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- Notes :
1. All questions carry marks as indicated.
 2. Solve Question 1 OR Questions No. 2.
 3. Solve Question 3 OR Questions No. 4.
 4. Solve Question 5 OR Questions No. 6.
 5. Solve Question 7 OR Questions No. 8.
 6. Solve Question 9 OR Questions No. 10.
 7. Solve Question 11 OR Questions No. 12.
 8. Due credit will be given to neatness and adequate dimensions.
 9. Assume suitable data whenever necessary.

1. a) How complexing is computed in parallel computing? 7
- b) Define parallel processing. State law of measurement of performance of parallel processing? 7

OR

2. a) What are network topologies? 7
- b) What are different modes of parallel computing? 7
3. a) What are different types of dependencies considered in parallel processing? 7
- b) Give the example of loop carried dependency? Is it possible to remove each dependency for parallel processing? 6

OR

4. a) What are different methods of transformation to eliminate dependency explain any one? 7
- b) What are the remedies for control dependency? 6
5. a) Binary search can be implemented in parallel processing. Give suitable program using open MP or MPI. 7
- b) Can bubble implemental in parallel processing why? Give the solution? 6

OR

6. a) Implement any sorting algorithm in parallel processing environment also measure the spud up of your solution. 7
- b) Explain Hyper quick sort. 6

7. a) Explain gauss method's steps for parallel program? 7
b) Write short note on Fourier transform. 6

OR

8. a) Explain in detail parallel solution to a linear equation with suitable example. 13
9. Name and explain any five platforms which can participate in grid computing? 13

OR

10. Discuss the parallel algorithm based on Krushal's algorithm for minimum cost spanning tree. 13
11. Name and explain any five platforms which can participate in grid computing. 14

OR

12. Explain depth first search algorithm for parallel processing also measure its speedup? 14



~ Walt Disney

