

MACHINE LEARNING – ANSWERS

1. A
2. A
3. A
4. B
5. C
6. B
7. D
8. D
9. A
10. B
11. B
12. A & B

13. Regularization is a technique used to reduce the errors by fitting the function appropriately on the given training set and avoid overfitting. The commonly used regularization techniques are:

- (i) **L1 regularization** – A regression model which uses **L1 Regularization** technique is called **LASSO (Least Absolute Shrinkage and Selection Operator)** regression. **Lasso Regression** adds “absolute value of magnitude” of coefficient as penalty term to the loss function (L).
- (ii) **L2 regularization** – A regression model that uses **L2 regularization** technique is called **Ridge regression**. **Ridge regression** adds “squared magnitude” of coefficient as penalty term to the loss function (L).

14. There are three algorithms used in regularization are:-

- (I) L1 regularization
- (II) L2 regularization
- (III) Dropout regularization

15. **Error present in linear regression equation-** Error is the difference between the actual value and Predicted value and the goal is to reduce this difference. Error is the difference between the actual value and Predicted value and the goal is to reduce this difference