**ASSIGNMENT NO-9**

**[MACHINE LEARNING]**

**WORKSHET NO.-5**

Q. 1. Which of the following are disadvantages of using Hard Margin SVM classifier?

**ANS. C) They are not optimal to use in case of outliers.**

Q.2. Which of the following statements are true regarding maximal margin classifier?

**ANS. B) It’s the classifier for which the margin length or the distance between the closest data-point on either side of the classifier and the classifier is maximized.**

Q.3. Which of the following statements are true regarding soft margin SVM classifier?

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

Q.4. Which of the following statements are true regarding SVMs?

**ANS. D) All of the above**

Q.5. Which of the following Statements are true regarding the Kernel functions used in SVM?

**ANS. A) These functions gives value of the dot product of pairs of data-points in the desired** **higher. dimensional space without even explicitly converting the whole data in to higher** **dimensional space.**

Q.6. 6. How can SVM be classified?

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

Q. 7. The quality of an SVM model depends upon:

**ANS. D) All of the above**

Q. 8. The SVM’s are less effective when:

**ANS. C) The data is noisy and contains overlapping points.**

Q. 9. What would happen when you use very small C (C~0)?

**ANS. A) Misclassification would happen.**

Q.10. 10. What do you mean by generalization error in terms of the SVM?

**ANS. B) How accurately the SVM can predict outcomes for unseen data**