

6406531166465. ✖ None of these

Sub-Section Number : 7
Sub-Section Id : 64065350440
Question Shuffling Allowed : Yes

Question Number : 230 Question Id : 640653351461 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0.5

Question Label : Multiple Choice Question

When the Marginal Utility is 0

Options :

- 6406531166466. ✔ Total utility is maximum
- 6406531166467. ✖ Total utility is minimum
- 6406531166468. ✖ Total utility continues to rise
- 6406531166469. ✖ None of these

Business Analytics

Section Id : 64065322143
Section Number : 13
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 9
Number of Questions to be attempted : 9
Section Marks : 20
Display Number Panel : Yes
Group All Questions : No
Enable Mark as Answered Mark for Review and Clear Response : Yes

Maximum Instruction Time : 0
Sub-Section Number : 1
Sub-Section Id : 64065350441
Question Shuffling Allowed : No

Question Number : 231 Question Id : 640653351462 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 0

Question Label : Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "BUSINESS ANALYTICS"

ARE YOU SURE YOU HAVE TO WRITE EXAM FOR THIS SUBJECT?
CROSS CHECK YOUR HALL TICKET TO CONFIRM THE SUBJECTS TO BE WRITTEN.

(IF IT IS NOT THE CORRECT SUBJECT, PLS CHECK THE SECTION AT THE TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

- 6406531166470. ✓ Yes
- 6406531166471. ✗ No

Sub-Section Number : 2
Sub-Section Id : 64065350442
Question Shuffling Allowed : Yes

Question Number : 232 Question Id : 640653351463 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0
Correct Marks : 2

Question Label : Multiple Choice Question

Suppose you conduct a chi-squared test of independence on the categorical variables cities and brand preferences at the significance level 0.05. You obtain a p-value of 0.07. What will you conclude?

Options :

- 6406531166472. ✗ Reject the null hypothesis and conclude that the categorical variables are

independent

6406531166473. ✖ Reject the null hypothesis and conclude that the categorical variables are not independent

6406531166474. ✔ Fail to reject the null hypothesis and conclude that the categorical variables are independent

6406531166475. ✖ Fail to reject the null hypothesis and conclude that the categorical variables are not independent

Question Number : 233 Question Id : 640653351467 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

There are 4 business units. Using the DEA, you solve the LP for all the four business units and find the efficiencies for these units. The efficiency is denoted by E. For these units, $E_1 = 0.83$, $E_2 = 1$, $E_3 = 0.57$, $E_4 = 0.91$. Which of these units are efficient?

Options :

6406531166479. ✖ Unit 1

6406531166480. ✔ Unit 2

6406531166481. ✖ Unit 3

6406531166482. ✖ Unit 4

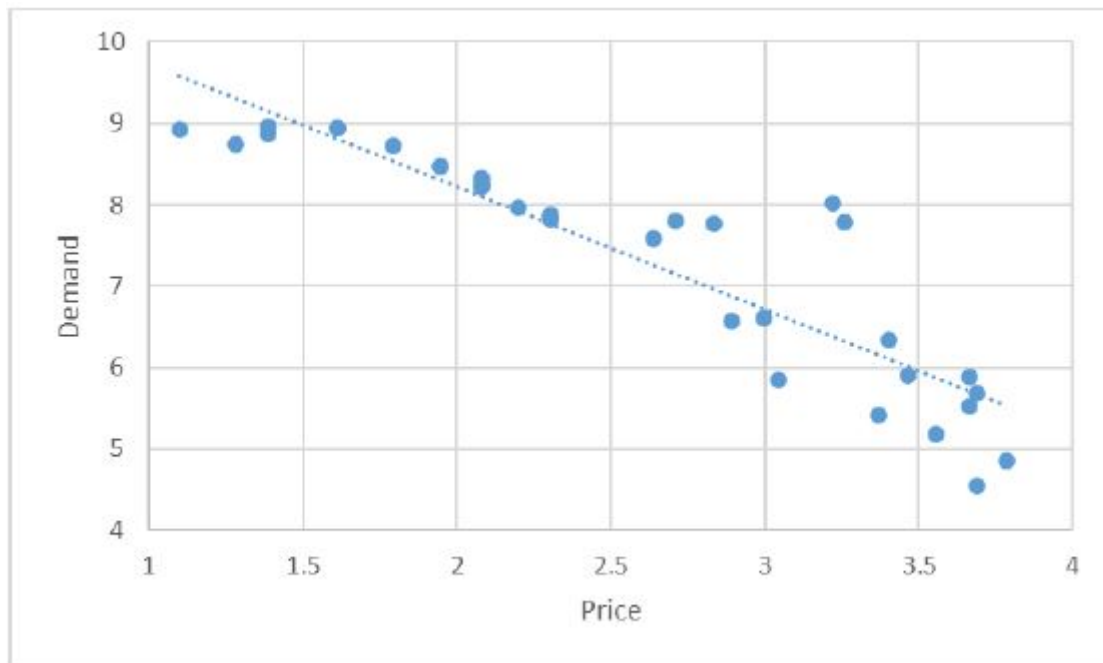
Question Number : 234 Question Id : 640653351469 Question Type : MCQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Multiple Choice Question

You construct a linear regression on a price-demand dataset and observe the following trend.



After observing the above figure, choose which of the following statements are true?

Options :

6406531166487. ✖ The intercept and the slope of this regression are both negative

6406531166488. ✖ The intercept and the slope of this regression are both positive

6406531166489. ✖ The intercept is negative and the slope is positive

6406531166490. ✔ The intercept is positive and the slope is negative

Sub-Section Number :

3

Sub-Section Id :

64065350443

Question Shuffling Allowed :

Yes

Question Number : 235 Question Id : 640653351468 Question Type : MSQ Is Question

Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Select Question

You solve the primal of a linear program with maximization objective, three decision variables and two constraints of the less than or equal to type. Non-negativity restrictions apply on the decision variables. After solving the linear program, you find that the first constraint is binding ($lhs = rhs$) and the second constraint is not binding ($lhs < rhs$). Which of the following statements are correct?

Options :

6406531166483. ✔ There are two decision variables in the dual

6406531166484. ✓ The dual variable corresponding to the second constraint is zero

6406531166485. ✖ There are three decision variables in the dual

6406531166486. ✖ The dual variable corresponding to the first constraint is zero

Sub-Section Number : 4

Sub-Section Id : 64065350444

Question Shuffling Allowed : Yes

Question Number : 236 Question Id : 640653351464 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

You have estimated the demand to follow the following relationship:

$D(p) = 60 - 5 * p$. Now, you intend to maximize the revenue

$R(p) = D(p) * p$. You find the first derivative of $R(p)$ with respect to p , equate it to 0 and find p^* . What is the value of p^* ?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

5.9 to 6.1

Question Number : 237 Question Id : 640653351465 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

In a multiple linear regression with 4 explanatory variables, you find that R-squared value is 0.7.

The number of observations is 25. What is the value of adjusted R-squared?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.62 to 0.66

Question Number : 238 **Question Id :** 640653351466 **Question Type :** SA **Calculator :** None

Response Time : N.A **Think Time :** N.A **Minimum Instruction Time :** 0

Correct Marks : 2

Question Label : Short Answer Question

You are conducting a multiple linear regression with sales as the dependent variable. Price, quantity and rating score are the independent variables. In order to calculate the VIF for the variable rating score, you implement a linear regression with rating score as the dependent variable and other variables as independent variables and obtain R-squared of 0.3. What is the VIF for the variable rating score?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

1.38 to 1.44

Sub-Section Number : 5

Sub-Section Id : 64065350445

Question Shuffling Allowed : No

Question Id : 640653351470 **Question Type :** COMPREHENSION **Sub Question Shuffling Allowed :** No **Group Comprehension Questions :** No **Calculator :** None **Response Time :** N.A **Think Time :** N.A **Minimum Instruction Time :** 0

Question Numbers : (239 to 241)

Question Label : Comprehension

Please use the confusion matrix below to answer the given subquestions.

Sample = 100	Predicted (No)	Predicted (Yes)
Actual (No)	35	15
Actual (Yes)	5	45

Sub questions

Question Number : 239 Question Id : 640653351471 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Short Answer Question

The accuracy of the classification model according to the confusion matrix is:_____

Hint: Enter your answer in %. If your answer is 12%, just enter 12

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

80

Question Number : 240 Question Id : 640653351472 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

The precision of the model with respect to the class (Yes) is: _____

Hint: Enter your answer in %. If your answer is 12%, just enter 12

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

75

Question Number : 241 Question Id : 640653351473 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2

Question Label : Short Answer Question

The recall of the model with respect to class (Yes) is: _____

Hint: Enter your answer in %. If your answers is 12%, just enter 12

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

90

System Commands

Section Id :	64065322144
Section Number :	14
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	17
Number of Questions to be attempted :	17
Section Marks :	100
Display Number Panel :	Yes
Group All Questions :	No
Enable Mark as Answered Mark for Review and	Yes