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**Question Paper Code : 57260**

**B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2016**

**Sixth Semester**

**Computer Science and Engineering**

**CS 6601 – DISTRIBUTED SYSTEMS**

**(Regulations 2013)**

**Time : Three Hours**

**Maximum : 100 Marks**

**Answer ALL questions.**

**PART – A (10 × 2 = 20 Marks)**

1. List the Limitations of distributed system.
2. Name some services and examples of Middleware.
3. What is the role of Proxy server and mobile code ?
4. Define Inter-process Communication.
5. Describe the characteristics of Peer to Peer systems.
6. Discuss on LDAP.
7. Distinguish between physical clock and logical clock.
8. Write the Happened-before relation.
9. List the issues in designing load balancing algorithms.
10. Write any two advantages of Process Migration.

**PART - B (5 × 16 = 80 Marks)**

11. (a) Explain in detail about trends in distributed systems. (16)

**OR**

(b) (i) Enlighten the examples of distributed systems. (10)

(ii) Write short notes on WWW. (6)

12. (a) Illustrate TCP and UDP communication with suitable example programs. (16)

**OR**

(b) Write down the steps in javaRMI and explain it with suitable programs. (16)

13. (a) (i) With neat sketch explain Routing Overlays in detail. (8)

(ii) Write short notes on the following :

(1) Napster and its legacy (4)

(2) Peer to Peer Middleware (4)

**OR**

(b) Elucidate about File Service Architecture with neat diagram. (16)

14. (a) Write short notes on the following :

(i) Ricart and Agrawala's algorithm (8)

(ii) Maekawa's Voting algorithm (8)

**OR**

(b) (i) Explain concurrency control in detail. (12)

(ii) Discuss on Nested Transactions. (4)

15. (a) Illustrate the features and mechanism of Process Migration with suitable examples. (16)

**OR**

(b) Discuss on Task assignment, loading balancing and sharing in detail. (16)