

Show Word Count : Yes

Answers Type : Range

Text Areas : PlainText

Possible Answers :

0.23 to 0.29

Sem2 Maths2

Section Id :	64065338304
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 :	64065380221
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Number : 39 **Question Id :** 640653563134 **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 :

6406531882735. ✓ YES

6406531882736. ✗ NO

Sub-Section Number :	2
Sub-Section Id :	64065380222
Question Shuffling Allowed :	Yes
Is Section Default? :	null

**Question Number : 40 Question Id : 640653563153 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 $f(x, y) = x^3 + y^3$. Which of the following affine subspaces represents the tangent line at the point $(1, 1)$ in the direction of the vector $(1, 1)$?

Options :

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

6406531882764. ✗

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

6406531882765. ✗

6406531882766. ✓

$$\{(x, y, z) \in \mathbb{R}^3 \mid \frac{x-1}{\frac{1}{\sqrt{2}}} = \frac{y-1}{\frac{1}{\sqrt{2}}} = \frac{z-2}{\frac{6}{\sqrt{2}}}\}$$

6406531882767. ✖

$$\{(x, y, z) \in \mathbb{R}^3 \mid \frac{x}{\frac{1}{\sqrt{2}}} = \frac{y}{\frac{1}{\sqrt{2}}} = \frac{z}{\frac{6}{\sqrt{2}}}\}$$

Sub-Section Number :	3
Sub-Section Id :	64065380223
Question Shuffling Allowed :	Yes
Is Section Default? :	null

Question Number : 41 Question Id : 640653563159 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

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

Options :

6406531882772. ✖ $\lim_{(x,y) \rightarrow (0,0)} f(x, y) = 1$

6406531882773. ✓ $f_x(0, 0) = 0$

6406531882774. ✓ The directional derivative of f at $(0, 0)$ in the direction of $(-1, 1)$ exists.

6406531882775. ✖ f is not continuous at $(0, 0)$.

Sub-Section Number : 4
Sub-Section Id : 64065380224
Question Shuffling Allowed : Yes
Is Section Default? : null

Question Number : 42 Question Id : 640653563144 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

For what values of a , does the system of linear equations $x + y - z = 0$, $2x + 3y + z = 0$, $ax + y + z = 0$ have infinitely many solutions?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

0.5

Question Number : 43 Question Id : 640653563145 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 is a 3×3 orthogonal matrix with positive determinant, what is the determinant of $3A$?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

27

Sub-Section Number : 5

Sub-Section Id : 64065380225

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 44 Question Id : 640653563135 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 $\begin{pmatrix} a+2 & b+c-1 \\ b-c+1 & d \end{pmatrix} = 3I$, where I denotes the 2×2 identity matrix, then what is the determinant of $\begin{pmatrix} a & b \\ c & d \end{pmatrix}$?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

3

Question Number : 45 Question Id : 640653563143 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 maximum product of three non-negative numbers whose sum is 6?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

8

Question Number : 46 Question Id : 640653563146 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 $\{(x, y, z) : 2x + y + z = 0\}$, $\{(x, y, z) : x + 2y + z = 0\}$ 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 $4x_1 + 8x_2 + 12x_3$.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

6

Sub-Section Number :	6
Sub-Section Id :	64065380226
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653563136 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 49)

Question Label : Comprehension

Let U denote the set of all 2×2 upper triangular matrices. Consider an ordered basis $\beta = \left\{ \begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 1 \\ 0 & 0 \end{pmatrix}, \begin{pmatrix} 0 & 0 \\ 0 & 1 \end{pmatrix} \right\}$. Let $T : U \rightarrow \mathbb{R}^2$ be a linear transformation defined as $T \begin{pmatrix} a & b \\ 0 & c \end{pmatrix} = (a+b, c)$. Let matrix A be the matrix representation of T with respect to the ordered basis β for U and the standard ordered basis for the co-domain $\mathbb{R}^2$. Answer the given subquestions.

Sub questions**Question Number : 47 Question Id : 640653563137 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 :**

6406531882738. ✓ $A = \begin{pmatrix} 1 & 1 & 0 \\ 0 & 0 & 1 \end{pmatrix}$

6406531882739. ✗ $A = \begin{pmatrix} 1 & 0 & 0 \\ 1 & 1 & 1 \end{pmatrix}$

6406531882740. ✗ $A = \begin{pmatrix} 1 & 0 \\ 1 & 0 \\ 0 & 1 \end{pmatrix}$

6406531882741. ✗ $A = \begin{pmatrix} 1 & 1 \\ 0 & 1 \\ 0 & 1 \end{pmatrix}$

Question Number : 48 Question Id : 640653563138 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 :

6406531882742. ✖ Rank of T is 3.

6406531882743. ✔ T is onto.

6406531882744. ✔ Nullity of T is 1.

6406531882745. ✖ T is one-one.

Question Number : 49 Question Id : 640653563139 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 an ordered basis $\{(1, 0), (1, 1)\}$ for the co-domain $\mathbb{R}^2$.

Which of the following is/are true?

Options :

6406531882746. ✔ A is equivalent to B .

6406531882747. ✖ Rank of B is 3.

6406531882748. ✔ Nullity of B is 1.

6406531882749. ✖ A is not equivalent to B .

Question Id : 640653563140 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 : (50 to 51)

Question Label : Comprehension

Consider the subspace $W = \{(x, y, z, w) : x + y = z, z + w = x - y\}$ of $\mathbb{R}^4$.

Answer the subquestions based on the given information.

Sub questions

Question Number : 50 Question Id : 640653563141 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 :

6406531882750. ✖ $\beta = \{(1, 1, 1, -2)\}$

6406531882751. ✔ $\beta = \{(1, 0, 1, 0), (0, 1, 1, -2)\}$

6406531882752. ✖ $\beta = \{(1, 0, 1, 0), (0, 1, 1, -2), (1, 1, 1, -2)\}$

6406531882753. ✖ $\beta = \{(1, 0, 1, 0), (0, 1, 0, 1), (1, 1, 1, -2)\}$

Question Number : 51 Question Id : 640653563142 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, d) is the projection of $(0, \sqrt{\frac{11}{2}}, 0, \sqrt{\frac{11}{2}})$ onto W , then what is $\sqrt{22}(a + b + c + d)$?

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

2

Question Id : 640653563147 **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 : (52 to 56)

Question Label : Comprehension

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

Based on the above data, answer the given subquestions.

Sub questions

Question Number : 52 **Question Id :** 640653563148 **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

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 :

4

Question Number : 53 **Question Id :** 640653563149 **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 :

2

Question Number : 54 **Question Id :** 640653563150 **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 : 55 Question Id : 640653563151 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 :

1

Question Number : 56 Question Id : 640653563152 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 $H(x, y)$ denotes the Hessian matrix of $f(x, y)$, find the determinant of $H(1, 0)$.

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

-72

Question Id : 640653563154 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 : (57 to 60)

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) Non-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) Associativity of addition
- 9) Elements
- 10) Global maxima
- 11) Global minima
- 12) A critical point
- 13) Gradient exists
- 14) Directional derivative exists in any direction
- 15) Partial derivatives exist
- 16) Orthonormal columns
- 17) Standard ordered basis
- 18) Affine subspace.
- 19) Limit exists

Sub questions

Question Number : 57 Question Id : 640653563155 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 local maxima is/can be _____. (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 :

1012

Question Number : 58 Question Id : 640653563156 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

Orthogonal 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 :

316

Question Number : 59 Question Id : 640653563157 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 4 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, 15 and 17, then you should enter 7141517]

Response Type : Numeric

Evaluation Required For SA : Yes

Show Word Count : Yes

Answers Type : Equal

Text Areas : PlainText

Possible Answers :

13141519

Question Number : 60 **Question Id :** 640653563158 **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 :

45678

Sub-Section Number : 7

Sub-Section Id : 64065380227

Question Shuffling Allowed : Yes

Is Section Default? : null

Question Number : 61 **Question Id :** 640653563160 **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)	$z = x^2 + y^2$	a)	$3x + 3y + 2z = 10$	1)	$\{(x, y, z) \mid x + y = \frac{z}{2}, x, y, z \in \mathbb{R}\}$
ii)	$x^2 + y^2 + z^2 = 6$	b)	$z = 2x + 2y - 2$	2)	$\{(x, y, z) \mid x + y = -\frac{2}{3}z, x, y, z \in \mathbb{R}\}$
iii)	$xy + yz + zx = 5$	c)	$x + y + 2z = 6$	3)	$\{(x, y, z) \mid 2z = -x - y, x, y, z \in \mathbb{R}\}$

Table: M2ES1

Choose the correct option from the following:

Options :

6406531882776. ✖ i) → b → 1, ii) → a → 2, iii) → c → 3

6406531882777. ✖ i) → a → 2, ii) → c → 1, iii) → b → 3

6406531882778. ✔ i) → b → 1, ii) → c → 3, iii) → a → 2

6406531882779. ✖ i) → b → 1, ii) → c → 2, iii) → a → 3

Sub-Section Number : 8

Sub-Section Id : 64065380228

Question Shuffling Allowed : No

Is Section Default? : null

Question Id : 640653563161 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 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)	$z = x^2 + y^2$	a)	$3x + 3y + 2z = 10$	1)	$\{(x, y, z) \mid x + y = \frac{z}{2}, x, y, z \in \mathbb{R}\}$
ii)	$x^2 + y^2 + z^2 = 6$	b)	$z = 2x + 2y - 2$	2)	$\{(x, y, z) \mid x + y = -\frac{2}{3}z, x, y, z \in \mathbb{R}\}$
iii)	$xy + yz + zx = 5$	c)	$x + y + 2z = 6$	3)	$\{(x, y, z) \mid 2z = -x - y, x, y, z \in \mathbb{R}\}$

Table: M2ES2

Sub questions

Question Number : 62 Question Id : 640653563162 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 :

6406531882780. ✖ $\{(x, y, 2) \mid x + y = 0, x, y \in \mathbb{R}\}$

6406531882781. ✓ $\{(x, 2 - x, 2) \mid x \in \mathbb{R}\}$

6406531882782. ✖ $\{(x, 2, 2) \mid x \in \mathbb{R}\}$

6406531882783. ✖ $\{(2, 0, 2)\}$

Question Number : 63 Question Id : 640653563163 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 $\text{nullspace}(A)$?

Options :

6406531882784. ✖ $\{(x, y, 0) \mid x - y = 0, x, y \in \mathbb{R}\}$

6406531882785. ✓ $\{(x, -x, 0) \mid x \in \mathbb{R}\}$

6406531882786. ✖ $\{(x, 0, 0) \mid x \in \mathbb{R}\}$

6406531882787. ✖ $\{(0, 0, 0)\}$

Sub-Section Number :	9
Sub-Section Id :	64065380229
Question Shuffling Allowed :	No
Is Section Default? :	null

Question Id : 640653563164 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 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)	$z = x^2 + y^2$	a)	$3x + 3y + 2z = 10$	1)	$\{(x, y, z) \mid x + y = \frac{z}{2}, x, y, z \in \mathbb{R}\}$
ii)	$x^2 + y^2 + z^2 = 6$	b)	$z = 2x + 2y - 2$	2)	$\{(x, y, z) \mid x + y = -\frac{2}{3}z, x, y, z \in \mathbb{R}\}$
iii)	$xy + yz + zx = 5$	c)	$x + y + 2z = 6$	3)	$\{(x, y, z) \mid 2z = -x - y, x, y, z \in \mathbb{R}\}$

Table: M2ES3

Sub questions

Question Number : 64 Question Id : 640653563165 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 :

2

Question Number : 65 Question Id : 640653563166 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 :

6406531882789. ✖ $\text{Span}\{(3, 2, 1)\}$

6406531882790. ✖ $\text{Span}\{(2, -1, 2)\}$

6406531882791. ✔ $\text{Span}\{(3, 2, 1), (2, -1, 2)\}$

6406531882792. ✔ $\text{Span}\{(3, 2, 1), (2, -1, 2), (1, 3, -1)\}$

Sem2 Intro to Python

Section Id :	64065338305
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