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)**

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