Item Text	Option Text 1	Option Text 2	Option Text 3	Option Text 4
Which technique is used in finding a solution for optimizing a given objective, such as profit maximization or cost reduction under certain constraints?	Queuing theory	Waiting time	Queuing theory and Waiting time	Linear Programming
What is the objective function in linear programming problems?	A constraint for available resource	An objective for research and development of a company	A linear function to be optimized	A set of non- negativity conditions
Which statement characterizes standard form of a linear programming problem?	All constraints are equations except non- negativity condition	Constraints are given by inequality of any type	Constraints are given only by inequalities of >= type	Constraints are given only by inequalities of <= type
In a Linear Programming problem, Feasible solution satisfies	constraints	non-negative restriction	constraints and non- negative restriction	Optimum solution
Decision variables in an linear programming model are	Uncontrollable	Controllable	Parameters	Constants
For maximization linear programming problem, the simplex method is terminated when all the net-evaluation are	Negative	non-positive	non-negative	Zero
In a BIG-M method, if at least one artificial variable is present in the basis with zero value, then the current optimum basic feasible solution is	Degenerate	Finite solution	Infeasible	Alternative optimal solution
In a linear Programming problem, if an optimal solution is degenerate, then	There are alternative optimal solution	The solution is infeasible	The solution is of no use to the decision maker	Better solution can be obtained

If a primal linear programming problem(LPP) has finite solution, then the dual LPP should have	Finite solution	Infeasible solution	Unbounded solution	Degenerate
A variable which has no physical meaning but it is used to obtain the initial basic feasible solution in Linear Programming problem is	Basic variable	surplus variable	slack variable	artificial variable
If the dual Linear Programming problem, has unbounded solution then solution of its primal is	Unbounded	infeasible	unique optimal	alternate
In a simplex method, a variable which is subtracted from the left side of greater than or equal to type constraint is	Slack variable	surplus variable	artificial variable	Slack variable and artifical variable
In a simplex method, a variable which is added to the left side of greater than or equal to type constraint is	Slack variable	surplus variable	artificial variable	Slack variable and surplus variable
Which of the following statements is true with respect to the optimal solution of an Linear Programming (LP) problem?	Every LP problem has solution	Every LP problem has an optimal solution	Optimal solution of an LP problem always occurs at an extreme point	At optimal solution all resources are completely used
In a Linear Programming problem, the objective functions and constraints are linear relationship between	Variables	Constraints	Functions	Arbitrary constants
In a Linear Programming problem, the variables whose coefficient vectors are unit vectors are called	Non basic Variables	Basic Variables	Unit Variables	Positive Variable

In a Linear Programming problem, a minimization problem can be converted into a maximization problem by changing the sign of coefficients in the	Constraints of greater equal type	Objective Functions	All constraints and objective function	Constraints of less equal type
In simplex method, if there is tie between a decision variable and a slack (or surplus) variable for selection of entering variable which of the following should be selected.	Decision variable	Slack variable	Surplus variable	row variable
A solution which optimizes the objective function in linear programming problem (LPP) is called as	Feasible solution	Basic Solution	Optimal solution	Solution
For any primal problem in a linear programming and its dual which of the following is incorrect	optimal value of objective function is same	dual will have an optimal solution iff primal does too	primal will have an optimal solution iff dual does too	both primal and dual can be infeasible
	Gross profit	Constraints	Net profit	Profit per unit
	Gross profit	Constraints	Net profit	Profit per unit
	Gross profit	Constraints	Net profit	Profit per unit
In a Simplex table, the key element is also known as	Pivot element	Row	Column	Unit element
While we are using a Simplex table to solve a maximization problem, if we find that the ratios for determining the pivot row are all negative, then the solution is	Unbounded	Degenerate	Optimal	infeasible
A feasible solution in linear programming problem (LPP) requires that all artificial variables is	less than zero	equal to zero	greater than zero	there are no special requirements on artificial variables; they may take on any value

The set of decision variable which satisfies all the constraints of the linear programming problem (LPP) is called as	Solution	Basic Solution	Feasible solution	Some feasible solution
In linear programming problem (LPP) a constraints means	limitations are expressed in mathematical equalities ( or inequalities)	Assumption	goal is to be achieved	Upper bound imposed on decision variable
In a BIG-M method, if at least one artificial variable is present in the basis with a positive value, then the given linear programming problem	Possess an optimum basic feasible solution	Does not possess an optimum basic feasible solution	Possess a degenerate solution	Possess an alternative optimum solution
The right hand side constant of a constraint in a primal linear programming problem appears in the corresponding dual as	a coefficient in the objective function	a right hand side constant of a function	an input output coefficient	a left hand side constraint coefficient variable
The first step in formulating a linear programming problem is	Identify any upper bound on the decision variables	State the constraints as linear combinations of the decision variables	Identify any lower bound on the decision variables	Identify the decision variables
If primal linear programming problem is of maximization type then dual problem is of	maximization	minimization	equality	inequality
In simplex method we convert less than or equal to constraint equations into equations by using	key variable	surplus variable	slack variable	positive variable
Column in simplex initial table used to represent new basic variable is classified as	column variable	key column	key row	row variable
In simplex method, slack, surplus and artificial variables are restricted to be	one	negative	non-negative	zero

In simplex method basic solution set as (n-m), all variables other than basic are classified as	Constant variable	non positive variables	basic variables	non-basic variable
In simplex method, basic feasible solution must satisfy the	Non-negativity constraint	Negativity constraint	Basic constraint	Common constraint
Third requirement of simplex method is that all variables are restricted to include	Negative even values	odd values	even values	non-negative values
According to algebra of simplex method, slack variables are assigned zero coefficients because	no contribution in objective function	high contribution in objective function	divisor contributionin objective function	base contribution in objective function
Dual linear programming problem statement is formulated with help of information available in another statement called	primal problem	prime problem	optimal problem	primal constants
Variable in dual linear programming problem which can assume negative values, positive values or zero values is classified as	unrestricted constant	restricted constant	restricted variable	unrestricted variable
If in a linear programming problem (LPP), the solution of a variable can be made infinity large without violating the constraints, the solution is	Infeasible	Unbounded	Alternative	feasible
In simplex method, which of the following do we add in equality constraints?	Slack Variable	Surplus Variable	Artificial Variable	An arbitrary constant
If at least one of the basic variable is zero then Basic Feasible Solution of a linear programming problem (LPP) is said to be	Degenerate	Non-degenerate	Infeasible	Unbounded

In linear programming problem (LPP), degeneracy occurs in how many stages	One	Two	Three	Four
Every linear programming problem (LPP) is associated with another LPP is called	Primal	Dual	Non-linear programming	Integer programming
In linear programming problem (LPP), given a system of m simultaneous linear equations in n unknowns (m <n), number="" of<br="" the="">basic variable will be</n),>	m	n	n-m	n+m
If a negative value appears in the solution values $(x_B)$ column of the simplex method, then	The basic solution is infeasible	The basic solution is optimum	The basic solution is unbounded	There are alternative optimum solutions
Which of the following is a correct statement?	Dual simplex method always leads to degenerate basic feasible solution	Dual simplex method is applicable to an LPP, if initial basic feasible solution is not optimum	If the number of primal variables is very small and the number of constraints is very large, then it is more efficient to solve the dual rather than the primal problem	If the primal is in its standard form, dual variables will be non-negative
The dual of the primal maximization linear programming problem (LPP) having m constraint and n non- negative variables should	Be maximization LPP	Have m constraints and n non-negative variables	Have n constraints and m non-negative variables	Have n constraints and n non-negative variables

				•
In the context of linear	An artificial variable can	Surplus variables	When the constraints are	Surplus variables
programming problem (LPP), which	be dropped for further	cannot appear in the	greater than equal to	can appear in the
of the following is not correct?	calculation once it	basis of the optimum	type, surplus variable are	basis of the
	becomes non-basic or	solution to an LPP	introduced to convert	optimum solution to
	gets removed at any		them into equations	an LPP
The role of artificial variables in	stage To find shadow prices	To start phases of	To aid in finding initial	To arrive at optimal
simplex table is	from the final simplex	simplex method	basic feasible solution	solution
	table	Simplex method		Solution
Dual simplex method is applicable	An infeasible but	An infeasible solution	a feasible solution	a feasible and
to these LPP's that start with	optimum solution			optimum solution
An optimal assignment requires	Rows or columns	Rows & columns	Rows + columns –1	Rows – columns
that the maximum number of lines				
that can be drawn through squares				
with zero opportunity cost be equal				
to the number of				
The method used for solving an	Reduced matrix method	MODI method	Hungarian method	Least Cost Method
assignment problem is called				
The purpose of a dummy row or	Obtain balance between	Prevent a solution from	Provide a means of	Provide alternative
column in an assignment problem is	total activities &total	becoming degenerate	representing a dummy	optimal solution
to	resources		problem	
Maximization assignment problem	Adding each entry in a	Subtracting each entry	Subtracting each entry in	Adding each entry in
is transformed into a minimization	column from the	in a column from the	the table from the	the table to the
problem by	maximum value in that	maximum value in that	maximum value in that	maximum value in
	column	column	table	that table

If there were n workers & n jobs there would be	n! solutions	(n-1)! solutions	n (n!) solutions	n solutions
An assignment problem cannot be solved by	Simplex method	Transportation method	Hungarian method	Inventory method
Consider the following with respect to assignment problem then which of the following is not correct	Requires that only one activity be assigned to each resource	Is a special case of transportation problem	Can be used to maximize resources	For every prohibited assignment, the given cost element is replaced by M, which is a very small
Consider the following with respect to assignment problem as a special case of transportation problem then which of the following is not correct	Number of rows equals number of columns	Supply available at each source and demand at each destination is 1	Values of each decision variable is either 0 or 1	Number of rows is not equals number of columns
In assignment problem of maximization, the objective is to maximize	Profit	loss	cost	manpower
An assignment problem can be viewed as a special case of transportation problem in which the capacity of each source is and the demand at each destination is				
Which of the following are used to balance an assignment or transportation problem	Destinations; sources	Units supplied; units demanded	Dummy rows; dummy columns	Large cost coefficients; small cost coefficients
With the transportation technique, the initial solution can be generated in any fashion one chooses. The only restriction is that	the edge constraints for supply and demand are satisfied	the solution is not degenerate	the solution must be optimal	one must use the northwest-corner method
The purpose of a dummy source or dummy destination in a transportation problem is to	prevent the solution from becoming degenerate	obtain a balance between total supply and total demand	make certain that the total cost does not exceed some specified figure	provide a means of representing a dummy problem

In a transportation problem, which of the following must be made equal in number	destinations; sources	units supplied; units demanded	columns; rows	positive cost coefficients; negative cost coefficients
The initial solution of a transportation problem can be obtained by applying any known method. However, the only condition is that	The solution be optimal	The rim conditions are satisfied	The solution not be degenerate	An alternate solution must exists
The dummy source or destination in a transportation problem is added to	Satisfy rim conditions	Prevent solution from becoming degenerate	Ensure that total cost does not exceed a limit	have an alternate solution must exists
The occurrence of degeneracy while solving a transportation problem means that	Total supply equals total demand	The solution so obtained is not feasible	The few allocations become negative	An alternate solution must exists
An alternative optimal solution to a minimization transportation problem exists whenever opportunity cost corresponding to unused route of transportation is:	Positive & greater than zero	Positive with at least one equal to zero	Negative with at least one equal to zero	Strictly negative
In transportation problem an iteration while moving from one solution to the next, degeneracy may occur when	The closed path indicates a diagonal move	Two or more occupied cells are on the closed path but neither of them represents a corner of the path	Two or more occupied cells on the closed path with minus sign are tied for lowest circled value	Occupied cells are equal to unoccupied cells
In transportation problem, the large negative opportunity cost value in an unused cell in a transportation table is chosen to improve the current solution because	It represents per unit cost reduction	It represents per unit cost improvement	It ensure no rim requirement violation	It ensure per unit cost addition

The smallest quantity is chosen at	It improve the total cost	It does not disturb rim	It ensure feasible	It ensure optimal
the corners of the closed path with		conditions	solution	solution
negative sign to be assigned at				
unused cell in a transportation				
problem because				
When total supply is equal to total	Balanced	Unbalanced	Degenerate	Non-degenerate
demand in a transportation				
problem, the problem is said to be				
Which of the following methods is	Least cost method	Vogel's approximation	Modified distribution	North West Corner
used to verify the optimality of the		method	method	Method
current solution of the				
transportation problem				
In a transportation problem, when	Unbalanced	Infeasible	Optimal	Degenerate
the number of occupied routes is				
less than the number of rows plus				
the number of columns -1, we say				
that the solution is:				
In applying Vogel's approximation	finding the largest unit	finding the smallest unit	finding the difference	finding the
method to a profit maximization	cost in each row or	cost in each row or	between the two lowest	difference between
problem, row and column penalties	column	column.	unit costs in each row	the two highest unit
are determined by			and column	costs in each row
				and column
The solution to a transportation	6	7	5	8
problem (TP) with three origins and				
four destinations is feasible if				
number of positive allocations are				
The solution to a transportation	m + n -1	m + n + 1	m + n	m x n
problem (TP) with m sources and n				
destinations is non-degenerate, if				
the numbers of allocations are				
In transportation model points of	Ordination	transportation	destinations	origins
demand is classified as				

When the total supply is not equal to total demand in a transportation problem then it is called	Balanced	Unbalanced	Degenerate	Optimal
Least Cost Method is also known as	North West Corner Method	Matrix Minima Method	Row Minima method	Column Minima method
In a transportation problem the Least Cost Method is used	To remove degeneracy	To find optimum solution	To find alternate solution	To find initial basic feasible solution
If we use opportunity cost value for non-basic cell to test optimality, it should be	Most negative number	Most positive number	Equal to zero	Any value
In an assignment problem involving four workers and three jobs, total number of assignment possible are	4	12	7	3
The minimum number of lines covering all zeros in a reduced cost matrix of order n can be	At the most n	At the least n	n+1	n-1
In an assignment problem involving seven workers and five jobs, total number of assignment possible are	5	7	35	12
In Vogel's Approximation method (VAM)	Initial solution to transportation is not applicable, if some routes are not prohibited	The cost difference indicates the penalties for not using the respective least cost routes	Degeneracy never occurs	The cost difference indicates benefit for not using the respective least cost routes

In an assignment problem involving two jobs and four workers, total number of assignment possible are	4	2	6	8	
In an assignment problem involving 5 workers and 5 jobs, total number of possible solutions are	5	24	25	120	
To resolve degeneracy at the initial solution, a very small quantity is allocated in which of the following cell	occupied	basic	non-basic	unoccupied	
In a transportation table, an ordered set of how many cells or more is said to form a loop	2	3	4	5	
While solving an assignment problem, an activity is assigned to a resource through a square with zero opportunity cost because the objective is to	Minimize total cost of assignment	Reduce the cost of assignment to zero	Reduce the cost of that particular assignment to zero	Maximize total cost of assignment	
In the transportation table, non- allocated cells are also called as	occupied cells	unoccupied cells	basic cells	finite cells	
The allocated cells in the transportation table are also called as	occupied cells	unoccupied cells	basic cells	finite cells	
In a transportation problem Vogel's Approximation method (VAM) is used	To remove degeneracy	To find optimum solution	To find alternate solution	To find initial basic feasible solution	
In simulation, to draw model samples we use	Bernoulli distribution	Normal distribution	Poisson distribution	Binomial distribution	

As simulation is not an analytical model, therefore the result of simulation must be viewed as	Unrealistic	Exact	Approximate	Simplified
We can simulate data by using	Randomization	Stratified sampling	Systematic sampling	Monte Carlo Method
While assigning random numbers in Monte Carlo simulation, it is?	Not necessary to assign the exact range of random number interval as the probability	Necessary to develop a cumulative probability distribution	Not necessary to develop a cumulative probability distribution	Necessary to assign a fixed set of value
Analytical results are taken into consideration before a simulation study so as to	Identify suitable values of the system parameters	Determine the optimal decision	Identify suitable values of decision variables for the specific choices of system parameters	To avoid lengthy computations
The set of Random numbers selected by a simulation model mostly comes from	Normal (100, 5) distribution	Uniform (0, 1) distribution	Poisson( 5) distribution	Bernoulli (0.5) Distribution
One can increase the chance that results of simulation are not erroneous by	Changing the input parameters	Validating the simulation model	Using discrete probability distribution in place of continuous one	Using cumulative probability distribution
Simulation can be done by using	Sample numbers	Attributes	Random numbers	Random variables
	2	9	11	32
	2	5	9	10
	1	5	9	13
The appropriate value for m (in LCM) is				
	9	17	18	20
What is pseudo random number generator?	an algorithm that generates random numbers with help of mathematical formula	an algorithm that generates random numbers according to user activity	an algorithm that generates random numbers according to time	an algorithm that generates random numbers with help of user input

The key properties of random numbers are	Uniform and dependent	Normal and dependent	Different and dependent	Uniform and independent
The first step in the Monte Carlo simulation process is to	Generate random number	Set up probability distribution	Set up cumulative probability distribution	Establish random number intervals
The first step in simulation is to	Construct a numerical model	Define the problem	Set up possible courses of action for testing	Validate the model
Cumulative probabilities are found by	summing all the previous probabilities up to the current value of the variable	summing all the probabilities associated with a variable	simulating the initial probability distribution	1- all the probabilities associated with a variable
In network analysis a dummy activity is required when	Two or more activities have the same starting events.	Two or more activities have different ending events.	Two or more activities have the same ending events.	The network contains two or more activities that have identical starting and ending events.
In PERT analysis the variance of the total project completion time is	The sum of the variances of all activities in the project.	The sum of the variances of all activities not on the critical path.	The sum of the variances of all activities on the critical path.	The variance of the final activity of the project.
The critical path of a network is	any path that goes from the starting node to the completion node	Longest time path through the network	Smallest time path through the network	Path with the most activities
If ES and EF are the earliest start and finish, LS and LF are latest start and latest finish time then EF of an activity is the	Max{EF of all immediate predecessors}	Min{LS of all immediate following activities}	ES + Activity time	LF Activity time
With respect to PERT and CPM, slack is	the amount of time a task may be delayed without changing the overall project completion time	The amount of slack that an activity has in common with another activity	The amount of unused resources for an activity	The amount by which a time estimate can be in error without affecting the critical path computations

Which of the following is incorrect	PERT is probabilistic in nature	CPM is deterministic in nature	CPM is event oriented	PERT is event oriented
Which of the following is incorrect with respect to network construction?	Each defined activity is represented by one and only one arrow	A network should have only one initial and one terminal node	There is a loop in a network	Dummy activities should be included if it is necessary
Which of the following is incorrect in respect of PERT calculations?	Expected time of an activity is arithmatic mean of three times estimates, pessimistic, most likely and optimistic time estimates	The three time estimates are assumed to follow beta distribution	The standard deviation of activity completion time is one-sixth of the excess of pessimistic over optimistic time	The sum of variances of critical activity gives the variance of the overall project completion time
CPM is	Critical Project Management	Critical Path Management	Critical Path Method	Crash Project Method
The activity which can be delayed without affecting the execution of the immediate succeeding activity is determined by	Total float	Free float	Independent float	Interfering float
An activity has an optimistic time of 10 days, a most likely time of 20 days, and a pessimistic time of 30 days. What is its expected time?	30	20	10	25
If ES and EF are the earliest start and finish, LS and LF are latest start and latest finish time then slack equals to	LF – EF	EF – LF	EF – LS	LF – ES
Activities with zero slack	can be delayed	must be completed first	lie on a critical path	have no predecessors
An activity has an optimistic time of 18 days, a most likely time of 24 days, and a pessimistic time of 30 days. What is its expected time?	25	20	24	42

An activity has an optimistic time of 12 days, a most likely time of 18 days, and a pessimistic time of 24 days. What is its variance?	12	4	1	18
An activity has an optimistic time of 18 days, a most likely time of 28 days, and a pessimistic time of 39 days. What is its standard deviation?	3.5	12.25	1.67	2.78
An activity has an optimistic time of 6 days, a most likely time of 8 days, and variance 9 days. What is its pessimistic time?	9	24	14	26
An activity has pessimistic time of 18 days, a most likely time of 12 days, and a standard deviation 2 days. What is its optimistic time?	8	12	6	4
Activities A and B are both 1 days long and the only immediate predecessors to activity C. Activity A has earliest start time = 4 and latest start time =4 and activity B has earliest start time =1 and latest start time = 3. What is the ES of activity C?	4	1	3	5
If ES and EF are the earliest start and finish, LS and LF are latest start and latest finish time then ES of an activity is	LF + Activity time	Min{LS of all immediate following activities}	Max{EF of all immediate predecessors}	LF-Activity time
What is the probability that a project with a mean completion time of 24 days and a variance of 6 days will be finished in 24 days?	0.8	0.2	0.5	0.6

Analysis of PERT is based on	Only optimistic time	Optimistic time and most likely time	Only pessimistic time	Optimistic, pessimistic and most likely time
What is the probability that a project with a mean completion time of 60 weeks and a standard deviation of 5 weeks will be finished in 60 weeks?	0.02	0.48	0.84	0.5
Which of the following is incorrect while scheduling a project by CPM	A project is divided into various activities	Required time for each activity is established	A sequence of various activities is made according to their importance	A random sequence of various activities are made
The full form of PERT is	Program Evaluation and Rate Technology	Program Evaluation and Review Technique	Program Evaluation and Review Technology	Program Evaluation and Robot Technique
The shortest possible time in which an activity can be achieved under ideal circumstances is known as	Pessimistic time estimate	Optimistic time estimate	Expected time estimate	The most likely time estimate
According to the time estimates made by the PERT planners, the maximum time that would be needed to complete an activity is called as	The most likely time estimate	Optimistic time estimate	Pessimistic time estimate	Expected time estimate
The difference between the maximum time available and the actual time needed to perform an activity is known as	Total float	Independent float	Free float	Half float
The artificial activity which indicates that an activity following it, cannot be started unless the preceding activity is complete, is known as	event	free float	dummy	constant

Which of the following is incorrect with respect to dummy activity	is artificially introduced	is represented by a dotted line	does not consume time	It is present in every project network
The estimated time required to perform an activity, is known as	event	dummy	duration	float
If T is the duration, ES and EF are the earliest start and finish, LS and LF are latest start and latest finish time, then the following relation holds good	EF = ES + T	LS = LF + T	LF = ES + T	LF = LS + T
The critical activity has	maximum float	minimum float	zero float	unit float
In a project network, four activities A, B, C and D are to be completed before starting activity E. If the finish times of A, B, C and D are 12 days, 14 days, 15 days and 17 days respectively, the earliest event occurrence time for the activity E is	12 days	17 days	15 days	14 days
Select the incorrect statement from the following	The float may be positive, zero or negative	If the float is positive and the activity is delayed by a period equal to its total float, the completion of project is not delayed	If the float of an activity is negative, delay in its performance is bound to delay the completion of project	The float is always positive
If a is the optimistic time, b is the pessimistic time and m is most likely time of an activity, the expected time of the activity, is	a + m + b	(a + 4m + b)/6	a + 4m + b	a + 2m + b
Select an incorrect statement from the following	The activity is the time consuming part of a project	The beginning and end of a job, are called events	The activity which consumes maximum time, is called a node	Logically and sequentially connected activities and events form a network

Select an incorrect statement from the following	CPM analysis is activity oriented	PERT analysis is event oriented	CPM does not make any allowance for the uncertainties in the duration of time	PERT is determinastic model
In CPM analysis which of the following is incorrect	emphasis is given to activities	uncertainties are not allowed	activities are represented by arrows	activities are represented by circle
A project has three independent critical paths A, B and C. To reduce the project length, we have to shorten	The activities of A	The activities of B	The activities of A, B, and C simultaneously	The activities of C
Which of the following statements is true?	PERT is considered as a deterministic approach and CPM is a probabilistic techniques	PERT is considered as a probabilistic techniques and CPM is considered as a deterministic approach	PERT and CPM are both considered as deterministic approaches	PERT and CPM are both probabilistic techniques
	Activity D can begin as soon as both activities A and C are complete	Activity D can begin as soon as both activities A and B are complete	Activity C can begin as soon as activity A is complete	Activity C can begin as soon as activity B is complete
An expected project completion time follows a normal distribution with a mean of 21 days and a standard deviation of 4 days. What is the probability that the project will be completed in more than 21 days?	0.8	0.7	0.5	0.9
The latest finish time for an activity is	equals the max {LFT – t for all immediate predecessors}	equals the min {LFT – t for all immediate successors}	equals the max {EST + t for all immediate predecessors}	equals the min {EST + t for all immediate successors}
In PERT analysis the relationship between Optimistic time, most likely time and Pessimistic time is	optimistic time < pessimistic time < most likely time	most likely time < optimistic time < pessimistic time	pessimistic time < optimistic time < most likely time	optimistic time < most likely time < pessimistic time

The objective of network analysis is	minimize total project	minimize total project	minimize production	maximize total
to	duration	cost	delays, interruption and conflicts	project duration
In the network, one activity connects how many nodes?	1	2	3	4
In a network diagram an event is denoted by the symbol	Arrow	Straight line	Circle	Curve
The difference between free float and tail event slack is	Total float	Slack	Float	Independent float
Slack is also known as	Event	Float	Path	Activity
How many estimates are used in PERT analysis	One	Тwo	Three	Four
Activity in a network diagram is represented by	Circle	Arrow	Rectangle	Square
A project network has	at least one critical path	no critical path	exactly one critical path	at most one critical path
In a network diagram if the delay in its start will further delay the project completion time then the activity is said to be	simple	Basic	critical	non critical
In analysis of PERT optimistic time, pessimistic time and most likely time estimates are assumed to follow which distribution	Beta	Normal	Uniform	Exponential