

### Machine Learning Answers

- 1) A- Least square Error
- 2) A-Linear regression is sensitive to outliers
- 3) A- Positive
- 4) B- Correlation
- 5) C- Low bias and high variance
- 6) B- Predictive model
- 7) D- Regularization
- 8) D- SMOTE
- 9) A- TPR and FPR
- 10) B- False
- 11) B- Apply PCA to project high dimensional data
- 12) A, B and C
- 13) Regularization is a technique to prevent the model from over fitting by adding extra information to it. It will allow maintaining all variables or features in the model by reducing the magnitude of the variables. Hence, it maintains accuracy as well as a generalization of the model.
- 14) Ridge Regression, LASSO (Least Absolute Shrinkage and Selection Operator) Regression, Elastic-Net Regression are the methods used for regularization.
- 15) Error term in a regression equation represents the effect of the variables that were omitted from the equation. error term that is represented by  $\epsilon$ .