Machine Learning (ML) solved MCQs

« Set 29 **30** of **31** Set 31 »

726. What is the purpose of performing cross-validation?

A. a. To assess the predictive performance of the models

B. b. To judge how the trained model performs outside the sample on test data

C. c. Both A and B

C.c. Both A and B discuss

727. Which of the following is true about Naive Bayes ?

A. Assumes that all the features in a dataset are equally important

B. Assumes that all the features in a dataset are independent

C. Both A and B

D. None of the above option

C.Both A and B discuss

728. Which of the following is not supervised learning?

D. Linerar regression

A. PCA

discuss

729. _____can be adopted when it's necessary to categorize a large amount of data with a few complete examples or when there's the need to impose some constraints to a clustering algorithm.

A. Supervised

B. Semi-supervised

C. Reinforcement

D. Clusters

B.Semi-supervised

discuss

730. In reinforcement learning, this feedback is usually called as___.

A. Overfitting

B. Overlearning

C. Reward

D. None of above

C.Reward

discuss

731. In the last decade, many researchers started training bigger and bigger models, built with several different layers that's why this approach is called_____.

A. Deep learning

B. Machine learning

C. Reinforcement learning

D. Unsupervised learning

A.Deep learning

discuss

732. there's a growing interest in pattern recognition and associative memories whose structure and functioning are similar to what happens in the neocortex. Such an approach also allows simpler algorithms called _____

A. Regression

B. Accuracy

C. Modelfree

D. Scalable

C.Modelfree

discuss

733. _____ showed better performance than other approaches, even without a context-based model

A. Machine learning

B. Deep learning

C. Reinforcement learning

D. Supervised learning

B.Deep learning

discuss

734. If two variables are correlated, is it necessary that they have a linear relationship?

A. Yes

B. No

B.No

discuss

735. Suppose we fit “Lasso Regression” to a data set, which has 100 features (X1,X2…X100). Now, we rescale one of these feature by multiplying with 10 (say that feature is X1), and then refit Lasso regression with the same regularization parameter.Now, which of the following option will be correct?

A. It is more likely for X1 to be excluded from the model

B. It is more likely for X1 to be included in the model

C. Can’t say

D. None of these

B. It is more likely for X1 to be included in the model

discuss

736. If Linear regression model perfectly first i.e., train error is zero, then _____

A. Test error is also always zero

B. Test error is non zero

C. Couldn’t comment on Test error

D. Test error is equal to Train error

C.Couldn’t comment on Test error

discuss

737. Which of the following metrics can be used for evaluating regression models?i) R Squaredii) Adjusted R Squarediii) F Statisticsiv) RMSE / MSE / MAE

A. ii and iv

B. i and ii

C. ii, iii and iv

D. i, ii, iii and iv

D. i, ii, iii and iv

discuss

738. In syntax of linear model lm(formula,data,..), data refers to _____

A. Matrix

B. Vector

C. Array

D. List

discuss

B.Vector

739. We can also compute the coefficient of linear regression with the help of an analytical method called “Normal Equation”. Which of the following is/are true about “Normal Equation”?1. We don’t have to choose the learning rate2. It becomes slow when number of features is very large3. No need to iterate

A. 1 and 2

B. 1 and 3.

C. 2 and 3.

D. 1,2 and 3.

discuss

D.1,2 and 3.

740. Which of the following option is true regarding “Regression” and “Correlation” ?Note: y is dependent variable and x is independent variable.

A. The relationship is symmetric between x and y in both.

B. The relationship is not symmetric between x and y in both.

C. The relationship is not symmetric between x and y in case of correlation but in case of regression it is symmetric.

D. The relationship is symmetric between x and y in case of correlation but in case of regression it is not symmetric.

discuss

D.The relationship is symmetric between x and y in case of correlation but in case of regression it is not symmetric.

B. Image Classification

C. Clustering of News Articles

D. All of the above

D. All of the above

discuss

742. Let's say, you are working with categorical feature(s) and you have not looked at the distribution of the categorical variable in the test data.

You want to apply one hot encoding (OHE) on the categorical feature(s). What challenges you may face if you have applied OHE on a categorical variable of train dataset?

A. All categories of categorical variable are not present in the test dataset.

B. Frequency distribution of categories is different in train as compared to the test dataset.

C. Train and Test always have same distribution.

D. Both A and B

D.Both A and B

discuss

743. _____which can accept a NumPy RandomState generator or an integer seed.

A. make_blobs

B. random_state

C. test_size

D. training_size

B.random_state

discuss

744. In many classification problems, the target dataset is made up of categorical labels which cannot immediately be processed by any algorithm. An encoding is needed and scikit-learn offers at least_____valid options

A. 1

B. 2

C. 3

D. 4

B.2

discuss

745. _____is the most drastic one and should be considered only when the dataset is quite large, the number of missing features is high, and

C. Using an automatic strategy to input them according to the other known values

D. All above

discuss

A.Removing the whole line

746. It's possible to specify if the scaling process must include both mean and standard deviation using the parameters_____.

A. with_mean=True/False

B. with_std=True/False

C. Both A & B

D. None of the Mentioned

discuss

C.Both A & B

747. Suppose you have fitted a complex regression model on a dataset. Now, you are using Ridge regression with tuning parameter lambda to reduce its complexity. Choose the option(s) below which describes relationship of bias and variance with lambda.

A. In case of very large lambda; bias is low, variance is low

B. In case of very large lambda; bias is low, variance is high

C. In case of very large lambda; bias is high, variance is low

D. In case of very large lambda; bias is high, variance is high

discuss

C. In case of very large lambda; bias is high, variance is low

748. Function used for linear regression in R is _____

A. lm(formula, data)

B. lr(formula, data)

C. lrm(formula, data)

D. regression.linear(formula, data)

discuss

A.lm(formula, data)

749. In the mathematical Equation of Linear Regression Y = β1 + β2X + ϵ, (β1, β2) refers to _____

A. (X-intercept, Slope)

B. (Slope, X-Intercept)

C. (Y-Intercept, Slope)

D. (slope, Y-Intercept)

discuss

C.(Y-Intercept, Slope)

750. We have been given a dataset with n records in which we have input attribute as x and output attribute as y. Suppose we use a linear