

Machine Learning

Q1-b) They cannot be used when the data is not completely linearly separable while allowing no errors.

c) They are not optimal to use in case of outliers.

Q2-D) All of the above.

Q3-C) They allow some degree of errors or misclassification.

D) They can be used in case data is not completely linearly separable.

Q4-A) They take the data from lower dimensional space to some higher dimensional space in case the data is not likely to be linearly separable.

B) They use the kernel tricks to escape the complex computations required to transform the data

Q5-A) These functions give value of the dot product of pairs of data-points in the desired higher dimensional space without even explicitly converting the whole data into higher dimensional space.

C) The data product values given by the kernel functions are used to find the classifier in the higher dimensional space.

Q6-C) It is a model trained using supervised learning. It can be used for classification and regression.

D) It is a model trained using supervised learning. It can be used for classification not for regression.

7)-D) All of the above

8)-C) The data is noisy and contains overlapping points.

B) The data is clean and ready to use.

9)-A) Misclassification would happen.

10)- B) How accurately the SVM can predict outcomes for unseen data.

C) The threshold amount of error in an SVM.