

8E5003

Roll No. _____

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B. Tech. VIII Sem. (Main) Exam., April, 2015
Computer Science & Engineering
8CS3 Distributed Systems

Time: 3 Hours

Maximum Marks: 80

Min. Passing Marks: 24

Instructions to Candidates:

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.

Units of quantities used/calculated must be stated clearly.

*Use of following supporting material is permitted during examination.
(Mentioned in form No. 205)*

1. NIL

2. NIL

UNIT – I

Q.1 What are the differences among cluster computing, grid computing and cloud computing? Explain. [16]

OR

Q.1 What are the goals behind developing distributed systems? Explain. [16]

UNIT – II

Q.2 (a) Can a server work as a client and a server in a system? Explain. [8]

(b) Is there any difference between vertical and horizontal fragmentation? Explain [8]

OR

Q.2 State the characteristics of a concurrent programming language. [16]

UNIT – III

Q.3 When do you prefer coda file system? Justify your answer. [16]

OR

Q.3 Explain the working of Bit Torrent file system with a neat diagram. [16]

UNIT – IV

Q.4 What do you understand by distributed deadlock handling? How is it different with centralized deadlock handling concept? [16]

OR

Q.4 What is a distributed pervasive system? Explain it with a suitable example and a neat sketch. [16]

UNIT – V

Q.5 Write short notes on **any two**:- [16]

- (a) Byzantine Agreement
- (b) CORBA Services
- (b) Randomized Distributed Agreement

OR

Q.5 Explain the concepts of relocation, migration and failure transparency. [16]