## **MACHINE LEARNING**

- 1. a 2. a 3. b 4. b 5. c 6. b 7. d 8. c 9. c 10. b 11. b 12. a,b,d 13. When we use regression model to train some data, there is a good chance that the model will overfit the given training data set. Regularization helps by restricting the degree of freedom of a given equation i.e, simply reducing the number of degrees of a polynomial function by reducing their corresponding weights.
- 14. To regularize the model, a simple shrinkage penalty is added to the cost function .The different algorithms used for regularization are:
- 1) LASSO (Least Absolute Shrinkage and Selection Operator) Regression.
- 2) RIDGE Regression.
- 3) ELASTICNET Regression.

15. An error term represents the margin of error (residual variable) 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. It is the amount at which the equation may differ during analysis. It is also known as residual, disturbance or remainder term.