1. Operations Research approach is $\qquad$ .
A. multi-disciplinary
B. scientific
C. intuitive
D. collect essential data
2. A non-feasible solution to a linear programming problem $\qquad$ _.
A. Does not satisfy all the constraints of the problem simultaneously
B. need not satisfy all of the constraints, only some of them
C. must be a corner point of the feasible region.
D. must optimize the value of the objective function
3. The objective of network analysis is to $\qquad$ .
A. minimize total project duration
B. minimize total project cost
C. minimize production delays, interruption and conflicts
D. maximize total project duration
4. $\qquad$ is a mathematical technique used to solve the problem of allocating limited resource among the competing activities
A. Linear Programming problem
B. Assignment Problem
C. Replacement Problem
D. Non-linear Programming Problem
5. The activity cost corresponding to the crash time is called the $\qquad$ .
A. critical time
B. normal time
C. cost slope
D. crash cost
6. The non basic variables are called $\qquad$ .
A. shadow cost
B. opportunity cost
C. slack variable
D. surplus variable
7. A transportation problem with sources and destinations is optimal if the numbers of allocations are $\qquad$ _.
A. $m+n$
B. mn
C. $m-n$
D. $m+n-1$
8. The assignment algorithm was developed by $\qquad$ method.
A. HUNGARIAN
B. VOGELS
C. MODI
D. TRAVELING SALES MAN
9. An activity which does not consume neither any resource nor time is known as
$\qquad$ .
A. predecessor activity
B. successor activity
C. dummy activity
D. activity
10. The difference between total and free float is $\qquad$ .
A. total
B. free
C. independent
D. interference
11. If the net evaluation corresponding to any non -basic variable is zero, it is an indication of the existence of an $\qquad$ .
A. initial basic feasible solution
B. optimum basic feasible solution
C. optimum solution.
D. alternate optimum solution.
12. When in assignment problem cost of completing task is given
A. the problem is minimization type
B. the problem is maximization type
C. feasible typ
D. adding each entry in the table from the maximum value in that table
13. When the sum of gains of one player is equal to the sum of losses to another player in a game, this situation is known as $\qquad$ .
A. two-person game
B. two-person zero-sum game
C. zero-sum game
D. non-zero-sum game
14. Graphical method is also known as $\qquad$ .
A. Simplex Method
B. Dual Simplex Method
C. Big-M Method
D. Search-Approach Method
15. When the total units to be transported is equal to units available then the transportation problem is said to be $\qquad$
A. balanced
B. unbalanced
C. maximization
D. minimization
16. A game is said to be strictly determinable if $\qquad$ .
A. maximin value equal to minimax value
B. maximin value is less than or equal to minimax value
C. maximin value is greater than or equal to minimax value
D. maximin value is not equal to minimax value
17. The irreducible minimum duration of the project is called $\qquad$ .
A. critical time
B. normal time
C. cost slope
D. crash duration
18. The minimum duration of the project is called $\qquad$ .
A. critical time
B. normal time
C. optimistic time
D. crash duration
19. In the transportation table, unoccupied cells will be calculated as $\qquad$ .
A. Cost -U
B. Cost -V
C. Cost $-(\mathrm{U}+\mathrm{V})$
D. finite
20. A degenerate solution is one that $\qquad$ .
A. gives an optimum solution to the Linear Programming Problem
B. gives zero value to one or more of the basic variables
C. yields more than one way to achieve the objective
D. makes use of all the available resources
