

Mathematical modeling technique designed to optimize the usage of resources is called.

- A. Function
- B. Composition
- C. Linear
- D. Linear programming

ANSWER: D

IN LP (Linear programming) we aim to optimize.

- A. Variable
- B. Objective
- C. Condition
- D. None of these

ANSWER: B

IN LP we need to satisfy.

- A. Objective
- B. Constraints
- C. Variables
- D. None of these

ANSWER: B

In LP we seek to determine.

- A. Variables
- B. Constraints
- C. Conditions
- D. None of these

ANSWER: A

Any solution that satisfies all the constraints of model is called.

- A. Solvent
- B. Insolvent
- C. Feasible
- D. None of these

ANSWER: D

A typical LP model may includes.

- A. Many variables
- B. Many constraints
- C. A and B
- D. None of these

ANSWER: C

The solution side of $6x+4y \leq 24$ includes.

- A. (6,1)
- B. (1,6)
- C. (8,1)
- D. (0,2)

ANSWER: D

Point (4,5) satisfy.

- A. $X+y < 9$
- B. $X+y > 9$
- C. $X+y = 9$
- D. None of these

ANSWER: C

$X+y=0$ is passes through -----quadrants.

- A. First

B. Second

C. Fourth

D. Band C

ANSWER: D

Equation of horizontal line is.

A. $X+y=0$

B. $Y=4$

C. $X=4$

D. None of these

ANSWER: B

Optimum solution is always associated with.

A. Line

B. Graph

C. Corner point

D. None of these

ANSWER: C

Identifying the extreme points of graph algebraically is called.

A. Simplex method

B. Graphical

C. Linear

D. None of these

ANSWER: A

For simplex method we convert the inequality constraints into.

A. Slack variables

B. Surplus

- C. Equations
- D. None of these

ANSWER: C

In the standard LP form all the constraints are equations with ----- right hand side.

- A. Positive
- B. Negative
- C. Nonnegative
- D. None of these

ANSWER: C

In the standard LP form all variables are.

- A. Nonnegative
- B. Square
- C. Cubic
- D. None of these

ANSWER: A

$X+y \leq 3$ equivalent to.

- A. $X+y+s = 3$
- B. $X+y-s = 3$
- C. $X+y-3 = 0$
- D. None of these

ANSWER: A

$3x+y \geq -5$ equivalent to.

- A. $3x+y+s = -5$
- B. $-3x-y+s = 5$
- C. A or B

D. None of these

ANSWER: B

Minimization of function $-f(u,v,w,x,y)$ is equivalent to maximization of.

A. $f(x)$

B. $f(u,v,w,x,y)$

C. $-f(u,v,w,x,y)$

D. None of these

ANSWER: B

$F=4x+2y+3z$ is called.

A. Linear function

B. Graph function

C. Square function

D. None

ANSWER: A

A point where objective function takes maximum or minimum value is called.

A. Point

B. Optimum solution

C. Curve

D. None

ANSWER: B

Vectors are a special case of.

A. Vector

B. Gradient

C. Matrices

D. None

ANSWER: C

If $A+B$ has order 2 by 2 then total entries of A are.

A. 5

B. 4

C. 8

D. None

ANSWER: B

$5B=2B+---$

A. $2B$

B. $3B$

C. $4B$

D. None

ANSWER: B

$AI=IA=A$ then I is called ---- matrix.

A. Strong

B. Weaker

C. Unit

D. None

ANSWER:

The matrix $5I$ is called.

A. Unit matrix

B. Identity matrix

C. Scalar matrix

D. None

ANSWER: C

If order of x is $n \times n$ Then $x^0 =$ _____.

- A. O matrix
- B. I
- C. X
- D. Non

ANSWER: B

If order of $[(4A)]^t$ is 5×5 Then order of A is.

- A. 25
- B. 8
- C. 5
- D. Non

ANSWER: D

If order of x is $n \times n$ Then order of x^0 is.

- A. O matrix
- B. N
- C. 0
- D. Non

ANSWER: D

If matrix A is of order 3×4 and matrix B is of 4×3 then $A+B$ is.

- A. O matrix
- B. Matrix A
- C. Matrix B
- D. Non

ANSWER: D

If $5(AB) =$

A. $A^5 B$

B. $(5A)(5B)$

C. $(5A)B$

D. Non

ANSWER: C