

Q.No.1

The k-means algorithm is a

- (A) Supervised learning algorithm
- (B) Unsupervised learning algorithm
- (C) Semi-supervised learning algorithm
- (D) Weakly supervised learning algorithm

Q.No.2

For unsupervised learning we have _____ model.

- (A) interactive
- (B) predictive
- (C) descriptive
- (D) prescriptive

Q. No. 3

Which of the following is true about SVM?

- (A) It is useful only in high-dimensional spaces
- (B) It requires less memory
- (C) SVM does not perform well when we have a large data set
- (D) SVM performs well when we have a large data set

Q. No. 4

When you find many noises in data, which of the following options would you consider in KNN?

- (A) Increase the value of k
- (B) Decrease the value of k
- (C) Noise does not depend on k
- (D) $k = 0$

Q. No. 5

A multiple regression model has:

- (A) Only one independent variable
- (B) More than one independent variable
- (C) More than one dependent variable
- (D) None of the above

Q. No. 6

The average squared difference between classifier predicted output and actual output

- (A) mean squared error
- (B) root mean squared error
- (C) mean absolute error
- (D) mean relative error

Q. No. 7

Which of the following is not a benefit of using Grid search?

- (A) It can be applied to non-differentiable functions.
- (B) It can be applied to non-continuous functions
- (C) It is easy to implement
- (D) It runs reasonably fast for multiple linear regression

Q. No. 8

Data used to build a data mining model

- (A) validation data
- (B) training data
- (C) test data
- (D) hidden data

Q.No.9

Introducing a non-essential variable into a linear regression model may result in: (1).Increase in R-square, (2).Decrease in R-square

- (A) Only 1 is correct
- (B) Only 2 is correct
- (C) Either 1 or 2
- (D) None of these

Q.No.10

Which data is used to tune the parameters of supervised learning model

- (A) training
- (B) test
- (C) verification
- (D) validation

Q. No. 11

Which of the following is not TRUE for regression?

- (A) It relates inputs to outputs
- (B) It is used for prediction
- (C) It may be used for interpretation
- (D) It discovers causal relationships

Q. No. 12

Which of the following statements regarding outliers is correct?

- (A) Outliers should be identified and removed from a dataset
- (B) Outliers should be part of the training dataset but should not be present in the test data
- (C) Outliers should be part of the test dataset but should not be present in the training data
- (D) The nature of the problem determines how outliers are used

Q. No. 13

Each data instance is assigned a conditional probability value using this method.

- (A) linear regression
- (B) logistic regression
- (C) simple regression
- (D) multiple linear regression

Q. No. 14

Neural networks

- (A) optimize a convex cost function
- (B) always output values between 0 and 1
- (C) can be used for regression as well as classification
- (D) can be used in an ensemble

Q. No. 15

Which of the following is an example of a deterministic algorithm?

- (A) PCA
- (B) K-Means
- (C) KNN
- (D) None of the above

Q. No. 16

Which of the following is a performance measure for regression?

- (A) Accuracy
- (B) Recall
- (C) Error rate
- (D) RMSE

Q.No.17

Conversion of a text corpus to a numerical representation is done using ____ process.

- (A) Tokenization
- (B) Normalization
- (C) Vectorization
- (D) None of the above

Q.No.18

PCA is a technique for

- (A) Feature extraction
- (B) Feature construction
- (C) Feature selection
- (D) None of the above

Q. No. 19

Predicting whether a tumour is malignant or benign is an example of?

- (A) Unsupervised Learning
- (B) Supervised Regression Problem
- (C) Supervised Classification Problem
- (D) Categorical Attribute

Q. No. 20

For categorical data, _____ cannot be used as a measure of central tendency.

- (A) Median
- (B) Mean
- (C) Quartile
- (D) None of the above