Professional Online Academy Vu Topper RM

MTH-501 Linear Algebra Update MCQ'S Final Term By Vu Topper RM

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Vu Topper RM



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Question No:1 **(Marks:1)** **Vu-Topper RM**

If the augmented matrices of two linear systems are row equivalent, then the two systems have the _____ solution set.

A. same
B. different
C. inconsistant
D. trivial

Question No:2 **(Marks:1)** **Vu-Topper RM**

A m ×n matrix U has orthonormal columns if and only if UT U = I

True
False

Question No:3 **(Marks:1)** **Vu-Topper RM**

Lets={u1+u2+.....up}be the set of non-zero vectors inRnis said to be an orthogonal set if all vectors in S are mutually orthogonal. That is O∉ S andui.uj=0∀ i≠ j, i,j=1,2,……..p.

True
False

Question No:4 **(Marks:1)** **Vu-Topper RM**

If x is orthogonal to both u and v, then x must be _____ to u – v.

A. orthonormal
B. orthogonal
C. equal
D. parallel

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Question No:5 **(Marks:1)** **Vu-Topper RM**

If u=(1, k, 0) and v=(1, 1, 0) are orthogonal vectors then which of the following is the value of k?

A. k = 1

B. k = -1

C. k = 2

D. k = 0

Question No:6 **(Marks:1)** **Vu-Topper RM**

A vector whose length is 1 is called ----------

Unit Vector

Identity Vector

Question No:7 **(Marks:1)** **Vu-Topper RM**

Two vectors are _____if at least one of the vector is a multiple of the other

linearly dependent

linearly independent

Question No:8 **(Marks:1)** **Vu-Topper RM**

If B= is an orthogonal set of vectors with respect to an inner product on a vector space V, then the set B

A. Is an orthonormal basis for v

B. Is linearly independent.

C. Spans the vector space v

D. Linearly dependent.

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Question No:9 **(Marks:1)** **Vu-Topper RM**

If u=(2, 0, -1) and v=(0, -1, 0) is an orthogonal set then which of the following has a norm of 1?

A. v.u
B. u.u
C. v.v
D. u.v

Question No:10 **(Marks:1)** **Vu-Topper RM**

If u and v are vectors in Rn, then we regard u and v as n×1 matrices. The matrix product utv is a ---------- matrix.

A. n × 1
B. n × n
C. 1 × n
D. 1 × 1

Question No:11 **(Marks:1)** **Vu-Topper RM**

7x + 2y = 16
–21x – 6y = 24
The above system has a _____ solution.

A. unique
B. consistent
C. inconsistent
D. trivial

Question No:12 **(Marks:1)** **Vu-Topper RM**

The process of creating the unit vector u from v sometime called--------

Diagonalizing v
Normalizing v

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Question No:13 **(Marks:1)** **Vu-Topper RM**

For u, v vectors in , the distance between u and v is written as
Rn

A. dist(u, v) = ||u − v||
B. dist(u, v) = ||v − v||
C. dist(u, v) = ||u − u||
D. None of these

Question No:14 **(Marks:1)** **Vu-Topper RM**

Suppose x,y,z are some vectors in an inner product space (v,<,>) such that <x,y>=<x,z> for all x∈V, then y=z

True
False

Question No:15 **(Marks:1)** **Vu-Topper RM**

If we divide a non-zero vector by its length we get a

A. zero vector
B. unit vector
C. normalized vector
D. none of these

Question No:16 **(Marks:1)** **Vu-Topper RM**

The matrix A^T(Transpose of A) x A is _____ if and only if the columns of A are linearly independent.

A. symmetric
B. invertible
C. singular
D. scalar

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Question No:17 **(Marks:1)** **Vu-Topper RM**

Let W be a subspace of Rn, then each y in Rn can be written uniquely in the form

A. y = yˆ − z

B. y = yˆ + z

C. y = yˆ/z

D. None of these

Question No:18 **(Marks:1)** **Vu-Topper RM**

Let W be a subspace of , y be any vector in and the orthogonal projection of onto . Then is the closest point in to , in the sense that

Rn Rn yˆ y W yˆ W y

||y − yˆ|| > ||y − v||

||y − yˆ|| < ||y − v||

Question No:19 **(Marks:1)** **Vu-Topper RM**

A square matrix with _____ columns is an orthogonal matrix.

A. same

B. orthogonal

C. orthonormal

D. even

Question No:20 **(Marks:1)** **Vu-Topper RM**

A _____ matrix with orthogonal columns is an orthogonal matrix.

A. rectangular

B. singular

C. square

D. diagonal

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Question No:21 **(Marks:1)** **Vu-Topper RM**

Any orthogonal subsets of vector in an inner product space is linearly independent

True

False

Question No:22 **(Marks:1)** **Vu-Topper RM**

The matrix A^T(Transpose of A) x A is invertible if and only if the columns of A are linearly independent.

True

False

Question No:23 **(Marks:1)** **Vu-Topper RM**

If x is _____ to both u and v, then x must be orthogonal to u – v.

orthonormal

orthogonal

Question No:24 **(Marks:1)** **Vu-Topper RM**

For any vectors u and v, the length of vector u – v will be _____.

A. | u – v |

B. u . v

C. || u – v ||

D. || u . v ||

Question No:25 **(Marks:1)** **Vu-Topper RM**

Any set of three non-coplanar vectors {a,b,c} in ordinary space spans the -------- space

R3

R2

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Question No:26 **(Marks:1)** **Vu-Topper RM**

The matrix A^T(Transpose of A) x A is invertible if and only if the columns of A are _____.

linearly independent

linearly dependent

Question No:27 **(Marks:1)** **Vu-Topper RM**

The two vectors are said to be equivalent if:

A. None of the above
B. Both (a) and (b)
C. Same length
D. Same direction

Question No:28 **(Marks:1)** **Vu-Topper RM**

The product of upper triangular matrices is:

A. Diagonal matrix.
B. Upper triangular matrix.
C. Lower triangular matrix
D. None of the above

Question No:29 **(Marks:1)** **Vu-Topper RM**

The _____ vector is orthogonal to every vector in Rn

A. zero vector
B. unit vector
C. normalized vector
D. none of these

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Question No:30 **(Marks:1)** **Vu-Topper RM**

If two rows are orthogonal, they are _____.

linearly independent

linearly dependent

Question No:31 **(Marks:1)** **Vu-Topper RM**

If the columns of a matrix are _____ then the matrix is invertible.

linearly dependent

linearly independent

Question No:32 **(Marks:1)** **Vu-Topper RM**

Let be a five-dimensional vector space, and let be a subset of consisting of five vectors. Then S

Must be linearly independent, but cannot span V

Must be linearly dependent, but may or may not span V

Question No:33 **(Marks:1)** **Vu-Topper RM**

If a _____ matrix has orthonormal columns, then it also has orthonormal rows.

A. singular

B. square

C. rectangular

D. diagonal

Question No:34 **(Marks:1)** **Vu-Topper RM**

If a square matrix has orthonormal columns, then it also has _____ rows.

orthogonal

orthonormal

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Question No:35 **(Marks:1)** **Vu-Topper RM**

A matrix with orthogonal columns is an _____ matrix.

A. identity
B. diagonal
C. orthogonal
D. orthonormal

Question No:36 **(Marks:1)** **Vu-Topper RM**

A square matrix with orthogonal columns is _____ matrix.

A. an orthonormal
B. an invertible
C. an nonivertible
D. an orthogonal

Question No:37 **(Marks:1)** **Vu-Topper RM**

If 3 is an eigenvalue of and is a corresponding eigenvector, then what is the eigenvalue of A2 ?

A. 6
B. 12
C. 3
D. 9

Question No:38 **(Marks:1)** **Vu-Topper RM**

For a real matrix A, complex Eigen values and associated Eigen vectors come in ---------

A. none of the above
B. similar pairs
C. conjugate pairs
D. Complex pairs

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Question No:39 **(Marks:1)** **Vu-Topper RM**

If λ+2 is a factor of the characteristic polynomial of matrix C , then which of the following is the Eigenvalue of C?

A. -2
B. 1/2
C. 0
D. 2

Question No:40 **(Marks:1)** **Vu-Topper RM**

If a vector x0 is specified, then the initial value problem is to construct the unique function x such that --------

A. x′=Ax and x(0)=x0
B. x′=Ax′ and x(0)=x0

Question No:41 **(Marks:1)** **Vu-Topper RM**

What is the maximum possible number of pivots in a 6x6 matrix?

A. 6
B. 4
C. 2
D. 0

Question No:42 **(Marks:1)** **Vu-Topper RM**

If n x n matrices A and B are similar, then they have the _____ characteristic polynomial.

A. different
B. inverse of the other
C. same but opposite in sign
D. same

Question No:43 **(Marks:1)** **Vu-Topper RM**

Let A be a real 2 by 2 matrix with complex eigen values λ=a−b+i,(b≠0) and associated eigenvectors v in C2, then A=PCP−1, where P=————————————

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A. P=[−Rev−Imv]
B. P=[Rev−Imv]
C. P=[RevImv]
D. P=[−RevImv]

Question No:44 **(Marks:1)** **Vu-Topper RM**

A and its transpose matrix have _____ eigenvalues.

A. different and positive
B. same but opposite in sign
C. different
D. same

Question No:45 **(Marks:1)** **Vu-Topper RM**

Rank of the matrix A=⎡⎣⎢⎢⎢⎢000046101000⎤⎦⎥⎥⎥⎥

A. 3
B. 0
C. 1
D. 2

Question No:46 **(Marks:1)** **Vu-Topper RM**

For a non-singular matrix A, A−1 is equal to------

A. det(A)∗Adj(A)
B. det(A)∗A
C. None of the above.
D. Adj(A)/det(A) *

Question No:47 **(Marks:1)** **Vu-Topper RM**

An_____matrix with n distinct eigenvalues is diagonlizable

A. NXN
B. NULL
C. MXN
D. None of these

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Question No:48 **(Marks:1)** **Vu-Topper RM**

Which of the following is true for the matrix M=[M11M12M13 OM22M23 OOM33]; where M11 , M22 and M33 are square sub-matrices , and O is a zero sub-matrix ?

A. It is a block lower triangular matrix.

B. It is a Null matrix.

C. It is diagonal-constant matrix.

D. It is a block upper triangular matrix.

Question No:49 **(Marks:1)** **Vu-Topper RM**

Two matrices with the same characteristic polynomial _____ similar.

A. must be

B. may not be

Question No:50 **(Marks:1)** **Vu-Topper RM**

If the real part of the eigenvalue is zero, then the trajectories form ---------- around the origin.

A. None of these

B. Hyperbola

C. Ellipse

D. Parabola

Question No:51 **(Marks:1)** **Vu-Topper RM**

The number of parameters in the solution set of Ax = 0 if A is a 4× 4 matrix of rank 0 then nullity (A) =?

A. 0

B. 4

Question No:52 **(Marks:1)** **Vu-Topper RM**

If A and B are row equivalent matrices, then(a) A given set of column vectors of A is

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Question No:57 **(Marks:1)** **Vu-Topper RM**

The eigenvalues of a 4 by 4 matrix [A] are given as 2, -3, 1, 3 and 7. The |det(A)| then is

A. 530
B. 546
C. cannot be determined
D. 25

Question No:58 **(Marks:1)** **Vu-Topper RM**

If A= transpose of A(where A is a square matrix), then which of the following is the most appropriate option for A?

A. A is singular matrix.
B. A is symetric matrix.
C. A is invertible matrix.
D. A is a scalar matrix.

Question No:59 **(Marks:1)** **Vu-Topper RM**

The determinant of identity matrix is?

A. 1
B. 0
C. Depends on the matrix
D. None of the mentioned

Question No:60 **(Marks:1)** **Vu-Topper RM**

What is the maximum possible number of pivots in a 4x6 matrix ?

A. 10
B. 4
C. 6
D. 8

Question No:61 **(Marks:1)** **Vu-Topper RM**

\lambda is an eigenvalue of a matrix A if and only if the equation (A−\lambdaI)x=0 has a ---------

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A. Non-trivial solution
B. Trivial Solution

Question No:62 **(Marks:1)** **Vu-Topper RM**
An n × n real matrix A is invertible if and only if the span of the rows of A is R^n
A. TRUE
B. FALSE

Question No:63 **(Marks:1)** **Vu-Topper RM**
Suppose that real solutions y1 and y2 of x′=Ax, form a basis for the two-dimensional real vector space if y1 and y2 are ……..
A. Linearly Independent
B. Linearly dependent

Question No:64 **(Marks:1)** **Vu-Topper RM**
Multiplication of a partitioned matrix by a scalar is also computed _____.
A. Column by column
B. Diagonal by diagonal
C. Block by block
D. Row by row

Question No:65 **(Marks:1)** **Vu-Topper RM**
Two equivalent vectors must have the same initial point:
A. None of the above
B. true
C. May be
D. false

Question No:66 **(Marks:1)** **Vu-Topper RM**
A row replacement operation on A does not change the _____.
A. rows

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B. columns
C. determinant
D. matrix

Question No:67 **(Marks:1)** **Vu-Topper RM**
An n x n matrix A is diagonalizable if and only if A has n linearly _____ eigenvectors.
A. dependent
B. independent

Question No:68 **(Marks:1)** **Vu-Topper RM**
If A is an m x n, matrix, then
Rank (A) = the number of leading variables in the solution of Ax = 0
Nullity (A) = the number of parameters in the general solution of Ax = 0
A. True
B. False

Question No:69 **(Marks:1)** **Vu-Topper RM**
If two matrices A and B are row equivalent matrices, then which of the following is true
A. None of these is true
B. a given set of column vectors of A is linearly independent if and only if the corresponding column vectors of B are linearly independent.
C. a given set of column vectors of A is linearly dependent if and only if the corresponding column vectors of B are linearly dependent.
D. a given set of column vectors of A is linearly independent if and only if the corresponding column vectors of B are exactly same.

Question No:70 **(Marks:1)** **Vu-Topper RM**
If A is invertible and b in Rn be any vector. Then, we must have a matrix A−1b ,which is a solution of _____.
A. A−1x=b

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B. Atx=b
C. Ax=b
D. A2x=b

Question No:71 **(Marks:1)** **Vu-Topper RM**
Diagonalization is a process of transforming a vector A to the form
A. A=P−1DP
B. A=PDP−1

Question No:72 **(Marks:1)** **Vu-Topper RM**
Rank of the matrix A = |0 4 1060010000|||
A. 3
B. 0
C. 2
D. 1

Question No:73 **(Marks:1)** **Vu-Topper RM**
If is an eigenvalue of a matrix and is a corresponding eigenvector, and if is any positive integer, then is an eigenvalue of _____ and is acorresponding eigenvector.
λ *k

Question No:74 **(Marks:1)** **Vu-Topper RM**
The dimension of the zero vector space {0} is defined to be
A. 0
B. 1
C. ∞
D. None

Question No:75 **(Marks:1)** **Vu-Topper RM**
A coordinate system on a set consists of a _____ mapping of the points in the set into R^n
One-to-one

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Onto

Question No:76 **(Marks:1)** **Vu-Topper RM**

If two matrices A and B are row equivalent, then their row spaces are the same.

True

False

Question No:77 **(Marks:1)** **Vu-Topper RM**

A set of single non-zero vector is

A. Linearly Independent

B. None of the above

C. Basis

D. Linearly Dependent

Question No:78 **(Marks:1)** **Vu-Topper RM**

The only 0-dimensional subspace of R3 is

A. (a,b)

B. Zero space

C. None of the above

D. Infinite space

Question No:79 **(Marks:1)** **Vu-Topper RM**

Every finite dimensional vector space contains a/an

A. Empty set

B. None of the above

C. Basis

D. Infinite set

Question No:80 **(Marks:1)** **Vu-Topper RM**

The rank of a 3 x 3 matrix C (= AB), found by multiplying a non-zero column matrix A of size 3 x 1 and a non-zero row matrix B of size 1 x 3, is

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A. 3
B. 1
C. 0
D. 2

Question No:81 **(Marks:1)** **Vu-Topper RM**
if A is a 4 × 5 matrix with a two − dimentinal nullspace, what is rank of A
A. 7
B. 6
C. 3
D. 5

Question No:82 **(Marks:1)** **Vu-Topper RM**
If A is a m×n matrix and A=AT , which of the following must always be true?
m and n are different
m=n

Question No:83 **(Marks:1)** **Vu-Topper RM**
Let V be a five-dimensional vector space, and let S be a subset of V which spans V. Then S
A. Must be a basis for
B. Must have infinitely many elements
C. Must be linearly dependent
D. Must have at most five elements

Question No:84 **(Marks:1)** **Vu-Topper RM**
Any set of linearly independent vectors cannot contain the ---------- vector.
A. Identity
B. None of these
C. zero

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D. Unit

Question No:85 **(Marks:1)** **Vu-Topper RM**

If λ is an eigenvector of A, then every nonzero vector x such that Ax=λx is called an ---------- of A corresponding to ----------

A. Eigenvalue, λ
B. Eigenvector, λ
C. Eigenvalue, A
D. Eigenvector, A

Question No:86 **(Marks:1)** **Vu-Topper RM**

If A is any matrix, then rank (A)=rank(A^t)

True
False

Question No:87 **(Marks:1)** **Vu-Topper RM**

An indexed set of vectors v1,v2,…,vp in V is said to be linearly independent if the vector equation

A. c1v1 + c2v2 + … + cpvp = 0
B. c1v1 + c2v2 + … + cpvp = 1
C. c1v1 + c2v2 + … + cpvp ≠ 0
D. None of the above.

Question No:88 **(Marks:1)** **Vu-Topper RM**

Cylindrical coordinate system is also called as_____

A. Rectangular coordinate system.
B. Circular coordinate system.
C. Spherical coordinate system.
D. Space coordinate system.

Question No:89 **(Marks:1)** **Vu-Topper RM**

The number of parameters in the solution set of Ax = 0 if A is a 5× 7 matrix of rank 3 then nullity (A)=?

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A. 3
B. 7
C. 4
D. 5

Question No:90 **(Marks:1)** **Vu-Topper RM**
If A is an n x n matrix, then the following statements are equivalent EXCEPT.
A. A has nontrivial fixed points.
B. det(I – A) = 0
C. I – A is singular.
D. det(A) = 0

Question No:91 **(Marks:1)** **Vu-Topper RM**
What is eigen value?
A. It is the inverse of the transform
B. A scalar associated with a given linear transformation
C. A matrix determined from the algebraic equations
D. A vector obtained from the coordinates

Question No:92 **(Marks:1)** **Vu-Topper RM**
The set B=1,x,x2,…,xn forms a basis for the vector space Pn of polynomial of degree
A. ≤n
B. ≥n
C. N
D. None of these

Question No:93 **(Marks:1)** **Vu-Topper RM**
In dim(Rn)=n, the standard basis has ------- vectors
A. N
B. N+1
C. 0

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D. mn

Question No:94 **(Marks:1)** **Vu-Topper RM**

The point of intersection of axes in three dimension coordinates system is called?

A. Collective coordinate
B. Collective intercept
C. Ordinate
D. Parallel pair order

Question No:95 **(Marks:1)** **Vu-Topper RM**

If one of the Eigenvalues of [A]n×n is zero, it implies

A. The solution to [A][X]=[0]
B. The determinant of [A] is zero
C. The determinant of [A] is nonzero
D. The solution to [A][X]=[C] system of equations is unique

Question No:96 **(Marks:1)** **Vu-Topper RM**

In two coordinate system, (PC←B)−1 is the matrix that converts

A. B-coordinates into C-coordinates
B. C-coordinates into C-coordinates
C. B-coordinates into B-coordinates
D. C-coordinates into B-coordinates

Question No:97 **(Marks:1)** **Vu-Topper RM**

The three dimensional coordinate system is one in which the coordinates intersect each other at

A. Positive point
B. Zero points
C. Negative points
D. Absolute point

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Question No:98 **(Marks:1)** **Vu-Topper RM**

Dim(Mm×n)=-------

A. 0

B. m-n

C. m+n

D. mn*

Question No:99 **(Marks:1)** **Vu-Topper RM**

If A is a triangular matrix then the eigenvalues of A are the entries on the main diagonal of A.

False

True

Question No:100 **(Marks:1)** **Vu-Topper RM**

If vector space is not spanned by a finite set of vectors, then V is said to be --------

Finite-dimensional

Infinite-dimensional

Question No:101 **(Marks:1)** **Vu-Topper RM**

A vector space V with a basis B containing n vectors is isomorphic to Rn i.e., there exist a ---------- linear transformation from V to Rn.

Onto

One -to- one

Question No:102 **(Marks:1)** **Vu-Topper RM**

If B=/b1,b2,…,bn/ and E is the standard basis /e1,e2,…,en/ in Rn, then

[b1]E=b1

[b1]E=0

Question No:103 **(Marks:1)** **Vu-Topper RM**

The set of unit vectors i,j,kform a basis of

A. R4

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Vu Topper RM

B. R2
C. R
D. R3

Question No:104 (Marks:1) Vu-Topper RM
The act of changing A into P^-1 AP is called a similarity transformation
False
True

Question No:105 (Marks:1) Vu-Topper RM
The set of all solutions of (A−\lambdaI)x is just the …….
Of the matrix A.
A. None of the above
B. Topological space
C. Metric space
D. Null space

Question No:106 (Marks:1) Vu-Topper RM
The pivot columns of a matrix A form a basis for ----------
RowA
ColA

Question No:107 (Marks:1) Vu-Topper RM
A single non-zero vector always forms a linearly ---------- set.
Independent
Dependent

Question No:108 (Marks:1) Vu-Topper RM
The rank of the matrix (m × n) where m<n cannot be more than?
M
N

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Question No:109 **(Marks:1)** **Vu-Topper RM**

The dominant or principal eigenvector of a matrix is an eigenvector corresponding to the eigenvalue of _____ magnitude (for real numbers, largest absolute value) of that matrix.

A. zero

B. largest

C. all of these

D. smallest

Question No:110 **(Marks:1)** **Vu-Topper RM**

If two matrices A and B are row equivalent, then their row spaces are the.

Different

Same

Question No:111 **(Marks:1)** **Vu-Topper RM**

If n>m, then the n vectors {a1,a2,…,an} are --------- of an m×n matrix A.

Row

Columns

Question No:112 **(Marks:1)** **Vu-Topper RM**

Electric circuit rotation is caused by sine and cosine functions if there eigenvalues are complex and hence the origin is called --------

Critical point

Spiral point

Question No:113 **(Marks:1)** **Vu-Topper RM**

Le a matrix A has both negative and positive eigen values, so in this case origin behaves as a ---------- point

Saddle

Critical

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Question No:114 **(Marks:1)** **Vu-Topper RM**

A blocked matrix in which blocks (blocked matrices) are repeated down the diagonals of the matrix is called a _____ matrix.

A. Blocked rectangular
B. Blocked square
C. Blocked diagonal-constant
D. Blocked identity

Question No:115 **(Marks:1)** **Vu-Topper RM**

Let A and B be the square matrices. Then, A and B are invertible with B=A−1 and A=B−1 if and only if AB=BA equals to a (an) _____ matrix.

A. Rectangular
B. Square
C. Identity
D. Singular

Question No:116 **(Marks:1)** **Vu-Topper RM**

The matrix M=|||||a\7\8\94a7854a7654a||||| is a _____ matrix.

A. Diagonal
B. Identity
C. Rectangular
D. Toeplitz

Question No:117 **(Marks:1)** **Vu-Topper RM**

Each pair of eigenvalue and its corresponding eigenvectors provides a solution of the equationx′=Axwhich is called

A. eigenfunctions
B. solution matrix
C. dynamical system
D. vector space

Vu Topper RM

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Question No:118 **(Marks:1)** **Vu-Topper RM**
When a matrix A has a complex eigenvalue with positive real part, the trajectories spiral ----------
Outwards
Inwards

Question No:119 **(Marks:1)** **Vu-Topper RM**
Let 'Ax = 0' be a homogeneous linear system of 'n' equations and 'n' unknowns. Then, the coefficient matrix 'A' is invertible if and only if this system has _____ solution.
A. No
B. trivial
C. non-trivial
D. infinite many

Question No:120 **(Marks:1)** **Vu-Topper RM**
Elementary row operations on a matrix do not affect the -------- relations among the columns of the matrix.
Linear independence
Linear dependence

Question No:121 **(Marks:1)** **Vu-Topper RM**
An n x n matrix A is _____ if and only if A has n linearly independent vectors.
A. singular
B. symmetric
C. scalar
D. diagonalizable

Question No:122 **(Marks:1)** **Vu-Topper RM**
An n x n matrix A is invertible if and only if _____ is not an eigen value of A.
A. -1

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B. 1
C. 2
D. 0

Question No:123 (Marks:1) Vu-Topper RM
If the inverse of a linear transformation exits then it is _____.
A. Unique
B. nonlinear
C. non-invertible
D. Not unique

Question No:124 (Marks:1) Vu-Topper RM
The Invertible Matrix Theorem applies only to _____ matrices.
A. Identity
B. Square
C. Scalar
D. Rectangular

Question No:125 (Marks:1) Vu-Topper RM
A partitioned matrix 'A' is said to be block diagonal if the matrices on the main diagonal are square and all other position matrices are _____.
A. Nonzero skew symmetric
B. Unit
C. Zero
D. Nonzero symmetric

Question No:126 (Marks:1) Vu-Topper RM
Two vectors are linearly independent if at least one of the vector is a multiple of the other.
TRUE
FALSE

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Question No:127 **(Marks:1)** **Vu-Topper RM**

If u + v =u + w, then:

A. v ≠ w

B. v = w

C. None of the above.

D. v + w.

Question No:128 **(Marks:1)** **Vu-Topper RM**

A matrix [A]_{n \times n has both positive and negative eigenvalues so in this case origin behaves as a ----------

Saddle point

Critical point

Question No:129 **(Marks:1)** **Vu-Topper RM**

A partitioned square matrix 'A' is said to be _____ matrix if the matrices on the main diagonal are square and all matrices above the main diagonal are zero.

A. Block upper triangular

B. Block lower triangular

C. Diagonal-constant

D. Null

Topper RM

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