MACHINE LEARNING

1) A – Least Square error
2) A – Linear Regression is sensitive to outliers
3) B – Negative
4) A – Regression
5) C – Low Bias and High Variance
6) C – Reinforcement learning
7) D – Regularization
8) D – SMOTE
9) A – TPR and FPR
10) B – False
11) A, B, C are correct answer
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13) The term regularization means it is a form of regression, that regularize or shrinks the coefficient estimates towards zero. In general, regularization means to make things regular or acceptable. It is a technique used to reduce the errors by fitting the function appropriately on the given training set and avoid overfitting.
14) There are three main regularization techniques used, they are:
    a) Lasso Regression- L1 regularization – it is a regression analysis method that performs both variable selection and regularization in order to enhance the prediction accuracy and interpretability of the result.
    b) Ridge Regression- L2 regularization – it is a model tuning method that is analyses any data that suffers from multicollinearity.
    c) Drop out – it is a regularization technique for reducing overfitting in artificial neural networks by preventing complex co-adaptations on training data.
15) An error term represents the margin of error within a statistical model, it refers to the sum of the deviations within the regression line, which provides an explanation for the difference between the theoretical value of the model and the actual observed results.