

**Question 41 :-** Among the following identify the one in which dimensionality reduction reduces.

**Answer :-** Collinearity

**Question 42 :-** Which of the following machine learning algorithm is based upon the idea of bagging?

**Answer :-** Random forest

**Question 43 :-** Choose a disadvantage of decision trees among the following.

**Answer :-** Decision tree are prone to overfit

**Question 44 :-** What is the term known as on which the machine learning algorithms build a model based on sample data?

**Answer :-** Training Data

**Question 45 :-** Which of the following machine learning techniques helps in detecting the outliers in data?

**Answer :-** Anomaly detection

**Question 46 :-** Identify the incorrect numerical functions in the various function representation of machine learning.

**Answer :-** Support vector

**Question 47 :-** Analysis of ML algorithm needs

**Answer :-** Both A and B

**Question 48 :-** Identify the difficulties with the k-nearest neighbour algorithm.

**Answer :-** Both A and B

**Question 49 :-** The total types of the layer in radial basis function neural networks is \_\_\_\_\_.

**Answer :-** 2

**Question 50 :-** Which of the following is not a supervised learning.

**Answer :-** PCA (Principal Component Analysis)

**Question 51 :-** What is unsupervised learning?

**Answer :-** Neither feature nor number of groups is known

**Question 52 :-** Which of the following is not a machine learning algorithm?

**Answer :-** SVG

**Question 53 :-** \_\_\_\_\_ is the scenario when the model fails to decipher the underlying trend in the input data.

**Answer :-** Underfitting

**Question 54 :-** Real-Time decisions, Game AI, Learning Tasks, Skill acquisition, and Robot Navigation are applications of .....

**Answer :-** Reinforcement Learning

**Question 55 :-** What is called the average squared difference between classifier predicted output and actual output?

**Answer :-** Mean Squared Error

**Question 56 :-** Logistic regression is a ..... regression technique that is used to model data having a ..... outcome.

**Answer :-** Linear, Binary

**Question 57 :-** You are given reviews of few Netflix series marked as positive, negative and neutral. Classifying reviews of a new Netflix series is an example of

**Answer :-** Supervised Learning

**Question 58 :-** Following is powerful distance metrics used by Geometric model.

**Answer :-** Both A and B

**Question 59 :-** Which of the following techniques would perform better for reducing dimensions of a data set?

**Answer :-** Every technique has different use in different scenario

**Question 60 :-** Supervised learning and unsupervised clustering both require which is correct according to the statement

**Answer :-** Input Attribute

**Question 61 :-** What is the meaning of hard margin in SVM?

**Answer :-** SVM allows very low error in classification

**Question 62 :-** Increase in which of the following hyper parameter results into overfit in Random forest? (1). Number of Trees. (2). Depth of Tree, (3). Learning Rate

**Answer :-** Only 2

**Question 63 :-** Below are the 8 actual values of target variable in the train file: [0,0,0, 0, 1, 1,1,1,1,1], What is the entropy of the target variable?

**Answer :-**  $\frac{6}{10} \log(\frac{6}{10}) + \frac{4}{10} \log(\frac{4}{10})$

**Question 64 :-** Lasso can be interpreted as least-squares linear regression where

**Answer :-** weights are regularized with the l1 norm

**Question 65 :-** Consider the problem of binary classification. Assume I trained a model on a linearly separable training set, and now I have a new labelled data point that the model properly categorized and is far away from the decision border. In which instances is the

learnt decision boundary likely to change if I now add this additional point to my previous training set and re-train? When the training model is,

**Answer :-** Perceptron

**Question 66 :-** Assume you've discovered multi-collinear features. Which of the following actions do you intend to take next? (1). Both collinear variables should be removed. (2). Instead of deleting both variables, we can simply delete one. (3). Removing correlated variables may result in information loss. We may utilize penalized regression models such as ridge or lasso regression to keep such variables.

**Answer :-** Either 1 or 3

**Question 67 :-** A least squares regression study of weight (y) and height (x) yielded the following least squares line:  $y = 120 + 5x$ . This means that if the height is increased by one inch, the weight should increase by what amount?

**Answer :-** increase by 5 pound

**Question 68 :-** The line described by the linear regression equation (OLS) attempts to \_\_\_\_?

**Answer :-** Minimize the squared distance from the points

**Question 69 :-** For two real-valued attributes, the correlation coefficient is 0.85. What does this value indicate?

**Answer :-** As the value of one attribute increases the value of the second attribute also increases

**Question 70 :-** Which neural network architecture would be most suited to handle an image identification problem (recognizing a dog in a photo)?

**Answer :-** Convolutional Neural Network