# National Testing Agency

Artificial Intelligence 30 Sep 2020 Shift 1 Artificial Intelligence 2020-09-30 13:30:24 Question Paper Name: Creation Date: Subject Name:

180

100

Number of Questions:

Duration :

Display Marks:

Total Marks:

Yes

### Artificial Intelligence

> Group Maximum Duration: Group Minimum Duration: Show Attended Group?:

Group Number:

Group Id:

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### **Artificial Intelligence**

Is this Group for Examiner?:

Group Marks:

Break time:

Mandatory 89951457 Online 100 100 Number of Questions to be attempted: Mandatory or Optional: Number of Questions: Section Number: Section type: Section Id:

89951479 Yes Yes 100 Mark As Answered Required?: Question Shuffling Allowed: Sub-Section Number Section Marks: Sub-Section Id:

Question Number: 1 Question Id: 8995144739 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In the case of MiniMax algorithm, the Alpha-beta pruning usually saves.

A single node

2. One ply

3. Multiple plies

4. A subtree

#### Options:

89951418835.1

89951418836.2

89951418837.3

89951418838.4

Question Number: 2 Question Id: 8995144740 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Consider a MiniMax algorithm being applied to a minimizing ply. Which value will be backed up in the following case? Three nodes are there in a ply with values 7, -9 and 5?

2. -9

4. Depends on other outcomes

#### Options:

89951418839. 1

89951418840.2

89951418841.3

Question Number: 3 Question Id: 8995144741 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In the MiniMax algorithm, the beta value is applied at

Maximizing layer

2. Minimizing layer

3. Both of above

4. None of above

#### Options:

89951418843.1

89951418844. 2

89951418845.3

89951418846.4

Question Number: 4 Question Id: 8995144742 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Why both players choose N over D in in Game Playing?

1. N can lead to win

2. D is just drawn, not win

3. One can still save even if N leads to a bad move

4. All of above

#### Options:

89951418847.1

89951418848.2

89951418849.3

89951418850.4

Question Number: 5 Question Id: 8995144743 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

While deciding the degree of freedom one must check if the piece under consideration

- 1. has enough freedom
- 2. is safe from all directions
- 3. Has all of the directions open
- nas all of the directions open
   A. Possibility of moving in how many directions

#### Options:

89951418851. 1

89951418852.2

89951418853.3

89951418854.4

Question Number: 6 Question Id: 8995144744 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In SEF calculation, Wi is a weight derived from Calculating

- another component's values
- 2. Summation of other values
- The best value
- 4. Expert's idea about how good a component is

#### Options:

89951418855. 1

89951418856.2

89951418857.3

89951418858. 4

Question Number: 7 Question Id: 8995144745 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Consider the state space representation methods described in the course. In the third representation of the farmer fox chicken grain problem, why do you think the values of multiple of 2 are chosen

- They are easier to be computed
- Addition indicates the numbers which are added
- 3. It is easier to see if the item is on left or right side
- 4. It is possible to find if the farmer is on the left or right side

#### Options:

89951418860.2 89951418859.1

89951418861.3

89951418862.4

Question Number: 8 Question Id: 8995144746 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

One solution to combinatorial explosion is to use

1. Better production rules

2. Heuristics

3. Better programming logic

4. Some constraint on domain

#### Options:

89951418863.1

89951418864.2

89951418865.3

89951418866. 4

Question Number: 9 Question Id: 8995144747 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

One of the problems AI designers face is writing programs that

1. Find the solution itself

2. Code designer's solution

3. Runs faster

4. Manage a huge storage

#### Options:

89951418867.1

89951418868. 2

89951418869.3

Question Number: 10 Question Id: 8995144748 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

What is needed to constrain the search process so it becomes possible to carry the search out in real

- 1. Heuristics
- 2. Better search method
- Faster processor
- 4. Variables

#### Options:

89951418871. 1

89951418872.2

89951418873.3

89951418874. 4

Question Number: 11 Question Id: 8995144749 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

times in IDA and RDF One node is explored

- 1. Only one
- Number of paths it is part of
- 3. Number of nodes in the graph
- 4. Number of all possible paths

#### Options:

89951418875.1

89951418876.2

89951418877.3

89951418878.4

Question Number: 12 Question Id: 8995144750 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

### The limitation of the IDA\* is that

- 1. It explores the entire tree in each iteration
- 2. Not well suited for well-connected graphs
- 3. Admissible heuristic function is not always good from another perspective
  - 4. All of above

#### Options:

89951418879.1

89951418880.2

89951418881.3

89951418882.4

Question Number: 13 Question Id: 8995144751 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Prof. Korf designed two algorithms, which we discussed in the course, while working on problems

- with domain
- 1. Combinatorial explosion
- 2. Search algorithm optimization
  - 3. Travelling salesman
- 4. Computational biology

#### Options:

89951418883.1

89951418884. 2

89951418885.3

89951418886. 4

Question Number: 14 Question Id: 8995144752 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The value of g in A\* algorithm indicates

- Estimate of root node to current node distance
- Estimate of root node to goal node distance
- 3. Estimate of current node to root node distance
- Root node to current node distance

#### Options:

89951418888.2 89951418887.1

89951418889.3

89951418890.4

Question Number: 15 Question Id: 8995144753 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The admissible function is of no use if

- 1. It is not optimal
- 2. It is not used properly
- 3. The algorithm is not admissible
  - 4. It does not fulfil other criteria

#### Options:

89951418891.1

89951418892.2

89951418893.3

89951418894. 4

Question Number: 16 Question Id: 8995144754 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Suppose following h and h' values are available of successive iterations, what can you say about the

- admissibility? (2,1),(3,1),(4,1),(5,1)
- 1. Overestimation
- 2. Underestimation
- 3. Consistent overestimation
- Consistent underestimation

#### Options:

89951418895.1

89951418896.2

89951418897.3

Question Number: 17 Question Id: 8995144755 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

when subsequent statements prove to be contrary After activating a script one might need to

1. Deactivate it

2. Revoke it

3. Apply it multiple times

4. All of above

#### Options:

89951418899. 1

89951418900.2

89951418901.3

89951418902.4

Question Number: 18 Question Id: 8995144756 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The reason for introduction of script is that the events

1. Hardly occur in isolation

2. Dependent on other events

3. Require people and objects

4. All of above

#### Options:

89951418903.1

89951418904.2

89951418905.3

89951418906.4

Question Number: 19 Question Id: 8995144757 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Alternate paths in a script might have different

- 1. Roles
- 2. Props
- 3. Scenes
- 4. Entry conditions

#### Options:

89951418907.1

89951418908.2

89951418909.3

89951418910. 4

Question Number: 20 Question Id: 8995144758 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

CD is considered stronger representation than Semantic Net because

- 1. It uses stronger links
- 2. CD uses stronger words
- 3. CD links are well defined
  - 4. None of above

#### Options:

89951418911.1

89951418912.2

89951418913.3

89951418914. 4

Question Number: 21 Question Id: 8995144759 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Frame IndianCricketer represents

- 1. A class
- 2. An object
- 3. Cricketer
- 4. Indian

#### Options:

89951418916.2

89951418917.3

89951418918. 4

Question Number: 22 Question Id: 8995144760 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Krishna went to Vrindavan with Balram requires

1. PTRANS

Destination Case

3. Rule 8 like situation

4. All of above

Options:

89951418919.1

89951418920.2

89951418921.3

89951418922. 4

Question Number: 23 Question Id: 8995144761 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The k subscript additionally used with weights in BPNN indicate

Input unit number

2. Hidden unit number

3. Output unit number

Layer number

Options:

89951418923.1

89951418924.2

89951418925.3

89951418926. 4

Question Number: 24 Question Id: 8995144762 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

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- 1. Rapidly changing
- 2. Large amount of
  - 3. Variety of
- 4. Incomplete

#### Options:

89951418927. 1

89951418928.2

89951418929.3

89951418930.4

Question Number: 25 Question Id: 8995144763 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

A sigmoid function is

- 1. A Square function
- 2. A discrete function
- 3. An activation function
- 4. Sine waves like function

#### Options :

89951418931.1

89951418932.2

89951418933.3

89951418934. 4

Question Number: 26 Question Id: 8995144764 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Which representation allows single point crossover in TSP problem?

- 1. Path
- 2. Ordinal
- 3. Heuristic
- 4. Adjacency

#### Options:

89951418935.1

89951418936.2

89951418937.3

89951418938. 4

Question Number: 27 Question Id: 8995144765 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Mutation process in GA

1. Generates genetically different children

2. Generates children inheriting from parents

3. Add steadiness to the process

Applied in a haphazard manner

#### Options:

89951418939. 1

89951418940.2

89951418941.3

89951418942.4

Question Number: 28 Question Id: 8995144766 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

over each iteration

In GA, the solutions are

- 1. Improved
  - 2. Modified
    - 3. Tested
- 4. Completely changed

#### Options:

89951418943.1

89951418944. 2

89951418945.3

89951418946.4

Question Number: 29 Question Id: 8995144767 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Correct Marks: 1 Wrong Marks: 0

The conclusion is biased if

- The data does not represent the universe closely
- 2. Some of the parameters are missing
- 3. The relation between the outcomes and parameters is not exactly found
- 4. All of above

#### Options:

89951418947. 1

89951418948. 2

89951418949.3

0///1410///

89951418950.4

Question Number: 30 Question Id: 8995144768 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Confidence level is an example of

- 1. Performance yardstick
- 2. Pattern matching
  - 3. Problem solving
    - 4. All of above

#### Options:

89951418951.1

89951418952.2

89951418953.3

89951418954. 4

Question Number: 31 Question Id: 8995144769 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

attributes and outcome but segregating inputs into groups in a way that inputs with similar attributes While dealing with neural network, when the problem is not confined to find a relation between together, it is known as

- 1. Grouping
- 2. Collecting
- 3. Clustering
- 4. All of above

#### Options:

89951418955.1

89951418956.2

89951418957.3

89951418958.4

Question Number: 32 Question Id: 8995144770 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Why is the typical BPNN algorithm named as backpropagation?

- 1. The activations are propagated backwards
- 2. The input propagated backwards
- 3. The output is propagated backwards
  - 4. The error is propagated backwards

#### Options:

89951418959. 1

89951418960.2

89951418961.3

89951418962.4

Question Number: 33 Question Id: 8995144771 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Unlike square function, the sigmoid function allows the network to learn for

- Incorrect values
- Correct Values
- 3. Correct outputs
- 4. Incorrect outputs

#### Options:

89951418963.1

89951418964.2

89951418965.3

89951418966.4

Question Number: 34 Question Id: 8995144772 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Though the multilayer perceptron is able to solve non-linearly separable problems, it is still not foolproof. It is because it cannot

1. Guarantee to learn

- 2. Run faster
- 3. Find optimal solution
- 4. All of above

#### Options:

89951418967.1

89951418968.2

89951418969.3

89951418970.4

Question Number: 35 Question Id: 8995144773 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Rationality of an agent is measured by

- The outcome of the agent's work
- 2. The matching of the process of the agent with the outcome
  - 3. The environment
- 4. The extent to which the objectives are matched

#### Options:

89951418971.1

89951418972.2

89951418973.3

89951418974. 4

Question Number: 36 Question Id: 8995144774 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

When h' overestimates the h value, we solution

- Sometimes get optimal sometimes non-optimal
  - 2. Not guaranteed to have optimal
    - 3. We may get optimal Solution
      - 4. All of above

#### Options:

89951418975.1

89951418976.2

89951418977.3

89951418978.4

Question Number: 37 Question Id: 8995144775 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The ant colony optimization is a

- 1. Multi-agent algorithm
- 2. Parallel algorithm
- 3. Algorithm which prefers choosing a path with maximum pheromone value
- 4. All of above

#### Options:

89951418979.1

89951418980.2

89951418981.3

Question Number: 38 Question Id: 8995144776 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

At each iteration, what happens to the values of both threshold and their position in the argument list (in MiniMax algorithm)

Value negated and positions interchanged

2. Both changed

3. Only values negated

4. Only positions are interchanged

#### Options:

89951418983.1

89951418984. 2

89951418985.3

89951418986. 4

Question Number: 39 Question Id: 8995144777 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The path, when Over() is called, is taken as Null, why (in MiniMax algorithm)

1. There is no path from this node

The path is calculated in reverse order

3. Path is always null

4. Path is set by other methods

#### Options:

89951418987.1

89951418988. 2

89951418989.3

89951418990.4

Question Number: 40 Question Id: 8995144778 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Both the cutoffs are applied (in MiniMax algorithm)

- 1. Together
- Only at specific plies
  - 3. Alternatively
- 4. All of above

#### Options:

89951418991. 1

89951418992.2

89951418993.3

89951418994. 4

Question Number: 41 Question Id: 8995144779 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A question "Why Jay ask conductor 'Is the bus crossed Jawahar Chowk' (a bus station) " should be answered using backward reasoning and considering

1. Jay does not know the route the bus takes

- 2. Jay has to disembark immediately after Jawahar Chowk.
  - 3. Jay does not know who the bus conductor is
- 4. Conductors are responsible for answering all questions by the travelers

#### Options:

89951418995. 1

89951418996.2

89951418997.3

89951418998. 4

Question Number: 42 Question Id: 8995144780 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

One of the roles for "take-a-bus" script is

- 1. Conductor
- 2. Ticket
- 3. Take a seat
- 4. Reaching destination

Options:
89951418999. 1
89951419000. 2
89951419001.3
89951419002. 4
Question Number: 43 Question Id: 8995144781 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
When alternate path is taken may not be considered to be true upon exit in scripts
1. Entry conditions
2. Results
3. Props 4. Roles
Options:
89951419003. 1
89951419004. 2
89951419005.3
89951419006. 4
Question Number: 44 Question Id: 8995144782 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No
Correct Marks: 1 Wrong Marks: 0
The dependency between an actor and an ACT is denoted by a bi-directional in CD
1. Single Arrow
2. Double arrow
3. Solid arrow
4. Solid double arrow
Options:
89951419007. 1
89951419008. 2
89951419009.3
89951419010. 4

Question Number: 45 Question Id: 8995144783 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Dhoni retired as he was growing old contains two conceptualization connected with

Correct Marks: 1 Wrong Marks: 0

1. Reason

2. Instrument

3. Equivalence

4. Direction case

Options:

89951419011.1

89951419012.2

89951419013.3

89951419014.4

Question Number: 46 Question Id: 8995144784 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A conceptualization Arvind went to Delhi requires

1. State change

2. Destination case

3. Recipient case

4. All of above

Options:

89951419015.1

89951419016.2

89951419017.3

89951419018. 4

Question Number: 47 Question Id: 8995144785 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

How may tours are possible for 6 cities in TSP

2.80

3, 120

4.240

#### Options:

89951419019.1

89951419020.2

89951419021.3

89951419022. 4

Question Number: 48 Question Id: 8995144786 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Medical diagnosis might require

1. Assisted search

2. Independent search

3. Local minima

4. Local heuristic function

#### Options:

89951419023.1

89951419024.2

89951419025.3

89951419026.4

Question Number: 49 Question Id: 8995144787 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

When a part of one parent is copied into a child and rest is filled using that mapping from another

parent, it is known as

1. Single point crossover

2. Order crossover

3. Partial Mapped Crossover

4. Cyclic Crossover

#### Options:

89951419028.2 89951419027.1

89951419029.3

89951419030.4

Question Number: 50 Question Id: 8995144788 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

In simulated annealing, the difference of heuristic values of the current state and a candidate state for

next move is known as

2. e-3E/T

3. -8E/T

#### Options:

89951419031.1

89951419032.2

89951419033.3

89951419034. 4

Question Number: 51 Question Id: 8995144789 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The DFID is a special case of DFDBS where the

1. Depth = 1

2. Depth = Depth + 1

3. Depth = level of the tree

4. None of above

#### Options:

89951419035.1

89951419036.2

89951419037.3

Question Number: 52 Question Id: 8995144790 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

is better When it is likely to reach a dead end and there is no possibility of going back,

- Variable neighborhood descend
  - 2. Tabu search
- 3. Beam search
- 4. All of above

#### Options:

89951419039. 1

89951419040.2

89951419041.3

89951419042.4

Question Number: 53 Question Id: 8995144791 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

When an action can disrupt the preconditions of some later action, which is set by some earlier action,

it is known as

- 1. A threat
- 2. A flaw
- 3. An open precondition
  - 4. All of above

#### Options:

89951419043.1

89951419044.2

89951419045.3

89951419046. 4

Question Number: 54 Question Id: 8995144792 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

When multiple actions result into a final state from previous states, the designer

- 1. Picks up anyone
- 2. Picks each one by one
- 3. Pick up all of them together
- 4. None of above

#### Options:

89951419047.1

89951419048.2

89951419049.3

89951419050.4

Question Number: 55 Question Id: 8995144793 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A threat and an open precondition together are known as

- 1. A flaw
- 2. Complications
  - 3. Plan
- 4. Incorrect plan

#### Options:

89951419051.1

89951419052.2

89951419053.3

89951419054.4

Question Number: 56 Question Id: 8995144794 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

game When a player loses and others gain, it is known as

Correct Marks: 1 Wrong Marks: 0

- 1. Lose-gain
  - 2. Zero sum
    - 3. One two
- 4. All equal

#### Options:

89951419056.2 89951419057.3 89951419058.4 89951419055.1

Question Number: 57 Question Id: 8995144795 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Searching for Chess and playing cards are

- 1. Same
- 2. Similar
- 3. Very different
- 4. Dependent on each other

#### Options:

89951419059.1

89951419060.2

89951419061.3

89951419062.4

Question Number: 58 Question Id: 8995144796 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

at each node The game tree contains

- 1. One move by one player
- 2. One move by two players each
  - 3. Two moves by one player
- 4. Two moves by two players

#### Options:

89951419063.1

89951419064.2

89951419065.3

89951419066. 4

Question Number: 59 Question Id: 8995144797 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Correct Marks: 1 Wrong Marks: 0

The process of resolution requires

- Two parent clauses
- 2. Literals with opposite signs
- 3. Same predicate with opposite signs
  - 4. Speed

#### Options:

89951419067.1

89951419068.2

89951419069.3

89951419070.4

Question Number: 60 Question Id: 8995144798 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

While processing for resolution, once the WFF is represented as conjunction of disjunctions, all such conjunctions are to be

1. Eliminated

- 2. Converted to clausal form
  - 3. Converted to disjunctions
- 4. Written as separate statements

#### Options:

89951419071.1

89951419072.2

89951419073.3

89951419074.4

Question Number: 61 Question Id: 8995144799 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

NMRS can have	information unlike predicate logic
1. FALSE	
2. TRUE	
3. Partially true	
4. Incomplete	
Options:	
89951419075.1	
89951419076. 2	
89951419077.3	
89951419078. 4	
Heaviness is a	word
1. Incorrect	
2. Washing machine related	elated
<ol><li>Cloth related</li></ol>	
4. Fuzzy	
Options:	
89951419079. 1	
89951419080.2	
89951419081.3	
89951419082. 4	

Question Number: 63 Question Id: 8995144801 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

In Subjective probability

- 1. Total probability is always one
- 2. Only one outcome is true at any given point of time 3. Probability of two events is multiple of both
- 4. None of above

#### Options:

89951419083.1

89951419084.2

89951419085.3

89951419086. 4

Question Number: 64 Question Id: 8995144802 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A search which applies random moves to try to reach to final state is known as

Unguided search

2. Blind search

Operating without strategy

4. All of above

#### Options:

89951419087.1

89951419088. 2

89951419089.3

89951419090.4

Question Number: 65 Question Id: 8995144803 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

BFS finds

1. All solutions

2. Non-optimal solution

3. Solutions more quickly than other algorithms

4. Solutions exploring a single branch at a time

#### Options:

89951419091.1

89951419092.2

89951419093.3

89951419094.4

Question Number: 66 Question Id: 8995144804 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Correct Marks: 1 Wrong Marks: 0

Dendral operates by first

- Applying Generate and Test
- Generate a random state
- 3. Applying constraints to have valid states
  - 4. All of above

#### Options:

89951419095.1

89951419096. 2

89951419097.3

89951419098. 4

Question Number: 67 Question Id: 8995144805 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

When we always pick up a node better than current, it is called

- 1. Hill climbing
- 2. Breadth First
- 3. Simulated annealing
- 4. Steepest ascent hill climbing

#### Options:

89951419099. 1

89951419100.2

89951419101.3

89951419102.4

Question Number: 68 Question Id: 8995144806 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The information about explored nodes is kept in best-first search to make sure

- The generated node is a valid node or not
- 2. If the node generated is better than previous or not
  - 3. It does not traverse already explored path
- The heuristic value of the generated node is better than others or not

89951419103.1

89951419104.2

89951419105.3

89951419106.4

Question Number: 69 Question Id: 8995144807 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Where there is no child which is better, the best first search picks up

- 1. The best child
- 2. The best from explored node list
- The best from unexplored node list
- Any other node at random

#### Options:

89951419107.1

89951419108.2

89951419109.3

89951419110.4

Question Number: 70 Question Id: 8995144808 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

in solving TSP using ACO, each agent acts like an ant and

- 1. traverse on a different path
- 2. spray pheromone along that path
- 3. choose a path with more pheromone value with more probability
  - 4. all of above

#### Options:

89951419111.1

89951419112.2

89951419113.3

Question Number: 71 Question Id: 8995144809 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Ants are most probably try to follow a path with

- Shortest distance
- 2. Strongest pheromone value
- 3. A possibility to find a return path
  - 4. All of above

#### Options:

89951419115.1

89951419116.2

89951419117.3

89951419118. 4

Question Number: 72 Question Id: 8995144810 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In A\*, if the estimates are not backpropagated,

- 1. Parents will have incorrect estimates
- 2. Parents can still choose an optimal path
  - 3. Parents may have an incorrect g value
    - 4. All of above

#### Options:

89951419119.1

89951419120.2

89951419121.3

89951419122. 4

Question Number: 73 Question Id: 8995144811 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The underestimation is about h' always being than
1. Less , h 2. More, h 3. Less, g 4. More, g
Options:
89951419124. 2
89951419125.3
89951419126. 4
Question Number: 74 Question Id: 8995144812 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0
one needs to backtrack in A* when
<ol> <li>all children are expensive</li> <li>there is a better path available than children</li> <li>the best path passes through one of the children</li> <li>one child is better than others</li> </ol>
Options:
89951419127. 1
89951419128. 2
89951419129. 3
89951419130. 4

Question Number: 75 Question Id: 8995144813 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

gleans information coming in from the expert during the initial process of ES development and used later for decision making.

- 1. The developer
  - 2. The designer 3. The KE 4. All of above

#### Options:

89951419131. 1

89951419132.2

89951419133.3

89951419134. 4

Question Number: 76 Question Id: 8995144814 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Knowledge management is about

1. Adding, removing and updating knowledge

2. Retaining expert's knowledge

Convert the data into structured form

4. All of above

#### Options:

89951419135.1

89951419136.2

89951419137.3

89951419138.4

Question Number: 77 Question Id: 8995144815 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

In N-fold validation, the training and testing sets are

1. Derived from the same data

2. Derived from different data

3. Designed separately

4. All of above

#### Options:

89951419139. 1

89951419140.2

89951419141.3

Question Number: 78 Question Id: 8995144816 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

SEF is a measure of \_\_\_\_\_ intuition and judgement about the game position

1. Our

2. Opponent's

3. Expert's

4. All of above

#### Options:

89951419143.1

89951419144.2

89951419145.3

89951419146. 4

Question Number: 79 Question Id: 8995144817 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

For chess being a good example of a game being modelled as a computer program, it possesses

characteristic

1. All rules for moving pieces are known

Which pieces are allowed to move in which situation is known

3. What is the result of a given single move for a given board position is unambiguously known

4. All of above

#### Options:

89951419147.1

89951419148. 2

89951419149.3

89951419150.4

Question Number: 80 Question Id: 8995144818 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The central position is the best, to begin with, in Tic Tac Toe. Why

- 1. Opponent cannot defeat us
- 2. We have maximum options
  - 3. Highest heuristic value
- 4. Opponent is confused

#### Options:

89951419151.1

89951419152.2

89951419153.3

89951419154. 4

Question Number: 81 Question Id: 8995144819 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A goal stack has two members, goals, and

- 1. Stacks
- 2. Components
  - 3. Rules
- 4. Actions or operators

#### Options:

89951419155. 1

89951419156.2

89951419157.3

89951419158.4

Question Number: 82 Question Id: 8995144820 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

graph based search Agent-based search is a

- 1. Subset of
- 2. Superset of
  - 3. Simple
- 4. Complex

89951419159.1

89951419160.2

89951419161.3

89951419162.4

Question Number: 83 Question Id: 8995144821 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A relevant forward action allows

1. Move from start state to end state

2. Move back from end state to start state

3. Move to the previous node have more resemblance to goal state

4. Move to next node have more resemblance to goal state

#### Options:

89951419163.1

89951419164.2

89951419165.3

89951419166. 4

Question Number: 84 Question Id: 8995144822 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Why is on-off scale not suitable for testing ES?

More than one answer may be right

System might fail sometimes

3. The solution depends on context

4. All of above

#### Options:

89951419167.1

89951419168.2

89951419169.3

89951419170.4

Question Number: 85 Question Id: 8995144823 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Correct Marks: 1 Wrong Marks: 0

What is the relation between prototype construction and conceptualization in the development of ES?

- 1. They happen in parallel
- 2. Prototype construction happens before conceptualization
- 3. Conceptualization happens before prototype construction
- 4. All of above

#### Options:

89951419171. 1

89951419172.2

89951419173.3

89951419174. 4

Question Number: 86 Question Id: 8995144824 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Why are all cases tested when a new case is introduced in a knowledgebase while the ES is being built?

- Avoid side effects
- Confirm the new case
- 3. Test expert's knowledge
- 4. All of above

#### Options:

89951419175.1

89951419176.2

89951419177.3

89951419178.4

Question Number: 87 Question Id: 8995144825 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

The ES, once developed, should continue
1. Running
2. Tested
3. Being supported and extended
4. All of above
Options:
89951419179.1
89951419180. 2
89951419181. 3
89951419182. 4
also requires being handled by experts in ES
1. Coding
2. Analysis
3. Design
4. Testing
Options:
89951419183. 1
89951419184. 2
89951419185. 3
89951419186. 4

Question Number: 89 Question Id: 8995144827 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

The data that the ES is dealing with sometimes also have other characteristics like

- 1. Voluminous
- 2. Coming from various sources and different formats
- 3. Continuously being augmented with additional information.
  - 4. All of above

#### Options:

89951419190. 4 89951419188. 2 89951419189.3 89951419187.1

Question Number: 90 Question Id: 8995144828 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

of solving goal components is important When goal components are interdependent

1. Rules

2. Actions

3. Order

4. All of above

Options:

89951419191. 1

89951419192. 2

89951419193.3

89951419194. 4

Question Number: 91 Question Id: 8995144829 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

Action can be applied if

User deems fit

2. Preconditions are satisfied

3. Goal state is reached

4. Is needed for solution

Options:

89951419195.1

89951419196.2

89951419197.3

Question Number: 92 Question Id: 8995144830 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

of a state in agent based planning An operator changes

1. A component

2. Previous state

3. Rule

4. Action

#### Options:

89951419199. 1

89951419200.2

89951419201.3

89951419202. 4

Question Number: 93 Question Id: 8995144831 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

What is done once all the components are solved in GSP?

1. Testing of the goal once again

2. The problem is solved so quit

Pick up any operator to test the goal

None of above

#### Options:

89951419203. 1

89951419204.2

89951419205.3

89951419206.4

Question Number: 94 Question Id: 8995144832 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

The additions in the PDDL describes

- 1. New components added by the new move
- 2. The addition in the rule
- 3. What is added by new rule
- 4. What is addition to the start state

#### Options:

89951419207.1

89951419208. 2

89951419209.3

89951419210. 4

Question Number: 95 Question Id: 8995144833 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A Skolem function can replace

1. A predicate

2. A variable

3. A value

4. All of above

#### Options:

89951419211. 1

89951419212. 2

89951419213.3

89951419214. 4

Question Number: 96 Question Id: 8995144834 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

A physical symbol system is capable of

1. Inferring

2. Structuring

3. Intelligent action

4. All of above

#### Options:

89951419215.1

89951419216.2

89951419217.3

89951419218. 4

Question Number: 97 Question Id: 8995144835 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

## Correct Marks: 1 Wrong Marks: 0

The process we used to reason from given facts from the item to be proved is known as

- 1. Forward chaining
- Backward chaining
  - 3. Inference of facts
    - 4. All of above

#### Options:

89951419219.1

89951419220.2

4.044.111.000

89951419221.3

89951419222. 4

Question Number: 98 Question Id: 8995144836 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

CFs can take care of

- 1. Probability changing over time
  - 2. Objective probability
- 3. Summing probability values to one
  - 4. Multiple events

#### Options:

89951419223.1

89951419224.2

89951419225.3

89951419226.4

Question Number: 99 Question Id: 8995144837 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No

Correct Marks: 1 Wrong Marks: 0

not (( for all X) Predicate) =

- 1. Predicate
- 2. not ((there exists) Predicate)
  - 3. (there exists) not Predicate
    - 4. not(not(Predicate))

Options:

89951419228.2 89951419227.1

89951419229.3

89951419230. 4

Question Number: 100 Question Id: 8995144838 Question Type: MCQ Option Shuffling: No Is Question Mandatory: No Correct Marks: 1 Wrong Marks: 0

Why NMRS keeps untrue statements in the database?

1. They might come in sometimes

2. They need to be there for some other statements to be true

3. They might need to disprove something based on them

4. All of above

Options:

89951419231. 1

89951419232.2

89951419233.3

