### Question Number : 217 Question Id : 640653737499 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 will be the output of the following code ?

```
data = [['apple', 120],
      ['apple', 125],
      ['grapes',120]]
from sklearn.preprocessing import OneHotEncoder
ohe = OneHotEncoder(sparse_output=False)
ohe.fit(data)
print(ohe.transform(data).shape[1])
```

### Response Type : Numeric

### **Evaluation Required For SA :** Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

**Possible Answers :** 

4

# **Business Analytics**

Section Id :	64065351362
Section Number :	14
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	10
Number of Questions to be attempted :	10
Section Marks :	20
Display Number Panel :	Yes

Section Negative Marks :	0
Group All Questions :	No
Enable Mark as Answered Mark for Review and	Voc
Clear Response :	163
Maximum Instruction Time :	0
Sub-Section Number :	1
Sub-Section Id :	640653107671
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 218 Question Id : 640653737500 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 :**

6406532468284. 🗸 YES

### 6406532468285. \* NO

Sub-Section Number :	2
Sub-Section Id :	640653107672
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 219 Question Id : 640653737505 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

From the Figure-1, which of the below statements are true?

# Global Average Temperature Vs. Number of Pirates



Figure-1

### **Options :**

6406532468292. \* There is a positive correlation between the number of pirates and the global average temperature increase

6406532468293. **\*** There is no correlation between the number of pirates and the global average temperature increase

6406532468294. \* More data is required to arrive at a conclusion

6406532468295. 🗸 None of these

Question Number : 220 Question Id : 640653737515 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 repr	esents		
Options :			
6406532468312. 🏶 None of these			
6406532468313. * The chance of observing the sample when the alternative hypothesis is true			
6406532468314. 🏶 The chance of observing the sample at the specified level of significance			
6406532468315. ✔ The chance of observing the sample when the null hypothesis is true			
Sub-Section Number :	3		
Sub-Section Id :	640653107673		
Question Shuffling Allowed :	Yes		
Is Section Default? :	null		
Question Number : 221 Question Id : 640653737504 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 :**

6406532468288. 🗸 Standard normal distribution

6406532468289. **\*** Exponential distribution

6406532468290. Vulform distribution between [-1 to +1]

### 6406532468291. \* Poisson distribution

Sub-Section Number :	4
Sub-Section Id :	640653107674
Question Shuffling Allowed :	Yes

null

# Question Number : 222 Question Id : 640653737514 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 data set with 450 data points provides information on 13 variables. Chi-square goodness of fit test is conducted on a variable in the data-set, to see if it follows a normal distribution. If the dataset is binned into 15 bins, then how many degrees of freedom does the chi-square statistic have?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

**Possible Answers :** 

12

Sub-Section Number :	5
Sub-Section Id :	640653107675
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653737501 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 : (223 to 224)

**Question Label : Comprehension** 

The linear demand response for a product-X is modelled as a simple linear regression represented as D(P) = 5000 - 20\*P, where D(P) is the demand at price-P. Then, answer the given subquestions.

Sub questions

### Question Number : 223 Question Id : 640653737502 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 this curve when the price is Rs.100? (*Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then enter it as"1.23"*.<u>DO NOT ENTER PERCENTAGE VALUES</u>) **Response Type :** Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

**Possible Answers :** 

### 0.65 to 0.67

Question Number : 224 Question Id : 640653737503 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 this curve? (Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then enter it as "1.23". DO NOT ENTER PERCENTAGE VALUES) Response Type : Numeric Evaluation Required For SA : Yes Show Word Count : Yes Answers Type : Equal Text Areas : PlainText Possible Answers :

# Question Id : 640653737521 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 : (225 to 228)

**Question Label : Comprehension** 

Using the excel regression output given in Figure-2 answer the given sub questions.

SUMMARY OUTPUT	-			
Regression Sta	tistics			
Multiple R	0.966016			
R Square	0.933186			
Adjusted R Square	0.926505			
Standard Error	363.8778			
Observations	X1			
ANOVA				
	df	SS	MS	F
Regression	1	X2		X4
Residual	10	1324070.51	Х3	
Total		19817291.7		

Figure-2

### Sub questions

Question Number : 225 Question Id : 640653737522 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 0.5

Question Label : Short Answer Question

What is the value of "X1"?

Response Type : Numeric

### Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

**Possible Answers :** 

### 12

Question Number : 226 Question Id : 640653737523 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0 Correct Marks : 0.5 Question Label : Short Answer Question What is the value of "X2"? (Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then 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 : 18493221 to 18493222

Question Number : 227 Question Id : 640653737524 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

### Correct Marks : 0.5

Question Label : Short Answer Question What is the value of "X3"? (Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then 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 :

132407 to 132408

Question Number : 228 Question Id : 640653737525 Question Type : SA Calculator : None		
Response Time : N.A Think Time : N.A Minimum Instruction Time : 0		
Correct Marks : 0.5		
Question Label : Short Answer Question		
What is the value of "X4"?		
Response Type : Numeric		
Evaluation Required For SA : Yes		
Show Word Count : Yes		
Answers Type : Range		
Text Areas : PlainText		
Possible Answers :		
138 to 140		
Sub-Section Number :	6	
Sub-Section Id :	640653107676	
Question Shuffling Allowed :	No	
Is Section Default? :	null	

Question Id : 640653737510 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 : (229 to 231)

**Question Label : Comprehension** 

Given the imaginary demand response curve in the below figure, answer the given subquestions.



### Sub questions

### Question Number : 229 Question Id : 640653737511 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

Which of the following statements are true? (choose all that is applicable)

### **Options :**

6406532468302. \* As price increases, latent demand decreases

6406532468303. \* As it is a linear curve, there is no impact of price on latent demand

6406532468304. \* The curve does not have any latent demand region

6406532468305. 🗸 None of these

### Question Number : 230 Question Id : 640653737512 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 between any two points of the given demand response curve?

(Note-1: Do not assume that it is linear and do not assume that it is a constant elasticity curve)

(Note-2: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then enter it as "1.23". <u>DO NOT ENTER PERCENTAGE VALUES</u>)

Response Type : Numeric Evaluation Required For SA : Yes Show Word Count : Yes Answers Type : Equal Text Areas : PlainText Possible Answers :

2

Question Number : 231 Question Id : 640653737513 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** 

Based on the computed elasticity, what kind of demand is being exhibited by the product?

### **Options :**

6406532468307. 🗸 Elastic demand

6406532468308. \*\* Inelastic demand

6406532468309. \* Demand for an inferior good

6406532468310. \* Demand for a normal good

Sub-Section Number :	7
Sub-Section Id :	640653107677
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653737506 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 : (232 to 234)

**Question Label : Comprehension** 

You are given the following contingency table (Table-1) based on sample data where different cities and their brand preferences are provided. You perform a chi-squared test of independence to make inferences about the population from this sample.

	Brand A	Brand B
Chennai	350	120
Mumbai	280	204
	T_1	1 1

Table-1

Based on the above data, answer the given subquestions.

### Sub questions

### Question Number : 232 Question Id : 640653737507 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** 

From the given contingency table, find the expected frequency of Chennai people preferring brand B?

(Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then enter it as "1.23". <u>DO NOT ENTER PERCENTAGE VALUES</u>)

Response Type : Numeric

### Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

### **Possible Answers :**

159 to 160

Question Number : 233 Question Id : 640653737508 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 calculated value of chi-squared? (*Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then enter it as "1.23". DO NOT ENTER PERCENTAGE VALUES*) Response Type : Numeric Evaluation Required For SA : Yes Show Word Count : Yes Answers Type : Range Text Areas : PlainText Possible Answers : 28 to 30

Question Number : 234 Question Id : 640653737509 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** 

At the significance level 0.01, chi-squared tabular value is 6.63. What do you conclude?

**Options :** 

6406532468298. Reject the null hypothesis and conclude that the categorical variables are not independent

6406532468299. \* Fail to reject the null hypothesis and conclude that the categorical variables are not independent

6406532468300. \* Fail to reject the null hypothesis and conclude that the categorical variables are

#### independent

6406532468301. **\*** Reject the null hypothesis and conclude that the categorical variables are independent

Sub-Section Number :	8
Sub-Section Id :	640653107678
Question Shuffling Allowed :	No
Is Section Default? :	null

# Question Id : 640653737516 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 : (235 to 238)

**Question Label : Comprehension** 

The application for the degree "Master in Being Useless (MBU)" has begun at "Star University (SU)". The applicants to SU are from three professional categories namely "TV Watcher", "Mobile Gamer" and "Procrastinator". The previous year admissions indicate that 20% of the total applications are Procrastinators, 40% are Mobile Gamers and the rest are TV Watchers.

When examining past applications submitted by the three professional categories, it is seen that the applications are either "Fully Completed", "Half Completed" or "Blank". It is observed that among the "Mobile Gamer" applications that are received, 30% are "Fully Completed" and 60% is "Half Completed". For TV Watcher applications that are received, 40% are "Half Completed" and 20% are "Blank". Among all received Procrastinator applications, 50% have submitted "Blank" applications and 40% have submitted "Half Completed" applications.

Assuming the necessary mutual exclusiveness, answer the given subquestions.

### Sub questions

Question Number : 235 Question Id : 640653737517 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 probability that an application for the coming admission will be "Fully Completed"? (*Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then enter it as "1.23". <u>DO NOT ENTER PERCENTAGE VALUES</u>)* 

Response Type : Numeric Evaluation Required For SA : Yes Show Word Count : Yes Answers Type : Range Text Areas : PlainText Possible Answers : 0.29 to 0.31

### Question Number : 236 Question Id : 640653737518 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 a total of 550 applications are expected to be received for the upcoming admission, then how many would you expect to be "Blank"? (*Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then enter it as "1.23".* <u>DO NOT ENTER PERCENTAGE VALUES</u>) **Response Type :** Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

**Possible Answers :** 

### 121

Question Number : 237 Question Id : 640653737519 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**

SU is planning spend money on advertising to increase applications. Once the advertising is completed, a total of 600 applications are expected. Then, what is the expected revenue that can be generated from "TV Watcher" category if an application fee of Rs. 500 is charged for "Blank" applications, Rs. 200 is charged for "Half Completed" applications and Rs. 100 is for "Fully Completed" applications? (*Note: Enter the answer rounded to two decimal places. For example, if the answer is "1.234", then 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 : 131999 to 132001

Question Number : 238 Question Id : 640653737520 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

Recently, you saw a person applying to "SU". The person had submitted the application "Half Completed". Then which category would you suspect the person to belong to?

### **Options**:

6406532468319. \* TV Watcher

6406532468320. \* Procrastinator

6406532468321. 🗸 Mobile Gamer

6406532468322. \* None of these, as I do not know how to solve

# System Commands

Section Id :	64065351363
Section Number :	15
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	15
Number of Questions to be attempted :	15
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 :	640653107679
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 239 Question Id : 640653737526 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 (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