Machine learning Quiz

* Required

1. Enter Your Name *

_____

2. Enter your roll Number *

_____

3. Enter your Mobile No. *

_____

4. Q1. Which one is the correct Linear regression assumption? *

Mark only one oval.

- ◯ Linear regression assumes the input and output variables are not noisy.
- ◯ Linear regression will over-fit your data when you have highly correlated input variables.
- ◯ The residuals (true target value − predicted target value) of the data are normally distributed and independent from each other
- ◯ All of the above

5. Q2. Which of the following is a true statement for regression methods the in case of feature selection? *

Mark only one oval.

- ◯ Ridge regression uses subset selection of features
- ◯ Lasso regression uses subset selection of features
- ◯ Both use subset selection of features
- ◯ None of above

6. Q3. Which of the following evaluation metrics can not be applied in case of logistic regression output to compare with target? *

Mark only one oval.

- AUC-ROC
- Accuracy
- Logloss
- Mean-Squared-Error

7. Q4. What's the the hypothesis of logistic regression? *

Mark only one oval.

- to limit the cost function between 0 and 1
- to limit the cost function between -1 and 1
- to limit the cost function between -infinity and +infinity
- to limit the cost function between 0 and +infinity

8. Q5. When performing regression or classification, which of the following is the correct way to preprocess the data? *

Mark only one oval.

- Normalize the data → PCA → training
- PCA → normalize PCA output → training
- Normalize the data → PCA → normalize PCA output → training
- None of the above

9. Q6. In the silhouette score method which point would be the most appropriate number of clusters for the K-means clustering algorithm? *

Mark only one oval.

- Global minimum
- Global maximum
- Both of the above points
- None of the above

10. Q7. Is it possible that Assignment of observations to clusters does not change between successive iterations in K-Means *

Mark only one oval.

- Yes
- No
- Can’t say
- None of these

11. Q8. What is the advantage of hierarchical clustering over K-means clustering? *

Mark only one oval.

- Hierarchical clustering is computationally faster than K-means clustering.
- None of the above.
- There is no difference. Both are equally proficient.
- You don't have to assign the number of clusters from the beginning in the case of hierarchical clustering.

12. Q9. F1 score is: *

Mark only one oval.

- absolute mean of precision and recall
- harmonic mean of precision and recall
- squared mean of precision and recall
- None of the above

13. Q10. In SVM, we are looking to maximize the margin between the data points and the hyperplane. The loss function that helps maximize the margin is called: *

Mark only one oval.

- hinge loss
- Log loss
- Mean square error
- None of the above

14. Q11. The SVM's are less effective when: *

Mark only one oval.

- The data is linearly separable
- The data is clean and ready to use
- The data is noisy and contains overlapping points
- None of the above

15. Q12. A company has build a kNN classifier that gets 100% accuracy on training data. When they deployed this model on client side it has been found that the model is not at all accurate. Which of the following thing might gone wrong? *

Mark only one oval.

- It is probably a overfitted model
- It is probably a underfitted model
- Can't say
- None of these

16. Q13. Which of the following is true about Naive Bayes ? *

Mark only one oval.

- assumes that all the features in a dataset are independent
- assumes that all the features in a dataset are dependent

17. Q14.What is the biggest weakness of decision trees compared to logistic regression classifiers? *

Mark only one oval.

- Decision trees are more likely to overfit the data
- Decision trees are more likely to underfit the data
- Decision trees do not assume independence of the input features
- None of the mentioned

18. Q15. Which of the following is/are true about bagging trees? *
1.In bagging trees, individual trees are independent of each other.
2.Bagging is the method for improving the performance by aggregating the results of weak learners

Mark only one oval.

- 1
- 2
- 1 and 2
- None of the above

19. Q16. Which of the following is/are true about boosting trees? *
1. In boosting trees, individual weak learners are independent of each other.
2.It is the method for improving the performance by aggregating the results of weak learners

Mark only one oval.

- 1
- 2
- 1 and 2
- None of the above

20. Q17. In Random forest you can generate hundreds of trees (say T1, T2 .....Tn) and then aggregate the results of these tree. Which of the following is true about individual(Tk) tree in Random Forest? *

Mark only one oval.

- Individual tree is built on a subset of the features
- Individual tree is built on a subset of observations(samples)
- Both
- None of the above

21. Q18. An itemset whose support is greater than or equal to a minimum support threshold is: *

Mark only one oval.

- Itemset
- Frequent Itemset
- Infrequent items
- Threshold values

22. Q19. Suppose, your target variable is whether a passenger will survived or not using Decision Tree. What type of tree do you need to predict the target variable? *

Mark only one oval.

- classification tree
- regression tree
- clustering tree
- None of the above

23. Q20. Gradient Descent is an optimization algorithm used for: *

Mark only one oval.

- Certain Changes in algorithm
- minimizing the cost function in various machine learning algorithms
- maximizing the cost function in various machine learning algorithms
- remaining same the cost function in various machine learning algorithms