

Quiz -3(Regular)

Due Feb 20 at 21:00**Points** 8**Questions** 8**Available** Feb 20 at 21:00 - Feb 20 at 21:30 30 minutes**Time Limit** 30 Minutes

Instructions

Time limit = 30 minutes

Total Marks = 8 (8 Questions of 1 mark each)

No negative marking will be given for wrong answers

This quiz was locked Feb 20 at 21:30.

Attempt History

| | Attempt | Time | Score |
|--------|---------------------------|------------|------------|
| LATEST | Attempt 1 | 11 minutes | 8 out of 8 |

Score for this quiz: **8** out of 8

Submitted Feb 20 at 21:11

This attempt took 11 minutes.

Question 1

1 / 1 pts

The objective function $\|w^2\|/2$ must be minimized to:

- ☐ To minimize the number of support vectors
- ☐ To minimize the margins in SVM
- ☒ To maximize the margins in SVM
- ☐ To maximize the number of support vectors

Correct!

Question 2**1 / 1 pts**

Suppose we have to solve a 3 class classification problem by training a Linear SVM model on the data (using the One-vs-all method).

How many times do we need to train our SVM model in such a case?

☐ 2☒ 3☐ 6☐ 1**Correct!****Question 3****1 / 1 pts**

Linear SVMs perform poorly if the classes are _____

☐ None of them☒ Non linearly seperable☐ linearly seperable☐ Both**Correct!****Question 4****1 / 1 pts**

When data contains overlapping points and noise, SVM's are less effective

Correct!

☒ True

☐ False

Question 5

1 / 1 pts

Hard margin allows a very low error in classification

Correct!

☒ True

☐ False

Question 6

1 / 1 pts

Which of the following are real-world applications of the SVM?

☐ churn prediction of telecom customers

☐ None of them

☐ Image classification

Correct!

☒ Both of them

Question 7**1 / 1 pts**

Which of the following is true about Support Vectors?

- ☐ None of the given options
- ☐ Changing support vector will change hyperplane
- ☒ Both of the given options
- ☐ The minimum number of support vectors in an SVM is 2

Correct!**Question 8****1 / 1 pts**

Lagrange multiplier is not employed to arrive at a solution for equality constrained optimization problem

- ☐ True
- ☒ False

Correct!**Quiz Score: 8 out of 8**