Correct Marks : 2

Question Label : Multiple Choice Question

Which of the following could be the possible output of print(reg.score())?

Options :

6406532240132. ✖ -0.528

6406532240133. ✖ 1

6406532240134. ✖ 0.528

6406532240135. ✔ Given code will return an error

Business Analytics

Section Id :	64065344907
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
Section Negative Marks :	0
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 :	64065395204
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 205 Question Id : 640653668649 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 TOP FOR THE SUBJECTS REGISTERED BY YOU)

Options :

6406532240164. ✔ YES

6406532240165. ✖ NO

Sub-Section Number :	2
Sub-Section Id :	64065395205
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 206 Question Id : 640653668650 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 “Pie Chart” the best visualisation option for presenting data?

Options :

6406532240166. ✖ When the outliers in the data need to be shown

6406532240167. ✖ When trends in the data need to be shown

6406532240168. ✔ When proportions in the data need to be shown

6406532240169. ✖ None of these

Sub-Section Number : 3

Sub-Section Id : 64065395206

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 207 Question Id : 640653668651 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 symmetric in nature (select all that are applicable)?

Options :

6406532240170. ✔ Standard Normal distribution

6406532240171. ✔ Standard Binomial distribution

6406532240172. ✔ Uniform distribution

6406532240173. ✖ Poisson distribution

Sub-Section Number : 4

Sub-Section Id : 64065395207

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653668652 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 : (208 to 212)

Question Label : Comprehension

Say, Table 1 specifies the blood sugar level (in mg/dL) for the male and female patients who visit a hospital. If the people in the locality have a nominal sugar level (which is between 70 mg/dL and 100 mg/dL), then it is expected that the number of people in any given sugar level is uniformly distributed between 1 and 9. If you want to validate this claim, then, answer the given subquestions.

Patient ID	*Gender*	*Blood sugar level (in mg/dL)*
P1	MALE	71
P2	MALE	84
P3	MALE	76
P4	MALE	78
P5	MALE	89
P6	FEMALE	92
P7	FEMALE	97
P8	FEMALE	95
P9	FEMALE	83
P10	FEMALE	72

Table 1

Sub questions

Question Number : 208 Question Id : 640653668653 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 value for the statistical test to be performed? *(Note: give only a numerical value rounded to 2 decimal places. For example, if your answer is 10.1253, then input the answer as "10.13")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

5

Question Number : 209 Question Id : 640653668654 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

If three bins of equal sizes {that is Bin-1 = [70-80), Bin-2= [80 to 90) and Bin-3 = [90 to 100)} are considered. Then, what is the value of the computed test statistic for the statistical test to be performed? *(Note: give only a numerical value rounded to 2 decimal places. For example, if your answer is 10.1253, then input the answer as "10.13")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

1.60 to 1.90

Question Number : 210 Question Id : 640653668655 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 statistical test to be performed? *(Note: give only a numerical value rounded to 2 decimal places. For example, if your answer is 10.1253, then input the answer as "10.13")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2.00

Question Number : 211 Question Id : 640653668656 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

What does the p-value of the performed statistical test refer to?

Options :

6406532240177. ✔ The chance of observing the sample in Table 1 given that the locality has people who are uniformly distributed between 1 and 9 with the nominal sugar levels.

6406532240178. ✖ The chance of observing the sample in Table 1 when the locality has a blood sugar levels which are uniformly distributed between 70mg/ dL and 100 mg/dL.

6406532240179. ✖ The chance of observing the sample in Table 1 given that the locality has people who are uniformly distributed between 1 and 9 at any given sugar level.

6406532240180. ✖ None of these

Question Number : 212 Question Id : 640653668657 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

If the p-value for the test is 0.75, then what can be the *maximum level of significance* if the Null Hypothesis is NOT TO BE REJECTED

Options :

6406532240181. ✔ 0.74

6406532240182. ✖ 0.26

6406532240183. ✖ Any value between 0 and 1

6406532240184. ✖ Cannot say without more data

Sub-Section Number : 5

Sub-Section Id : 64065395208

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653668658 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 215)

Question Label : Comprehension

Say Table 2, provides the data on the number of enrolments who complete the “Foundation”, “Diploma”, and “Degree” and the number of enrolments who “discontinue” the IITM BSc program for “Male” and “Female” gender students. Given this information, answer the subquestions.

	Completed Foundation	*Completed Diploma*	*Completed Degree*	*Discontinued*
Male	30	40	30	23
Female	55	20	25	15

Table-2

Sub questions

Question Number : 213 Question Id : 640653668659 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

If the aim is to understand if the “Gender” categories and “Completion” categories (including completion of any degree and discontinuation) are independent of each other, then what is the value for the computed test statistic? *(Note: round your final answer to two decimal places. Example: If your answer is “1.2354” enter it as “1.24”)*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

15.50 to 16.30

Question Number : 214 Question Id : 640653668660 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 statistical test to be performed? *(Note: give only a numerical value rounded to 2 decimal places. For example, if your answer is 10.1253, then input the answer as "10.13")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

3.00

Question Number : 215 Question Id : 640653668661 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% significance level is considered, then which of the following statements is/are true for the performed statistical test (choose all that are applicable)

Options :

6406532240187. ✔ If the p-value for the test is 0.25, conclude that the course completions are independent of gender

6406532240188. ✔ If the p-value for the test is 0.15, conclude that the course completions are not

independent of gender

6406532240189. ✖ If the p-value for the test is 0.25, conclude that the course completions are not independent of gender

6406532240190. ✖ If the p-value for the test is 0.15, conclude that the course completions are independent of gender

6406532240191. ✔ If the computed test statistic is less than the chi-square tabulated, then conclude that the course enrolments are independent of gender

6406532240192. ✔ If the computed test statistic is greater than the chi-square tabulated, then conclude that the course enrolments are not independent of gender

6406532240193. ✖ If the computed test statistic is less than the chi-square tabulated, then conclude that the course enrolments are not independent of gender

6406532240194. ✖ 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 :	6
Sub-Section Id :	64065395209
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 216 Question Id : 640653668662 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 right-tailed if (select all that is applicable)

Options :

6406532240195. ✖ Coefficient of variation is positive

6406532240196. ✔ Skewness is positive

6406532240197. ✖ Skewness is negative

6406532240198. ✖ Cannot say without the histogram

Sub-Section Number : 7

Sub-Section Id : 64065395210

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653668663 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 : (217 to 220)

Question Label : Comprehension

The manager at a restaurant has observed that the “Lunch Buffet” follows a linear demand response curve. Hence, the manager has decided to raise the “Lunch Buffet” price by Rs. 250 rupees per person to Rs. 500 per person. The demand was 300 people per Lunch before the raise and is 200 people per lunch after the raise. Then answer the given subquestions.

Sub questions

Question Number : 217 Question Id : 640653668664 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 market size for the “Lunch Buffet” at the restaurant? *(Note: give only a numerical value rounded to 2 decimal places. For example, if your answer is 10.1253, then input the answer as “10.13”)*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

400.00

Question Number : 218 Question Id : 640653668665 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 linear demand response curve at a price of 500? *(Note: give only a numerical value rounded to 2 decimal places. For example, if your answer is 10.1253, then input the answer as "10.13")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.40 to 0.41

Question Number : 219 Question Id : 640653668666 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 of the linear demand response curve for the "Lunch Buffet" demand at the restaurant? *(Note: give only a numerical value rounded to 2 decimal places. For example, if your answer is 10.1253, then input the answer as "10.13")*

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1000.00

Question Number : 220 Question Id : 640653668667 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

At the satiating price, what can be said about the “Lunch Buffet” demand? (choose all that are applicable)

Options :

6406532240202. ✔ It is perfectly elastic

6406532240203. ✖ It is perfectly inelastic

6406532240204. ✖ It is for an “inferior good”

6406532240205. ✖ It is for a “luxury good”

6406532240206. ✖ Cannot say, insufficient information

Sub-Section Number :	8
Sub-Section Id :	64065395211
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 221 Question Id : 640653668668 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

Your family is seeking an alliance for you and has found three matrimonial services “A”, “B” and “C”. Assume that the enrolment in the matrimonial services is mutually exclusive. A market survey indicates that 30% of total enrolments are in “A”, 30% are in “B” and the remaining are in “C”. The market survey also indicates that 15% of registrations in “A” do not find a suitable match, 12% in “B” do not find a suitable match, and 30% in “C” do not find a suitable match. Recently, your family has heard the news that a relative “X” has found a suitable match after enrolling in one of the

matrimonial services. Then which matrimonial service would you suspect “X” to have enrolled in?

Options :

6406532240207. ✖ A

6406532240208. ✖ B

6406532240209. ✔ C

6406532240210. ✖ Cannot say, require more information.

System Commands

Section Id :	64065344908
Section Number :	14
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
Section Negative Marks :	0
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 :	64065395212
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 222 Question Id : 640653668669 Question Type : MCQ Is Question