

Options :

6406531737206. ✓ Current assets are 2 times the liability

6406531737207. ✘ Liability is 2 times the current assets

6406531737208. ✓ Stocks is 0.5 times the liability

6406531737209. ✘ Liability is 0.5 times Stocks

6406531737210. ✓ Current assets are greater than stocks

6406531737211. ✘ Stocks are greater than current assets

6406531737212. ✘ None of these

Sub-Section Number :	6
Sub-Section Id :	64065373980
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 208 Question Id : 640653521197 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

A firm has annual sales turnover of INR 95,00,000/-. Its total current liabilities sum up to INR 3,00,00,000/-. It has INR 15,00,000/- as accounts receivable. Calculate the firm's debtor days (round the answer to 2 decimal places).

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

57.00 to 58.00

Section Id : 64065333941
Section Number : 13
Section type : Online
Mandatory or Optional : Mandatory
Number of Questions : 8
Number of Questions to be attempted : 8
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 : 64065373981
Question Shuffling Allowed : No
Is Section Default? : null

Question Number : 209 Question Id : 640653521202 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 "DIPLOMA LEVEL : 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 :

6406531737221. ✓ YES

6406531737222. ✖ NO

Sub-Section Number : 2
Sub-Section Id : 64065373982
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 210 Question Id : 640653521203 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

Latent demand in a demand-response curve is the area obtained when?

Options :

6406531737223. ✔ Price is reduced below the identified optimal price

6406531737224. ✖ Price is increased beyond the identified optimal price

6406531737225. ✖ The optimal price is increased beyond the maximum available price

6406531737226. ✖ Quantity is reduced below the identified optimal quantity

6406531737227. ✖ Quantity is increased beyond the identified maximum quantity

Question Number : 211 Question Id : 640653521211 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

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

Options :

6406531737241. ✖ There are three decision variables in the dual

6406531737242. ✖ The dual variable corresponding to the second constraint is zero

6406531737243. ✔ There are two decision variables in the dual formulation

6406531737244. ✔ The dual variable corresponding to the second constraint is non-zero

Question Number : 212 Question Id : 640653521216 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

In Multiple Linear Regression, the "R" represents _____ (choose all those that are applicable)

Options :

6406531737248. ✖ Correlation between the dependent variable and all independent variables

6406531737249. ✔ Correlation between the actual and predicted values of the dependent variable

6406531737250. ✖ Correlation between the predicted value of the dependent variable and the actual value of the independent variable

6406531737251. ✖ Correlation between the errors

6406531737252. ✖ Correlation between the actual and predicted value of any given independent variable

6406531737253. ✖ Correlation between the actual value of the dependent variable and the predicted value of the errors

6406531737254. ✖ None of these

Sub-Section Number : 3

Sub-Section Id : 64065373983

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653521204 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (213 to 217)

Question Label : Comprehension

The price and demand for a product are provided in Table 1. The linear regression model is fit for this data in excel, and the output is given in Table 2. Using this information, answer the given subquestions.

Price	Demand
10	9703
15	4701
20	2284
25	2137
30	1036
35	503
40	144
45	111
50	54

Table-1

Regression Model Parameter	Value
R-Squared	0.7084
Observations	9
Intercept	8125
Co-efficient (Beta-1)	-194.27
S.E of Intercept	1538.44
S.E of Co-efficient (Beta-1)	47.10

Table-2

Sub questions

Question Number : 213 Question Id : 640653521205 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

What is the total market size?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

8125

Question Number : 214 Question Id : 640653521206 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

What is the satiating price for the price-demand data based on the fitted model (*Note: If your answer is in decimal, enter it rounded to two decimal places. For example, if your answer is "10.256", enter it as "10.26"*)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

41.60 to 42.00

Question Number : 215 Question Id : 640653521207 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

What is the elasticity of the (regression line) demand, when the price is Rs. 33 (round to two decimal places)? (*Note: If your answer is in decimal, enter it rounded to two decimal places. For example, if your answer is "10.256", enter it as "10.26"*)

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

3.60 to 3.80

Question Number : 216 Question Id : 640653521208 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Selectable Option : 0

Question Label : Multiple Select Question

At the price of Rs. 33, based on the elasticity (of the regression line)_____

Options :

6406531737231. ✓ Demand is elastic

6406531737232. ✗ Demand is inelastic

6406531737233. ✗ Demand indicates luxury item

6406531737234. ✗ Demand indicates inferior item

Question Number : 217 Question Id : 640653521209 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

Question Label : Multiple Choice Question

As the price moves to the satiating price, then elasticity _____?

Options :

6406531737235. ✗ Decreases

6406531737236. ✓ Increases

6406531737237. ✗ Remains the same

6406531737238. ✗ Increases then decreases

6406531737239. ✗ Decreases then increases

Sub-Section Number :	4
Sub-Section Id :	64065373984
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 218 Question Id : 640653521210 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

You have estimated the demand to follow the following relationship: $D(p) = 100 - p$. 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 :

49.9 to 50.1

Sub-Section Number : 5

Sub-Section Id : 64065373985

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653521212 Question Type : COMPREHENSION Sub Question Shuffling

Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix

Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Question Numbers : (219 to 221)

Question Label : Comprehension

A multiple linear regression model, as specified below is fit on a data set with 150 data points.

MLR Model: $Y = 2.1 + 1.4 * X_1 - 4.2 * X_2 + 0.5 * X_3 + \epsilon$

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 219 Question Id : 640653521213 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

How many degrees of freedom are present for the "Residuals" in the ANOVA Table?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

146

Question Number : 220 Question Id : 640653521214 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

How many degrees of freedom are present for the "Regression" in the ANOVA Table?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

3

Question Number : 221 Question Id : 640653521215 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

How many total degrees of freedom are present for the fitted model in the ANOVA Table?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

149

Sub-Section Number :	6
Sub-Section Id :	64065373986
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653521217 Question Type : COMPREHENSION Sub Question Shuffling Allowed : No Group Comprehension Questions : No Question Pattern Type : NonMatrix Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Question Numbers : (222 to 229)

Question Label : Comprehension

Company "ABC" manufacturer's product "X". Currently, the quality inspection of "X" is done manually through visual inspection. The aim of the quality inspection process is to identify defective products. From historical experience, manual visual inspection correctly identified 75% of defective items in any given batch of only defective items.

The management has decided to replace manual visual inspection with an automatic detection system (ADS). This ADS runs a logistic model in the background for classifying an item as defective or not-defective based on photos taken by a camera. To test the ADS, a sample of 100 units of X is taken. 30% of the sample contains defective items. The samples are passed through the ADS, and the system identifies 20% of the non-defective items as defective and 10% of the defective items as non-defective.

Using this information, answer the given subquestions.

Sub questions

Question Number : 222 Question Id : 640653521218 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

How many "True Positives" is ADS predicting?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

27

Question Number : 223 Question Id : 640653521219 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

How many "False Positives" is ADS predicting?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

14

Question Number : 224 Question Id : 640653521220 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

How many "True Negatives" is ADS predicting?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

56

Question Number : 225 Question Id : 640653521221 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

How many "False Negatives" is ADS predicting?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

3

Question Number : 226 Question Id : 640653521222 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

What is the accuracy of the ADS? (Note: Enter the answer as a numeric percentage value rounded to two decimal places without the % symbol. For example, if your answer is "10.256 %", enter it as "10.26")

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

82.00 to 84.00

Question Number : 227 **Question Id :** 640653521223 **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

What is the precision of the ADS when predicting defective products? *(Note: Enter the answer as a numeric percentage value rounded to two decimal places without the % symbol. For example, if your answer is "10.256 %", enter it as "10.26")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

65.00 to 67.00

Question Number : 228 **Question Id :** 640653521224 **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

What is the recall of the ADS when predicting non-defective products? *(Note: Enter the answer as a numeric percentage value rounded to two decimal places without the % symbol. For example, if your answer is "10.256 %", enter it as "10.26")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

79.00 to 81.00

Question Number : 229 **Question Id :** 640653521225 **Question Type :** MSQ **Is Question**

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

Correct Marks : 1 **Selectable Option :** 0

Question Label : Multiple Select Question

Should ADS be implemented?

Options :

6406531737262. ✘ Yes, the precision of ADS in predicting defects is higher than the current manual visual inspection

6406531737263. ✘ No, the precision of ADS in predicting defects is lower than the current manual visual inspection

6406531737264. ✔ Yes, the recall of ADS in predicting defects is higher than the current manual visual inspection

6406531737265. ✘ No, the recall of ADS in predicting defects is lower than the current manual visual inspection

6406531737266. ✘ Yes, the precision of ADS in predicting non-defects is higher than the current manual visual inspection

6406531737267. ✘ No, the precision of ADS in predicting non-defects is lower than the current manual visual inspection

6406531737268. ✘ Yes, the recall of ADS in predicting non-defects is higher than the current manual visual inspection

6406531737269. ✘ No, the recall of ADS in predicting non-defects is lower than the current manual visual inspection

System Commands

Section Id :	64065333942
Section Number :	14
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	13
Number of Questions to be attempted :	13
Section Marks :	100
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 :	64065373987
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 230 Question Id : 640653521226 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 "DIPLOMA LEVEL: SYSTEM COMMANDS"

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