

**B.TECH. SEM -VII (COMPUTER) 2014 COURSE (CBCS) : WINTER
- 2017**

SUBJECT: DISTRIBUTED SYSTEMS

Day : **Friday**
Date : **12/01/2018**

W-2017-2276

Time : **02.30 PM TO 05.30 PM**
Max. Marks: 60

N. B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Assume suitable data **WHEREVER** necessary.

Q.1 What is Distributed System? What are the trends in Distributed System? (10)
Discuss pros and cons of Distributed System.

OR

What is IPC? What are the desirable features of a message passing system? (10)
Explain the issues in IPC by message passing.

Q.2 What was the primary motivation behind the development of the RPC (10)
facility? How an RPC facility does make the jobs of Distributed Application
Programmer simpler?

OR

What are the main issues in designing a transparent RPC mechanism? Is it (10)
possible to achieve complete transparency of RPC mechanism? If no,
explain why .if yes, explain how?

Q.3 What is Napster and its legacy peer to peer system? Explain in detail. (10)

OR

Differentiate between human-oriented and system-oriented names used in (10)
system. What problems may occur when a distributed system contains
objects which are identified by their system-oriented names only and there
are no human –oriented names for objects? Explain.

Q.4 Explain in detail the various clock synchronization algorithms. How you (10)
achieve event ordering in distributed environment?

OR

What is Mutual Exclusion? What are the different approaches to achieve the (10)
Mutual Exclusion? Explain.

Q.5 What is process migration? What are the desirable features of a good process (10)
migration mechanism? Explain.

OR

What is Thread? Explain in detail the motivations for using threads and also (10)
explain issues in designing a Thread package.

Q.6 List some of the common goals of Computer Security. Differentiate between (10)
passive and active attacks. Which of the two is more harmful and why?

OR

What is Cryptography? What are some of its common uses in a Distributed (10)
System? What are some of the basic requirements that a good cryptosystem
must fulfill?

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