B.TECH. SEM -VII (COMPUTER) 2014 COURSE (CBCS) :
SUMMER - 2018
SUBJECT : DISTRIBUTED SYSTEMS

Day : **Monday** **S-2018-2481** Time : **02.30 PM TO 05.30 PM**
Date : **21/05/2018** Max. Marks :60

N. B. :

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

Q.1 What is dstributed system? Explain the need of distributed system with suitable example **(10)**

OR

Explain in detail the design and implemetnation issues of distributed system **(10)**

Q.2 What are the main issues in designing a transperent RPC mechanism? Is it possible to achieve complete transperency in a RPC mechanism? If no, explain why. If yes, explain how **(10)**

OR

Discuss in detail Java RMI group communication in detail. Also explain the roll of RMI Registry in Java RMI model. **(10)**

Q.3 Name the main components of distributed file system. What might be the reasons for seperating the various functions of a distributed file system into these components? Explain. **(10)**

OR

What is naming facility in distributed system? Explain desirable features of a good naming system. **(10)**

Q.4 Explain in detail various clock synchronization algorithms. How event ordering is achieved in distributed environment. **(10)**

OR

What is deadlock? What are the necessary conditions for deadlock? How deadlocks are handled in distributed systems. **(10)**

Q.5 Explain in detail various techniques and methodologies for scheduling processes of a distributed system. **(10)**

OR

What is process migration? What are the desirable feature of a good process migration mechanism? Explain. **(10)**

Q.6 List common goals of computer secuirty mechanism. Differentiate between active and passive attacks. Which of them is more harmful and why? **(10)**

OR

What are the common types of active attacks associated with message communication in a distributed system? Comment on the relative complexities of these types of attackes from the viewpoint of the following **(10)**

- An intruder
- The designer of the security system for distributed environments

* * * *