

Con. 5438-09.

B.E. (Comp) Sem VIII CR

SP-6878

(3 Hours)

[Total Marks : 100

22/12/09

Distributed Computing

N.B. : (1) Question No. 1 is compulsory.

- (2) Attempt any four questions out of remaining six questions.
 (3) **Figures** to the **right** indicate **full** marks.
 (4) **All** questions carry **equal** marks.

1. (a) Compare NOs with DOs. 10
 (b) Discuss clock synchronization mechanism in distributed operating system. 10
2. (a) Compare and contrast the usefulness of stateless server with a stateless server. 10
 Highlight their application areas.
 (b) Explain any algorithm designed to provide mutual exclusion in a distributed 10
 environment.
3. (a) Explain clearly, with the help of suitable diagram, how RPC is implemented. 10
 (b) Explain, what are possible failures that can happen during RPC. 10
4. (a) Explain with example, threads and processes. Discuss differences and similarities 10
 between threads and processes.
 (b) Explain marshalling / unmarshalling mechanism in RPC/RMI. 10
5. (a) Explain locating mobile entities in detail. 10
 (b) Explain the goals of distributed system. 10
6. (a) Explain commit in distributed transaction. 10
 (b) What is CORBA ? Explain its architecture and various services provided by it. 10
7. Write detailed notes on any four :- 20
 - (a) CODA file system
 - (b) Code Migration
 - (c) Security mechanism in distributed system
 - (d) Sun network file system
 - (e) Crash and Recovery.