

# Unit 10 - Week 8

## Course outline

### How to access the portal

#### Week 0

#### Week 1

#### Week 2

#### Week 3

#### Week 4

#### Week 5

#### Week 6

#### Week 7

#### Week 8

● Lecture 26: Machine Learning Part 3

● Lecture 27: Machine Learning Part 4

● Lecture 28: Machine Learning Part 5

● R codes

○ Quiz : Assignment - 8

○ Solutions - Assignment 8

○ Feedback form for week 8

## Assignment - 8

The due date for submitting this assignment has passed.  
As per our records you have not submitted this assignment.

**Due on 2019-10-23, 23:59 IST.**

1) With a decrease in the flexibility of the model, the interpretability of the model will \_\_\_\_\_

**2 points**

- ☐ increase  
☐ decrease  
☐ remains the same

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
increase

2) In the process of in-sample validation, the test dataset is a part of train dataset.

**2 points**

- ☐ True  
☐ False

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
True

3) Choose the correct statement from below.

**2 points**

- ☐ In the k-Nearest neighbor algorithm, the variance will increase with a high value of the parameter 'k'.  
☐ In the k-Nearest neighbor algorithm, the bias will increase with a high value of the parameter 'k'.  
☐ In the k-Nearest neighbor algorithm, the bias will remain unchanged with a high value of the parameter 'k'.

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
In the k-Nearest neighbor algorithm, the bias will increase with a high value of the parameter 'k'.

4) Given  $P(A) = 0.3$ ,  $P(B) = 0.2$  and  $P(B/A) = 0.4$ . Evaluate  $P(A/B)$ .

**2 points**

- ☐ 0.9  
☐ 0.7  
☐ 0.6  
☐ 0.25

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
0.6

5) The Naive Bayes algorithm is useful for online machine learning applications.

**2 points**

- ☐ True  
☐ False

No, the answer is incorrect.  
Score: 0

Accepted Answers:  
True