

MTH601 Quiz

Solved by Rizwan Qadeer (Riz Mughal)

BSCS Completed

SQA Engineer

I can solve any quiz of any book from any Department

With 100% result

Guarantee marks

Youtube link:

<https://www.youtube.com/channel/UCINsFwDiB62SValCcPDZbRQ/playlists>

MTH601:Quiz

Quiz Start Time: 05:18 PM, 17 August 2020

Question # 1 of 10 (Start time: 05:18:14 PM, 17 August 2020)


Total Marks: 1

In North West Corner method, the first step after choosing the appropriate cell in 1st row, we allocate -----so that the capacity of first row or first column is exhausted.

Select the correct option

<input type="radio"/>	as least as possible	//
<input checked="" type="radio"/>	as much as possible	//
<input type="radio"/>	non- negative quantity	//
<input type="radio"/>	any arbitrary quantity	//

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Question # 2 of 10 (Start time: 05:18:41 PM, 17 August 2020)

In two phase method process, first phase _____ the sum of artificial variables.

Select the correct option

<input checked="" type="radio"/>	minimize
<input type="radio"/>	maximize
<input type="radio"/>	maximize or minimize depending on the situation
<input type="radio"/>	non of these

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Question # 3 of 10 (Start time: 05:19:05 PM, 17 August 2020)

Total Marks: //

If an LP problem contains large number of constraints and a smaller number of variables then which of the following will reduce the computational burden in finding its solution?

Select the correct option

<input type="radio"/>	M-method	//
<input type="radio"/>	Two phase method	//
<input type="radio"/>	Graphical method	//
<input checked="" type="radio"/>	Duality principle	//

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Question # 4 of 10 (Start time: 05:19:30 PM, 17 August 2020)

If initial basic solution is -----, while solving an LP problem then no further iteration can be performed.

Select the correct option

degenerate

non-degenerate

feasible

infeasible

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Question # 5 of 10 (Start time: 05:19:55 PM, 17 August 2020)

Which of the following difficulty may found while attempting an LP problem by M-method?

Select the correct option

- | | |
|----------------------------------|---|
| <input type="radio"/> | It often leads to infeasible solution |
| <input checked="" type="radio"/> | Computational error due to large value of M |
| <input type="radio"/> | Degeneracy is inevitable |
| <input type="radio"/> | Artificial do not leave the basis |

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Question # 6 of 10 (Start time: 05:20:18 PM, 17 August 2020)

The cost coefficient of artificial variable in Objective function is -----.

Select the correct option

<input type="radio"/>	0
<input checked="" type="radio"/>	M
<input type="radio"/>	1
<input type="radio"/>	> than 1

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Question # 7 of 10 (Start time: 05:20:38 PM, 17 August 2020)

Total Marks: 1

While solving an LP problem by the Simplex method, in the standard table, the element at the intersection of key column and key row is called element.

Select the correct option

- Entering
- Leaving
- Slack
- Pivot

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Question # 8 of 10 (Start time: 05:20:56 PM, 17 August 2020)

Total Marks: 1

For finding the maximum profit in an enterprise of selling two products such that 'freezing' the sale of one product and keep selling the other. This scenario is studied under

Select the correct option

- Un-boundedness
- Duality
- Degeneracy
- Artificial variable technique

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Question # 9 of 10 (Start time: 05:21:22 PM, 17 August 2020)

Which of the following will be an example of degenerate basic feasible solution for an LP problem?

Select the correct option

- | | |
|----------------------------------|----------|
| <input type="radio"/> | (2,3-1) |
| <input checked="" type="radio"/> | (0,2,1) |
| <input type="radio"/> | (2,1,3) |
| <input type="radio"/> | (-1,2,0) |
- RIZ MUGHAL*
- R*

Question # 10 of 10 (Start time: 05:21:41 PM, 17 August 2020)

In a Transportation Problem, the objective function 'Z' gives -----.

Select the correct option

<input checked="" type="radio"/>	Total Cost of transportation
<input type="radio"/>	Total Time of transportation
<input type="radio"/>	Total Profit of transportation
<input type="radio"/>	Total inventory be supplied in transportation

2nd account

MTH601:Quiz

Question # 1 of 10 (Start time: 09:21:52 PM, 17 August 2020)

In a Transportation Problem, the objective function 'Z' gives -----.

Select the correct option

<input checked="" type="radio"/>	Total Cost of transportation
<input type="radio"/>	Total Time of transportation
<input type="radio"/>	Total Profit of transportation
<input type="radio"/>	Total inventory be supplied in transportation

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Question # 2 of 10 (Start time: 09:22:13 PM, 17 August 2020)

Total

If an LP problem contains large number of constraints and a smaller number of variables then which of the following will reduce computational burden in finding its solution?

Select the correct option

<input type="radio"/>	M-method
<input type="radio"/>	Two phase method
<input type="radio"/>	Graphical method
<input checked="" type="radio"/>	Duality principle

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Question # 4 of 10 (Start time: 09:22:56 PM, 17 August 2020)

Total Marks: 1

Which of the following order pair would minimize the objective function of the linear programming problem; $z = x + 5y$ subject to $x \geq 2, y \geq 0$?

Select the correct option

[Reload Math Equations](#)

<input type="radio"/>	(2,3)
<input checked="" type="radio"/>	(2,0)
<input type="radio"/>	(0,3)
<input type="radio"/>	(0,0)

Question # 5 of 10 (Start time: 09:23:19 PM, 17 August 2020)

Total Marks:

Under which of the following condition to solve an LP by using two phase method, we can't proceed for 2nd phase?

Select the correct option

<input type="radio"/>	Objective function of 1st phase has zero value.
<input checked="" type="radio"/>	Objective function of 1st phase has positive value.

Question # 6 of 10 (Start time: 09:23:45 PM, 17 August 2020)

Total Ma

A balanced transportation model with '5' number of sources and '7' destinations has ----- number of constraint equations.

Select the correct option

- | | |
|----------------------------------|----|
| <input type="radio"/> | 2 |
| <input checked="" type="radio"/> | 12 |
| <input type="radio"/> | 35 |
| <input type="radio"/> | 10 |

Question # 7 of 10 (Start time: 09:24:06 PM, 17 August 2020)

Total Marks: 1

By Simplex method, to maximize 'Z = 2x + 9y' of an LP problem, if 'z=0' for the initial iteration then for its next improved solution, which of the following would be the next entering variable?

Select the correct option

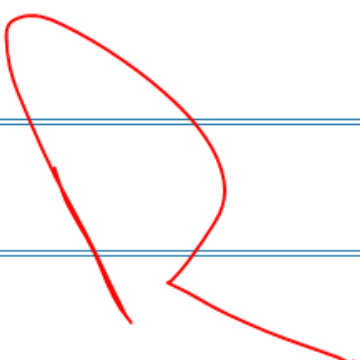
- | | | |
|----------------------------------|-----|----|
| <input type="radio"/> | x>0 | // |
| <input checked="" type="radio"/> | y>0 | // |
| <input type="radio"/> | x<0 | // |
| <input type="radio"/> | y<0 | // |

Question # 8 of 10 (Start time: 09:24:24 PM, 17 August 2020)

Total Marks

For North West Corner method, in the first row and first column, resource and sink contain '5' and '7' units respectively; then after allocating the appropriate amount 'x11' in the cell (1,1), we will move towards which of the following cell?

Select the correct option

- | | | |
|----------------------------------|-------|---|
| <input type="radio"/> | (2,2) | ✓ |
| <input type="radio"/> | (5,2) | ✓ |
| <input type="radio"/> | (1,2) | ✓ |
| <input checked="" type="radio"/> | (2,1) | ✓ |
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Question # 9 of 10 (Start time: 09:24:41 PM, 17 August 2020)

Total M

By Simplex method, to minimize ' $Z = 2x+9y$ ' of an LP problem, if ' $z=A>0$ ' for the initial iteration then for its next improved solution ($0<A<100$), which of the following would be the next entering variable?

Select the correct option

- | | |
|----------------------------------|-------|
| <input type="radio"/> | $x<0$ |
| <input type="radio"/> | $y<0$ |
| <input checked="" type="radio"/> | $x>0$ |
| <input type="radio"/> | $y>0$ |

Question # 10 of 10 (Start time: 09:25:00 PM, 17 August 2020)

Dual of a Dual is -----

Select the correct option

<input checked="" type="radio"/>	Primal
<input type="radio"/>	Dual
<input type="radio"/>	Primal-dual
<input type="radio"/>	$(\text{Dual})^2$

3rd account

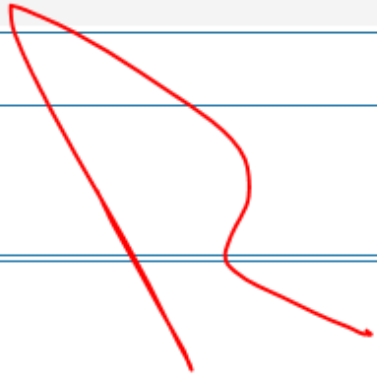
Question # 1 of 10 (Start time: 09:29:31 PM, 17 August 2020)

While solving an LP by two phase method, an objective function of 1st phase is always of-----.

Select the correct option

<input type="radio"/>	maximization
<input checked="" type="radio"/>	minimization
<input type="radio"/>	dependent on original objective function
<input type="radio"/>	none of these

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Question # 2 of 10 (Start time: 09:29:52 PM, 17 August 2020)

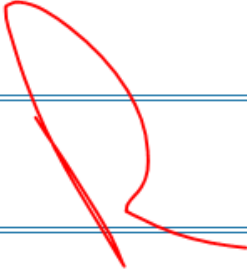
Total Mark:

In two phase method if the minimum value of objective function in the first phase is greater than zero, then the solution of original problem _____.

Select the correct option

<input type="radio"/>	is uncertain
<input type="radio"/>	exists
<input checked="" type="radio"/>	does not exists
<input type="radio"/>	non of these

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Question # 3 of 10 (Start time: 09:30:14 PM, 17 August 2020)

Total Marks: 1

In the Simplex method to solve an LP problem of minimization, if at the end of iteration, there is a positive coefficient in the objective row then the given problem

Select the correct option

<input type="radio"/>	can not be optimized	//
<input type="radio"/>	has no solution	//
<input type="radio"/>	has been maximized	//
<input checked="" type="radio"/>	needs further improvement	//

Question # 4 of 10 (Start time: 09:30:36 PM, 17 August 2020)

Total Marks: 1

For an unbalanced Transportation problem, if the total demand is MORE than total supply then which of the following is true in order to balance the problem?

Select the correct option

<input type="radio"/>	One constraint will have evacuate	//
<input type="radio"/>	One constraint will have to add	//
<input type="radio"/>	A dummy sink would have to include with demand equal to the surplus	//
<input checked="" type="radio"/>	A dummy source would have to include with supply equal to shortage	//

Question # 5 of 10 (Start time: 09:30:57 PM, 17 August 2020)

Shortcoming of Big M method is that the value of M could be _____.

Select the correct option

- | | |
|----------------------------------|------------|
| <input type="radio"/> | very small |
| <input checked="" type="radio"/> | very large |
| <input type="radio"/> | negative |
| <input type="radio"/> | positive |

[Click to Save Answer](#)

Question # 6 of 10 (Start time: 09:31:15 PM, 17 August 2020)

Total Marks:

In Simplex method to solve an LP problem, Gauss Jordan Elimination method demands that all the key column entries should be zero except-----.

Select the correct option

- | | | |
|----------------------------------|--------------------------------------|----|
| <input type="radio"/> | 1st row entry | // |
| <input checked="" type="radio"/> | key row(pivot)entry | // |
| <input type="radio"/> | last row entry | // |
| <input type="radio"/> | row with maximum ratio on RHS column | // |

Question # 7 of 10 (Start time: 09:31:35 PM, 17 August 2020)

Total Marks: 1

For an unbalanced Transportation problem, if the total demand is LESS than total supply then which of the following is true in order to balance the problem?

Select the correct option

- | | | |
|----------------------------------|---|----|
| <input checked="" type="radio"/> | A dummy sink would have to include with demand equal to the surplus | // |
| <input type="radio"/> | A dummy source would have to include with supply equal to shortage | // |
| <input type="radio"/> | One constraint will have evacuate | // |
| <input type="radio"/> | One constraint will have to add | // |

Question # 8 of 10 (Start time: 09:31:56 PM, 17 August 2020)

Total Marks: 1

In the Simplex method to solve an LP problem of maximization, if at the end of iteration, every entry of objective function row is positive then the given problem-----.

Select the correct option

- | | | |
|----------------------------------|---------------------------|----|
| <input type="radio"/> | needs further improvement | // |
| <input checked="" type="radio"/> | has been maximized | // |
| <input type="radio"/> | can not be optimized | // |
| <input type="radio"/> | has no solution | // |

Question # 9 of 10 (Start time: 09:32:16 PM, 17 August 2020)

In the initial iteration of Big M-method, the artificial variables appear in -----.

Select the correct option

<input checked="" type="radio"/>	Basis
<input type="radio"/>	Non-basic variables' set

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Question # 10 of 10 (Start time: 09:32:46 PM, 17 August 2020)

Total Mark

In two phase method, for the phase-I, if the objective function in terms of artificial variables is not minimized then the given problem has-----.

Select the correct option

<input type="radio"/>	Feasible solution
<input type="radio"/>	Optimal solution
<input checked="" type="radio"/>	Infeasible solution
<input type="radio"/>	Degeneracy

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