

Vellore Institute Of Technology, Chennai

B.Tech (5th Semester (2020-2021))

CAT II Examination

Parallel Distribution System(CSE4001)

Max Marks : 30

Time : 3 Hours

Note: There are three Questions in this paper . All Questions are compulsory.

Max marks for all Question are 10

Attempt ALL Questions.

Question 1: Apply suitable decomposition technique for the problem given below and justify. Draw task dependency graphs. Comment on the maximum degree of concurrency and granularity.

Question 2: Identify the type of data movement given in the above diagram. Give a brief explanation on the type of data movement and other concepts of X, Write the MPI program explaining the given data movement with a suitable example.

Question 3: Find the algorithm for multiple readers-one writer protocol. Explain and sketch the algorithm for implementing this distributed shared memory. Also, suggest a suitable way to improve the performance of this algorithm.