

# **Business Analytics**

Number of Questions: 26

Section Marks: 110

**Question Number: 199 Question Type: MCQ** 

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

### **Options:**

A. VES

B. \* NO

**Question Number: 200 Question Type: MCQ** 

**Correct Marks: 1** 

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 of 0.05. You obtain a p-value of 0.03. What will you conclude?

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A. Reject the null hypothesis and conclude that the categorical variables are independent

B. VReject the null hypothesis and conclude that the categorical variables are not independent

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

D. Fail to reject the null hypothesis and conclude that the categorical variables are not

independent

**Question Number: 201 Question Type: SA** 

**Correct Marks: 2** 

Question Label: Short Answer Question

You have estimated the demand to follow the following relationship: D(p) = 100-5\*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  $p^*$ ?

**NOTE:** Enter your answer in one decimal place.

**Response Type:** Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

Text Areas: PlainText

**Possible Answers:** 

9.9 to 10.1

**Question Number: 202 Question Type: SA** 

**Correct Marks: 5** 

Question Label: Short Answer Question

There are 6 business units. There are two outputs and one input under consideration. You are solving the optimization problem for business unit 3 and find that the efficiency is 0.7. You find that the dual variables corresponding to the constraints of business units 4 and 5 are non-zero and the dual variables corresponding to the constraints of other units are zerop The dual variables corresponding to the constraints of business units 4 and 5 are 0.3 and 0.4 respectively. You are given the following table where sales and number of leads are the two outputs.

	Sales	Number of leads
Business unit 4	9000	10
Business unit 5	8000	12

What is the sales in HCU 3?

**NOTE:** Enter your answer to the nearest integer.

Response Type: Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

**Text Areas:** PlainText

**Possible Answers:** 

8420 to 8440

**Question Number: 203 Question Type: SA** 

**Correct Marks: 5** 

Question Label: Short Answer Question

In a multiple linear regression with 4 explanatory variables, you find that R-squared value is 0.74.

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

**NOTE:** Enter your answer in two decimal places.

**Response Type:** Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

**Text Areas:** PlainText

**Possible Answers:** 

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0.66 to 0.74

**Question Number: 204 Question Type: SA** 

**Correct Marks: 5** 

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 quantity, you implement linear regression with quantity as the dependent variable and other variables as independent variables and obtain an R-squared of 0.5. What is the VIF for the variable quantity?

**NOTE:** Enter your answer in one decimal place.

**Response Type:** Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

Text Areas: PlainText

**Possible Answers:** 

1.9 to 2.1

**Question Number: 205 Question Type: SA** 

Correct Marks: 4

**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 the multiple linear regression, you find that the direct effect of price on sales is 0.3, the direct effect of quantity on sales is 0.2 and the direct effect of rating score on sales is 0.4. And, you also know that the effect of price on quantity is 0.2 and the effect of price on rating score is 0.1. What is the total effect of price on sales?

**NOTE:** Enter your answer in two decimal places.

**Response Type:** Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

**Text Areas :** PlainText

**Possible Answers:** 

0.40 to 0.44

**Question Number: 206 Question Type: SA** 

**Correct Marks: 4** 

Question Label: Short Answer Question

The price of an envelop was Rs. 3/ piece yesterday and Aditya bought 10 envelopes. Today, the price is Rs. 3.75/ piece and Aditya is willing to buy only 8 envelopes. What is the elasticity of Aditya's demand?

**NOTE:** Enter your answer in one decimal place.

Response Type: Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Equal

**Text Areas:** PlainText

**Possible Answers:** 

8.0

**Question Number: 207 Question Type: MSQ** 

**Correct Marks: 2** 

Question Label: Multiple Select Question

There are 7 business units and you are using the DEA to compare them. You solve the LP for business unit 5. You find from the constraint expression that the business unit 3 has obtained an efficiency of 0.9 and the business unit 7 has obtained an efficiency of 1 with the optimal weights of business unit 5. Which of the following statements are correct?

## **Options:**

A. V Business unit 3 may be inefficient

B. \* Business unit 3 will be efficient

C. \* Business unit 7 may be inefficient

D. V Business unit 7 will be efficient

**Question Number: 208 Question Type: MSQ** 

**Correct Marks: 2** 

Question Label: Multiple Select Question

The table below provides the summary statistic for a random variable. Then what distribution could be a good fit for this random variable? (select all that is/are applicable)

Summary Statistic	Value
Number of observations	300
Mean	12
Median	13
Mode	12
Std. Deviation	2
Minimum	11
Maximum	15
Skewness	0.01

## **Options:**

A. \* Poisson distribution

B. \* Standard normal distribution

C. ✓ Uniform distribution

D. \* Exponential distribution

**Question Number: 209 Question Type: MSQ** 

#### **Correct Marks: 2**

Question Label: Multiple Select Question

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

## **Options:**

A. \* Coefficient of variation is positive

B. \* Skewness is positive

C. ✓ Skewness is negative

D. \* Cannot say without the histogram

**Question Number: 210 Question Type: MSQ** 

#### **Correct Marks: 3**

Question Label: Multiple Select Question

There are 4 business units. Using the DEA, you solve the LP for all four business units and find the efficiencies for these units. The efficiency is denoted by E. For these units, E1 = 0.83, E2 = 1, E3 = 1, E4 = 0.91. Which of these units are efficient?

## **Options:**

A. **\*** 1

B. 🗸 2

C. 🗸 3

D. \* 4

**Question Number: 211 Question Type: MSQ** 

#### **Correct Marks: 3**

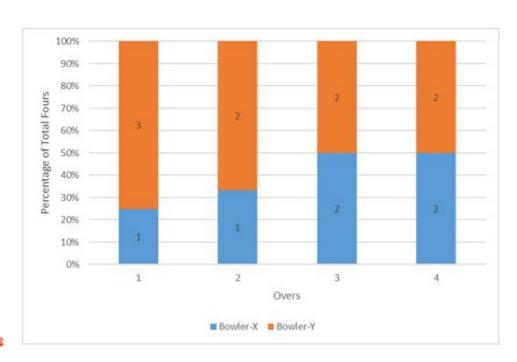
Question Label: Multiple Select Question

A cricket analyst is interested in comparing two bowlers (X and Y) based on the number of fours conceded by them in a match. Given that both bowlers have bowled their full quota of 4 overs in a 20 over match, which of the following graphs would be the best to identify that Bowler-X has performed better than Bowler-Y (choose all that is applicable)

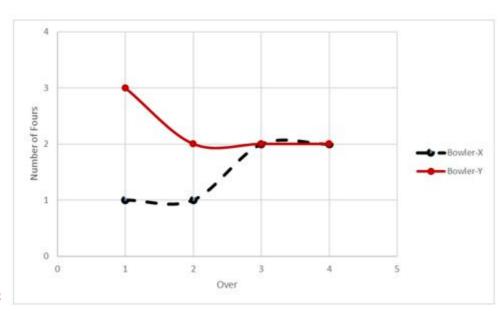
# Options:

Over	Bowler-X	Bowler-Y
1	1	3
2	1	2
3	2	2
4	2	2
Total	6	9

A. 🗸

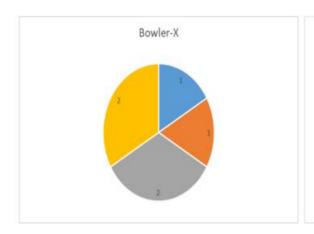


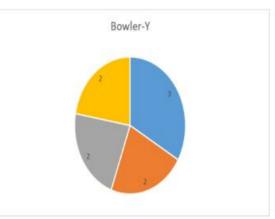
В. 🗱



C. 🗱

D. 🗱





**Question Number: 212 Question Type: MSQ** 

**Correct Marks: 4** 

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 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 are correct?

#### **Options:**

A. \* There are three decision variables in the dual

B. \* The dual variable corresponding to the second constraint is zero

C. ✓ There are two decision variables in the dual

D. ✓ The dual variable corresponding to the second constraint is non-zero

**Question Number: 213 Question Type: MSQ** 

**Correct Marks: 4** 

Question Label: Multiple Select Question

Which of the following is not a standard format used for collecting data in order to perform the conjoint analysis?

**Options:** 

- A. \* Ranking
- B. \* Pairwise preferences
- C. \* Rating
- D. V None of these

**Question Number: 214 Question Type: MSQ** 

**Correct Marks: 4** 

Question Label: Multiple Select Question

Correctly interpret the terms from the regression equation below:

#### Demand = 5843 - 158 × Price

#### **Options:**

A. ✓ 5483 is the demand when price is zero

B. ✓ if the price is increased by 1 Rs, demand will reduce by 158 unit

C. \* 158 is the demand when price is zero

D. \* if the price is increased by 1 Rs, demand will reduce by 5843 units

**Question Number: 215 Question Type: MCQ** 

**Correct Marks: 4** 

Question Label: Multiple Choice Question

What is the purpose of doing a conjoint analysis?

#### **Options:**

A. \* To find the attribute values for an ideal product

B. \* To understand the importance of each attribute from the customer's point of view

C. ✓ To find the attribute values for an ideal product & To understand the importance of each attribute from the customer's point of view

D. \* None of these

**Question Number: 216 Question Type: MCQ** 

#### **Correct Marks: 4**

Question Label: Multiple Choice Question

For 4 options (4 products) and 2 attributes conjoint problem, how many pairwise options will the customer have? Example: (1,2) says that option one is preferred over 2 & (1,3)

## **Options:**

- A. \* 4
- B. **\$** 12
- C. **3** 8
- D. 🗸 6

**Question Number: 217 Question Type: MCQ** 

#### **Correct Marks: 4**

Question Label: Multiple Choice Question

In the pairwise comparison, which of the following is true:

#### **Options:**

- A. \* We want to minimize the violation with regard to wrong preferences
- B. \* Objective function is to maximize the goodness of fit
- C. ✓ We want to minimize the violation with regard to wrong preferences & Objective function is to maximize the goodness of fit
- D. \* We neither want to minimize the violation with regard to wrong preferences nor the Objective function is to maximize the goodness of fit

**Question Number: 218 Question Type: MCQ** 

**Correct Marks: 4** 

Question Label: Multiple Choice Question

What is the satiating price for a Constant-elasticity price response function?

Options:

A. \* Zero

B. **✓** Does not exist

C.  $\approx$  Equal to the Market size ( $D_0$ )

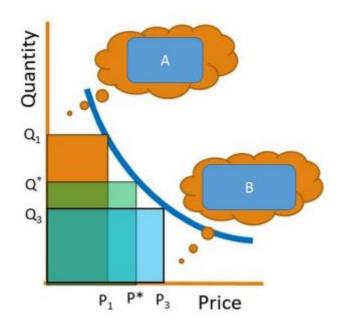
D. \* Can be anything

**Question Number: 219 Question Type: MCQ** 

**Correct Marks: 4** 

Question Label : Multiple Choice Question

Correctly identify the description for the regions depicted as "A" and "B" in the picture below from the given options



## **Options:**

A. ✓ A: Latent Demand, B: Consumer Surplus

B. **\*** B: Latent Demand, A: Consumer Surplus

C. \* A: Latent Demand, B: Seller Surplus

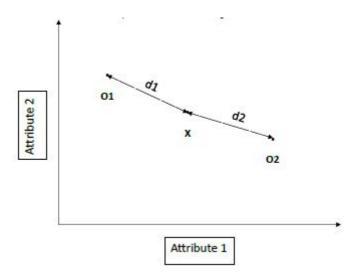
D. \* None of these

**Question Number: 220 Question Type: MCQ** 

Correct Marks: 5

Question Label: Multiple Choice Question

A customer is trying to choose between two products O1 and O2. In the diagram below, points O1, O2 represent the coordinates of the two products on two attributes. "X" represents the coordinates of the ideal product. Which of the following are true?



#### **Options:**

A. ✓ Customers will prefer O1 when d2>d1

B. \* Customers will prefer O2 when d1<d2

C. Customers will prefer O1 when d2>d1 & Customers will prefer O2 when d1<d2

D. \* Customers will not prefer O1 when d2>d1 & Customers will not prefer O2 when d1<d2

**Question Number: 221 Question Type: MCQ** 

Correct Marks : 2

Question Label: Multiple Choice Question

How do we capture the latent demand?

# **Options:**

A. \* Increasing price

B. ✓ Reducing price

C. **▼** Both Increasing and Reducing price

D. \* None of these

Question Type: COMPREHENSION Sub Question Shuffling Allowed: No Group

**Comprehension Questions: No** 

Question Numbers: (222 to 225)

Question Label: Comprehension

The daily sales of choco-chip ice-creams in an ice-cream parlour is assumed to follow a Normal distribution with a mean of 5 and a variance of 4. To check the assumption of normal distribution, the sales of choco-chip ice-creams at the ice-cream parlour for 7 days was collected (Table-1). On all 7 days, the total number of ice-creams (of all flavours) sold per day was 100. With this data, answer the given subquestions.

{Note: Round all your calculations (intermediate and final) to one decimal place}

Day	The actual number of choco-chip ice-creams sold
Day-1	12
Day-2	14
Day-3	12
Day-4	13
Day-5	12
Day-6	11
Day-7	12

Table-1

## **Sub questions**

**Question Number: 222 Question Type: MCQ** 

Correct Marks: 3

Question Label: Multiple Choice Question

For the given data in Table-1. What is the expected number of choco-chip ice-creams that are sold on Day-2?

#### **Options:**

A. \* 5

B. \* 14

C. **12.3** 

D. \* 14.3

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**Question Number: 223 Question Type: SA** 

**Correct Marks: 5** 

Question Label: Short Answer Question

What is the value for the Chi-Square Goodness of Fit Test statistic?

Response Type: Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

**Text Areas :** PlainText

**Possible Answers:** 

0.3 to 0.5

**Question Number: 224 Question Type: SA** 

**Correct Marks: 3** 

Question Label: Short Answer Question

How many degrees of freedom does that Chi-Square Goodness of Fit Test statistic have?

Response Type: Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Equal

**Text Areas :** PlainText

**Possible Answers:** 

4

**Question Number: 225 Question Type: MCQ** 

**Correct Marks: 1** 

Question Label: Multiple Choice Question

Which of the following is the **correct null hypothesis** for the Goodness of fit test for this problem

(with data in Table-1)?

**Options:** 

A. ✓ The distribution of sale of choco-chip ice-creams at the ice-cream parlour is normal

B. \* The distribution of sale of choco-chip ice-creams is normal

C. \* The distribution of choco-chip ice-creams at the ice-cream parlour is normal

D. \* The distribution of choco-chip ice-creams is normal

**Question Type: COMPREHENSION** 

Question Numbers: (226 to 228)

Question Label: Comprehension

The health parameters of 100 patients are used to develop a logistic model that predicts if a given patient has CORONA (Y=1) or not (Y=0). It is seen that the model correctly predicts the presence of

CORONA in 23 patients and correctly predicted the absence of CORONA in 11 patients. The

threshold set to obtain these results was 0.6, and the variable of focus was to identify the patients

with CORONA (Y=1). Then answer the given subquestions

**Sub questions** 

**Question Number: 226 Question Type: SA** 

Correct Marks: 2

Question Label: Short Answer Question

What is the accuracy (in percentage) of predicting CORONA patients correctly? (round to two

decimal places)

**Response Type:** Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

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Text Areas : PlainText
Possible Answers :
16.90 to 17.01
Question Number : 227 Question Type : SA
Correct Marks : 2
Question Label : Short Answer Question
The number of data points that contribute to the "Type-1 Error" of the model is
<b>NOTE:</b> Enter your answer to the nearest integer.
Response Type: Numeric
Evaluation Required For SA: Yes
Show Word Count : Yes
Answers Type: Equal
Text Areas : PlainText
Possible Answers :
77
Question Number : 228 Question Type : SA
Correct Marks : 2
Question Label : Short Answer Question
With what precision (in percentage) are patients without CORONA identified by the model? (round
to two decimal places)
Response Type: Numeric
Evaluation Required For SA: Yes
Show Word Count: Yes
Answers Type: Range
Text Areas: PlainText

**Possible Answers:** 

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**Question Type: COMPREHENSION** 

Question Numbers: (229 to 232)

Question Label: Comprehension

Given the below regression output, calculate the cell values highlighted in yellow:

SUMMARY OUTPUT								
Regression Statistics								
Multiple R	0.856678246							
R Square	0.733897617							
Adjusted R Square	0.724721673							
Standard Error	1290.448208			79.98060985				
Observations	31							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	133188236.7	133188236.7	Q3	7.80618E-10			
Residual	Q1	48292440.76	Q2					
Total	30	181480677.4						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	5842.836198	400.6837789	14.58216306	6.94552E-15	5023.345856	6662.326539	5023.345856	6662.326539
Price	-157.7008739	17.63363083	-8.943187902	7.80618E-10	-193.7656983	-121.6360494	-193.7656983	-121.6360494

Based on the above data, answer the given subquestions.

# **Sub questions**

**Question Number: 229 Question Type: SA** 

**Correct Marks: 4** 

Question Label: Short Answer Question

What is the value of **Q1**?

**NOTE:** Enter your answer to the nearest integer.

Response Type: Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Equal

**Text Areas:** PlainText

**Possible Answers:** 

29

**Question Number: 230 Question Type: SA** 

**Correct Marks: 4** 

**Question Label: Short Answer Question** 

What is the value of **Q2**?

**NOTE:** Enter your answer to the nearest integer.

**Response Type:** Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Range

**Text Areas:** PlainText

**Possible Answers:** 

1665255 to 1665257

**Question Number: 231 Question Type: SA** 

**Correct Marks: 4** 

Question Label: Short Answer Question

What is the value of **Q3**?

**NOTE:** Enter your answer to the nearest integer.

Response Type: Numeric

**Evaluation Required For SA:** Yes

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Possible Answers :		
77 to 82		
Question Number : 232 Question Type : MCQ		
Correct Marks : 3		
Question Label : Multiple Choice Question		
What is the conclusion from the given result?		
Options :		
A. * Accept the Null Hypothesis		
B. ✔ Reject the Null Hypothesis		
C. * P-value cannot be found		
D. <b>*</b> Cannot say insufficient data		
DB	MS	
Number of Questions :	26	
Section Marks :	50	
Question Number : 233 Question Type : MCQ		
Correct Marks : 0		
Question Label : Multiple Choice Question		

**Show Word Count:** Yes

**Answers Type:** Range

**Text Areas :** PlainText

**Question Number: 379 Question Type: SA** 

**Correct Marks: 4** 

Question Label: Short Answer Question

What will be the output of the below Bash script? Enter only the number.

Note: Operators && and || have the same level of precedence in bash.

```
#!/usr/bin/bash
script() {
   [[ $# -gt 0 ]] && script ${@:1:$#-1} || echo $#
}
script 1 2 3 4 5
```

**NOTE:** Enter your answer to the nearest integer.

Response Type: Numeric

**Evaluation Required For SA:** Yes

**Show Word Count:** Yes

**Answers Type:** Equal

**Text Areas:** PlainText

**Possible Answers:** 

0

# **TDS**

Number of Questions: 26

Section Marks: 50

**Question Number: 380 Question Type: MCQ** 

**Correct Marks: 0** 

Question Label: Multiple Choice Question

THIS IS QUESTION PAPER FOR THE SUBJECT "DIPLOMA LEVEL: TOOLS IN DATA SCIENCE"

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:**

A. VES

B. \* NO

**Question Number: 381 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

We are analyzing how much the number of lecture hours attended by students affects their exam scores. Which Excel function would you use as a starting point in this analysis?

## **Options:**

A. STDEV.P()

B. \* STDEV.S()

C. ✓ SLOPE()

D. \* EXACT()

**Question Number: 382 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

We are analyzing how much the number of lecture hours attended by students affects their exam scores. we plan to run a regression analysis after the preliminary analysis. Which of the following features provide you with the capability to do this?

#### **Options:**

A. V Data Analysis Toolpak

B. \* Regression Analyzer

C. \* Regression ToolBokz

D. \* OptSol finder

**Question Number: 383 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

We have a variable X, which can take values AA, BB, or CC. The first 4 values of this variable in a dataset are CC, AA, BB, AA. The format of representing this information as shown in the table below is called:

AA	ВВ	СС
0	0	1
1	0	0
0	1	0
1	0	0

# Options:

A. \* multi-col format

B. ✓ one-hot encoding

C. \* long format

D. \* integer

**Question Number: 384 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

We have a variable X, which can take values AA, BB, or CC. The first 4 values of this variable in a

dataset are CC, AA, BB, AA. This information is represented as shown below.

AA	ВВ	СС
0	0	1
1	0	0
0	1	0
1	0	0

To convert a variable to this format in Python, one can use:

# **Options:**

A. ✓ pandas.get\_dummies

B. \* from sklearn.preprocessing import BinaryEncoder

C. \* import numpy as np

D. \* import seaborn as sb

**Question Number: 385 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label : Multiple Choice Question

k-means is typically influenced by the start values. What option in sklearn.cluster.KMeans helps reduce the impact?

# Options:

A. \* verbose

B. \* algorithm

C. ✓ n\_init

D. \* init

**Question Number: 386 Question Type: MCQ** 

Correct Marks: 2 Page 331 of 340

Question Label: Multiple Choice Question

A Pandas dataframe *DF* has a column named *salary\_range* which contains the salary details of 10000 employees of a firm binned as *medium*, *high*, and *very high*. You are interested in finding out

the number of employees in each category of salary\_range. Which of the following commands will

help you to achieve this goal?

**Options:** 

A. \* DF['salary range'].bin count()

B. ✓ DF['salary\_range'].value\_counts()

C. \* DF\$'salary\_range.bin\_count()

D. \* DF\$'salary range.value counts()

Question Number: 387 Question Type: MCQ

**Correct Marks: 2** 

Question Label: Multiple Choice Question

Scikit-learn has a DecisionTreeClassifier module that is useful in building decision tree classifiers.

Suppose, our dataset is imbalanced in class. Which feature in the DecisionTreeClassifier() will help

us tackle this problem?

**Options:** 

A. \* random state

B. \* min sample split

C. \* class\_balance

D. ✓ class\_weight

**Question Number: 388 Question Type: MCQ** 

Correct Marks: 2

Question Label: Multiple Choice Question

We have predictions (y\_hat) on a train dataset of 100 records. Let y be the true value.

We are interested in calculating Sum\_i=1 to 100: |y\_i-y\_hat\_i|/100. Which of the

following functions will help you in achieving this easily?

**Options:** Page 332 of 340

- A. ✓ from sklearn.metrics import mean\_absolute\_error
- B. \* from sklearn.metrics import median\_absolute\_error
- C. \* from sklearn.metrics import median absolute percentage error
- D. \* from sklearn.metrics import average\_absolute\_percentage\_error

**Question Number: 389 Question Type: MCQ** 

#### Correct Marks: 2

Question Label: Multiple Choice Question

We are interested in fitting an ARIMA model to our time series data. Specifically, we are interested in a moving average model of 0, setting a lag value of 4 for autoregression, and a difference order of 1. Which of the following gives you such a model?

## **Options:**

A. ARIMA(..., trend = (4,1,0))

B.  $\checkmark$  ARIMA(..., order = (4,1,0))

C. ARIMA(..., order = (0,4,1))

D. \* ARIMA(..., trend = (0,4,1))

Question Number: 390 Question Type: MCQ

#### **Correct Marks: 2**

Question Label: Multiple Choice Question

pycaret is a

#### **Options:**

A. \* Visualization tool

B. \* Dashboard helper

C. ✓ low-code machine learning library

D. \* Data cleaning solution

Question Number: 391 Question Type: MCQ

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#### **Correct Marks: 2**

Question Label: Multiple Choice Question

subjectivity and polarity are two properties returned by the sentiment function of library:

## **Options:**

A. \* TextBulb

B. \* NLPtext

C. **✓** TextBlob

D. \* NLP

**Question Number: 392 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

A subjectivity score of 0.8 means that the text statement:

## **Options:**

A. \* has a positive sentiment

B. \* has a negative sentiment

C. ✓ is more of an opinion statement

D. \* is more of a factual statement

**Question Number: 393 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

A *polarity* score of negative 0.5 means that the text statement:

#### **Options:**

A. \* has a positive sentiment

B. ✓ has a negative sentiment

C. \* is more of an opinion statement

D. \* is more of a factual statement

**Question Number: 394 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

You are working on a piece of code that classifies different fruits into its respective groups (citrus, berries, melons, apples & pears, and tropical & exotic). Which of the following loss functions from *Keras* would you pick for the task?

## **Options:**

A. \* binary\_crossentropy

B. ✓ categorical\_crossentropy

C. \* mean\_squared\_error

D. \* mean absolute error

Question Number: 395 Question Type: MCQ

Correct Marks: 2

Question Label: Multiple Choice Question

classification report function from the sklearn.metrics module

## **Options:**

A. \* builds a decision tree classifier and prints the accuracy of the classifier

B. \* reports the root mean square error of the model

C. \* runs different classification models and compares the results

D.  $\checkmark$  builds a text report displaying the main classification metrics

**Question Number: 396 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

csr\_matrix from the scipy library:

### **Options:**

- A. \* always helps reduce matrix space
- B. ✓ helps reduce matrix space when there are a lot of zero entries in the matrix
- C. \* helps reduce matrix space when there are a lot of negative entries in the matrix
- D. \* makes matrix multiplication more meaningful and powerful

**Question Number: 397 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

*Comicgen* is a useful tool in narrating data stories using comics. Which of the following is not a function of comicgen?

#### **Options:**

- A. \* Comicgen creates comic characters
- B. \* Comicgen provides options to custom create different comic characters and their emotions and pose
- C. \* Comicgen can be easily integrated into Google sheets or Excel to narrate your data stories
- D. ✓ You can type in your data story into comicgen to get your comic in return

Question Number: 398 Question Type: MCQ

Correct Marks: 2

Question Label: Multiple Choice Question

Kumu is a tool that allows you to:

#### **Options:**

- A. \* visualize dynamic line charts
- B. \* create stunning dashboards for large projects
- C. \* merge Comicgen characters into a comic
- D. Visualize complex network data

**Question Number: 399 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

Google Studio is a tool that allows you to

### **Options:**

- A. \* merge Comicgen characters into a comic
- B. \* visualize complex network data
- C. ✓ create dashboards for small scale projects
- D. \* Edit photographs and videos

**Question Number: 400 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

Which of the following tabs is used to identify API calls in the Inspect element in any browser?

## **Options:**

A. V Network

B. \* Elements

C. \* Console

D. \* Sources

**Question Number: 401 Question Type: MCQ** 

**Correct Marks: 2** 

Question Label: Multiple Choice Question

Which of the following libraries is used to construct API urls?

#### **Options:**

A. V Urllib

B. * BeautifulSoup
C. * Requests
D. * Pandas
Question Number : 402 Question Type : MCQ
Correct Marks : 2
Question Label : Multiple Choice Question
The final output from the BBC Weather Location Service API is in JSON format:
Options:
A. ✔ TRUE
B. * FALSE
Question Number : 403 Question Type : MCQ
Correct Marks : 2
Question Label : Multiple Choice Question
Which among the following excel charts is the most suitable for detecting outliers in the data?
Options:
A. * Bar chart
B. * Line chart
C.  ✓ Box and Whisker chart
D. * Histogram
Ouestion Number: 404 Ouestion Type: MCO

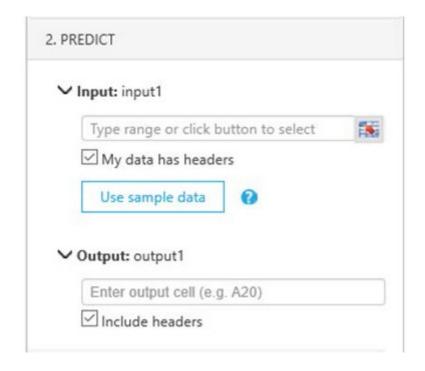
**Correct Marks: 2** 

Question Label : Multiple Choice Question

Provided below is a snapshot of the dataset which consists of movie reviews and respective labels.

1	A	В
1	review	sentiment
2	One of the other reviewers has	positive
3	A wonderful little production. <	positive
4	I thought this was a wonderful v	positive
5	Basically there's a family where	negative
6	Petter Mattei's "Love in the Tim	positive
7	Probably my all-time favorite m	positive
8	I sure would like to see a resurre	positive
9	This show was an amazing, fresh	negative
10	Encouraged by the positive com	negative
11	If you like original gut wrenchin	positive

To compute the sentiment scores the Azure Machine Learning add-in requires input and output values. In the figure provided below the input and output cells need to be populated with appropriate values to obtain sentiment scores.



Choose the most appropriate option that enables you to predict sentiment scores using the Excel Azure Machine Learning add-in.

# **Options:**

A. VInput: Sheet1!A1:A11

Output: Sheet!C1

B. \* Input: Sheet1!B1:B11

Output: Sheet!C1

**Question Number: 405 Question Type: MSQ** 

**Correct Marks: 2** 

Question Label: Multiple Select Question

scikit-network package contains functions for (pick all correct sentences):

# Options:

- A. \* analysis of faults in a computer network
- B. **✓** social network analysis
- C. ✓ analysis of large graphs
- D. \* enhancing one's social network