Question: is the science of numbers and shape

Answer:A: Mathematics

Question: is the science of reasoning or explaining events

Answer:A: Logic

Question: is the study and analysis of a mathematical proposition as to ascertain the Truth Value of the proposition

Answer:A: Logic

Question: Given that 2 3 4 the Truth Value of this statement is

Answer:A: false

Question: Lagos is a cosmopolitan state The Truth Value of this is

Answer:A: true

Question: is used to analyze the Truth Value of any mathematical statement

Answer:A: Truth Value Table

Question: A statement or proposition in the context of logic is

Answer:A: a declarative sentences or an expression of words which are either true or false but cannot assume both

Question: The connective Rightarrow in logic is a

Answer:A: conditional

Question: The connective Lightrightarrow in logic is a

Answer:A: bi implication

Question: is said to be formed when the conjunction of a set of simple mathematical statements gives rise to another mathematical statement

Answer:A: An argument

Question: What is the common difference in the sequence 3 5 7 9 11

Answer:A: 2

Question: Evaluate fracz1 3 2i z2 4 3i

Answer:A: 359

Question: What is the distance between the points z1 and z2 given that z1 3 2i and z2 4 3i

Answer:A: 2

Question: Find the unit vectors in the direction of the vector a4i3j

Answer:A: 5

Question: Given that r1 3i 5 j r2 4i 19 j Find the modulus of 5r1 r2

Answer:A: 1992

Question: What is the magnitude of the vectors 3i 4 j

Answer:A: 5

Question: If P T P and P F F implies

Answer:A: Identity Laws

Question: If p q q p and p q q p implies an

Answer:A: Commutative Laws

Question: is the use of connectives to combine two or more simple statements to form just one

Answer:A: composite statement

Question: The connective wedge in logic is a

Answer:A: conjunction

Question: Given that x 2y 3 3x 4y 1 What is x and y

Answer:A: 5 4

Question: Which of the following statements is true

Answer:A: pvee qwedge pvee rpveeqwedge r

Question: A necessary and sufficient condition for a matrix square A to be invertible is that

Answer:A: Aneq 0

Question: A matrix in which all its diagonal elements are one 1 where all other elements are zero is called

Answer:A: identity matrix

Question: The of a matrix is the inter changing of its row with the column

Answer:A: transpose matrix

Question: Let Abeginpmatrix123450214endpmatrix then the cofactor of matrix A is the matrix

Answer:A: beginpmatrix20 16 16 5 23 1512 3endpmatrix

Question: Calculate the determinant of the matrix Abeginpmatrix1234 50214endpmatrix

Answer:A: 10

Question: Given that Abeginpmatrix123456endpmatrix and Bbeginpmatrix123 456endpmatrix What is AB

Answer:A: ABbeginpmatrix22284964endpmatrix

Question: What is the determinant of the Abeginpmatrix 12 3 4 endpmatrix

Answer:A: 2

Question: reads the goods are standard if and only if the goods are expensive

Answer:pleftrightarrow q

Question: A matrix that has elements only on its diagonal is called

Answer:diagonal matrix

Question: pwedge q qvee p and pvee q qvee p implies an

Answer:Commutative Laws

Question: pvee qvee rpvee qvee r and pwedge qwedge r pwedge qwedge r implies an

Answer:Associative laws

Question: given thatAeginpmatrix1 2 3 4 5 6 endpmatrixand Beginpmatrix 1 2 3 4 5 6 endpmatrix Find AB

Answer:eginpmatrix 5 12 15 19 26 31 29 40 51 endpmatrix

Question: A matrix in which its transpose is equal to itself is called

Answer:symmetric matrix

Question: is equivalent to pvee q

Answer:pleftrightarrow q

Question: which of the following statement is true

Answer:pvee qwedge pvee rpvee qwedge r

Question: is a rectangular array of numbers with reference to specific rules governing the array

Answer:Matrix

Question: given thatAbeginpmatrix1 2 3 4 5 6 endpmatrixrnand Bbeginpmatrix 1 2 3 4 5 6 endpmatrixrn Find AB

Answer:D: beginpmatrix 5 12 15 19 26 31 29 40 51 endpmatrix

Question: Given that x 2y 3z 1 3x 2y z 4 x 3y 2z 0 What is xy and z

Answer:74 3414

Question: What is the common difference in the sequence 3 5 7 9 11cdots

Answer:2

Question: Given that Aeginpmatrix 2 0 1 k 2 3 2 1 4 endpmatrix what is the value of k if A is said to be a singular matrix

Answer: 6

Question: Given that Aeginpmatrix 1 2 3 3 2 1 1 3 2 endpmatrix Find the determinant of A

Answer:3

Question: let Aeginpmatrix 1 2 3 4 5 0 2 1 4 endpmatrix then the cofactor of matrix A is the matrix

Answer:Aeginpmatrix 20   16   6 5   2 3 15 12   3 endpmatrix

Question: A matrix is said to be singular if the determinant is equal to

Answer:zero

Question: Given that eginpmatrix 1 3 k 4 endpmatrix is singular matrix Find the value of k

Answer:43

Question: A necessary and sufficient condition for a matrix square A to be invertible is that

Answer:A is not equal zero

Question: Calculate the determinant of the matrix Aeginpmatrix 1 2 3 4 5 0 2 1 4 endpmatrix

Answer: 10

Question: Given that beginpmatrix 1 3 k 4 endpmatrix is singular matrix Find the value of k

Answer:43

Question: Given that Abeginpmatrix 1 2 3 3 2 1 1 3 2 endpmatrix Find the determinant of A

Answer:3

Question: Given that Abeginpmatrix 2 0 1 k 2 3 2 1 4 endpmatrix what is the value of k if A is said to be a singular matrix

Answer: 6

Question: let Abeginpmatrix 1 2 3 4 5 0 2 1 4 endpmatrix then the cofactor of matrix A is the matrix

Answer:Abeginpmatrix 20   16   6 5   2 3 15 12   3 endpmatrix

Question: Calculate the determinant of the matrix Abeginpmatrix 1 2 3 4 5 0 2 1 4 endpmatrix

Answer: 10

Question: Q1 Calculate the distance between the points: A(0,1) and B(6,9)

Answer: 10

Question: Q2 Find the magnitude of the vector: \[5i-12j\]

Answer: 13

Question: Q3 The addition of two vectors is defined by the

Answer: triangular rule

Question: Q4 The absolute value of a vector is

Answer: that positive number which is a measure of the length of the directed segment

Question: Q5 A vector, PQ drawn from a fixed point P which gives the displacement of the point Q from the point P is called ï¿½?ï¿½ï¿½?ï¿½..

Answer: Position Vector

Question: Q6 The inverse of a matrix A is given by

Answer: \[A^{-1}=\frac{1}{|A|}Adj A\]

Question: Q7 Quantity having magnitude only but no direction is called

Answer: scalar

Question: Q8 A physical quantity having magnitude and direction is known as

Answer: vector

Question: Q9 For what value of k would the matrix \[\begin{bmatrix}2k+1amp;5\\4amp;6\end{bmatrix}\] be singular?

Answer: 2

Question: Q10 Let \[A=\begin{bmatrix}1amp;4\\3amp;1\end{bmatrix}\] and \[B=\begin{bmatrix}3amp;1\\2amp;k\end{bmatrix}\] Given that |AB| =121, find the value of k

Answer: -3

Question: Q11 Let\[A=\begin{bmatrix}1amp;4\\3amp;1\end{bmatrix} \] and \[B=\begin{bmatrix}3amp;1\\2amp;k\end{bmatrix}\] evaluate |AB|

Answer: 22-33k

Question: Q12 What is the cofactor of element '-2' in \[\begin{bmatrix}2amp;-4amp;1\\-2amp;5amp;0\\3amp;-3amp;4\end{bmatrix}\]

Answer: 13

Question: Q13 What is the cofactor of element '-3' in \[\begin{bmatrix}2amp;-4amp;1\\-2amp;5amp;0\\3amp;-3amp;4\end{bmatrix}\]

Answer: 2

Question: Q14 Let \[A=\begin{bmatrix}xamp;2amp;b\\2amp;3amp;4\\bamp;4amp;y\end{bmatrix}\], then A is ï¿½?ï¿½ï¿½?ï¿½..

Answer: Symmetric matric

Question: Q15 Find the determinant of \[\begin{bmatrix}3amp;2amp;1\\-2amp;5amp;0\\3amp;-1amp;4\end{bmatrix}\]

Answer: 63

Question: Q16 If the inverse of matrix B exists, then it is ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½

Answer: unique

Question: Q17 The transpose of the cofactor matrix of a square matrix B is called theï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½. of B

Answer: adjoint

Question: Q18 Determinant is a number associated with ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½.. Matrices

Answer: square

Question: Q19 A square matrix is called ï¿½?ï¿½ï¿½?ï¿½.... if all the elements above the main diagonal vanish

Answer: lower triangular

Question: Q20 Two matrices A and B are said to be conformable for multiplication if

Answer: the number of columns of A is same as the number of rows in B

Question: Q21 Two matrices are said to be equal

Answer: equal if their corresponding elements are the same

Question: Q22 Any matrix of dimension (m x n) with all its elements equal to zero is called ï¿½?ï¿½ï¿½?ï¿½.. Matrix

Answer: Void

Question: Q23 A matrix same as its transpose is

Answer: symmetric

Question: Q24 A diagonal matrix having all its diagonal element as one (1) is

Answer: identity

Question: Q25 A matrix having the same number of rows and columns is referred to as ï¿½?ï¿½ï¿½?ï¿½.. Matrix

Answer: square

Question: Q26 A rectangular array of numbers with reference to specific rules governing the array is known as

Answer: Matrix

Question: Q27 The number of rows and the number of columns of a matrix determine its ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½

Answer: all of the options

Question: Q28 One of the following has truth value 'False"

Answer: Ijebu-Ode is in Ogun State if and only if 4+3 = 6

Question: Q29 One of the following is not a connective in Logic

Answer: Disjointion

Question: Q30 The True value of Bi-conditional statement would be true

Answer: if the two statements have the same Truth Value

Question: Q31 Let p and q be two simple statements , then the following are conditional statements except

Answer: p if and only if q

Question: Q32 All but one of the statements have truth value true

Answer: Ibadan is the capital of Oyo State or 4 + 3 = 6

Question: Q33 ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½. statement is the use of connectives to combine two or more simple statements to form just one

Answer: Composite

Question: Q34 ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½ occurs when the conjunction of a set of simple mathematical statements gives rise to another mathematical statement

Answer: Argument

Question: Q35 Expressions, phrases or symbols that are made used of, to join two or more simple statements together in order to form a compound statement are called ï¿½?ï¿½ï¿½?ï¿½

Answer: Connectives

Question: Q36 A declarative sentences or an expression of words which are either true or false, but cannot be both is called

Answer: Proposition

Question: Q37 One of these does not explain the objectives of logical reasoning

Answer: It could be used to decode equivalent only

Question: Q38 The Truth value of the statement 'Ijebu-Ode is in Lagos State' is ï¿½?ï¿½..

Answer: False

Question: Q39 The study and analysis of a mathematical proposition as to ascertain the Truth Value of the proposition is known as ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½

Answer: Logic

Question: Q40 ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½ï¿½?ï¿½.. can be used to depict or analyze the Truth Value of any mathematical statement

Answer: Truth Value Table