1. A

2. A

3. B

4. A

5. C

6. B

7. D

8. D

9. A

10. B

11. B

12. A, B,C

13.

Regularization is a technique used to reduce the errors by fitting the function appropriately on the given training set and avoid overfitting.

14.

The different Regularization algorithms are:

- **Ridge Regression-**

Ridge regression is a method for analyzing data that suffer from multi-collinearity.

- **LASSO**

Full form of LASSO is Least Absolute Shrinkage and Selection Operator Regression. IT is a regression analysis method that performs both feature selection and regularization in order to enhance the prediction accuracy of the mode

- **Elastic-Net Regression**

Elastic-Net is a regularized regression method that linearly combines the L1 and L2 penalties of the LASSO and Ridge methods respectively.

15.

Linear regression most often uses mean-square error (MSE) to calculate the error of the model. MSE is calculated by:

1. measuring the distance of the observed y-values from the predicted y-values at each value of x;
2. squaring each of these distances;
3. calculating the mean of each of the squared distances.

Linear regression fits a line to the data by finding the regression coefficient that results in the smallest MSE.