Machine learning

Q.no 1

Ans (a)

Q.no 2

Ans (a)

Q.no 3

Ans (b)

Q.no 4

Ans (c)

Q.no 5

Ans (c)

Q.no 6

Ans (a)

Q.no 7

Ans (d)

Q.no 8

Ans (d)

Q.no 9

Ans (a)

Q.no 10

Ans (b)

Q.no 11

Ans (b)

Q.no 12

Ans (a),(b)

Q.no 13

Ans: It is technique used to reduce errors by fitting the function appropriately on the given training data set and avoiding overfitting.

Regularization works by adding a penalty or compexity to the cost function of a complex model.

This technique can be used in such a way that it will allow to maintain all variables or features in the model by reducing the magnitude of the variables. Hence it maintains accuracy as well as generalization of the model.

Q.no 14

Ans: There are two types of algorithms used for regularization

1. Ridge regression
2. Lasso regression

Ridge regression is one of the types of regularization in which a small amount of bias is introduced so that we can get better lon-term predictions. The amount of bias added to the model is known as ridge regression penalty. It is also called L2 regularization.

Lasso regression is another regularization technique to reduce the complexity of the model. It stands for least absolute and selection operator , taking absolute values instead of square of values. It is also called L1 regilarization.