
1. Operations Research approach is

2 points

Mark only one oval.

- scientific
- intuitive
- collect essential data
- multi-disciplinary

2.

Mark only one oval.

- Option I

3. A feasible solution to a linear programming problem _

2 points

Mark only one oval.

- must satisfy all the constraints of the problem simultaneously
- need not satisfy all of the constraints, only some of them
- must be a mid point of the feasible region.
- must optimize the value of the objective function

4. If any value in XB column of final simplex table is negative, then the solution is 2 points

Mark only one oval.

- infeasible
- bounded
- no solution
- Unbounded

5. An optimal assignment requires that the maximum number of lines which can be drawn through squares with zero opportunity cost should be equal to the number of 2 points

Mark only one oval.

- rows and columns.
- rows + columns.
- rows or columns.
- rows + columns - 1

6. To proceed with the Modified Distribution method algorithm for solving an transportation problem, the number of dummy allocations need to be added are 2 points

Mark only one oval.

- n
- n - 1
- n + 1
- n * n

7. A set of feasible solution to a Linear Programming Problem is

2 points

Mark only one oval.

convex

polygon

triangle

bold

8. In an Linear Programming Problem functions to be maximized or minimized are called

2 points

Mark only one oval.

constraints

objective function

basic solution

feasible solution

9. The coefficient of slack\surplus variables in the objective function are always assumed to be

2 points

Mark only one oval.

M

0

-M

I

10. An assignment problem is a particular case of

2 points

Mark only one oval.

- transportation Problem
- Game Problem
- travelling salesman problem
- replacement Problem

11. To resolve degeneracy at the initial solution, a very small quantity is allocated in _____ cell

2 points

Mark only one oval.

- occupied
- unoccupied
- no
- finite

12. PERT analysis is based on

2 points

Mark only one oval.

- Time
- Location
- Project
- Cost

13. Which of the option is not a notable challenge while scheduling a project? 2 points

Mark only one oval.

- Deadlines exist.
- Independent activities.
- Too many workers may be required.
- Costly delay

14. The particular task performance in CPM is known 2 points

Mark only one oval.

- Dummy
- Event
- Activity
- Contract.

15. The earliest start time rule 2 points

Mark only one oval.

- Compares the activities starting time for an activity successor.
- Compares the activities end time for an activity predecessor.
- Directs when a project can start.
- Regulates when a project must begin.

16. The critical path 2 points

Mark only one oval.

- Is a path that operates from the starting node to the end node
- Is a mixture of all paths.
- Is the longest path
- Is the shortest path

17. Planning tasks associated with job scheduling, machine loading, and dispatching typically falls under 2 points

Mark only one oval.

- long-range plans
- intermediate-range plans
- short-range plans
- mission-related planning

18. Which of the following statements regarding PERT times is true? 2 points

Mark only one oval.

- Optimistic time estimate is an estimate of the minimum time an activity will require.
- Optimistic time estimate is an estimate of the maximum time an activity will require.
- The probable time estimate is calculated as $t = (a + 4m + b)/6$.
- Pessimistic time estimate is an estimate of the minimum time an activity will require.

19. Which of the following statements regarding critical paths is true? 2 points

Mark only one oval.

- The shortest of all paths through the network is the critical path.
- Some activities on the critical path may have slack.
- Every network has exactly one critical path.
- On a specific project, there can be multiple critical paths, all with exactly the same duration.

20. In game theory, the outcome or consequence of a strategy is referred to as the 2 points

Mark only one oval.

- payoff.
- penalty.
- reward.
- end-game strategy.

21. Activities A, B, and C are the immediate predecessors for Y activity. If the earliest finish times for the three activities are 12, 15, and 10, then the earliest start time for Y will be 2 points

Mark only one oval.

- 12
- 15
- 10
- 11

22. Activities P, Q and R instantly follow activity M, and their current start times are 12, 19, and 10. Therefore, the latest finish time for activity M is 2 points

Mark only one oval.

- 19
- Can not be determined
- 12
- 10

23. The full form of PERT is

2 points

Mark only one oval.

- Program Evaluation and Rate Technology
- Program Evaluation and Robot Technique
- Program Evaluation and Robot Technology
- Program Evaluation and Review Technique

24. _____ are used to represent activity in a network (PERT) diagram.

2 points

Mark only one oval.

- Circles
- Squares
- Rectangles
- Arrows

25. The shortest possible time in which an activity of PERT can be achieved under ideal circumstances is known as

2 points

Mark only one oval.

- Pessimistic time estimate
- Optimistic time estimate
- Expected time estimate
- The most likely time estimate

26. The difference between the maximum time available and the actual time needed to perform an activity is known as

Mark only one oval.

- F
- r
- e
- e

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rows or columns.

2 points

r rows + columns - 1

o

w

s

a

n

d

c

o

l

u

m

n

s

.

r

o

w

s

+

c

o

l

u

m

n

s

.

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- 0
- M
- 1

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20. The difference between the maximum time available and the actual time needed to perform an activity is known as 2 points

Mark only one oval.

- Free float
- Independent float
- Total float
- Half float

21. If the value of the game is zero, then the game is known as 2 points

Mark only one oval.

- pure strategy
- fair strategy
- pure game
- mixed strategy

22. If the losses of player A are gains of player , then game is known as 2 points

Mark only one oval.

- Fair game
- non-zero sumgame
- unfair game
- zero sum game

23. In northwest corner method allocation are made 2 points

Mark only one oval.

- Starting from the left hand side top corner
- Starting from the right hand side top corner
- Starting from the lowest cost cell
- Starting from the left hand side bottom corner
- _____

24. While solving an assignment problem, an activity is assigned to a resource through a square with zero opportunity cost because the objective is to_____ . 2 points

Mark only one oval.

- reduce the cost of assignment to zero
- minimize total cost ofassignment.
- . reduce the cost of that particular assignment to zero
- reduce total cost of assignment

25. The cell with allocation can be called_____

2 points

cell

empty cell

basic cell

non-basic cell

Ma
rk
onl
y
on
e
ova
l

- C
- e
- l
- l

Google

E
m
p
t
y

c
e
l

Google