give us disjunctions of conjunctions, that is, they have the form: (A AND B) _____ (C AND D).

► **OR (Page 176)**

- AND
- XOR
- None of the given

Question # 2 of 10 (Marks: 1) - Please choose one

Hypothesis space uses the _____ of the attributes.

► **Conjunctions (AND) (Page 168)**

- Disjunctions (OR)
- Negation (NOR)
- None of the given

Question # 3 of 10 (Marks: 1) - Please choose one

Measure of the effectiveness of an attribute in classifying the training data is called.

► **Information Gain (Page 177)**

- Measure Gain
- Information Goal
- None of the given

Question # 4 of 10 (Marks: 1) - Please choose one

The first step of FIND-S is to initialize h to the most specific hypothesis in _____: $h = \langle \emptyset, \emptyset \rangle$

► **H (Page 172)**

- I
- J
- K

Question # 5 of 10 (Marks: 1) - Please choose one

A concept is the representation of the _____ with respect to the given attributes.

- Solution
- **Problem (Page 167)**
- Knowledge
- None of the given

خود کو تمہیں سے بڑھ کر کوئی اچھا مشورہ نہیں دے سکتا

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Quiz No.4(Fall 2012)

Question # 1 of 10 (Marks: 1) - Please choose one

Outputs of learning are determined by the _____

► **Application** (Page 161)

- Validation
- Training
- None of the given

Question # 2 of 10 (Marks: 1) - Please choose one

The Candidate-Elimination algorithm represents the _____

► **Version space** (Page 173)

- Solution space
- Elimination space
- None of the given

Question # 3 of 10 (Marks: 1) - Please choose one

Inductive learning takes examples and generalizes rather than starting with _____ knowledge.

► **Existing** (Page 162)

- Inductive
- Deductive
- None of the given

Question # 4 of 10 (Marks: 1) - Please choose one

The brain is a collection of about 100 _____ interconnected neurons.

- Million
- **Billion** (Page 181)
- Trillion
- None of the given

Question # 5 of 10 (Marks: 1) - Please choose one

Machine learning is a prerequisite for any mature program of artificial intelligence

► **True** (Page 160)

- False

جو شخص ناکامیوں سے ڈر کر بھاگتا ہے کامیابی اُس سے ڈر کر بھاگتی ہے

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Question # 6 of 10 (Marks: 1) - Please choose one

Many machine learning systems are classifiers

► **True** (Page 161)

► False

Question # 7 of 10 (Marks: 1) - Please choose one

_____ stands for interactive dichotomizer

► **ID** (Page 177)

► IDC

► Int D

► None of the given

Question # 8 of 10 (Marks: 1) - Please choose one

Crisp set is not a synonym for _____

► Fuzzy set

► Classical set

Question # 9 of 10 (Marks: 1) - Please choose one

Fuzzy inference systems (FIS) are NOT associated with a number of names.

► True

► **False** (Page 153)

Question # 10 of 10 (Marks: 1) - Please choose one

Fuzzy inference systems (FIS) have multidisciplinary nature.

► True

► **False** (Page 153)

Question # 1 of 10 (Marks: 1) - Please choose one

_____ learning works on existing facts and knowledge and deduces new knowledge from the old.

► **Deductive** (Page 162)

► Inductive

► Application

► None of the given

جو لوگوں کے سامنے فخر کرتا ہے وہ لوگوں کی نظروں سے گر جاتا ہے

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Question # 2 of 10 (Marks: 1) - Please choose one

_____ logic lets us define more realistically the true functions that define real world

► **Fuzzy (Page 148)**

- Classical
- Boolean
- None of the given

Question # 3 of 10 (Marks: 1) - Please choose one

In theoretical computer science there are two main branches of problems:

► **Tractable and intractable (Page 165)**

- Intractable and induction
- Tractable and induction
- None of the given

Question # 4 of 10 (Marks: 1) - Please choose one

Complex problems usually have well-defined steps

- True
- **False (Page 165)**

Question # 5 of 10 (Marks: 1) - Please choose one

Entropy characterizes the purity/impurity of an arbitrary collection of examples

- True
- **False (Page 177)**

Question # 6 of 10 (Marks: 1) - Please choose one

In ANNs, Training is the heart of learning, in which finding the best _____ that covers most of the examples is the objective.

► **Hypothesis (Page 189)**

- Neuron
- Agent
- Operator

Question # 7 of 10 (Marks: 1) - Please choose one

Which one is NOT the phase of machine learning:

- Training
- Application
- Validation
- **None of the given (Page 189)**

Question # 8 of 10 (Marks: 1) - Please choose one

A single perceptron simply draws a line, which is a hyper plan when data is _____ than 2 dimensional.

▶ **More** (Page 184)

- ▶ Less
- ▶ Equal
- ▶ None of the given

Question # 9 of 10 (Marks: 1) - Please choose one

the input of aggregation is the list of truncated output functions returned by the _____ process for each rule.

- ▶ truncation
- ▶ **implication** (Page 184)
- ▶ Aggregation
- ▶ None of the given

Question # 10 of 10 (Marks: 1) - Please choose one

Identify the sets in which Member function is used.

- ▶ Crisp set
- ▶ Classical set
- ▶ **Fuzzy set** (Page 149)
- ▶ None of the above

Question # 1 of 10 (Marks: 1) - Please choose one

Fuzzy logic is a subset of conventional (Boolean) logic

- ▶ True
- ▶ **False** (Page 149)

Question # 2 of 10 (Marks: 1) - Please choose one

The role of tester is often called the critic

- ▶ **True** (Page 160)
- ▶ False

Question # 3 of 10 (Marks: 1) - Please choose one

Identify the statement which best defines fuzzy sets.

- ▶ Fuzzy sets, unlike classical sets, restrict themselves to something lying wholly in either set A or in set not-A.
- ▶ Fuzzy sets, like classical sets, restrict themselves to something lying wholly in either set A or in set A.
- ▶ **Fuzzy sets, unlike classical sets, do not restrict themselves to something lying wholly in either set A or in set not-A.** (Page 146)
- ▶ Fuzzy sets, like classical sets, do not restrict themselves to something lying wholly in either set A or in set not-A.

Question # 4 of 10 (Marks: 1) - Please choose one

In Fuzzy Inputs we resolve all fuzzy statements in the antecedent to a degree of membership between 0 and_____

▶ **1 (Page 152)**

▶ 2

▶ 3

▶ 4

Question # 5 of 10 (Marks: 1) - Please choose one

The Multilayer Perceptrons are the most basic artificial neural _____

▶ **Network (Page 186)**

▶ System

▶ Interface

▶ None of these

Question # 6 of 10 (Marks: 1) - Please choose one

Another expert system named_____was developed by Digital Equipment Corporation, as a computer configuration assistant.

▶ **R1/XCON (Page 112)**

▶ MYCIN

▶ Dendral

▶ R3/XCON

Question # 7 of 10 (Marks: 1) - Please choose one

Which one is not the application area of expert system?

▶ Diagnosis

▶ Prescription

▶ Interpretation

▶ **None (Page 114)**

Ref: - Expert systems may be used in a host of application areas including diagnosis, interpretation, prescription, design, planning, control, instruction, prediction and simulation.

Question # 8 of 10 (Marks: 1) - Please choose one

An expert system is different from conventional programs in the sense that program control and knowledge are _____.

▶ **Separate (Page 121)**

▶ Defined

▶ Together

▶ Common

Question # 9 of 10 (Marks: 1) - Please choose one

Which one of the following is involved in an ES development project:

- ▶ The domain expert
- ▶ The knowledge engineer
- ▶ The end user
- ▶ **All of the given (Page 122)**

Question # 10 of 10 (Marks: 1) - Please choose one

“A computer program designed to model the problem solving ability of a human expert” is known as ---

- ▶ **Expert system (Page 111)**
- ▶ Intelligent System
- ▶ Echo System
- ▶ Energy System

Question # 1 of 10 (Marks: 1) - Please choose one

An expert system may replace the expert or assist the expert

- ▶ **True (Page 113)**
- ▶ False

Question # 2 of 10 (Marks: 1) - Please choose one

A ----- is ‘A person who posses the skill and knowledge to solve a specific problem in a manner superior to others’

- ▶ **The domain expert (Page 122)**
- ▶ The knowledge engineer
- ▶ The end user
- ▶ All of the given

Question # 3 of 10 (Marks: 1) - Please choose one

Conventional programming focuses on _____, while ES programming focuses on _____

- ▶ **Solution, Problem (Page 122)**
- ▶ Problem, Solution
- ▶ Problem, Expert
- ▶ Solution, Expert

Question # 4 of 10 (Marks: 1) - Please choose one

In backward chaining terminology, the hypothesis to prove is called the _____.

- ▶ Proof
- ▶ **Goal (Page 126)**
- ▶ Plan
- ▶ None of the given

Some More Quizzes

Question # 1 of 10 (Marks: 1) - Please choose one

Genetic algorithm uses evolutionary techniques, based on function optimization and artificial intelligence, to develop a solution.

- ▶ **True** [click here for detail](#)
- ▶ False

Question # 2 of 10 (Marks: 1) - Please choose one

An AI system has a _____ component that allows the system to get information from its environment.

- ▶ Planning
- ▶ **Perception** (Page 89)
- ▶ Learning
- ▶ Execution

Question # 3 of 10 (Marks: 1) - Please choose one

In the worst case of semantic network, we may need to traverse the entire network and then discover that the requested info _____.

- ▶ **Does not exist** (Page 97)
- ▶ Exists
- ▶ Is incorrect
- ▶ Is correct

Question # 4 of 10 (Marks: 1) - Please choose one

An AI system must form a meaningful and useful _____ of the internal information.

- ▶ **Representation** (Page 89)
- ▶ Execution
- ▶ Learning
- ▶ Planning

Question # 5 of 10 (Marks: 1) - Please choose one

Breadth-first search is a good idea when you are confident that the branching factor is_____

- ▶ Extremely small
- ▶ **Small** (Artificial Intelligence, 3/E) [Click here for detail](#)
- ▶ Medium
- ▶ Large

Question # 6 of 10 (Marks: 1) - Please choose one

Progressive deepening guarantees to find the solution at a minimum depth like

- ▶ DFS
- ▶ **BFS (Page 37)**
- ▶ None

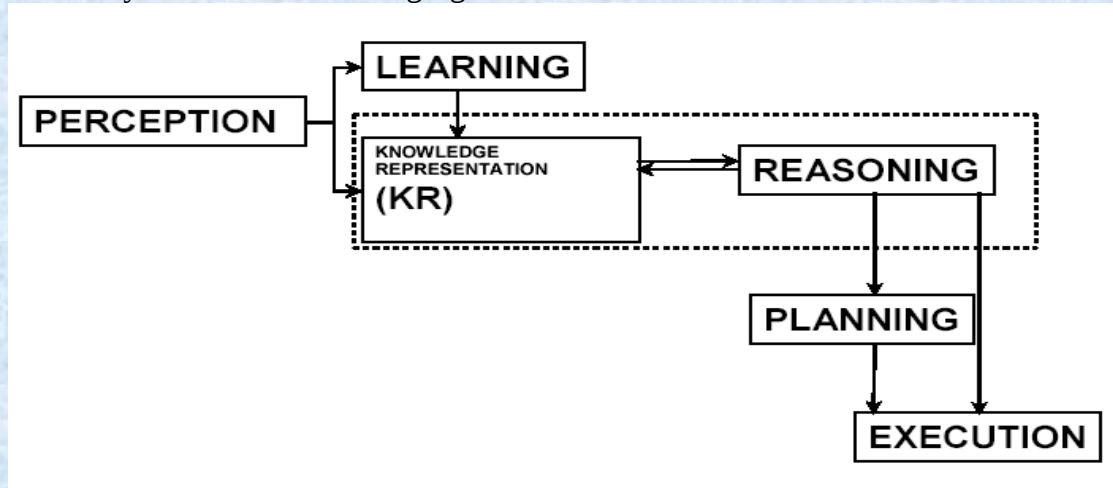
Question # 7 of 10 (Marks: 1) - Please choose one

In Adversarial search the goals of the adversaries are usually _____ to each other

- ▶ **Contrary (Page 62)**
- ▶ Same
- ▶ None

Question # 8 of 10 (Marks: 1) - Please choose one

Which Cycle does the following figure show?



- ▶ **AI Cycle (Page 89)**
- ▶ Design Cycle
- ▶ SDLC
- ▶ None

Question # 9 of 10 (Marks: 1) - Please choose one

To infer new information from semantic networks, we can ask questions from nodes.

- ▶ **True (Page 97)**
- ▶ False

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Question # 10 of 10 (Marks: 1) - Please choose one

Semantic networks are computationally expensive at _____

► **Run time (Page 97)**

- Compile Time
- Start Time
- End Time

Question # 1 of 10 (Marks: 1) - Please choose one

“The branch of computer science that is concerned with the automation of intelligent behavior” this definition is from:

► **Luger and Stubblefield (Page 8)**

- Winston
- Schalkoff
- Bellman

Question # 2 of 10 (Marks: 1) - Please choose one

Searching is a formal mechanism to explore

► **Alternatives (Page 21)**

- Recursive
- Best
- Fitness

Question # 3 of 10 (Marks: 1) - Please choose one

In Artificial Intelligence GA stands for Genetic Algorithms

► **True (Page 77)**

- False

Question # 4 of 10 (Marks: 1) - Please choose one

----- is based on forming, or inducing a ‘generalization’ from a limited set of observations

► **Inductive reasoning (Page 102)**

- Deductive reasoning
- Analogical reasoning
- Common-sense reasoning

Question # 5 of 10 (Marks: 1) - Please choose one

Every graph can be converted into a tree

► **True (Page 22)**

- False

Question # 6 of 10 (Marks: 1) - Please choose one

Hill Climbing is basically a ----- with a measure of quality that is assigned to each node in the tree.

► **Depth First Search (Page 39)**

- Breadth First Search
- Best First Search
- Beam Search

Question # 7 of 10 (Marks: 1) - Please choose one

----- are closely coupled components; each is intrinsically tied to the other.

- i-Knowledge representation
- ii-Reasoning
- iii-Planning
- iv-Execution

- ii & iii
- ii & iii
- iii & iv

► **i & ii (Page 89)**

Question # 8 of 10 (Marks: 1) - Please choose one

Which one of the problem is more subtle, and consequently, is more frustrating:

- Foothill problem
- Plateau
- **Ridge (Artificial Intelligence, 3/E) [click here for detail](#)**
- Box

Question # 9 of 10 (Marks: 1) - Please choose one

Most of the solution spaces for problems can be represented in a _____

► **Graph (Page 21)**

- Table
- Demo

Question # 10 of 10 (Marks: 1) - Please choose one

By getting grips on _____ that deal with searching techniques in graphs and trees, problem solving can be performed in an efficient manner.

- Pseudocode
- **Algorithms (Page 21)**
- Charts
- Graphs

Question # 1 of 10 (Marks: 1) - Please choose one

Every graph can be converted into a tree.

▶ **True** (Page 22)

▶ False

Question # 2 of 10 (Marks: 1) - Please choose one

In Breadth First Search the node with the largest value of height will be at the _____ priority to be picked.

▶ **Maximum** (Page 28)

▶ Minimum

▶ None of the given

Question # 3 of 10 (Marks: 1) - Please choose one

Breadth-First Search checks all paths of a given length before moving on to any longer paths.

▶ **True** [Click here for detail](#)

▶ False

Question # 1 of 10 (Marks: 1) - Please choose one

The foothill problem occurs whenever there are _____ peaks.

▶ High

▶ **Secondary** (Artificial Intelligence, 3/E) [click here for detail](#)

▶ Primary

▶ Deep

Question # 4 of 10 (Marks: 1) - Please choose one

The Plateau problem comes up when there is a mostly flat area _____ the peaks.

▶ **Separating** (Artificial Intelligence, 3/E) [click here for detail](#)

▶ Joining

▶ Over

▶ None of the given

Question # 5 of 10 (Marks: 1) - Please choose one

The paths found by best-first search are likely to be _____ than those found with other methods.

▶ None of the given

▶ **Shorter** (Artificial Intelligence, 3/E) [click here for detail](#)

▶ Longer

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Question # 6 of 10 (Marks: 1) - Please choose one

In Basic Genetic Algorithm the term mutation refers to a small random _____.

- ▶ Number
- ▶ **Change (Page 77)**
- ▶ Operator
- ▶ Operand

Question # 1 of 10 (Marks: 1) - Please choose one

Which of the following two components are closely coupled and each is intrinsically tied to the other.

- i. Knowledge representation
- ii. Reasoning
- iii. Execution
- iv. Planning

- ▶ i & iii
- ▶ ii & iii
- ▶ iii & iv
- ▶ **i & ii (Page 89)**

Question # 7 of 10 (Marks: 1) - Please choose one

Some essential components of problem solving are Problem statement, _____, solution space and Operators

- ▶ Complex State
- ▶ Initial State
- ▶ Intermediate State
- ▶ **Goal State (Page 17)**

Question # 8 of 10 (Marks: 1) - Please choose one

The traveling inside a solution space requires something called as _____

- ▶ Operands
- ▶ Inner solution
- ▶ Space solution
- ▶ **Operators (Page 18)**

Question # 9 of 10 (Marks: 1) - Please choose one

Genetic Algorithms is a search method in which multiple search paths are followed in _____

- ▶ Series
- ▶ **Parallel (Page 77)**
- ▶ None of the give
- ▶ Sequential

Question # 10 of 10 (Marks: 1) - Please choose one

We use graph to represent problems and their solution spaces.

- ▶ False
- ▶ **True (Page 22)**

Question # 1 of 10 (Marks: 1) - Please choose one

Which of the following disciplines provides us with the theories of structure and meaning of language

- ▶ **Linguistic (Page 9)**
- ▶ Philosophy
- ▶ Biology
- ▶ Psychology

Question # 2 of 10 (Marks: 1) - Please choose one

In optimal path searches we try to find the _____ solution

- ▶ Least
- ▶ Worst
- ▶ Least but not worst
- ▶ **Best (Page 24)**

Question # 3 of 10 (Marks: 1) - Please choose one

From discipline _____ we have information about the network structure of a human brain and all the theories on functionalities of different human organs.

- ▶ Mathematics
- ▶ **Biology (Page 9)**
- ▶ Computer Science
- ▶ Psychology

Question # 4 of 10 (Marks: 1) - Please choose one

Hit and trial is classical approach to solve the _____ problem easily

- ▶ **Trivial (Page 15)**
- ▶ Medium

Question # 5 of 10 (Marks: 1) - Please choose one

Intelligence id the characteristics of:

- ▶ **Living things (Page 4)**
- ▶ All things
- ▶ None of them
- ▶ All of them

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Question # 6 of 10 (Marks: 1) - Please choose one

Intelligence is the ability to

▶ **Think / learn/Plan/ Schedule (Page 5)**

- ▶ Recognize / Remember
- ▶ Problem Solving
- ▶ All of the Above

Question # 7 of 10 (Marks: 1) - Please choose one

Ability to tackle ambiguous and fuzzy problems demonstrate

▶ **Intelligence (Page 6)**

- ▶ Non intelligence behavior
- ▶ All of the given
- ▶ None of the given

Question # 8 of 10 (Marks: 1) - Please choose one

Can we precisely define Artificial Intelligence?

- ▶ Yes We Can
- ▶ **No we cannot (Page 14)**

Question # 9 of 10 (Marks: 1) - Please choose one

The traveling inside solution space requires something called

- ▶ Problem Statement
- ▶ Operands
- ▶ **Operators (Page 18)**
- ▶ Solution Space

Question # 10 of 10 (Marks: 1) - Please choose one

In DFS node with the largest value of height will be at Priority

▶ **Maximum (Page 25)**

- ▶ Minimum
- ▶ Zero
- ▶ Least

Question # 1 of 10 (Marks: 1) - Please choose one

Try to catch out own thoughts as they go by is

▶ **Introspection (Page 28)**

- ▶ Psychology
- ▶ Both of above
- ▶ None of the above

Question # 1 of 10 (Marks: 1) - Please choose one

Classical way of problem solving

► GA

► **Generate and Test (Page 15)**

Question # 2 of 10 (Marks: 1) - Please choose one

Procedures that search the solution space in an uninformed manner are usually costly with respect to _____.

► Time

► Space

► Time and space both

► **All of the given (Page 37)**

Question # 3 of 10 (Marks: 1) - Please choose one

Best first search is a greedy approach.

► **True (Page 47)**

► False

Question # 4 of 10 (Marks: 1) - Please choose one

Answering the Sequence Problem need

► **Intelligence (Page 15)**

► Ability to make plan

► Ability to schedule

► None of the given

Question # 5 of 10 (Marks: 1) - Please choose one

IF A THEN B This can be considered to have a similar logical meaning as the following:

► **A -> B (Page 99)**

► A <-> B

► A <- B

► None of the given

Question # 6 of 10 (Marks: 1) - Please choose one

In the statement "IF A THEN B", B is called

► Antecedent

► **Consequent (Page 95)**

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Question # 7 of 10 (Marks: 1) - Please choose one

In general, the antecedent of a rule compares an object with a possible value, using an operator.

- ▶ True [click here for detail](#)
- ▶ False

Question # 8 of 10 (Marks: 1) - Please choose one

Which of the following is a valid example which represents a suitable antecedent in a rule?

- ▶ IF $x > 3$
- ▶ IF name is "Bob"
- ▶ IF weather is cold
- ▶ All of the given options

Question # 9 of 10 (Marks: 1) - Please choose one

From discipline of _____ we have the tools and techniques to investigate the human mind and ways to represent the resulting theories

- ▶ Computer Science
- ▶ Biology
- ▶ Mathematics
- ▶ Psychology (Page 9)

Question # 10 of 10 (Marks: 1) - Please choose one

Intelligence is the characteristic of

- ▶ Living being (Page 4)
- ▶ All things
- ▶ None of them
- ▶ All of them

Question # 1 of 10 (Marks: 1) - Please choose one

_____ AI actually tries to recreate the functions of the inside of the brain as opposed to simply emulating behavior

- ▶ Weak
- ▶ Strong (Page 8)
- ▶ Weak and Strong
- ▶ None of the given

بہترین تجربہ وہ ہے جس سے نصیحت حاصل ہو

Question # 2 of 10 (Marks: 1) - Please choose one

_____ AI treats the brain as a black box and just emulates its functionality.

► **Weak (Page 8)**

- Strong
- Weak and Strong
- None of the given

Question # 1 of 10 (Marks: 1) - Please choose one

Aggregation only occurs once for each output variable, just after the fifth and final step, defuzzification.

► **True (Page 157)**

► False

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انسان کے لئے بری صحبت سے بڑھ کر بری کوئی چیز نہیں
تم اچھا کرو زمانہ تم کو برا سمجھے یہ اس سے بہتر ہے کہ تم برا کرو اور زمانہ تم کو اچھا سمجھے

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