Options :

6406531930067. ✖ 0.50

6406531930068. ✔ 0.85

6406531930069. ✖ 0.35

6406531930070. ✖ 0.55

Business Analytics

Section Id :	64065339079
Section Number :	14
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	11
Number of Questions to be attempted :	11
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 :	64065382630
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 218 Question Id : 640653577972 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 (COMPUTER BASED EXAM)"

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 <u>TOP</u> FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406531930079. ✔ YES

6406531930080. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	64065382631
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 219 Question Id : 640653577973 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

When is a "Table" the best visualisation option for presenting data?

Options :

6406531930081. ✖ When the outliers in the data need to be shown

6406531930082. ✖ When trends in the data need to be shown

6406531930083. ✖ When proportions in the data need to be shown

6406531930084. ✔ None of these

Question Number : 220 Question Id : 640653577984 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

The table below provides the summary statistic for a random variable. Then what distribution could be a good fit for this random variable?

Summary Statistic	Value
Number of observations	300
Mean	20
Median	22
Mode	20
Std. Deviation	3
Minimum	2
Maximum	50

Options :

6406531930102. ✖ Poisson distribution

6406531930103. ✔ Normal distribution

6406531930104. ✖ Uniform distribution

6406531930105. ✖ Standard normal distribution

Question Number : 221 Question Id : 640653577991 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

For a linear demand response curve, the satiating price is __

Options :

6406531930121. ✖ The price at which the profits are maximum

6406531930122. ✔ The price at which demand is zero

6406531930123. ✖ The price beyond which the consumer surplus exists

6406531930124. ✖ The price beyond which latent demand exists

Sub-Section Number :	3
Sub-Section Id :	64065382632
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 222 Question Id : 640653577974 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

Which of the following distributions is/are not symmetric in nature (select all that are applicable)?

Options :

6406531930085. ✖ Standard Normal distribution

6406531930086. ✖ Standard Binomial distribution

6406531930087. ✖ Uniform distribution between [-1 to +1]

6406531930088. ✔ Poisson distribution

Question Number : 223 Question Id : 640653577985 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

A distribution is left tailed if (select all that is applicable)

Options :

6406531930106. ✖ Coefficient of variation is positive

6406531930107. ✖ Skewness is positive

6406531930108. ✔ Skewness is negative

6406531930109. ✖ Cannot say without the histogram

Question Number : 224 Question Id : 640653577989 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

For a demand response curve which has constant elasticity, which of the following statements are true (choose all that are applicable)

Options :

6406531930116. ✖ If the curve is for an inelastic product, the revenue is increased only by setting price close to zero

6406531930117. ✔ If the curve is for an inelastic product, the revenue is increased by simply increasing the prices

6406531930118. ✖ If the curve is for an elastic product, the revenue is increased by simply increasing the prices

6406531930119. ✔ If the curve is for an elastic product, the revenue is increased only by setting price close to zero

Sub-Section Number :	4
Sub-Section Id :	64065382633
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 225 Question Id : 640653577990 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

Suppose a factory manufactures products on three machines A, B and C. Suppose 65% of total output comes from machine A, 30% of total output comes from machine B and 5% of total output comes from machine C. From the past data, it is known that 1% of products by machine A are

defectives, 2% of products by machine B are defectives and 10% of products by machine C are defectives. What is the probability that the product has come from machine B, given that it is defective?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.32 to 0.36

Sub-Section Number :	5
Sub-Section Id :	64065382634
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653577975 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 : (226 to 230)

Question Label : Comprehension

Say, Table-1 specifies the win results for the teams that batted first during the PARADOX Cricket Games. You are now interested to generate more data on win margins for Teams that bat first during future PARADOX games, which will be used as part of your business proposal to improve the pitch. Accordingly, you are told that the win margins are uniformly distributed between 1 and 10 runs U[1,10] for any given game in the future. Then answer the given subquestions.

Game	Result for Team Batting First
Game-1	Won by 5 Runs
Game-2	Won by 4 Runs
Game-3	Won by 6 Runs
Game-4	Won by 3 Runs
Game-5	Won by 7 Runs

Table-1

Sub questions

Question Number : 226 Question Id : 640653577976 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 expected number of runs by which a team batting first will win a game?

Note: Round your answer to one decimal point. Example, if your answer is "1.245", enter the answer as "1.2"

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

5.5

Question Number : 227 Question Id : 640653577977 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

What is the value of the computed test statistic?

Note: Round your answer to one decimal point. Example, if your answer is "1.245", enter the answer as "1.2"

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

2 to 2.2

Question Number : 228 Question Id : 640653577978 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 number of degrees of freedom for the test?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

4

Question Number : 229 Question Id : 640653577979 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

The p-value of the chi-square goodness of fit test represents __

Options :

6406531930092. ✖ The chance of observing the sample when the null hypothesis is false

6406531930093. ✖ The chance of observing the sample when the alternative hypothesis is true

6406531930094. ✖ The chance of observing the sample at the specified level of significance

6406531930095. ✔ None of these

Question Number : 230 Question Id : 640653577980 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

If the p-value for the test is 0.75, then what should be the _minimum level of significance_ needed if we need to conclude that the sample indeed comes from a U[1,10]

Note: Round your answer to one decimal point. Example, if your answer is "1.245", enter the answer as "1.2"

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.75 to 0.76

Sub-Section Number :	6
Sub-Section Id :	64065382635
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653577981 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 : (231 to 232)

Question Label : Comprehension

Say Table-2, provides the data on the number of enrolments in the three BSc courses for "Male"and "Female" gender students. Given this information, answer the given subquestions.

	Diploma in Data Science	Diploma in Programming	BS in Electronic Systems
Male	30	40	30
Female	55	20	25

Table-2

Sub questions

Question Number : 231 Question Id : 640653577982 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

What is the value for the computed test statistic? *(Note-1: round your final answer to two decimal places. Example: If your answer is "1.2345" enter it as "1.23")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

14.00 to 15.00

Question Number : 232 Question Id : 640653577983 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2 Max. Selectable Options : 0

Question Label : Multiple Select Question

If a 20% confidence interval is considered, then which of the following statements is/are true (choose all that is applicable)

Options :

6406531930098. ✔ If the p-value for the test is 0.35, conclude that the course enrolments are independent of gender

6406531930099. ✖ If the p-value for the test is 0.35, conclude that the course enrolments are not independent of gender

6406531930100. ✖ If the computed test statistic is less than the chi-square tabulated, then conclude that the course enrolments are not independent of gender

6406531930101. ✖ If the computed test statistic is greater than the chi-square tabulated, then conclude that the course enrolments are independent of gender

Sub-Section Number :	7
Sub-Section Id :	64065382636
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653577986 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 : (233 to 234)

Question Label : Comprehension

Your local grosser has observed that the demand for Butter Milk follows a linear demand response curve. Hence, he has decided to raise the "Butter Milk" price by Rs. 5 rupees per bottle to Rs. 15 per bottle. If the demand was 100 units per day before the rise and is now 80 units per day after the rise, then answer the given subquestions.

Sub questions

Question Number : 233 Question Id : 640653577987 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 demand?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.4 to 0.42

Question Number : 234 Question Id : 640653577988 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1 Max. Selectable Options : 0

Question Label : Multiple Select Question

Given the computed elasticity, what can you say about the "Butter Milk" demand? (choose all that are applicable)

Options :

6406531930111. ✖ It is elastic

6406531930112. ✔ It is inelastic

6406531930113. ✖ It is a luxury

6406531930114. ✖ It is a necessity

6406531930115. ✖ Cannot say, insufficient information

System Commands

Section Id :	64065339080
Section Number :	15
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	16
Number of Questions to be attempted :	16
Section Marks :	100
Display Number Panel :	Yes