ASSIGNMENT 3

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

Ans- d) Collinearity

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

Ans- b) Random Forest

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

Ans- c) Decision Tree are prone to overfit

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

Ans- c) Training data

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

Ans- c) Anamoly detection

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

Ans- c) Case based

47) Analysis of ML algorithm needs

Ans- d) Both a and b

48) Identify the difficulties with the k-nearest neighbor algorithm.

Ans- c) Both a and b

49) The total types of the layer in radial basis function neural networks is _____

Ans- c) 3

50 Which of the following is not a supervised learning

Ans- a) PCA

21)When implementing linear regression of some dependent variable y on the set of independent variables $\mathbf{x} = (x_1, \ldots, x_r)$, where r is the number of predictors, which of the following statements will be true?

Ans- d) Both a and b

22) What indicates that you have a perfect fit in linear regression?

Ans- d) The value $R^2 = 1$, which corresponds to SSR = 0

23) In simple linear regression, the value of what shows the point where the estimated regression line crosses the y axis?

Ans- b) B0

24) Check out these four linear regression plots:

Which one represents an underfitted model?

Ans- c) The bottom-right plot

25) There are five basic steps when you're implementing linear regression: • a. Check the results of model fitting to know whether the model is satisfactory. • b. Provide data to work with, and eventually do appropriate transformations. • c. Apply the model for predictions. • d. Import the packages and classes that you need. • e. Create a regression model and fit it with existing data. However, those steps are currently listed in the wrong order. What's the correct order?

Ans- a) e, c, a, b, d

26) Which of the following are optional parameters to LinearRegression in scikit-learn?

Ans- b) fit_intercept

27) While working with scikit-learn, in which type of regression do you need to transform the array of inputs to include nonlinear terms such as x^2?

Ans- c) Polynomial regression

28) You should choose statsmodels over scikit-learn when:

Ans- A)You want graphical representations of your data.

29) _____ is a fundamental package for scientific computing with Python. It offers comprehensive mathematical functions, random number generators, linear algebra routines, Fourier transforms, and more. It provides a high-level syntax that makes it accessible and productive.

Ans- b) Numpy

30) _____ is a Python data visualization library based on Matplotlib. It provides a high-level interface for drawing attractive and informative statistical graphics that allow you to explore and understand your data. It integrates closely with pandas data structures.

Ans- b) Seaborn