FBQ1: … is the amount by which a resource is under utilized

Answer: Slack

FBQ2: … is the point at which the curve is neither a maximum nor a minimum value

Answer: Point of reflexion

FBQ3: At point of inflexion, the turning points are………

Answer: Equal

FBQ4: If the value of turning point in the second derivative is negative, then it is a …

Answer: Maximum point

FBQ5: If the value of turning point in the second derivative is positive, then it is a ……..

Answer: Minimum point

FBQ6: These are point on

the curve at which

&nbsp;and the value of the function at this point is

called…………..

Answer: stationary point

FBQ7: Stationary points are also called…………..

Answer: turning point

FBQ8: The coordinate of the point of interception of the lines, 2x + 3y = 5 and x + 2y = 3, is………..

Answer: (1, 1)

FBQ9: If y = c, where c is a constant, then δyδx yields….

Answer: 0

FBQ10: Given the function H(x) =kx+3      for x &lt; 2 3x2 – x + 3    for x ≥ 2 . The values of „k‟ for which H(x) is continuous at x = 2 is …

Answer: K=5

FBQ11: The limn→∞⁡7-2x is ….…

Answer: 7

FBQ12: The limit of function fx=12x as x→0, is ……………

Answer: 1

FBQ13: The limit of function fx=12x as x→2, is ……………

Answer: ¼

FBQ14: … describe what happen to a function f(x), as its variable x approaches a particular number, say c

Answer: Limit

FBQ15: The common ratio of the G.P 2, 6, 18, 54, 162, is …

Answer: 3

FBQ16: A … is a sequence in which each successive terms of the sequence are in equal ratio.

Answer: geometric progression

FBQ17: The 7th term of an A.P is 15 and the fourth term is 9. The first term and the common difference are … and … respectively

Answer: 3, 2

FBQ18: The 7th term of an A.P whose first term is 102 and common difference is -3 is

Answer: 84

FBQ19: The square of common difference of the sequence 3, 5, 7, 9, 11,… is

Answer: 4

FBQ20: … is a sequence in which each term differs by a common difference

Answer: Arithmetic progression

FBQ21: An infinite sequence is one whose terms are…

Answer: Uncountable

FBQ22: …. is a succession of terms spanned by a rule or formula.

Answer: A sequence

FBQ23: … is the amount of goods requested for by customers at any point in time.

Answer: Demand

FBQ24: The demand curve is the relationship between quantity and ……. of goods

Answer: Price

FBQ25: A physical quantity having both magnitude and direction is called \_\_\_\_

Answer: vector

FBQ26: The necessary and sufficient conditions for two lines to intercept are that they must be consistent and ……………..

Answer: Independent

FBQ27: A good application of intercept of two lines is the……………

Answer: market equilibrium

FBQ28: ………..…will the equation of a line (-1, -4) whose gradient is 1?

Answer: y=x-3

FBQ29: The equation of a straight line is of the form ………..

Answer: y=mx+c

FBQ30: The distance between the pairs of points A(0, 1) and B(6, 9) is ………….

Answer: 10

FBQ31: By a point P(x, y) we mean that P is in the …… plane

Answer: (x, y)

FBQ32: zn = [r(cosθ + isinθ )]n is called the ………… theorem

Answer: De Moivre’s

FBQ33: If z = x + iy, ⇒ z = r cosθ + r i sinθ is called the… of z.

Answer: polar form

FBQ34: Let A be a square matrix where the element ai j = 0. For i &gt; j, then A is called………….

Answer: An upper triangular matrix

FBQ35: The distance between (0, 1) and (6, 9) is \_\_\_\_\_\_

Answer: 10

FBQ35: The gradient of the line perpendicular to x + 3y = 2 is …..

Answer: 3

FBQ36: The determinant of is

Answer: -1

FBQ37: Let ; . Given that |AB| =121, find the value of k

Answer: -3

FBQ38: For what value of m would the matrix be singular?

Answer: 2

FBQ39: Calculate the distance between the points: A(0,1) and B(6,9)

Answer: 10

FBQ40: The negation of tautology is a \_\_\_\_\_\_\_

Answer: contradiction

FBQ41: The magnitude of the vector is \_\_\_\_\_

Answer: 13

FBQ42: The magnitude of the vector is \_\_\_\_

Answer: 5

FBQ43: Two vectors are said to be \_\_\_ if they are in equal direction

Answer: parallel

FBQ44: A \_\_\_\_\_ is a succession of terms spanned by a rule or formula

Answer: sequence

FBQ45: A sequence in which each term differs by a common difference is known as \_\_\_\_\_

Answer: Arithmetic Sequence

FBQ46: The 6th term of an A.P whose first term is 102 and common difference is -3 is \_\_\_\_

Answer: 87

FBQ47: the point at which the curve is neither a maximum nor a minimum value is called point of \_\_\_

Answer: inflexion

FBQ48: The 11th term of an A.P whose first term is 102 and common difference is -3

Answer: 72

FBQ49: \_\_\_\_\_\_ sequence is a sequence in which each successive terms of the sequence are in equal ratio

Answer: geometric

FBQ50: A \_\_\_\_ sequence is one whose first and last element are known

Answer: finite

MCQ1: … is the study and analysis of a mathematical proposition as to ascertain the Truth Value of the proposition.

Answer: Logic

MCQ2: Lagos is a cosmopolitan state. The Truth Value of this is …

Answer: true

MCQ3: There are two types of statements:

Answer: simple and composite

MCQ4: The connective "∧" in logic is a…

Answer: conjunction

MCQ5: The connective "⇒ " in logic is a…

Answer: conditional

MCQ6: The connective "∼" in logic is a…

Answer: negative

MCQ7:  The connective "⟺ " in logic is a…

Answer: bi – implication

MCQ8: The negation of contradiction is a …

Answer: tautology

MCQ9: … is said to be formed when the conjunction of a set of simple mathematical statements gives rise to another mathematical statement.

Answer: argument

MCQ10: If ( p ∧ q) = p and ( p ∨ q) = p implies an…

Answer: Idempototent Laws

MCQ11: If (p ∨ q) ∨ r = p ∨ (q∨ r) and (p ∧ q) ∧ r = p ∧ (q∧ r) implies an…

Answer: Associate Laws

MCQ12:  If (p ∧ q) = (q∧ p) and (p ∨ q) = (q∨ p) implies an…

Answer: Commutative Laws

MCQ13:  --- reads “the goods are standard and the goods are expensive

Answer: (p ∧ q)

MCQ14: … reads “the goods are standard if and only if the goods are expensive”

Answer: (p ↔ q)

MCQ15:  … is equivalent to (p ∨ q)

Answer: (p ↔ q)

MCQ16:  Which of the following statement is true

Answer: (p ∨ q) ∧ ( p∨ r) = p∨ (q ∧ r )

MCQ17: Which of the following statement is true

Answer: (~ (p∨ ~ q)= ~ (p∧~ q)

MCQ18:  …. is a rectangular array of numbers with reference to specific rules governing the array

Answer: Matrix

MCQ19: A matrix that has elements only on its diagonal is called

Answer: diagonal matrix

MCQ20: The … of a matrix is the inter- changing of its row with the column.

Answer: transpose matrix

MCQ21:  A matrix in which its transpose is equal to itself is called…

Answer: symmetric matrix

MCQ22:  Given that A=123456 and B=123456, Find AB?

Answer: 51215192631294051

MCQ23:  Find the determinant of the A=2-456?

Answer: 32

MCQ24:  Given that A =123321132, Find the determinant of A

Answer: 3

MCQ25: A matrix is said to be singular if the determinant is equal to

Answer: 0

MCQ26:  Given that 13k4 is a singular matrix. Find the value of k?

Answer: 43

MCQ27: Given that A =201k23214 , what is the value of k, if A is said be a singular matrix?

Answer: -6

MCQ28:  Given that x + 2y = 3, 3x + 4y =1. What is x and y?

Answer: -5, 4

MCQ29:  Given that x + 2y + 3z =1, 3x + 2y + z = 4, x + 3y + 2z = 0. What is x,y and z?

Answer: 74 , - 34, 14

MCQ30:  Let A =123450214 , then the cofactor of matrix A is the matrix

Answer: 20-16-6-5-23-1512-3

MCQ31: What is the common difference in the sequence 3, 5, 7, 9, 11…

Answer: 2

MCQ32: Calculate the determinant of the matrix A =123450214?

Answer: -10

MCQ33:  Given the following equations for two related markets (A) and (B). Find the equilibrium conditions for each market. What is the equilibrium price for each marketxd (A) = 82 – 3PA + PB , xd (B) = 92 + 2PA - 4PB , xs (A) = -5 + 15PA xs (A) = -6 + 32PB,where xd and xs denote quantity demanded and quantity supplied respectively.

Answer: PA = 5, PB = 3 are the equilibrium prices for each market

MCQ34:  A necessary and sufficient condition for a matrix (square) A to be invertible is that

Answer: A ≠ 0

MCQ35:  What is the sum of AB→, -CB→, CD→, − ED→ .

Answer: AE→

MCQ35: The equation of a straight line at pointand slope 5 is given byMCQ36: The equation of the straight line given one pointand slope 3 is MCQ37: The equation of a line given two points ,is given byMCQ38: Obtain the equation of the line having points A(-2, 3) and B(4, -6)MCQ39: The equation of the line with points A(-3, -2) and B(-1, 0)MCQ40: The necessary and sufficient conditions for two lines to intercept are

Answer: they must be consistent and independent

MCQ41: Two lines are said to be parallel if

Answer: All the options

MCQ42: Find the coordinate of the point of interception of the lines: 2x + 3y = 5 ; x + 2y = 3MCQ43: Find the coordinate of the point of interception of the lines: x + 2y = 5 ; x + y = 3

Answer:

MCQ44: Find the coordinate of the point of interception of the lines: 2x + y = 5 ; x + y = 3MCQ45: Let the gradient of a line be 3, find the equation of the line at point (1,2)

Answer: y = 2x

MCQ46: Find the equation of the line which is parallel to 3x + 2y = 5 and passes through the point (2, -4)

Answer: 3x + 2y = -2

MCQ47: Find the equation of the line which is parallel to 3x - 2y = 5 and passes through the point (-2, -4)

Answer: -3x + 2y = -2

MCQ48: Find the equation of line that passes through the points: A(2, 3) and B(4, 6)

Answer: 2y =3x

MCQ50: What is the gradient the line that passes through points A(-3, -2) and B(1, 0)? MCQ1: … is the study and analysis of a mathematical proposition as to ascertain the Truth Value of the proposition.

Answer: Logic

MCQ2: Lagos is a cosmopolitan state. The Truth Value of this is …

Answer: true

MCQ3: There are two types of statements:

Answer: simple and composite

MCQ4: The connective "∧" in logic is a…

Answer: conjunction

MCQ5: The connective "⇒ " in logic is a…

Answer: conditional

MCQ6: The connective "∼" in logic is a…

Answer: negative

MCQ7:  The connective "⟺ " in logic is a…

Answer: bi – implication

MCQ8: The negation of contradiction is a …

Answer: tautology

MCQ9: … is said to be formed when the conjunction of a set of simple mathematical statements gives rise to another mathematical statement.

Answer: argument

MCQ10: If ( p ∧ q) = p and ( p ∨ q) = p implies an…

Answer: Idempototent Laws

MCQ11: If (p ∨ q) ∨ r = p ∨ (q∨ r) and (p ∧ q) ∧ r = p ∧ (q∧ r) implies ..…

Answer: Associate Laws

MCQ12: If (p ∧ q) = (q∧ p) and (p ∨ q) = (q∨ p) implies an…&nbsp;

Answer: Commutative Laws

MCQ13:  --- reads “the goods are standard and the goods are expensive

Answer: (p ∧ q)

MCQ14: … reads “the goods are standard if and only if the goods are expensive”

Answer: (p ↔ q)

MCQ15:  … is equivalent to (p ∨ q)

Answer: (p ↔ q)

MCQ16:  Which of the following statement is true

Answer: (p ∨ q) ∧ ( p∨ r) = p∨ (q ∧ r )

MCQ17: Which of the following statement is true

Answer: (~ (p∨ ~ q)= ~ (p∧~ q)

MCQ18: …. is a rectangular

array of numbers with reference to specific rules governing the &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp; array

Answer: Matrix

MCQ19: A matrix that has elements only on its diagonal is called

Answer: diagonal matrix

MCQ20: The … of a matrix is the inter- changing of its row with the column.

Answer: transpose matrix

MCQ21:  A matrix in which its transpose is equal to itself is called…

Answer: symmetric matrix

MCQ22:  Given that A=123456 and B=123456, Find AB?

Answer: 51215192631294051

MCQ23:  Find the determinant of the A=2-456?

Answer: 32

MCQ24:  Given that A =123321132, Find the determinant of A

Answer: 3

MCQ25: A matrix is said to be singular if the determinant is equal to

Answer: 0

MCQ26:  Given that 13k4 is a singular matrix. Find the value of k?

Answer: 43

MCQ27: Given that A =201k23214 , what is the value of k, if A is said be a singular matrix?

Answer: -6

MCQ28:  Given that x + 2y = 3, 3x + 4y =1. What is x and y?

Answer: -5, 4

MCQ29:  Given that x + 2y + 3z =1, 3x + 2y + z = 4, x + 3y + 2z = 0. What is x,y and z?

Answer: 74 , - 34, 14

MCQ30:  Let A =123450214 , then the cofactor of matrix A is the matrix

Answer: 20-16-6-5-23-1512-3

MCQ31: What is the common difference in the sequence 3, 5, 7, 9, 11…

Answer: 2

MCQ32: Calculate the determinant of the matrix A =123450214?

Answer: -10

MCQ33: Given the following equations for two related markets (A)

and (B). Find the equilibrium conditions for each market. What is

the equilibrium price for each market

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp; xd (A) = 82 – 3PA + PB ,&nbsp;&nbsp; xd (B) = 92 + 2PA -

4PB ,

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp; &nbsp;xs (A)

= -5 + 15PA&nbsp;&nbsp;

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp; xs (A) = -6 + 32PB,

&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp; where

xd and xs denote quantity demanded and quantity supplied &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp; respectively.&nbsp;

Answer: PA = 5, PB = 3 are the equilibrium prices for each market

MCQ34:  A necessary and sufficient condition for a matrix (square) A to be invertible is that

Answer: A ≠ 0

MCQ35:  What is the sum of AB→, -CB→, CD→, − ED→ .

Answer: AE→

MCQ35: The equation of a straight line at point and slope 5 is given by

Answer:

MCQ36: The equation of the straight line given one point and slope 3 is

Answer:

MCQ37: The equation of a line given two points ,is given by

Answer:

MCQ38: Obtain the equation of the line having points A(-2, 3) and B(4, -6)

Answer:

MCQ39: The equation of the line with points A(-3, -2) and B(-1, 0)

Answer:

MCQ40: The necessary and sufficient conditions for two lines to intercept are

Answer: they must be consistent and independent

MCQ41: Two lines are said to be parallel if

Answer: All the options

MCQ42: Find the coordinate of the point of interception of the lines: 2x + 3y = 5 ; x + 2y = 3

Answer:

MCQ43: Find the coordinate of the point of interception of the lines: x + 2y = 5 ; x + y = 3

Answer:

MCQ44: Find the coordinate of the point of interception of the lines: 2x + y = 5 ; x + y = 3

Answer:

MCQ45: Let the gradient of a line be 3, find the equation of the line at point (1,2)

Answer: y = 2x

MCQ46: Find the equation of the line which is parallel to 3x + 2y = 5 and passes through the point (2, -4)

Answer: 3x + 2y = -2

MCQ47: Find the equation of the line which is parallel to 3x - 2y = 5 and passes through the point (-2, -4)

Answer: -3x + 2y = -2

MCQ48: Find the equation of line that passes through the points: A(2, 3) and B(4, 6)

Answer: 2y =3x

MCQ50: What is the gradient the line that passes through points A(-3, -2) and B(1, 0)?

Answer: