



## **Technical Test Result**

DESCRIPTION	STATUS
Attempted Questions	13
Blank Answer	2
Basic Correct	11
Optional Correct	0

## 1. Which search method takes less memory

(A) D	epth-First search
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- (B) Breadth-First serach 🗸
- O(C) Linear Search
- O(D) Optimal Search

## 2. $\frac{7}{2}$ Which condition is used to influence a variable directly by all the others?

- O (A) Partially connected
- (B) Fully connected
- (C) Local connected
- $\bigcirc$  (D) None of the mentioned

## 3. Which algorithm is used for solving temporal probabilistic reasoning?

- (A) Hill-climbing search
- (B) Hidden markov model 🗸
- O(C) Depth-first search
- O(D) Breadth-first search

4. Where does the Hidden Markov Model is used?
<ul> <li>(A) Speech recognition</li> <li>(B) Understanding of real world</li> <li>(C) Both Speech recognition &amp; Understanding of real world</li> <li>(D) None of the mentioned</li> </ul>
5. Which data structure is used to give better heuristic estimates?
<ul> <li>○ (A) Forwards state-space</li> <li>○ (B) Backward state-space</li> <li>● (C) Planning graph algorithm ✓</li> <li>○ (D) None of the mentioned</li> </ul>
6. How many types of recognition are there in artificial intelligence
<ul> <li>○ (A) 1</li> <li>○ (B) 2</li> <li>● (C) 3 ✓</li> <li>○ (D) 4</li> </ul>
7. How the distance between two shapes can be defined?
<ul> <li>(A) Weighted sum of the shape</li> <li>(B) Size of the shape</li> <li>(C) Shape context</li> <li>(D) None of the mentioned</li> </ul>
8. Which of the following machine learning algorithm can be used for imputing missing values of both categorical and continuous variables?
<ul><li>(A) K-NN ✓</li><li>(B) Linear Regression</li><li>(C) Logistic Regression</li><li>(D)</li></ul>
9. In k-NN it is very likely to overfit due to the curse of dimensionality. Which of the following option would you consider to handle such problem?

O (A) Dimensionality
(B) Feature selection
O (D) None of these
10. Which of the following statements is true for k-NN classifiers?
<ul> <li>(A) The classification accuracy is better with larger values of k</li> <li>(B) The decision boundary is smoother with smaller values of k</li> <li>(C) The decision boundary is linear</li> <li>(D) k-NN does not require an explicit training step ✓</li> </ul>
11. In which of the following scenario a gain ratio is preferred over Information Gain?
<ul> <li>(A) When a categorical variable has very large number of category ✓</li> <li>(B) When a categorical variable has very small number of category</li> <li>(C) Number of categories is the not the reason</li> <li>(D) None of these</li> </ul>
12. A perceptron is:
<ul> <li>(A) a single layer feed-forward neural network with pre-processing</li> <li>(B) an auto-associative neural network</li> <li>(C) a double layer auto-associative neural network</li> <li>(D) a neural network that contains feedback</li> </ul>
13. ♣ A 4-input neuron has weights 1, 2, 3 and 4. The transfer function is linear with the constant of proportionality being equal to 2. The inputs are 4, 10, 5 and 20 respectively. The output will be:
<ul><li>○ (A) 238 ✓</li><li>○ (B) 76</li><li>○ (C) 119</li><li>○ (D) 123</li></ul>
14. What is true regarding backpropagation rule?
<ul> <li>(A) it is a feedback neural network</li> <li>(B) actual output is determined by computing the outputs of units for each hidden layer</li> </ul>
(C) hidden layers output is not all important, they are only meant for supporting input

and output layers
$\circ$ (D) none of the mentioned
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15. A What consist of boltzman machine?
$^{\circ}$ (A) fully connected network with both hidden and visible units
(A) fully connected network with both hidden and visible units (B) asynchronous operation
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