

**SSN COLLEGE OF ENGINEERING**  
Department of Computer Science and Engineering  
B.E. Computer Science  
**CS6703 - GRID AND CLOUD COMPUTING**

14 AUG 2017, 8 - 9.30 AM  
Academic Year: 2017-18 ODD

**Unit Test 2**

Max Marks: 50  
Batch: 2014-18

Faculty: Dr. K. Vallidevi / Ms. Y. V. Lokeswari

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**PART A**

$5 \times 2 = 10$

1. List the topologies of Grid. (CO1) (K2)
2. Differentiate between Data Grid, Computational Grid and P2P Grid. (CO1) (K2)
3. Specify the motivation of Parallel Programming Paradigm. (CO3) (K2)
4. What will happen when Name node is failed in HDFS? (CO3) (K2)
5. What is the drawback of Hadoop and how to overcome it? (CO3) (K2)

**PART B**

40 MARKS

\*\*\*\*\* Answer all Questions \*\*\*\*\*

6. (a) Sketch and explain the working of Map Reduce data flow and control flow. (CO3) (K2) 16)  
(OR)

(b) Explain the architecture of Hadoop framework with diagram. (CO3) (K2) (16)

7. (a) (i) Briefly explain about how is fault tolerance provided by HDFS. (CO3) (K2) (5)  
(ii) Explain how communication overhead and locality issue is resolved by Map Reduce Library. (CO3) (K2) (5)

(OR)

(b) Explain about how file mutations are carried out in Google File System (GFS). (CO3) (K2) (10)

(P. T. O)

8. (a) Discuss in detail about how a job is executed in Hadoop Framework. (CO3) (K2) (10)  
(OR)
- (b) Write about the scope of grid computing in different applications. (CO1) (K3) (10)
9. (a) Summarize the technologies available in grid standards. (CO1) (K2) (4)  
(OR)
- (b) Illustrate in detail about the various layers in grid architecture. (CO1) (K2) (4)

\*\*\* ALL THE BEST \*\*\*

Prepared by

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Reviewed by

HoD, CSE