

University of Caloocan City
Computer Studies Department

Parallel Algorithm Design and Program Development
QUIZ

I. Identification. Choose the letter of the correct answer from the box and write it on the blank provided at the left side of the test paper.

- | | |
|------------------------------|---------------------------|
| A. Divide and Conquer Method | D. Methodical Design |
| B. Greedy Method | E. Backtracking Algorithm |
| C. Dynamic Programming | F. Linear Programming |
| | G. Branch and Bound |

_____ 1. In this method the problem is divided into several small sub-problems. Then the sub-problems are solved recursively and combined to get the solution of the original problem.

_____ 2. This method decides which step will provide the most accurate solution in the next step. Once a solution is considered, this algorithm never considers the same solution again.

_____ 3. It is an optimization technique, unlike divide and conquer method, this reuses the solution to the sub-problems many times.

_____ 4. It is a technique to get the best outcome like maximum profit, shortest path, or lowest cost.

_____ 5. A framework of design parallel algorithm. This methodology focuses on four distinct stages: PCAM.

_____ 6. The purpose of this algorithm search is to maintain the lowest-cost path to a target. Once a solution is found, it can keep improving the solution.

_____ 7. It is an optimization technique to solve combinational problems. If a level does not produce a satisfactory solution, it returns to one level back and start with a new option.

_____ 8. In this programming, we have a set of variables, and we must assign absolute values to them to satisfy a set of linear equations and to maximize or minimize a given linear objective function.

II. Enumerate the following in chronological order.

9-11. Divide and Conquer Steps

9. _____

10. _____

11. _____

12-15. Methodical Design Stages

12. _____

13. _____

14. _____

15. _____

ANSWER KEYS:

1. A
2. B
3. C
4. F
5. D
6. G
7. E
8. F
9. DIVIDE
10. CONQUER
11. COMBINE
12. PARTITIONING
13. COMMUNICATION
14. AGGLOMERATION
15. MAPPING

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