

Course outline

How does an NPTEL online course work?

Week 0 :

Week 01

Week 02

Week 03

Week 04

Week 05 :

● Lecture 48: Multiple Regression

● Lecture 49: Multiple Regression (Contd.)

● Lecture 50: Regression Table

● Lecture 51: Regression Table (Contd.)

○ Quiz: Week 6:Assignment 6

● Feedback for Week 6

Week 07

Week 08

Week 09

Week 10

Week 11

Week 12

Course Material

Download Videos

Assignment Solution

Week 6:Assignment 6

The due date for submitting this assignment has passed.

Due on 2021-09-08, 23:59 IST.

As per our records you have not submitted this assignment.

Instruction for solving Question 1 to 5

Refer the following Regression Table and answer questions 1 to 5

regress wagetotal genedu exp expsq sector

Source	SS	df	MS	Number of obs	=	774
Model	1.6167e+09	A	404170558	F(4, 769)	=	D
Residual	2.1110e+09	B	2745082.47	Prob > F	=	0.0000
				R-squared	=	E
				Adj R-squared	=	F
Total	3.7277e+09	C	4822316.49	Root MSE	=	G

wagetotal	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
genedu	H	15.78237	22.16	0.000	318.7213	380.6846
exp	95.82445	I	5.31	0.000	J	K
expsq	-1.021933	.3027903	L	0.001	-1.616327	-.4275396
sector	M	122.534	4.46	N	306.1478	787.2294
_cons	-3002.274	332.9539	O	0.000	-3655.88	-2348.668

1) In the given regression table, the value of A is:
a. 769
b. 773
c. 4
d. 3

1 point

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: c

2) What is the value of B in the given regression table:
a. 774
b. 769
c. 773
d. 4

1 point

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: b

3) Find out the value of H from the information given in the Regression Table
a. 546.69
b. 318.72
c. 306.14
d. 349.7

1 point

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: d

4) Calculate the value of L from the information given in the Regression Table
a. -1.96
b. -3.38
c. -2.42
d. -3.83

1 point

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: b

5) Find out the value of D from the information given in the Regression Table
a. 150.15
b. 147.32
c. 147.23
d. 150.51

1 point

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: c

6) Which of the following tests are used to determine whether the dependent and independent variables have statistically significant relationship or not?
a) Z-test
b) F-test
c) t-test
d) none of the above

1 point

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: b

7) The test score of a student is regressed on family income and parent's education. If an additional variable is added in the regression equation, which of the following is TRUE?

1 point

- a) R^2 value will remain the same or increase
b) Adjusted R^2 value will remain the same or increase
c) Both of the above
d) None of the above

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: a

8) A fitted regression equation is given by $\hat{Y} = 20 + 0.75X$. What is the value of the residual at the point $X=100$, $Y=90$?

1 point

- a) 0.5
b) -5
c) 5
d) 5.5

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: b

9) The least square estimation method minimizes

1 point

- a. Summation of absolute values of errors
b. Summation of errors
c. Summation of square of errors
d. All of the above

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: c

10) A bivariate linear regression has 40 observations, what is the number of degrees of freedom to be used?

1 point

- (a) 42
(b) 39
(c) 38
(d) 41

- ☐ a
☐ b
☐ c
☐ d

No, the answer is incorrect.

Score: 0

Accepted Answers: c