

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

If the current ratio is 2:1 and the Quick ratio is 1.5:1, then which of the following is/are true? (Select all that are applicable)

Options :

6406531562419. ✓ Current assets are 2 times the liability

6406531562420. ✗ Liability is 2 times the current assets

6406531562421. ✓ Stocks is 0.5 times the liability

6406531562422. ✗ Liability is 0.5 times Stocks

6406531562423. ✓ Current assets are greater than stocks

6406531562424. ✗ Stocks are greater than current assets

6406531562425. ✗ None of these

Business Analytics

Section Id :	64065330340
Section Number :	14
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	5
Number of Questions to be attempted :	5
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 :	64065367724
Question Shuffling Allowed :	No

Is Section Default? : null

Question Number : 228 Question Id : 640653470161 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 :

6406531562426. ✓ YES

6406531562427. ✗ NO

Sub-Section Number : 2

Sub-Section Id : 64065367725

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653470162 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 230)

Question Label : Comprehension

A visualization expert (VE) having the data given in Table-1 needs to make a presentation to the company's top management. Table-1 specifies the number of units of products A and B sold in the last 12 months in a given market. Then answer the given subquestions.

Note to students: Please do not worry about the colour combinations. In TCS ion, the colour

representations may not appear accurately. Kindly use the “data labels” and “visualisation theory” to arrive at the appropriate answers.

Month	Sales for Product-A	Sales for Product-B
1	10	20
2	11	19
3	11	19
4	12	17
5	12	16
6	14	16
7	16	12
8	17	12
9	17	11
10	17	9
11	18	6
12	20	6

Table-1

Sub questions

Question Number : 229 Question Id : 640653470163 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 1

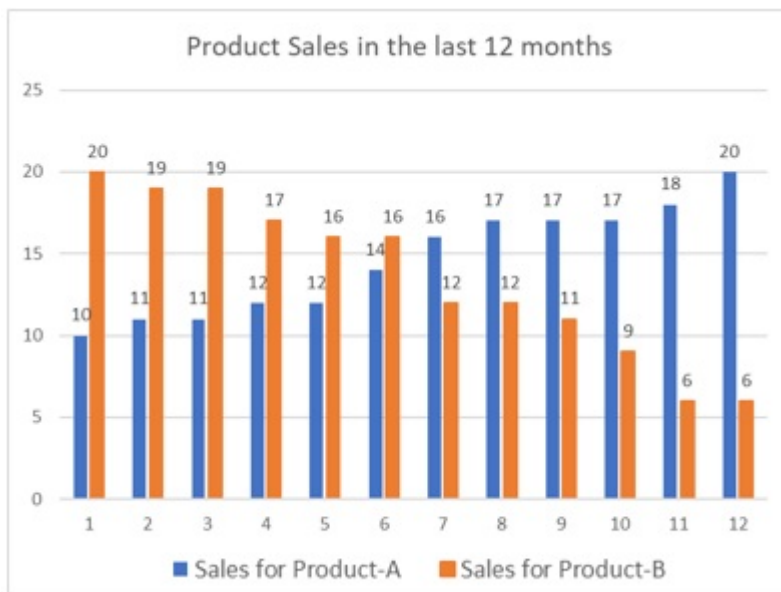
Question Label : Multiple Choice Question

If the aim is to highlight the behaviour of the product sales in the past year, then which of the following visualizations would be best suited?

Options :



6406531562428. ✓



6406531562429. ✖

6406531562430. ✖ None of these

Question Number : 230 Question Id : 640653470164 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

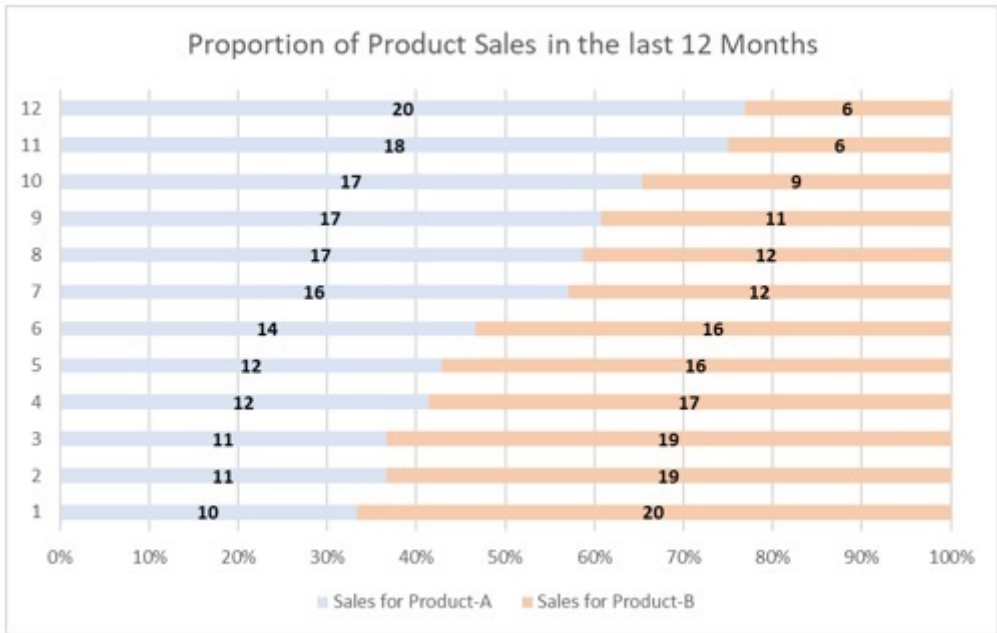
Correct Marks : 1

Question Label : Multiple Choice Question

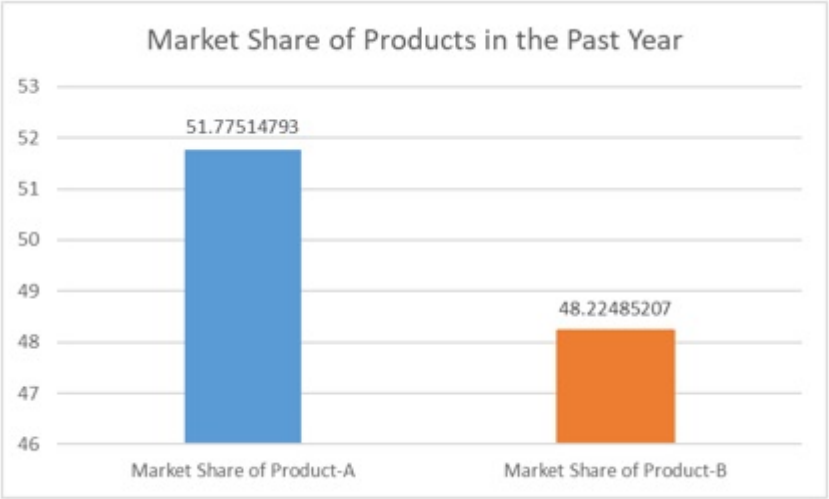
If the aim is to highlight the market share of the products in the past year, then which of the following visualizations would be best suited?

Options :

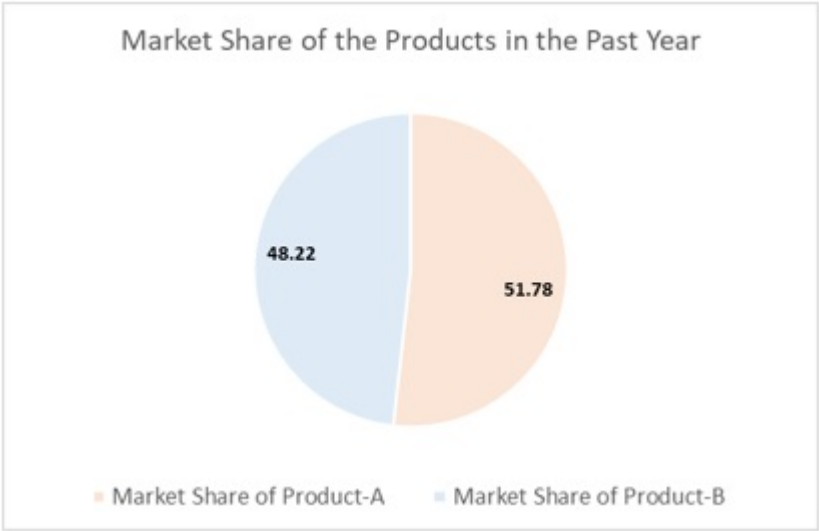
6406531562431. ✖



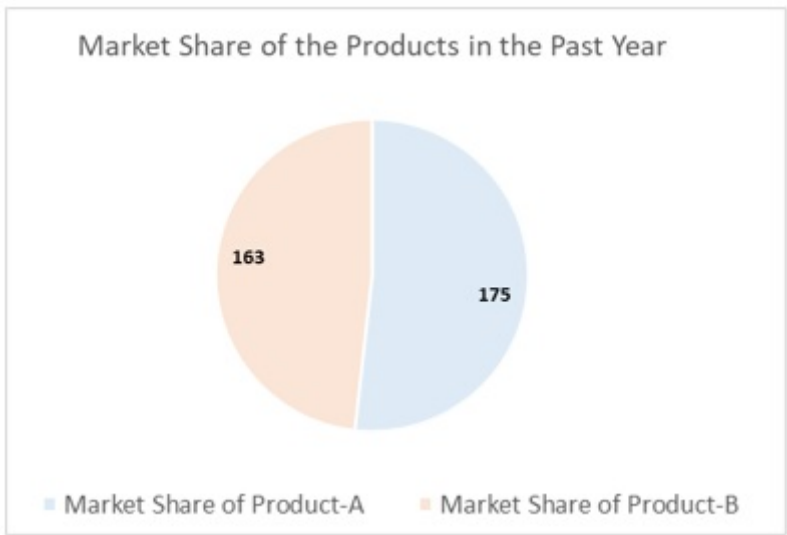
6406531562432. ✖



6406531562433. ✔



6406531562434. ✖



Sub-Section Number :

3

Sub-Section Id :

64065367726

Question Shuffling Allowed :

No

Is Section Default? :

null

Question Id : 640653470165 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 236)

Question Label : Comprehension

A company sells two products (A and B) in two different marketplaces. In the first marketplace, the sales are made at the Forenoon (FN). In the second marketplace, sales are made during the Afternoon (AN). Table-2 provides the data on the sales in the two marketplaces for the two products in the first 10 days on January 2023. Using this data, answer the given subquestions.

Date	Time of Day	Number of units of Product A Sold	Number of units of Product B Sold
01-01-2023	FN	31	30
02-01-2023	FN	21	41
03-01-2023	FN	16	45
04-01-2023	FN	7	56
05-01-2023	FN	13	49
06-01-2023	FN	8	40
07-01-2023	FN	8	42
08-01-2023	FN	21	44
09-01-2023	FN	13	55
10-01-2023	FN	7	42
01-01-2023	AN	31	30
02-01-2023	AN	21	41
03-01-2023	AN	16	52
04-01-2023	AN	7	57
05-01-2023	AN	13	49
06-01-2023	AN	8	55
07-01-2023	AN	8	57
08-01-2023	AN	21	44
09-01-2023	AN	13	52
10-01-2023	AN	7	62

Table-2

Sub questions

Question Number : 231 Question Id : 640653470166 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 total sales of both products (A&B) on any given day are expected to be uniformly distributed across both marketplaces, then what is the expected total sales on any given day? *(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 : Equal

Text Areas : PlainText

Possible Answers :

123

Question Number : 232 Question Id : 640653470167 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

To test the hypothesis that **the total sales of both products (A&B) are uniformly distributed across both marketplaces (FN&AN)**, a chi-square goodness-of-fit test is conducted. If the days are taken as the buckets, then what is the value of the computed test statistic? *(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 :

3.45 to 3.55

Question Number : 233 Question Id : 640653470168 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 the Goodness-of-Fit test, if the computed test statistic is greater than the tabulated value of the test statistic at a given significance level, then (choose all that is applicable)

Options :

6406531562437. ✖ Reject the null hypothesis and conclude that there is strong evidence that the data does not come from a population with a specified distribution

6406531562438. ✔ At the specified significance level, reject the null hypothesis and conclude that there is strong evidence that the data does not come from a population with a specified distribution

6406531562439. ✖ Do not reject the null hypothesis and conclude that there is strong evidence that the data does not come from a population with a specified distribution

6406531562440. ✖ At the specified significance level, do not reject the null hypothesis and conclude that there is strong evidence that the data does not come from a population with a specified distribution

6406531562441. ✖ None of these

Question Number : 234 Question Id : 640653470169 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

In the Goodness-of-Fit test, if the days are taken as the buckets, what is the number of degrees of freedom **if the total sales of both products (A&B) across both markets (FN&AN) is assumed to be normally distributed?** (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 : Equal

Text Areas : PlainText

Possible Answers :

7

Question Number : 235 Question Id : 640653470170 Question Type : SA Calculator : None

Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Short Answer Question

The question of whether sales of products A and B are independent across the different markets is

being checked. Then what is the value of the computed test statistic? (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 :

0.73 to 0.77

Question Number : 236 **Question Id :** 640653470171 **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

The question of whether sales of products A and B are independent across the different markets is being checked. Then 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 :

1

Sub-Section Number : 4

Sub-Section Id : 64065367727

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653470172 **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 : (237 to 238)

Question Label : Comprehension

The linear demand response for product-A is modelled as a simple linear regression represented as $D(P) = 1500 - 20 \cdot P$, where $D(P)$ is the demand at price- P . Then, answer the given subquestions.

Sub questions

Question Number : 237 Question Id : 640653470173 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 elasticity of the demand-response curve when the price is Rs. 50? *(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 : Equal

Text Areas : PlainText

Possible Answers :

2

Question Number : 238 Question Id : 640653470174 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 demand-response curve? *(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 : Equal

Text Areas : PlainText

Possible Answers :

75

Question Id : 640653470175 **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 : (239 to 241)

Question Label : Comprehension

You want to apply for a student visa to country X. You can do this through any one of the two application centres, "A" or "B". To determine which application centre to choose, you collect data. Currently, the embassy has decided to receive 65% of the applications from centre A, and 35% from centre B. Historically, 70% of the applications from centre A have been granted the visa, and 80% of the applications from centre B have been granted the visa. Then answer the given subquestions.

Sub questions

Question Number : 239 **Question Id :** 640653470176 **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 your probability of applying for a student visa through centre A and it is granted?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.45 to 0.47

Question Number : 240 Question Id : 640653470177 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 your probability of applying for a student visa through centre B and it is granted?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.27 to 0.29

Question Number : 241 Question Id : 640653470178 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

Say you find someone who had applied for a student visa in the past, and the application was rejected. However, that person (someone) has not told you which application centre was chosen to submit the application. Then which application centre will you choose, given this additional information?

Options :

6406531562449. ✖ Centre A

6406531562450. ✔ Centre B

System Commands

Section Id :

64065330341