

Answer Submitted.

X


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[NPTEL \(https://swayam.gov.in/explorer?ncCode=NPTEL\)](https://swayam.gov.in/explorer?ncCode=NPTEL) » Data Science for Engineers (course)
Course
outlineHow does an
NPTEL online
course work?

Setup Guide

Pre Course
Material

Week 0

Week 1

Week 2

Week 3

Week 4

Week 5

Week 6

☐ Module :
Predictive
Modelling
(unit?
unit=73&lesson=74)

☐ Linear
Regression

Week 6: Assignment 6 (Non Graded)

Your last recorded submission was on 2021-09-07, 08:15 IST

Note : This assignment is only for practice purpose and it will not be counted towards the Final score

1) The Pearson correlation coefficient for the given data is: -

1 point

X	5.1	4.9	4.7	4.6	5.0
Y	3.5	3.0	3.2	3.1	3.6

☐ -0.68☒ 0.68☐ 1.00☐ 0.00

Yes, the answer is correct.

Score: 1

Accepted Answers:

0.68

2) Which of the following statements is/are NOT TRUE?

1 point

I. Spearman rank correlation can be used for ordinal variables

II. Pearson's correlation takes a value between 0 to +1

III. A pair of observations (x_1, y_1) and (x_2, y_2) that follow the property of $x_1 > x_2, y_1 > y_2$ or $x_1 < x_2, y_1 < y_2$ are called concordant pairs☐ I☐ I and III

(unit?
unit=73&lesson=75)

○ Model
Assessment
(unit?
unit=73&lesson=76)

○ Diagnostics to
Improve Linear
Model Fit
(unit?
unit=73&lesson=77)

○ Simple Linear
Regression
Model Building
(unit?
unit=73&lesson=78)

○ Simple Linear
Regression
Model
Assessment
(unit?
unit=73&lesson=79)

○ Simple Linear
Regression
Model
Assessment (Continued)
(unit?
unit=73&lesson=80)

○ Multiple Linear
Regression
(unit?
unit=73&lesson=81)

○ Dataset (unit?
unit=73&lesson=82)

○ FAQ (unit?
unit=73&lesson=83)

○ Week 6
Feedback
Form: Data
Science for
Engineers
(unit?
unit=73&lesson=84)

● **Practice:**
Week 6:
Assignment 6
(Non Graded)
(assessment?
name=125)

● Quiz: Week 6:
Assignment 6

- ☒ III
☐ II and III
☐ I, II

No, the answer is incorrect.
Score: 0

Accepted Answers:
II and III

3) The equation for simple linear regression equation is represented as $y_i = \beta_0 + \beta_1 x_i$. The term β_1 denotes:-

1 point

- ☐ Predicted response
☒ Estimated slope
☐ Estimated intercept
☐ Error

Yes, the answer is correct.
Score: 1

Accepted Answers:
Estimated slope

4) In regression analysis, which of the following R^2 values indicate a strong linear relationship?

1 point

- ☐ 0.90
☒ 0.00
☐ -0.86
☐ 0.30

No, the answer is incorrect.
Score: 0

Accepted Answers:
0.90

5) The condition resulting in non-uniform error variance in regression analysis is termed as:-

1 point

- ☐ Homoscedasticity
☒ Heteroscedasticity

Yes, the answer is correct.
Score: 1

Accepted Answers:
Heteroscedasticity

Check Answers and Submit

Your score is: 3/5

(assessment?
name=137)

☒ Week 6:
Solution (unit?
unit=73&lesson=144)

Week 7

Week 8

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