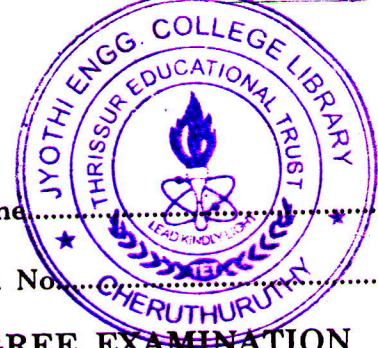


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Name.....

Reg. No.....



**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION
DECEMBER 2008**

**CS/IT 04 703—DISTRIBUTED SYSTEM
(2004 Admissions)**

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

Part A

- I. (a) What is a distributed system. Give *two* examples.
(b) Specify the difference between loosely coupled and tightly coupled systems.
(c) List the features of concurrent programming languages.
(d) Explain the distributed deadlock detection.
(e) Describe the distributed mutual exclusion.
(f) Write short notes on Request/Reply communication in distributed systems.
(g) Discuss the Security mechanism involved in distributed systems.
(h) Explain the file replication.

(8 × 5 = 40 marks)

Part B

- II. (a) Explain the goals of Distributed computing environment and its components. (15 marks)
Or
(b) Discuss the hardware concepts of a distributed system. (15 marks)
- III. (a) What are concurrent processes ? Discuss the mechanisms used to synchronize their operation. (15 marks)
Or
(b) Write short notes on Threads and explain the design issues for threads. (15 marks)
- IV. (a) Write short notes on :
(i) Message passing communication. (7 marks)
(ii) Leader election. (8 marks)
Or
(b) Explain the name and directory services provided by distributed systems. (15 marks)
- V. (a) Discuss the design and implementation issues of distributed shared memory. (15 marks)
Or
(b) Explain in detail about dynamic load sharing and balancing. (15 marks)

[4 × 15 = 60 marks]