



Grand Quiz Spring 2021

Subject Code MTH601 lecture 1 to 22

Solved By Riz Mughal



Sialkot,
Punjab Pakistan



Rizwanqadeer848@gmail.com



<https://www.facebook.com/groups/923887914750307>



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

Dear Viewers:

I'm providing 100% correct quiz solution. You can visit my YouTube channel and get more information about all other subjects' quizzes and final year project (CS619).

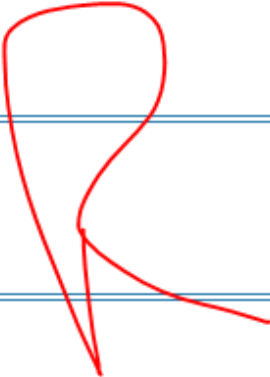
RIZ MUGHAL (SQA ENGINEER)

Question # 1 of 30 (Start time: 09:00:15 AM, 29 June 2021)

Tot

Which of the following correspond to the practical limitations of available resources while modeling a real life situation into a linear program?

Select the correct option


- | | |
|----------------------------------|--------------------|
| <input checked="" type="radio"/> | Constraints |
| <input type="radio"/> | Objective function |
| <input type="radio"/> | Linear function |
| <input type="radio"/> | Decision variables |
- 

MTH601:Grand Quiz

Question # 2 of 30 (Start time: 09:00:43 AM, 29 June 2021)

Which of the following method follows iterative procedure to solve a Linear Programming problem?

Select the correct option

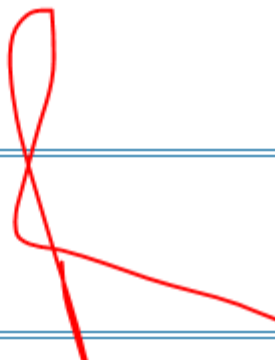
- | | |
|----------------------------------|---------------------|
| <input type="radio"/> | Graphical |
| <input checked="" type="radio"/> | Algebraic (Simplex) |
- 

MTH601:Grand Quiz

Question # 3 of 30 (Start time: 09:00:57 AM, 29 June 2021)

Solution region of the constraints: ' $2x+3y>12$ ' and ' $2x+3y<12$ ' will be the-----.

Select the correct option


- | | |
|----------------------------------|---------------------------|
| <input type="radio"/> | point(6,4) |
| <input type="radio"/> | straight line: $2x+3y=12$ |
| <input checked="" type="radio"/> | empty set |
| <input type="radio"/> | all first quadrant |
- 

MTH601:Grand Quiz

Question # 4 of 30 (Start time: 09:01:13 AM, 29 June 2021)

In the graph of the Purchasing Model with shortages, the area under the horizontal axis represents -----

Select the correct option

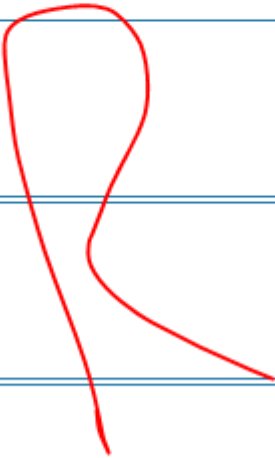
- | | |
|----------------------------------|-----------------------|
| <input type="radio"/> | set up cost of item |
| <input type="radio"/> | purchase cost of item |
| <input type="radio"/> | carrying cost of item |
| <input checked="" type="radio"/> | shortage cost of item |
- 

Question # 5 of 30 (Start time: 09:01:27 AM, 29 June 2021)

The straight line associated with the constraint: $2x+3y<12$, will meet x-axis at a distance of----- units from origin.

Select the correct option

<input type="radio"/>	2
<input type="radio"/>	4
<input checked="" type="radio"/>	6
<input type="radio"/>	3

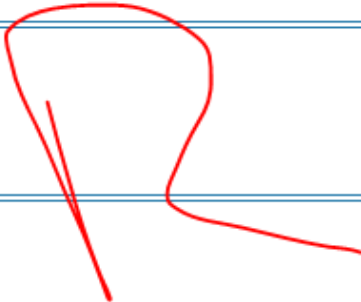


Question # 6 of 30 (Start time: 09:01:51 AM, 29 June 2021)

Total

Which of the following value is correct for the expected time of an activity having optimistic, pessimistic and most likely times as 4, 8 and 6 days respectively?

Select the correct option

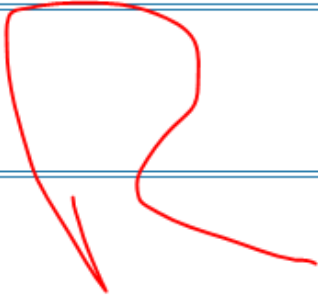
- 6.66 days
 - 4.66 days
 - 6 days
 - 9.33 days
- 

Question # 7 of 30 (Start time: 09:02:10 AM, 29 June 2021)

Total Mark

In a network flow diagram, for an activity (i,j) of duration of three days, if its earliest start time is of two days then which of the following will be its early finish time?

Select the correct option

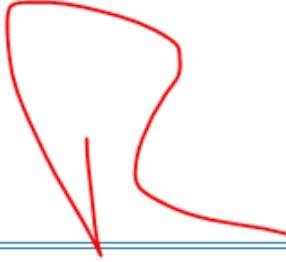
- One and half day
 - One day
 - Six days
 - Five days
- 

Question # 8 of 30 (Start time: 09:02:26 AM, 29 June 2021)

Total Marks: 1

Which of the following method would remain impractical to solve a Linear Programming problem when there are more than two decision variable?

Select the correct option

- | | | | |
|----------------------------------|---------------------|--|----|
| <input type="radio"/> | Algebraic (Simplex) |  | // |
| <input checked="" type="radio"/> | Graphical | | // |

Question # 9 of 30 (Start time: 09:02:44 AM, 29 June 2021)

Total

In a development project, if an activity (m,n) of seven days duration, starts late on 5rd day then which of the following will be its latest finish time?

Select the correct option

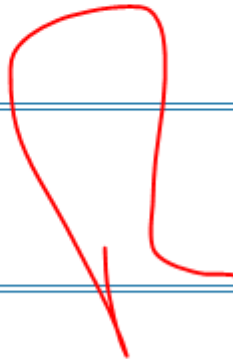
- 7th day
- 5th or 7th day
- 12th day
- 5th day



Question # 10 of 30 (Start time: 09:03:00 AM, 29 June 2021)

Which of the following is an intermediate step to model a linear programming problem?

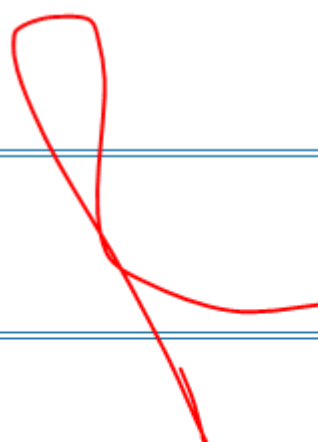
Select the correct option

- | | |
|----------------------------------|--|
| <input type="radio"/> | Identify the objective function |
| <input checked="" type="radio"/> | Identify the non-negative restrictions and constraints |
| <input type="radio"/> | Identify the unknown decision variables |
| <input type="radio"/> | None of these |
- 

Question # 11 of 30 (Start time: 09:03:16 AM, 29 June 2021)

A/An ----- is the collection of inter related activities to be performed in a particular sequence to completion.

Select the correct option

- | | |
|----------------------------------|---------|
| <input checked="" type="radio"/> | project |
| <input type="radio"/> | branch |
| <input type="radio"/> | event |
| <input type="radio"/> | node |
- 

Question # 12 of 30 (Start time: 09:03:31 AM, 29 June 2021)

Total Marks: 1

Which of the following times are directly related to the activity cost that is by reducing the activity duration, the direct cost of the corresponding activity is increased?

Select the correct option

<input type="radio"/>	PERT Times	
<input checked="" type="radio"/>	CPM Times	

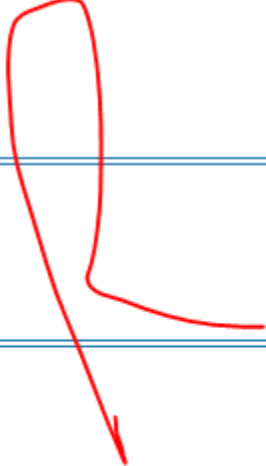
Click to Save Answer & Move to Next Question

MTH601:Grand Quiz

Question # 13 of 30 (Start time: 09:03:49 AM, 29 June 2021)

Which of the following is an operations research (OR) process?


Select the correct option

- | | |
|----------------------------------|--------------------|
| <input type="radio"/> | Simplex method |
| <input type="radio"/> | Linear programming |
| <input checked="" type="radio"/> | Observation |
| <input type="radio"/> | Networking |
- 

Question # 14 of 30 (Start time: 09:04:04 AM, 29 June 2021)

In the Purchasing Model with Shortages the Cost Function 'C(S,Q)' can also be expressed as function of -----.

Select the correct option

- | | |
|----------------------------------|-------|
| <input type="radio"/> | (S,D) |
| <input type="radio"/> | (Q,D) |
| <input checked="" type="radio"/> | (S,t) |
| <input type="radio"/> | (t,D) |
- 


Question # 15 of 30 (Start time: 09:04:21 AM, 29 June 2021)

Total Marks

Which of the following would be the objective of the yield per minute in a chemical process which depends upon the temperature 'x' and pressure 'y'?

Select the correct option

<input type="radio"/>	Minimization
<input type="radio"/>	Inflection
<input checked="" type="radio"/>	Maximization
<input type="radio"/>	Average

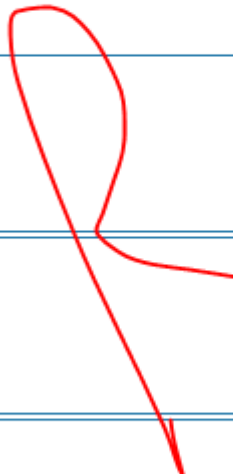


MTH601:Grand Quiz

Question # 16 of 30 (Start time: 09:04:38 AM, 29 June 2021)

Which of the following is an operations research (OR) process?

Select the correct option

- | | |
|----------------------------------|--------------------|
| <input type="radio"/> | Linear programming |
| <input type="radio"/> | Simplex method |
| <input type="radio"/> | Networking |
| <input checked="" type="radio"/> | Solution |
- 

Question # 17 of 30 (Start time: 09:04:54 AM, 29 June 2021)

Total M

In the Dynamic Order Quantity problem if the ratio of Setup and Carrying Costs is '500' and the Demands of 2nd and 3rd months are 50 and 130 respectively then which of the following is true about the 2nd month's requirement?

Select the correct option

- | | |
|----------------------------------|---|
| <input checked="" type="radio"/> | 2nd month demand can be included in 1st month |
| <input type="radio"/> | 2nd month demand can be included in 3rd month |
| <input type="radio"/> | 2nd month demand can be included in any month of the year |
| <input type="radio"/> | 2nd month demand will have to fulfill in 2nd month |
- 

Question # 18 of 30 (Start time: 09:05:09 AM, 29 June 2021)

Total Marks:

The mathematical technique which is used to solve a wide class of problems such as allocating scarce resources among competitive activities is known as

Select the correct option

- Classical model
- Descriptive model
- Linear Programming model
- Mathematical Model

MTH601:Grand Quiz

Question # 19 of 30 (Start time: 09:05:28 AM, 29 June 2021)

Which of the following would be the objective of the cost per unit of producing certain cameras?

Select the correct option


- | | |
|----------------------------------|--------------|
| <input type="radio"/> | Average |
| <input checked="" type="radio"/> | Minimization |
| <input type="radio"/> | Inflection |
| <input type="radio"/> | Maximization |

Question # 20 of 30 (Start time: 09:05:50 AM, 29 June 2021)

In CPM each activity has one deterministic time while in PERT each activity has -----probabilistic time/times.

Select the correct option

<input checked="" type="radio"/>	three
<input type="radio"/>	also one
<input type="radio"/>	two
<input type="radio"/>	no




Question # 21 of 30 (Start time: 09:06:03 AM, 29 June 2021)

Total Marks: 1

In the phase of Early Start and Early Finish, to find the Critical Path in a network flow diagram, the computations are proceeded from ----- to the final event.

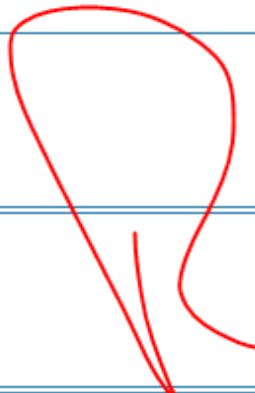
Select the correct option

<input checked="" type="radio"/>	left to right	
<input type="radio"/>	bottom to top	
<input type="radio"/>	top to bottom	
<input type="radio"/>	right to left	

Question # 22 of 30 (Start time: 09:06:19 AM, 29 June 2021)

In a development project, if an activity (i,j) of six days duration, starts late on 3rd day then which of the following will be its latest finish time?

Select the correct option

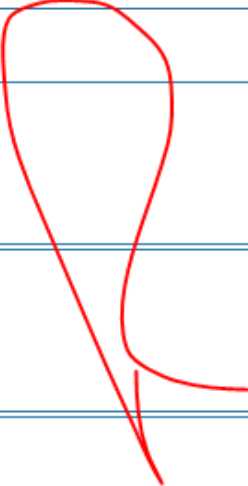
- 18th day
 - 9th day
 - 3rd day
 - 2nd day
- 

Question # 23 of 30 (Start time: 09:06:33 AM, 29 June 2021)

Total Mark

If the annual demand of a product is 10000 items, and its set up and inventory costs are 200 and 100 respectively then its economic order quantity is ----
----provided that shortage is fulfilled INSTANTANEOUSLY.

Select the correct option

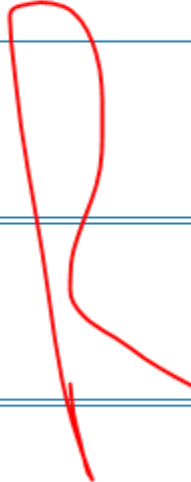
- | | |
|----------------------------------|-------------|
| <input checked="" type="radio"/> | 200 units |
| <input type="radio"/> | 20000 units |
| <input type="radio"/> | 40000 units |
| <input type="radio"/> | 100 units |
- 

MTH601:Grand Quiz

Question # 24 of 30 (Start time: 09:06:49 AM, 29 June 2021)

For a LP problem say:Max: $z=x+y$,under the constraints $x,y \geq 0$, the feasible region would be-----.

Select the correct option

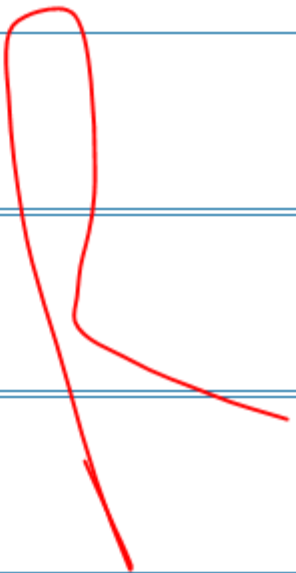
- | | |
|----------------------------------|------------------------|
| <input checked="" type="radio"/> | all the first quadrant |
| <input type="radio"/> | all xy-plane |
| <input type="radio"/> | empty |
| <input type="radio"/> | point(0,0) |
- 

MTH601:Grand Quiz

Question # 25 of 30 (Start time: 09:07:06 AM, 29 June 2021)

By which of the following method, any complex linear programming problem can be handled?

Select the correct option

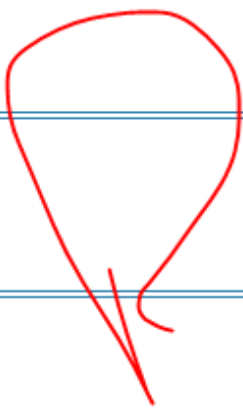
- | | |
|----------------------------------|-------------------|
| <input type="radio"/> | Degenerate method |
| <input type="radio"/> | Graphical method |
| <input checked="" type="radio"/> | Simplex method |
| <input type="radio"/> | Dual method |
- 

Question # 26 of 30 (Start time: 09:07:22 AM, 29 June 2021)

To

In the phase of Early Start and Early Finish, to find the Critical Path in a network flow diagram, for the first node(event), we start with time -----

Select the correct option

- with strict positive value
 - $t = 0$
 - $t = a$ (arbitrary)
 - $t = \text{infinity}$
- 

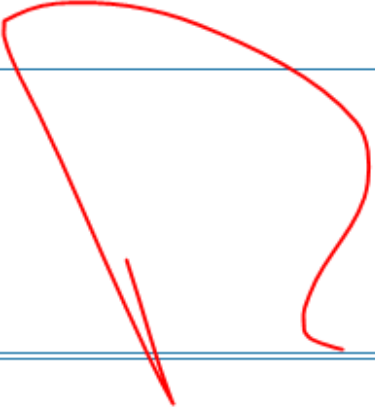
Question # 27 of 30 (Start time: 09:07:36 AM, 29 June 2021)

To

Solution region of the constraints: $2x+3y>12$ or $6x+9y=36$, will be the half plane bisected by ' $2x+3y=12$ ', ----- all the points on ' $2x+3y=12$ '.

Select the correct option

<input type="radio"/>	excluding
<input checked="" type="radio"/>	including



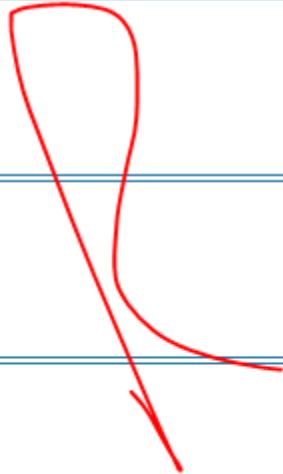
MTH601:Grand Quiz

Question # 28 of 30 (Start time: 09:07:50 AM, 29 June 2021)

Which of the following event has no immediate predecessor in any network flow diagram?

Select the correct option

<input type="radio"/>	Critical Event
<input checked="" type="radio"/>	Head Event
<input type="radio"/>	Tail Event
<input type="radio"/>	Non-Critical Event

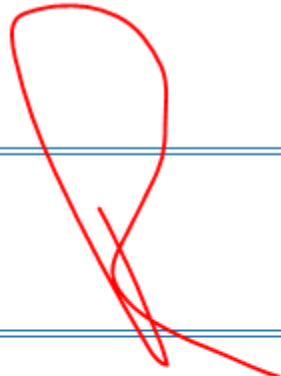


MTH601:Grand Quiz

Question # 29 of 30 (Start time: 09:08:06 AM, 29 June 2021)

Which one of the following is not an operations research problem solving steps?

Select the correct option

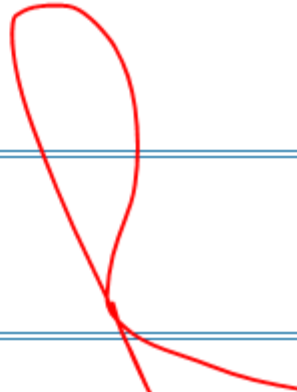
- | | |
|----------------------------------|----------------------------|
| <input checked="" type="radio"/> | variable selections |
| <input type="radio"/> | definition of the problems |
| <input type="radio"/> | observation |
| <input type="radio"/> | model construction |
- 

MTH601:Grand Quiz

Question # 30 of 30 (Start time: 09:08:23 AM, 29 June 2021)

For critical path of a network, which of the followings is the best suitable answer.

Select the correct option

- | | |
|----------------------------------|-------------------------------|
| <input type="radio"/> | Its total float is zero |
| <input type="radio"/> | Its free float is zero |
| <input checked="" type="radio"/> | All of the above |
| <input type="radio"/> | Its independent float is zero |
- 



Thank you for watching

Please share it with your friends 😊

RIZ MUGHAL (SQA ENGINEER)

