

**SECTION II****[TO BE ATTACHED TO THE MAIN ANSWER-BOOK]****M.Com DEGREE (CSS) PRIVATE EXAMINATION, NOVEMBER 2023**

D58BAA11

**DO NOT WRITE YOUR REGISTER NUMBER OR NAME ANYWHERE IN****SECTION II OF THE QUESTION PAPER****CM010104MCQ - MANAGEMENT OPTIMISATION TECHNIQUES**

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Answer **all** questions.

All questions carry equal weight

Put a tick mark [✓] against the correct answer

1. The production manager will not recommend group replacement policy in case of .....  
(a) When large number of identical items is to be replaced      (b) Low cost items are to be replaced, where record keeping is a problem  
(c) Repairable items      (d) None of these
2. The value of the coefficient of optimism (a) is needed while using the criterion of .....  
(a) Equally Likely      (b) Maximin  
(c) Realism      (d) None of these
3. A basic solution is said to an optimal solution if it satisfies .....  
(a) Objective function      (b) All constraints  
(c) Alternative Course of Action      (d) None of these
4. The replacement policy that is imposed on an item irrespective of its failure is .....  
(a) Group replacement      (b) Individual replacement  
(c) Successive replacement      (d) None of these
5. .... represent the worth or unit of a resource.  
(a) Dual variables      (b) Basic Variables  
(c) Key Elements      (d) None of these

6. The coefficients of decision variables in the objective function become quantities on the right-hand side of the ..... problem.  
 (a) Primal      (b) Dual  
 (c) Basic      (d) None of these
7. Which technique is used in finding a solution for optimizing a given objective, such as profit maximization or cost reduction under certain constraints?  
 (a) Waiting line theory      (b) Linear Programming  
 (c) Decision Theory      (d) None of these
8. A matrix which shows the gains and losses resulting from moves and counter moves is called .....  
 (a) Cost matrix      (b) Pay off matrix  
 (c) Gain matrix      (d) None of these
9. Operations Research Approach is .....  
 (a) Scientific      (b) Multi -disciplinary  
 (c) Intuitive      (d) None of these
10. If all  $a_{ij}$  values entering in the variable column of the simplex table are negative, then .....  
 (a) solution is unbounded      (b) solution is degenerate  
 (c) there exists no solution      (d) None of these
11. If the primal has an unbound objective function value, then the dual has .....  
 (a) basic solution      (b) basic feasible solution  
 (c) no feasible solution      (d) None of these
12. Graphical method of linear programming is useful when the number of decision variable are ...  
 (a) 2      (b) 3  
 (c) 4      (d) None of these
13. The dummy source or destination in a transportation problem is added to .....  
 (a) Satisfy rim condition      (b) Prevent solution from becoming degenerate  
 (c) Ensure that total cost does not exceed a limit      (d) None of these
14. Which of the following methods is used to verify the optimality of the current solution of the transportation problem?  
 (a) Least cost method      (b) Vogel's approximation method

(c) Modified distribution method      (d) None of these

15. In PERT, what type of distribution is used for time estimation?

(a) Beta distribution                      (b) Poisson distribution

(c) Exponential distribution      (d) None of these

16. The occurrence of degeneracy while solving a transportation problem means that .....

(a) Total supply equals total demand                      (b) The solution so obtained is not feasible

(c) The few allocations become negative      (d) None of these

17. What is PERT analysis based on?

(a) Optimistic time      (b) Pessimistic time

(c) Most likely time      (d) None of these

18. Firm that considers the potential reactions of its competitors when it makes a decision.....

(a) is referred to as a price leader      (b) is engaged in strategic behavior

(c) is engaged in collusion                      (d) None of these

19. OR uses models to help the management to determine it's .....

(a) Policies                      (b) Actions

(c) Both (a) and (b)      (d) None of these

20. Hungarian Method is used to solve .....

(a) A transportation problem      (b) A travelling salesman problem

(c) A LP problem                      (d) None of these

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No. of MCQ's Attempted :

Weight Score :

(To be entered by the examiner)

No. of MCQ's not Attempted :

**ATTACH SECTION II INTERNAL EXAMINATION MCQ PAPER  
WITH THE MAIN ANSWER BOOK**