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Score: **68%**

No. of questions: 10

Correct answer: 7

Incorrect answer: 3

Show incorrect attempt only

Question 1 🛞

Which of the following is true about r-squared?

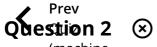
A On the addition of new features, r-squared always increases.



- B On the addition of new features, r-squared may increase or decrease.
- On the addition of new features, r-squared either increases or remains the same but it never decreases.
- D On the addition of new features, r-squared always decreases.

Correct Answer: C. On the addition of new features, r-squared either increases or remains the same but it never decreases.

R-squared value will either increase or remain the same, it never decreases.



<u>A</u>	Number of observations in the data Module Test	Ų	Н
В	Number of features in the data		
С	Number of classes in the dependent/target variable		
D	None of the above		*

Correct Answer: C. Number of classes in the dependent/target variable

The dimension of a confusion matrix is equal to the number of classes in the target variable. Hence, option c is correct.

Question 3 a marks

Imagine, you are solving a classification problem with highly imbalanced class. The majority class is observed 99% of times in the training data. Your model has 99% accuracy after taking the predictions on test data. Which of the following is true in such a case?

A Accuracy metric is not a good idea for imbalanced class problems

B Accuracy metric is a good idea for imbalanced class problems

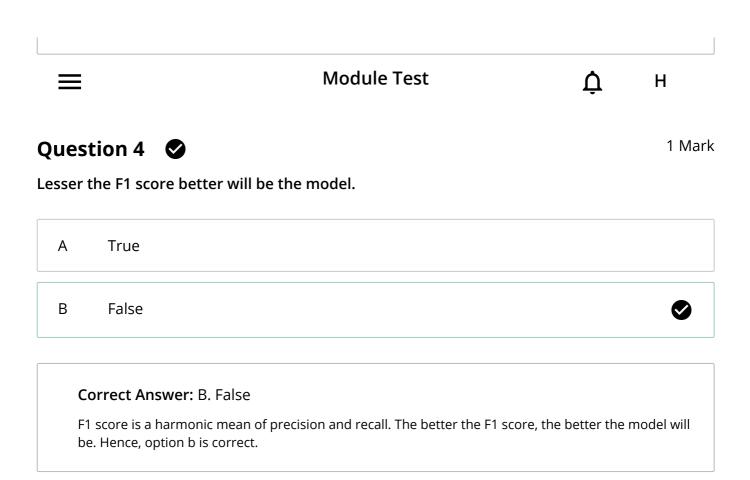
C Precision and recall metrics are good for imbalanced class problems

D Precision and recall metrics aren't good for imbalanced class problems

Correct Answer: E. Both A and C

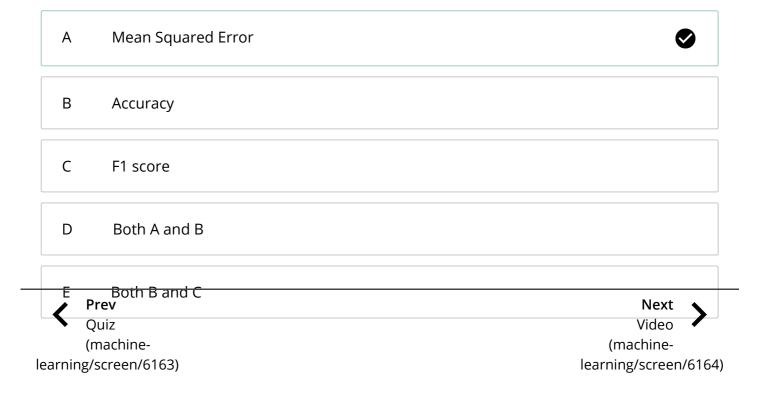
IRF新Vimbalanced data set, accuracy should not be used as a measure of performance becauses (健康中) might only be predicting majority class correctly, but our class of interest is minority dess (他為dhènee, to evaluate model performance, we should use precision and recall to determine learning/ess 學時的mance of the classifier.

Iearning/ess 學時的mance of the classifier.

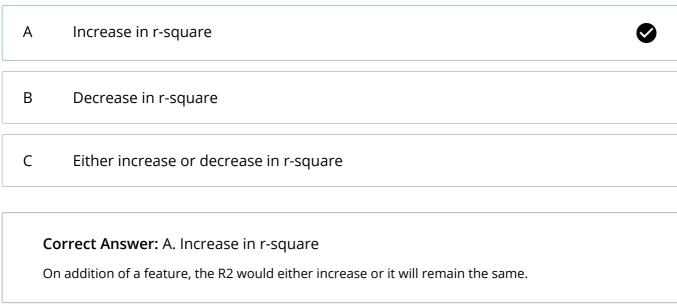


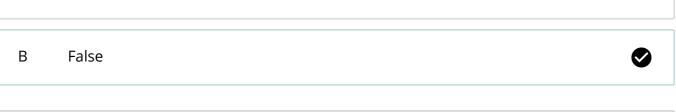
Question 5 2 Marks

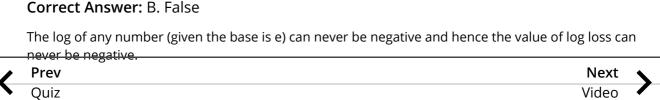
Imagine, you are working with "Analytics Vidhya" and you want to develop a machine learning algorithm which predicts the number of views on the articles. Your analysis is based on features like author name, the number of articles written by the same author on Analytics Vidhya in the past and a few other features. Which of the following evaluation metric would you choose in that case?



Correct Answer: A. Mean Squared From Module Test You can think that the number of views of articles is the continuous target variable which falls under the regression problem. So, mean squared error will be used as an evaluation metrics. Question 6 A dding a non-important feature to a linear regression model may result in: A Increase in r-square







(machinelearning/screen/6163) (machinelearning/screen/6164) Question 9 🗴 3 marks

Which evaluation metric takes into account the number of features from the dataset?

A RMSE

B R-squared

C Adjusted R-squared

D Both r-squared and adjusted r-squared

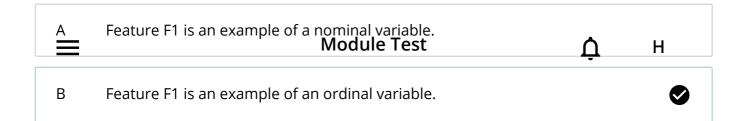
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Correct Answer: C. Adjusted R-squared

Only adjusted r-squared takes into account the number of features. RMSE and r-squared are not affected by the number of features.



Next¹ Mark Video



C It doesn't belong to any of the above categories.

Correct Answer: B. Feature F1 is an example of an ordinal variable.

Ordinal variables are the variables which have some order in their categories. For example, grade A should be considered high grade than grade B.