

	<b>CS-202 Machine Intelligence(Old-2014-15) &amp; (252212)</b>	<b>A N S</b>
1)	_____ gains efficiency from the fact that it operates on the statements that have been converted to very convenient standard form  (A)Refutation (B) Resolution (C) Clause form (D) None of these	B
2)	To use resolution for expressions in predicate logic, we use _____ to locate pair of literals that cancel out.  (A) Unification algorithm (B) Resolution algorithm (C) Both A and B (D) None of these	A
3)	What is Time Complexity of Breadth First search algorithm?  (A) b (B) $b^d$ (C) $b^2$ (D) $b^b$	B
4)	First order logic is also known as_____  (A) First order predicate calculus (B) Quantification theory (C) Low order calculus (D) All of these	D
5)	How many preposition symbols are present in Machine Intelligence?  (A) 1 (B) 2 (C) 3 (D) 4	B

6)	How many logical connectives are there in Machine intelligence? (A) 2 (B) 3 (C) 4 (D) 5	D
7)	Which of the following is an application of AI? (A) Gaming (B) Expert Systems (C) Vision Systems (D) All of the above	D
8)	Fuzzy Set theory defines fuzzy operators. Choose the fuzzy operators from the following. (A) AND (B) OR (C) NOT (D) All of the above	D
9)	The field that investigates the mechanics of human intelligence is: (A) history (B) cognitive science (C) psychology (D) sociology	B
10)	What action to take when IF temperature=(Hot OR Very_Hot) AND target=Warm THEN? (A) Heat (B) No_Change (C) Cool (D) None of the Above	B

11)	Default reasoning is another type of (A) Analogical reasoning (B) Bitonic reasoning (C) Non-monotonic reasoning (D) Monotonic reasoning	C
12)	Research scientists all over the world are taking steps towards building computers with circuits patterned after the complex inter connections 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	C
13)	What is the form of Fuzzy logic? (A) Two-valued logic (B) Crisp set logic (C) Many-valued logic (D) Binary set logic	C
14)	Who was the inventor of Fuzzy Logic? (A) doug cutting (B) John McCarthy (C) LotfiZadeh (D) John cutting	C
15)	What is an auto-associative network? (A) a neural network that contains no loops (B) a neural network that contains feedback (C) a neural network that has only one loop (D) a single layer feed-forward neural network with pre-processing	B

16)	Which of the following is true? (i) On average, neural networks have higher computational rates than conventional computers. (ii) Neural networks learn by example. (iii) Neural networks mimic the way the human brain works.  (A) All of the mentioned are true (B) (ii) and (iii) are true (C) (i), (ii) and (iii) are true (D) None of the mentioned	A
17)	Which is true for neural networks?  (A) It has set of nodes and connections (B) Each node computes it's weighted input (C) Node could be in excited state or non-excited state (D) All of the mentioned	D
18)	One of the most useful forms of inference is_____, in which elements of specific classes inherit attributes and values from more general classes in which they are included.  (A) Simple inheritance      (B) attribute inheritance (C) property inheritance      (D) None of these	C
19)	Knowledge and reasoning also plays crucial role in dealing with _____ environment.  (A) Completely Observable (B) Partially Observable (C) Neither Completely nor partially observable (D) None of these	B
20)	What are types of knowledge?  (A) Declarative    (B) Procedural    (C) Heuristic    (D) All of these	D
21)	Which are not familiar connectives in the first order predicate logic?  (A) and                      (B) iff                      (C) or                      (D) not	D

22)	What kind of information can play a role in the reasoning about values? (A) Information about the type of value    (B) constraint on value (C) Rules for computing values                      (D) All of these	D
23)	The whole problem of representing the facts that change as well as those that do not is known as the _____ (A) Frame problem                                      (B) Sequence problem (C) Reasoning problem                                      (D) None	A
24)	What is the frame? (A) A way of representing knowledge    (B) Data Structure (C) Data Type                                      (D) None of the mentioned	A
25)	What are the advantages of neural networks over conventional computers? (i) They have the ability to learn by example (ii) They are more fault tolerant (iii) They are more suited for real time operation due to their high 'computational' rates (A) (i) and (ii) are true (B) (i) and (iii) are true (C) Only (i) (D) All of the mentioned	D
26)	When will further expansion is unnecessary for planning graph? (A) Identical (B) Replicate (C) Not identical (D) None of the mentioned	A

27)	There are also other operators, more linguistic in nature, called _____ that can be applied to fuzzy set theory.  (A) Hedges (B) Lingual Variable (C) Fuzz Variable (D) None of the mentioned	A
28)	What is the name of the computer program that simulates the thought processes of human beings?  (A) Human logic (B) Expert reason (C) Expert system (D) Personal information	C
29)	We require machine learning to_____  (A) Understand and improve efficiency of human learning. (B) Discover new things & structure that is unknown to human. (C) Fill in incomplete specification about a domain. (D) All of the above	D
30)	Automated vehicle is an example of _____  (A) Supervised learning (B) Unsupervised learning (C) Active learning (D) Reinforcement learning	A
31)	Which of the following is not a part of fuzzy logic Systems Architecture?  (A) Fuzzification Module (B) Knowledge Base (C) Defuzzification Module (D) Interference base	D

32)	Fuzzy logic is usually represented as _____ (A) IF-THEN-ELSE rules (B) IF-THEN rules (C) Both IF-THEN-ELSE rules & IF-THEN rules (D) None of the Above	C
33)	A _____ is used to demonstrate, on purely syntactic basis, that one formula is a logical consequence of another formula (A) Deductive Systems (B) Inductive Systems (C) reasoning with knowledge based system (D) None	A
34)	Which of the following is the model used for learning? (A) Decision trees (B) Neural networks (C) Propositional and FOL rules (D) All of the mentioned	D
35)	How is Fuzzy Logic different from conventional control methods? (A) IF and THEN Approach (B) FOR Approach (C) WHILE Approach (D) DO Approach	A
36)	In an Unsupervised learning _____ (A) Specific output values are given (B) Specific output values are not given (C) No specific Inputs are given (D) Both inputs and outputs are given	B

37)	<p>"In AI, we study the whole universe by dividing it into two components."</p> <p>What are these two components?</p> <p>(A) Sky and Land</p> <p>(B) Agent and environment</p> <p>(C) Yes or No</p> <p>(D) None of the above</p>	B
38)	<p>Which of the following elements constitutes the frame structure?</p> <p>(A) Facts or Data</p> <p>(B) Procedures and default values</p> <p>(C) Frame names</p> <p>(D) Frame reference in hierarchy</p>	A
39)	<p>The attributes that we use to describe objects are the entities that we represent, what properties do they have independent of the specific knowledge they encode?</p> <p>(A) Inverses and single valued attributes</p> <p>(B) Existence in an <i>isa</i> hierarchy</p> <p>(C) Techniques for reasoning about values</p> <p>(D) All of these</p>	D
40)	<p>Which statement is true about Scripts?</p> <p>(A) Describe event rather than objects.</p> <p>(B) used in specific problem-solving contexts.</p> <p>(C) may use deductive or inductive reasoning.</p> <p>(D) None of these</p>	A
41)	<p>_____ are mathematical problems defined as a set of objects whose state must satisfy a number of constraints or limitations.</p> <p>(A) Constraints Satisfaction Problems</p> <p>(B) Uninformed Search Problems</p> <p>(C) Local Search Problems</p> <p>(D) All of the mentioned</p>	A



42)	Graph used to represent semantic network is called_____	B
	(A)Undirected Graph (B) Directed Graph (C) DAG (D) Directed Complete Graph	
43)	Which of following is extension of Semantic Network?	D
	(A)Expert System (B) Rule based expert system (C) Decision tree system (D) Partitioned Networks	
44)	Semantic Network Represents_____	B
	(A)Syntactic structure between concepts (B) Semantic structure between concepts (C)Both A & B (D) None of these	
45)	What are the limitations of Semantic Networks?	B
	(A)Intractability                      (B) Lack of expressing some properties (C)Incomplete                          (D) Has memory constraints	
46)	There exists two ways to infer using semantic networks in which knowledge is represented using frames?	A
	(A)Intersection search      (B) inheritance search (C) Both A & B              (D) None of these	
47)	To represent simple quantified expressions in semantic nets we have to_____ the semantic net into hierarchical set of spaces.	C
	(A) Quantification              (B) non-partition (C) partition                      (D) None of these	
48)	A _____ is a collection of attributes (slots) and associated values that describe some entity in the world.	B
	(A) Semantic nets (B) Frame (C) Partitioned nets (D) None of these	

49)	Which of the following is not Application Areas of Fuzzy Logic? (A) Automotive Systems (B) Domestic Goods (C) Domestic Control (D) Environment Control	C
50)	Solving a constraint satisfaction problem on a finite domain is an/a _____ problem with respect to the domain size. (A) P complete (B) NP complete (C) NP hard (D) Domain dependent	B
51)	Which of the following algorithm is generally used CSP search algorithm? (A) Breadth-first search algorithm (B) Depth-first search algorithm (C) Hill-climbing search algorithm (D) None of the mentioned	B
52)	Inductive learning involves finding a _____ (A) Consistent Hypothesis (B) Inconsistent Hypothesis (C) Regular Hypothesis (D) Irregular Hypothesis	A
53)	Fuzzy Logic can be implemented in? (A) Hardware (B) software (C) Both A and B (D) None of the Above	C

54)	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	C
55)	What is the main task of a problem-solving agent? (A) Solve the given problem and reach to goal (B) To find out which sequence of action will get it to the goal state (C) Both A and B (D) None of the Above	C
56)	What is Initial state + Goal state in Search Terminology? (A) Problem Space (B) Problem Instance (C) Problem Space Graph (D) Admissibility	B
57)	Which of following is also called as single inference rule? (A)Reference (B) Resolution (C) Reform (D) None of these	B
58)	Which of following is also called conjunction of disjunction of literals? (A)Conjunctive normal form (B) Disjunctive normal form (C) Normal form (D) None of These	A
59)	What is the condition of literals in variables? (A)Existentially Quantified (B) Universally Quantified (C) Quantified (D) None of these	B
60)	Which can be converted to inferred equivalent CNF sentence? (A)Every sentence of propositional logic (B)Every sentence of inference (C)Every sentence of first order predicate (D) None of these	C

61)	Which algorithm work backward from goal to solve problem? (A) Forward chaining (B) Backward Chain (C) Hill-Climbing (D)None of these	B
62)	Depth-First Search is implemented in recursion with _____ data structure. (A) LIFO (B) LILO (C) FIFO (D) FILO	A
63)	How the logic programming can be constructed? (A) Variables (B) Expressing Knowledge in formal Language (C) Database (D) None of these	B
64)	It is useful to have _____ and _____ in predicate logic. (A) Computable functions (B) Predicates (C) Both A & B (D) None of these	C
65)	Which of the following is true for neural networks? (i) The training time depends on the size of the network. (ii) Neural networks can be simulated on a conventional computer. (iii) Artificial neurons are identical in operation to biological ones. (A) All of the mentioned (B) (ii) is true (C) (i) and (ii) are true (D) None of the mentioned	C
66)	What is perceptron? (A) a single layer feed-forward neural network with pre-processing (B) an auto-associative neural network (C) a double layer auto-associative neural network (D) a neural network that contains feedback	A

67)	Genetic Algorithm are a part of (A) Evolutionary Computing (B) inspired by Darwin's theory about evolution - "survival of the fittest" are adaptive heuristic search algorithm based on the evolutionary (C) ideas of natural selection and genetics (D) All of the above	D
68)	What is Fuzzy Logic? (A) a method of reasoning that resembles human reasoning (B) a method of question that resembles human answer (C) a method of giving answer that resembles human answer. (D) None of the Above	A
69)	How many output Fuzzy Logic produce? (A) 2 (B) 3 (C) 4 (D) 5	A
70)	The room temperature is hot. Here the hot (use of linguistic variable is used) can be represented by _____ (A) Fuzzy Set (B) Crisp Set (C) Both A and B (D) None of the Above	A
71)	Scripts were developed by _____ (A) Dennis Ritchie (B) Alan Turing (C) Roger Schank (D) John Grinder	C

72)	<p>Semi-supervised learning</p> <p>(A) learns how to act given an observation of the world</p> <p>(B) combines both labelled and unlabeled examples to generate an appropriate function or classifier.</p> <p>(C) models a set of inputs, like clustering</p> <p>(D) None of these</p>	B
73)	<p>Supervised learning_____</p> <p>(A) generates a function that maps inputs to desired outputs</p> <p>(B) models a set of inputs, like clustering. See also data mining and knowledge discovery.</p> <p>(C) combines both labeled and unlabeled examples to generate an appropriate function or classifier.</p> <p>(D) None of these</p>	A
74)	<p>Which of the following statements about Conceptual dependency is correct?</p> <p>(A) It is independent of the language in which the sentences were originally stated.</p> <p>(B) It depends on the language in which the sentences were originally stated.</p> <p>(C) Neither A nor B</p> <p>(D) Both A and B</p>	A
75)	<p>ATRANS in Conceptual dependency denotes:</p> <p>(A) Transfer of the physical location of an object</p> <p>(B) Transfer of an abstract relationship</p> <p>(C) Application of physical force to an object</p> <p>(D) Transfer of mental information</p>	B
76)	<p>Which of the following are comprised within AI?</p> <p>(A) Machine Learning</p> <p>(B) Deep Learning</p> <p>(C) Both (1) and (2)</p> <p>(D) None of the above</p>	C

77)	Which of the following is not a goal of AI? (A) Thinking humanly (B) Adapting to the environment and situations (C) To rule over humans (D) Real Life Problem Solving	C
78)	In AI systems, Knowledge can be represented by____ (A) Machine Logic (B) Predicate Logic and Propositional Logic (C)Compound Logic (D) None of these	B
79)	A good system for the representation of knowledge in particular domain should have following property_____ (A)Representational Adequacy (B) Inferential Adequacy (C) Inferential Efficiency (D) All of the mentioned	D
80)	Which is not property of representation of knowledge? (A) Representational Verification (B) Representational Adequacy (C) Inferential Adequacy (D) Inferential Efficiency	A
81)	Which data structure conveniently used to implement BFS? (A) Stacks (B) Queues (C) Priority Queues (D) None of the Above	B

82)	What is disadvantage of Greedy Best First Search? (A) This algorithm is neither complete, nor optimal. (B) It can get stuck in loops. It is not optimal. (C) There can be multiple long paths with the cost $\leq C^*$ (D) may not terminate and go on infinitely on one path	B
83)	Searching using query on Internet is, use of _____ type of agent. (A) Offline agent (B) Online Agent (C) Goal Based (D) Both B and C	D
84)	Which of following is used to compute truth of any sentence? (A) Semantics of Propositional Logic (B) Alpha-Beta Pruning (C) First order predicate (D) Both (A) & (B)	A
85)	What are Semantic Networks? (A) A way of representing knowledge (B) Data Structure (C) Data Type (D) None of these	A
86)	Each Frame represents _____ (A) Class (B) Instance (C) Both A & B (D) None of these	C
87)	Which of the following is the model used for learning? (A) Decision trees (B) Neural networks (C) Propositional and FOL rules (D) All of the mentioned	D



88)	What is the name of the computer program that contains the distilled knowledge of an expert?  (A) Data base management system (B) Management information System (C) Expert system (D) Artificial intelligence	C
89)	Which of the Following problems can be modelled as Constraint Satisfaction Problem?  (A) 8-Puzzle problem (B) 8-Queen problem (C) Map coloring problem (D) All of the mentioned	D
90)	The term _____ is used for a depth-first search that chooses values for one variable at a time and returns when a variable has no legal values left to assign.  (A) Forward search (B) Backtrack search (C) Hill algorithm (D) Reverse-Down-Hill search	B
91)	How many types of learning are available in machine learning?  (A) 8 (B) 6 (C) 4 (D) 2	B
92)	Scripts consist of _____  (A) Rules of propositional logic (B) Rules of predicate calculus (C) Stereotypically ordered causal or temporal chain of events. (D) Facts and premises	C

93)	A typical set of primitive actions in Conceptual Dependency includes: (A) ATRANS (B) PTRANS (C) PROPEL (D) All of the above	D
94)	What are the elements that construct the frame structure? (A) Procedures and default values (B) Facts or Data (C) Frame names (D) Frame reference	B
95)	Which of the following is a knowledge representation technique used to represent knowledge about stereotype situation? (A) Semantic network (B) Frames (C) Scripts (D) Conceptual Dependency	C
96)	Who is the father of Artificial Intelligence? (A) Doug Cutting (B) Alan Turing (C) William S. (D) Rasmus Lerdorf	B
97)	What are the main goals of AI? (A) To Create Expert Systems (B) To Implement Human Intelligence in Machines (C) Both A and B (D) None of the Above	C

98)	Truth in some relevant world is the _____ that we want to represent. (A) Representations (B) Facts (C) Mappings (D) None of These	B
99)	The things that we will be able to manipulate are called as _____ (A) Representations (B) Facts (C) Mappings (D) None of These	A
100)	Which of the following is not the type of AI? (A) Reactive machines (B) Unlimited memory (C) Theory of mind (D) Self-awareness	B

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