41)

Among the following identify the one in which dimensionality reduction reduces.

a) Performance
b) statistics
c) Entropy
d) Collinearity

The answer of 41 is option D- Collinearity, as with removal of multicollinearity this will improve interpretations of machine learning model. Because it becomes very easy to visualize data when reduced in low dimensions as 2-D or 3-D

42) Which of the following machine learning algorithm is based upon the idea of bagging? a)

Decision Tree

b) Random Forest

c) Classfication

d) SVM

The Answer of 42 is- Random Forest is a machine learning algorithm that is based on idea of bagging as this builds an ensemble of decision trees based on bootstrap aggregation i.e., bagging

43) Choose a disadvantage of decision trees among the following. a)

Decision tree robust to outliers

b) Factor analysis

c) Decision Tree are prone to overfit

d) all of the above

Answer of 43 is- option D, all of the above mentioned disadvantages are faced in high variance algorithm of decision trees.

44)

What is the term known as on which the machine learning algorithms build a model based on sample data?

a) Data Training
b) Sample Data
c) Training data
d) None of the above

Answer of 44 is option C, Training Data as it is a sample data upon which machine learning algorithms build a model in order to make predictions or decisions without being explicitly programmed to do so.

45)

Which of the following machine learning techniques helps in detecting the outliers in data? a) Clustering

b) Classification
c) Anamoly detection
d) All of the above

Answer of 45 is option C, Anamoly detection as these systems are either manually built or constructed automatically by learning from available data through machine learning which finds the outliers of a dataset that doesn't belong.

46)
Identify the incorrect numerical functions in the various function representation of machine learning.

a) Support Vector
b) Regression
c) Case based
d) Classification

The answer of 46 is option C, Case-Based is not used in various function representation of machine learning.

47)

Analysis of ML algorithm needs

a) Statistical learning theory
b) Computational learning theory
c) None of the above
d) Both a and b

Answer of 47 is option D, both a and b - as CLT is for designing and analyzing algorithms that enable machines to learn from data with high confidence. Also, SLT aims to develop mathematical models that enable machines to analyze and learn relationships from data.

48)

Identify the difficulties with the k-nearest neighbor algorithm.

a) Curse of dimensionality
b) Calculate the distance of test case for all training cases

c) Both a and b
d) None

Answer of 48 is option D ,none of the both.

49)
The total types of the layer in radial basis function neural networks is _____
a) 1
b) 2
c) 3
d) 4

Answer of option 49 is option C , three layers as an RBF network is a type of feed forward neural network composed of three layers ,namely the input layer,the hidden layer and the output layer

50
Which of the following is not a supervised learning a)
PCA
b) Naïve bayes
c) Linear regression
d) KMeans

The answer of 50 is option A-PCA is not a supervised learning whereas Naïve bayes, linear regression and K-means is a type of supervised learning