

SUBJECT CODE NO: E-241
FACULTY OF ENGINEERING AND TECHNOLOGY
B.E.(CSE) Examination Nov/Dec 2017
Parallel & Distributed Computing
(REVISED)

[Time: Three Hours]

[Max.Marks:80]

Please check whether you have got the right question paper.

- N.B
- i) Question No.1 and 6 are compulsory.
 - ii) Attempt any two questions from each section.
 - iii) Figures right indicates full marks.
 - iv) Assume Suitable data if necessary.

SECTION A

- Q.1
- a) Explain Task graph model. 05
 - b) Draw & explain CUDA device memory types. 05
- Q.2
- a) Explain following network topologies i) Buses ii) crossbars 08
 - b) Explain concept of data parallelism in detail. 07
- Q.3
- a) Explain parallel algorithm models in detail. 08
 - b) What is BlockIdx & ThreadIdx? 07
- Q.4
- a) Explain following terms : i) Pipelining Architecture ii) Superscalar Execution 08
 - b) Explain following terms: i) Degree of concurrency ii) Critical path length 07
- Q.5 Explain the term decomposition. Explain all decomposition techniques in detail. 15

SECTION B

- Q.6
- a) Explain happened before model in detail. 05
 - b) Explain granularity in DSM. 05
- Q.7
- a) What are the different design & implementation issues in DSM? 08
 - b) Explain structure of MapReduce program. 07
- Q.8
- a) What is distributed computing? Explain characteristics of distributed computing? 08
 - b) Explain Java RMI in detail. 07
- Q.9
- a) What is mutual exclusion? 08
 - b) How to set up SSH for Hadoop cluster? 07
- Q.10
- a) Explain following terms: i) Vector clocks ii) Direct dependency clocks 08
 - b) Explain the term trashing in detail. 07

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