[Total No. of Printed Pages:1] **CODE NO:- U-272**

FACULTY OF ENGINEERING & TECHNOLOGY

B.E (CSE) Examination - DEC - 2014

Parallel & Distributed Computing (Revised)

[Time: Three Hours] **[Max. Marks: 80]**

"Please check whether you have got the right question paper."

N.B *1) Q.No.1 and Q.No.6 are compulsory.*
2)Attempt any two questions from remaining of each section.
3)Figures to the right indicate full marks.

SECTION A

Q.1	A)	Explain the factors motivating parallelism.	05
	B)	State and explain the advantages of threaded programming model.	05
Q.2	A)	Explain the static interconnection network and dynamic network with appropriate diagram.	08
	B)	With a suitable example explain the effect of memory latency. Also explain the method to improve the memory latency.	07
Q.3	A)	Explain task dependency graph with the help of suitable example.	08
	B)	Explain the method of data decomposition-partitioning output data with suitable examples.	07
Q.4	A)	Explain the for directive in open NP to specify concurrent iterations and tasks.	07
	B)	Explain the CUDA thread organization.	08
Q.5	A)	Explain the methods to maintain cache coherence in multiprocessor systems with shared address space	08
	B)	Explain CUDA program structure. Also explain the execution of CUDA program.	07

SECTION B

Q.6	A)	Compare parallel systems and Distributed systems.	05
	B)	Explain the implementation issues of Distributed shared memory system.	05
Q.7	A)	Explain ham port algorithm for mutual exclusion in detail.	07
	B)	Explain the following models of Distributed computation. i) Interleaving model ii) Happened before model	08
Q.8	A)	Explain the method of communication between distributed objects.	07
	B)	Explain any three consistency models in DSM.	08
Q.9	A)	Explain the following modes in Hadoop. i) Local mode ii) Pseudo- distributed mode iii) Fully distributed mode	07
	B)	Explain the basic template of a map Reduce program with an example.	08
Q.10	A)	Explain the steps for setting SSH for a Hadoop cluster.	07
	B)	Explain the algorithm for logical clocks with suitable example.	08

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