

ASSIGNMENT SOLUTIONS

MACHINE LEARNING SOLUTIONS

1 – A

2 – A

3 – A

4 – B

5 – C

6 – B

7 – D

8 – D

9 – A

10 – A

11 – B

12 – B & C

Theory Answers

13 – Regularization: Regression analysis uses the regularization technique to minimize model complexity and shorten the independent feature coefficients. Regularization helps models perform better by preventing overfitting. To reduce computing costs and minimize the possibility of overfitting, this method reduces the complexity of a complex model by shrinking its coefficients.

14 – Regularization Algorithms are:

- 1- Lasso Regression – L1 Regularization
- 2- Ridge Regression – L2 Regularization
- 3- Elastic Net

15 – In linear regression equation, error describes the sum of the deviations within the regression line, which explains the discrepancy between the observed results and the model's predicted value. To find the correlation

between one independent variable and one dependent variable, one uses the regression line as a point of analysis.

PYTHON SOLUTION

- 1- C
- 2- B
- 3- C
- 4- A
- 5- D
- 6- C
- 7- A
- 8- C
- 9- A, B & C
- 10-A &B