

Technical Test Result

DESCRIPTION	STATUS
Attempted Questions	15
Blank Answer	0
Basic Correct	9
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. ★★ 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

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

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

4. ★★ ☆ 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

5. ★★ ☆ 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

6. ★★ ☆ What kind of interpretation is done by adding context-dependant information?

- ☒ (A) Semantic
- ☐ (B) Syntactic
- ☐ (C) Pragmatic ✓
- ☐ (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. ★★ ☆ 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?

- ☐ (A) Dimensionality
- ☐ (B) Feature selection
- ☒ (C) A and B ✓
- ☐ (D) None of these

9. ★★ ☆ Which of the following statements is true for k-NN classifiers?

- ☐ (A) The classification accuracy is better with larger values of k
- ☐ (B) The decision boundary is smoother with smaller values of k
- ☐ (C) The decision boundary is linear
- ☒ (D) k-NN does not require an explicit training step ✓

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

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

11. ★ When you use the boosting algorithm you always consider the weak learners. Which of the following is the main reason for having weak learners?

- ☐ (A) To prevent overfitting ✓
- ☒ (B) To prevent under fitting
- ☐ (C) To prevent overfitting and underfitting
- ☐ (D) None of these

12. ★ 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

13. ★ 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

14. ★
☆ $p(s=1|x) = 1/(1+\exp(-x/T))$, 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

15. ★
☆ One of the main challenge/s of NLP is _

- ☐ (A) Handling Ambiguity of Sentences ✓
- ☐ (B) Handling Tokenization
- ☐ (C) Handling POS-Tagging
- ☒ (D) All of the mentioned