

Technical Test Result

DESCRIPTION	STATUS
Attempted Questions	13
Blank Answer	2
Basic Correct	10
Optional Correct	0

1. ★★ Which algorithm is used for solving temporal probabilistic reasoning?

- ☐ (A) Hill-climbing search
- ☒ (B) Hidden markov model ✓
- ☐ (C) Depth-first search
- ☐ (D) Breadth-first search

2. ★★ Where does the Hidden Markov Model is used?

- ☐ (A) Speech recognition ✓
- ☐ (B) Understanding of real world
- ☒ (C) Both Speech recognition & Understanding of real world
- ☐ (D) None of the mentioned

3. ★★ Which data structure is used to give better heuristic estimates?

- ☐ (A) Forwards state-space
- ☐ (B) Backward state-space
- ☒ (C) Planning graph algorithm ✓
- ☐ (D) None of the mentioned

4. ★★ How many types of recognition are there in artificial intelligence

- ☐ (A) 1
- ☐ (B) 2
- ☒ (C) 3 ✓
- ☐ (D) 4

5. ★★ Which object recognition process is an error-prone process

- ☒ (A) Bottom-up segmentation ✓
- ☐ (B) Top-down segmentation
- ☐ (C) Both Bottom-up & Top-down segmentation
- ☐ (D) None of the mentioned

6. ★★ How the distance between two shapes can be defined?

- ☒ (A) Weighted sum of the shape ✓
- ☐ (B) Size of the shape
- ☐ (C) Shape context
- ☐ (D) None of the mentioned

7. ★★ Which of the following machine learning algorithm can be used for imputing missing values of both categorical and continuous variables?

- ☒ (A) K-NN ✓
- ☐ (B) Linear Regression
- ☐ (C) Logistic Regression
- ☐ (D)

8. ★★ Which of the following algorithm doesn't use learning Rate as one of its hyperparameter?

- ☒ (A) Random Forest ✓
- ☐ (B) Gradient Boosting
- ☐ (C) AdaBoost
- ☐ (D)

9. ★★ How to select best hyperparameters in tree based models

- ☐ (A) Measure performance over training data
- ☐ (B) Measure performance over validation data ✓
- ☒ (C) Both of these
- ☐ (D) None of these

10. ★★ A perceptron is:

- ☒ (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

11. ★★ 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:

- ☒ (A) 238 ✓
- ☐ (B) 76
- ☐ (C) 119
- ☐ (D) 123

12. ★★ What is true regarding backpropagation rule?

- ☒ (A) it is a feedback neural network
- ☐ (B) actual output is determined by computing the outputs of units for each hidden layer ✓
- ☐ (C) hidden layers output is not all important, they are only meant for supporting input and output layers
- ☐ (D) none of the mentioned

13. ★★ $p(s=1|x) = 1/(1+\exp(-x/T))$, where 's' is the output given the activation 'x' is a?

- ☐ (A) hopfield network
- ☐ (B) sigma network
- ☒ (C) stochastic network ✓
- ☐ (D) none of the mentioned

14. ★★ What consist of boltzman machine?

- ☐ (A) fully connected network with both hidden and visible units

- ☐ (B) asynchronous operation
- ☐ (C) stochastic update
- ☐ (D) all of the mentioned ✓

15. ★★ ☆ **Morphological Segmentation**

- ☐ (A) Does Discourse Analysis
- ☐ (B) Separate words into individual morphemes and identify the class of the morphemes ✓
- ☐ (C) Is an extension of propositional logic
- ☐ (D) None of the mentioned