Q.P. Code: 25653

Duration: 3 Hours **[Total Marks -80]**

N.B. (i) **Q. No. 1** is compulsory
(ii) Attempt any **three** questions out of the remaining **five** questions

1	(a)	How Pipeline Architecture is different from Array Processor architecture	**05**
	(b)	Explain the various types of Parallel Programming Models?	**05**
	(c)	Explain a method of Dynamic Instruction scheduling for minimizing hazards.	**05**
	(d)	Explain Dataflow Computer with examples.	**05**
2	(a)	Explain different types of pipeline Hazards and the techniques used to eliminate those hazards.	**10**
	(b)	Describe Architectural Model of Distributed System with neat diagram.	**10**
3	(a)	Discuss in detail the various performance metrics in parallel computing.	**10**
	(b)	Explain Lamport's Distributed Mutual Algorithm.	**10**
4	(a)	Explain Matrix Multiplication on SIMD.	**10**
	(b)	Discuss File caching for Distributed Algorithm.	**10**
5	(a)	Compare and contrast Task Assignment, Load Balancing and Load Sharing approaches	**10**
	(b)	Explain call Semantics of RPC.	**10**
6	(a)	Describe any one Election algorithm in detail with an example.	**10**
	(b)	Explain File Accessing Models.	**10**

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