

## **Answer of PFA file3**

- 1) d) Collinearity
- 2) b) Random forest
- 3) c) Decision tree are prone to overfit
- 4) c) Training data
- 5) c) Anomaly detection
- 6) c) Case based
- 7) d) Both a and b
- 8) c) Both a and b
- 9) c) 3
- 10) a) PCA
- 11) c) Neither feature nor number of groups is known
- 12) b) SVG
- 13) b) Underfitting
- 14) a) Reinforcement learning
- 15) b) Mean squared error
- 16) c) Nonlinear, binary
- 17) a) Supervised learning
- 18) c) Both a and b
- 19) a) Removing columns which have too many missing values
- 20) c) Input attribute
- 21) a) SVM allows very low error in classification
- 22) b) Only 2
- 23) a)  $-(6/10 \log(6/10) + 4/10 \log(4/10))$
- 24) a) Weights are regularized with the  $L_1$  norm
- 25) a) Perceptron and logistic regression
- 26) c) Either 1 or 3
- 27) b) Increased by 5 pounds
- 28) d) Minimize the square distance from points
- 29) b) As the value of one attribute increases the value of the second attributes also increases
- 30) b) Convolutional neural network