Reg. No. : | | | | | | | | | | |

Question Paper Code: 36204

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2018

Sixth Semester

Computer Science and Engineering

01UCS604 - DISTRIBUTED SYSTEMS

(Regulation 2013)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 2 = 20 Marks)

1. What is Distributed system? Give examples.
2. Define heterogeneity.
3. Compare and contrast RMI with RPC.
4. Define jitter and latency.
5. Define Berkeley Internet Name Domain (BIND).
6. What is Napster peer-to-peer file sharing?
7. Differentiate between logical clock and physical clocks.
8. What is atomic commit protocol?
9. What is process migration?
10. Differentiate between load balancing and load sharing approaches.

PART - B (5 x 16 = 80 Marks)

11. (a) Discuss in detail about the trends and challenges in distributed systems. (16)

Or

(b) Explain transparency in distributed systems and give examples for different types of transparencies. (16)

12. (a) Describe the characteristics of inter process communication. Also create API for internet protocols and its addressing with a neat sketch. (16)

Or

(b) Describe in detail the implementation of RPC mechanism with a block diagram. (16)

13. (a) What is name resolution? Describe the methods of name resolution with suitable diagrams. (16)

Or

(b) Discuss the case study of the Andrew file system. (16)

14. (a) Explain the distributed algorithm for mutual exclusion for synchronization with suitable examples. (16)

Or

(b) Explain about atomic commit protocols and distributed deadlocks. (16)

15. (a) Explain in detail about Resource Management. (16)

Or

(b) Briefly discuss about task assignment approach with suitable example. (16)