Question Number : 39 Question Id : 640653565400 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

Find the significance level of the test. Enter the answer correct to two decimal places.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.02 to 0.04

Sem2 Maths2

Section Id :	64065338384
Section Number :	3
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	15
Number of Questions to be attempted :	15
Section Marks :	50
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 :	64065380780
Question Shuffling Allowed :	No

Is Section Default? :   null

Question Number : 40 Question Id : 640653565401 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 "FOUNDATION LEVEL : SEMESTER 2: MATHEMATICS FOR DATA SCIENCE 2 (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 :

6406531889893. ✔ YES

6406531889894. ✖ NO

Sub-Section Number :   2

Sub-Section Id :   64065380781

Question Shuffling Allowed :   Yes

Is Section Default? :   null

Question Number : 41 Question Id : 640653565402 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 $A = \begin{pmatrix} a+b+c & b+c-d \\ b-c+1 & d \end{pmatrix} = \begin{pmatrix} a+1 & 2c-3d+3 \\ 2 & c+a \end{pmatrix}$, then what is the value of $tr(A)$, where $tr(A)$ denotes the trace of A (sum of diagonal entries of A)?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

3

Sub-Section Number :	3
Sub-Section Id :	64065380782
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653565403 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 : (42 to 44)

Question Label : Comprehension

Let D denote the set of all 2×2 diagonal matrices. Consider an ordered basis $\beta = \left\{ \begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 \\ 0 & 2 \end{pmatrix} \right\}$.

Let $T : U \to \mathbb{R}^2$ be a linear transformation defined as

$T \begin{pmatrix} a & 0 \\ 0 & b \end{pmatrix} = (a + b, 4a - 5b)$. Let matrix A be the

matrix representation of T with respect to the ordered basis β for D and the standard ordered

basis for the co-domain $\mathbb{R}^2$.

Answer the **given** subquestions.

Sub questions

Question Number : 42 Question Id : 640653565404 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

Which of the following matrix is *A*?

Options :

6406531889896. ✖ $\begin{pmatrix} 1 & 4 \\ 2 & -10 \end{pmatrix}$

6406531889897. ✖ $\begin{pmatrix} 1 & 4 \\ 1 & -5 \end{pmatrix}$

6406531889898. ✔ $\begin{pmatrix} 1 & 2 \\ 4 & -10 \end{pmatrix}$

6406531889899. ✖ $\begin{pmatrix} 1 & 1 \\ 4 & -5 \end{pmatrix}$

Question Number : 43 Question Id : 640653565405 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Which of the following is/are true about *T*?

Options :

6406531889900. ✔ Rank of T is 2.

6406531889901. ✖ There exists an isomorphism from $R(T)$ (range of T) to $\mathbb{R}$.

6406531889902. ✖ Nullity of T is 1.

6406531889903. ✔ *T* is one-one.

Question Number : 44 Question Id : 640653565406 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

Let B be the matrix representation of T with respect to the ordered basis β for the domain and the ordered basis $\{(1, -1), (1, 1)\}$ for the co-domain $\mathbb{R}^2$. Which of the following is/are true?

Options :

6406531889904. ✔ A is similar to B.

6406531889905. ✖ Rank of B is 1.

6406531889906. ✔ Nullity of B is 0.

6406531889907. ✖ A is not similar to B.

Question Id : 640653565407 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 : (45 to 46)

Question Label : Comprehension

Consider the subspace $W = \{(x, y, z) \mid x - y + z = 0, x, y, z \in \mathbb{R}\}$ of $\mathbb{R}^3$. Answer the given subquestions based on the given information.

Sub questions

Question Number : 45 Question Id : 640653565408 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

Which of the following is a basis β for *W*?

Options :

6406531889908. ✔ $\beta = \{(1, 1, 0), (-1, 0, 1)\}$

6406531889909. ✘ $\beta = \{(1, 1, 0), (0, 1, -1)\}$

6406531889910. ✘ $\beta = \{(0, 1, 1), (1, 1, 0), (-1, 0, 1)\}$

6406531889911. ✘ $\beta = \{(0, 1, 1), (0, 1, -1)\}$

Question Number : 46 Question Id : 640653565409 Question Type : SA Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Short Answer Question

If γ is the orthonormal basis of W obtained from β (from the previous question) by using the Gram Schmidt process with respect to the usual inner product, and (a, b, c) is the projection of $(1, 0, 1)$ onto W, then what is $6(a + b + c)$?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

8

Question Id : 640653565414 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 : (47 to 50)

Question Label : Comprehension

Let $f(x, y) = x^4 + y^4 + 4x^3 + 4x^2 - 8y^2 - 5$.

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 47 Question Id : 640653565415 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 number of critical points of $f(x, y)$ is

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

9

Question Number : 48 Question Id : 640653565416 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 number of saddle points of $f(x, y)$ is

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

4

Question Number : 49 Question Id : 640653565417 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 number of local maxima of $f(x, y)$ is

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Question Number : 50 Question Id : 640653565418 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 number of local minima of $f(x, y)$ is

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

4

Question Id : 640653565420 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 : (51 to 54)

Question Label : Comprehension

From the list of given terms find out the best possible options for each of the given subquestions:

1) Rank 2
2) Zero nullity
3) Non-zero determinant
4) Closure with respect to addition and scalar multiplication
5) Existence of zero element
6) Existence of additive inverse
7) Commutativity of addition
8) Elements
9) Associativity of addition
10) Global maxima
11) Saddle point
12) Global Minima
13) Gradient exists
14) Directional derivative exists in any direction
15) Orthonormal columns
16) First order partial derivatives exist
17) Function is differentiable
18) Affine subspace.
19) Limit exists

Sub questions

Question Number : 51 Question Id : 640653565421 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

A critical point can be _____. (Enter 3 best possible options. Enter only the serial numbers of those options in increasing order without adding any comma or space in between them.)

[Suppose your answer is 7, 14 and 17, then you should enter 71417]

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

101112

Question Number : 52 Question Id : 640653565422 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

An invertible matrix of order 3 has _____. (Enter 2 best possible options. Enter only the serial numbers of those options in increasing order without adding any comma or space in between them.) [Suppose your answer is 7 and 17, then you should enter 717]

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

23

Question Number : 53 Question Id : 640653565423 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 tangent plane exists for a function at a point then at that point _____. (Enter 5 best possible options. Enter only the serial numbers of those options in increasing order without adding any comma or space in between them.) [Suppose your answer is 1, 2, 3,4 and 5, then you should enter 12345]

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1314161719

Question Number : 54 Question Id : 640653565424 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

Some of the conditions that need to be checked to identify a vector space *V* are: _____
(Enter 5 best possible options. Enter only the serial numbers of those options in increasing order
without adding any comma or space in between them.) [Suppose your answer is 7, 14, 11, 15 and
17, then you should enter 714111517]

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

45679

Sub-Section Number :	4
Sub-Section Id :	64065380783
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 55 Question Id : 640653565410 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 minimum sum of three non-negative numbers whose product is 27?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

9

Question Number : 56 Question Id : 640653565413 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

Let V_1, V_2 and V_3 represent the subspaces $\{(x, y, z) : 2x + 3y + 4z = 0\}$, $\{(x, y, z) : x + 2y + z = 0\}$ and $\{(x, y, z) : x + y + 2z = 0\}$, respectively of $\mathbb{R}^3$. Let A_i, $i = 1, 2, 3$ be the affine spaces corresponding to V_i, $i = 1, 2, 3$. Suppose A_1 contains $(1, 1, -2)$, A_2 contains $(-2, 1, 1)$ and A_3 contains $(1, -2, 1)$. If (x_1, x_2, x_3) is the point of intersection of A_1, A_2 and A_3, find $x_1 + 2x_2 + x_3$.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

1

Sub-Section Number :	5
Sub-Section Id :	64065380784
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 57 Question Id : 640653565411 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

Find the number of values of a so that the system of linear equations

$x + y - z = 0, 2x + (a + 2)y + z = 0, ax + y + z = 0$ has infinitely

many solutions.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2

Sub-Section Number :	6
Sub-Section Id :	64065380785
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 58 Question Id : 640653565412 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

Let A be a 3 × 3 orthogonal matrix with positive determinant. Which of the following option(s) is/are true?

Options :

6406531889915. ✔ The determinant of 2A is 8.

6406531889916. ✖ The determinant of 3A is 3.

6406531889917. ✔ A is equivalent to the identity matrix of order 3.

6406531889918. ✖ None of these

Sub-Section Number :	7
Sub-Section Id :	64065380786
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 59 Question Id : 640653565419 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

Consider the function $f(x, y) = x^2 + xy$. Which of the following line represents the tangent line at the point $(1, 1)$ in the direction of the vector $(1, 1)$?

Options :

6406531889924. ✔ $\{(x, y, z) \in \mathbb{R}^3 \mid \frac{x-1}{\frac{1}{\sqrt{2}}} = \frac{y-1}{\frac{1}{\sqrt{2}}} = \frac{z-2}{2\sqrt{2}}\}$

6406531889925. ✖ $\{(x, y, z) \in \mathbb{R}^3 \mid \frac{x-1}{\frac{1}{\sqrt{2}}} = \frac{y-1}{\frac{1}{\sqrt{2}}} = \frac{z-1}{\frac{1}{\sqrt{2}}}\}$

6406531889926. ✖ $\{(x, y, z) \in \mathbb{R}^3 \mid \frac{x-1}{\frac{1}{\sqrt{2}}} = \frac{y-1}{\frac{1}{\sqrt{2}}} = \frac{z-2}{\frac{3}{\sqrt{2}}}\}$

6406531889927. ✖ $\{(x, y, z) \in \mathbb{R}^3 \mid \frac{x}{\frac{1}{\sqrt{2}}} = \frac{y}{\frac{1}{\sqrt{2}}} = \frac{z}{2\sqrt{2}}\}$

Sub-Section Number :	8
Sub-Section Id :	64065380787
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 60 Question Id : 640653565425 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3 Selectable Option : 0

Question Label : Multiple Select Question

Choose the correct statements for the function

$$f(x, y) = \begin{cases} \dfrac{x^2 y^2}{x^4 + y^4} & (x, y) \neq (0, 0) \\ 0 & (x, y) = (0, 0) \end{cases}$$

Options :

6406531889932. ✔ $\displaystyle\lim_{(x,y)\to(0,0)} f(x, y) = \dfrac{4}{17}$ along the path $y = 2x$

6406531889933. ✘ $f_x(0, 0) = 1$

6406531889934. ✘ The directional derivative of f at $(0, 0)$ in the direction of $(1, -1)$ exists.

6406531889935. ✔ f is not continuous at $(0, 0)$.

Sub-Section Number :	9
Sub-Section Id :	64065380788
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 61 Question Id : 640653565426 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 4

Question Label : Multiple Choice Question

Match the equation of the surface in Column A with the tangent plane at the point $(1, 1, 2)$ in column B and the vector subspace corresponding to the affine subspace (of $\mathbb{R}^3$) formed by the tangent plane, in Column C.

	Equation of the surface (Column A)		Equation of the tangent plane at $(1,1,2)$ (Column B)		Vector subspace corresponding to the affine subspace formed by tangent plane (Column C)
i)	$z = x^2 y + xy^2$	a)	$3x + 3y - z = 4$	1)	$\{(x, y, z) \mid 6x = 2y + z, x, y, z \in \mathbb{R}\}$
ii)	$z = 3x^2 - y^2$	b)	$z = -2x - 2y + 6$	2)	$\{(x, y, z) \mid x + y = \frac{1}{3}z, x, y, z \in \mathbb{R}\}$
iii)	$xyz = 2$	c)	$6x - 2y = z + 2$	3)	$\{(x, y, z) \mid z = -2(x + y), x, y, z \in \mathbb{R}\}$

Table: M2ES1

Choose the correct option from the following:

Options :

6406531889936. ✖ i) $\rightarrow$ b $\rightarrow$ 1, ii) $\rightarrow$ a $\rightarrow$ 2, iii) $\rightarrow$ c $\rightarrow$ 3

6406531889937. ✔ i) $\rightarrow$ a $\rightarrow$ 2, ii) $\rightarrow$ c $\rightarrow$ 1, iii) $\rightarrow$ b $\rightarrow$ 3

6406531889938. ✖ i) $\rightarrow$ b $\rightarrow$ 1, ii) $\rightarrow$ c $\rightarrow$ 3, iii) $\rightarrow$ a $\rightarrow$ 2

6406531889939. ✖ i) $\rightarrow$ b $\rightarrow$ 1, ii) $\rightarrow$ c $\rightarrow$ 2, iii) $\rightarrow$ a $\rightarrow$ 3

Sub-Section Number : 10

Sub-Section Id : 64065380789

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653565427 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 : (62 to 63)

Question Label : Comprehension

Consider the system of linear equations formed by the equations in column B of Table M2ES2 and let A be its coefficient matrix. Answer the given related subquestions.

	Equation of the surface (Column A)		Equation of the tangent plane at $(1,1,2)$ (Column B)		Vector subspace corresponding to the affine subspace formed by tangent plane (Column C)
i)	$z = x^2 y + xy^2$	a)	$3x + 3y - z = 4$	1)	$\{(x, y, z) \mid 6x = 2y + z, x, y, z \in \mathbb{R}\}$
ii)	$z = 3x^2 - y^2$	b)	$z = -2x - 2y + 6$	2)	$\{(x, y, z) \mid x + y = \frac{1}{3}z, x, y, z \in \mathbb{R}\}$
iii)	$xyz = 2$	c)	$6x - 2y = z + 2$	3)	$\{(x, y, z) \mid z = -2(x + y), x, y, z \in \mathbb{R}\}$

Table: M2ES2

Sub questions

Question Number : 62 Question Id : 640653565428 Question Type : MCQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 3

Question Label : Multiple Choice Question

Which of the following denotes the solution space of this system of linear equations?

Options :

6406531889940. ✖ $\{(x, y, 2) \mid x + y = 2, x, y \in \mathbb{R}\}$

6406531889941. ✖ $\{(x, y, 2) \mid x, y \in \mathbb{R}\}$

6406531889942. ✖ $\{(x, x, 2) \mid x \in \mathbb{R}\}$

6406531889943. ✔ $\{(1, 1, 2)\}$

Question Number : 63 Question Id : 640653565429 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

Which of the following sets denotes *nullspace*(*A*)?

Options :

6406531889944. ✖ $\{(x, y, 0) \mid x, y \in \mathbb{R}\}$

6406531889945. ✖ $\{(x, -x, 0) \mid x \in \mathbb{R}\}$

6406531889946. ✖ $\{(x, x, 0) \mid x \in \mathbb{R}\}$

6406531889947. ✔ $\{(0, 0, 0)\}$

Sub-Section Number :	11
Sub-Section Id :	64065380790
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653565430 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 : (64 to 65)

Question Label : Comprehension

Consider the system of linear equations formed by the equations in column B of Table M2ES3 and let *A* be its coefficient matrix. Answer the given related questions.

	Equation of the surface (Column A)		Equation of the tangent plane at $(1, 1, 2)$ (Column B)		Vector subspace corresponding to the affine subspace formed by tangent plane (Column C)
i)	$z = x^2 y + xy^2$	a)	$3x + 3y - z = 4$	1)	$\{(x, y, z) \mid 6x = 2y + z, x, y, z \in \mathbb{R}\}$
ii)	$z = 3x^2 - y^2$	b)	$z = -2x - 2y + 6$	2)	$\{(x, y, z) \mid x + y = \frac{1}{3}z, x, y, z \in \mathbb{R}\}$
iii)	$xyz = 2$	c)	$6x - 2y = z + 2$	3)	$\{(x, y, z) \mid z = -2(x + y), x, y, z \in \mathbb{R}\}$

Table: M2ES3

Sub questions

Question Number : 64 Question Id : 640653565431 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

Find *Rank*(*A*).

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

Question Number : 65 Question Id : 640653565432 Question Type : MSQ Is Question Mandatory : No Calculator : None Response Time : N.A Think Time : N.A Minimum Instruction Time : 0

Correct Marks : 2 Selectable Option : 0

Question Label : Multiple Select Question

Which of the following denotes the column space of A?(More than one option may be correct)

Options :

6406531889949. ✔ $\mathbb{R}^3$

6406531889950. ✖ $Span\{(-1, -1, 1)\}$

6406531889951. ✖ $Span\{(3, 6, 2), (3, -2, 2)\}$

6406531889952. ✔ $Span\{(3, 6, 2), (3, -2, 2), (-1, -1, 1)\}$

Sem2 Intro to Python

Section Id :	64065338385
Section Number :	4
Section type :	Online
Mandatory or Optional :	Mandatory
Number of Questions :	26
Number of Questions to be attempted :	26
Section Marks :	100
Display Number Panel :	Yes
Group All Questions :	No