

Code: CS7T4C

**IV B.Tech - I Semester – Regular / Supplementary Examinations
November 2016**

**DISTRIBUTED SYSTEMS
(COMPUTER SCIENCE AND ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Scalability can be achieved applying different techniques.
What are these techniques ? 7 M

- b) Explain about self management in distributed systems. 7 M

2. a) Describe a simple scheme in which there are as many light weight processes as there are runnable threads. 7 M

- b) Explain migration in heterogeneous systems. 7 M

3. a) Describe how a connectionless communication between a client and a server proceed when using a socket. 7 M

- b) Explain why transient synchronous communication has inherent scalability problems and how these could be solved? 7 M

4. a) How is a mounting point looked up in a most UNIX Systems? 7 M
- b) Summarize clock synchronization algorithms in distributed systems. 7 M
5. a) Describe a simple implementation of read-your –writes consistency for displaying web pages that have just been updated. 7 M
- b) Explain the management of shared objects in Orca. 7 M
6. a) In the two-phase commit protocol, why can blocking never be completely eliminated, even when the participants elect a new coordinator? 7 M
- b) How the write-ahead log in distributed transaction can be used to recover from failures? 7 M
7. a) What is wrong in implementing a nonce as a timestamp? 7 M
- b) Write the advantages and disadvantages of using centralized server for key management . 7 M
8. a) List and explain the services of CORBA. 7 M
- b) Write short notes on distributed objects. 7 M