SE 2013 Digital Sem

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

Question Paper Code : 80301

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Sixth Semester

Computer Science and Engineering

CS 6601 — DISTRIBUTED SYSTEM

(Common to Sixth Semester Information technology)

(Regulations 2013)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Name five reasons why to build distributed system.
2. Discuss the design issues in Intranet.
3. Write the characteristics of multicast communication.
4. Define Network virtualization.
5. Give the advantages in using name caches in file systems.
6. List the file accessing models.
7. Define nested transactions.
8. What is clock's drift rate?
9. Write down the goals to achieve an optimal assignment.
10. List the features of scheduling algorithms.

PART B — (5 × 16 = 80 marks)

11. (a) (i) List the various challenges in distributed systems and explain them. (10)

(ii) How resource sharing is done in distributes systems (6)

Or

(b) Elaborate on the recent trends in distributed systems. (16)

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

Or

(b) Explain any two indirect communication techniques in detail. (16)

13. (a) (i) Explain in detail about naming in file systems. (8)

(ii) With neat sketch explain Routing Overlays in detail . (8)

Or

(b) (i) Describe in detail about Andrew File system in detail. (10)

(ii) Discuss on File Sharing semantics. (6)

14. (a) (i) Explain distributed mutual exclusion with suitable algorithms. (8)

(ii) Elaborate on any three election algorithms. Use diagrams wherever necessary. (8)

Or

(b) (i) Describe atomic commit protocols in detail. (8)

(ii) Explain replication in detail. (8)

15. (a) (i) Explain the thread models and the issues in thread implementation with diagrams.

(ii) Describe the features of process migration.

Or

(b) (i) Discuss the load balancing approach of resource management in detail. (8)

(ii) What is meant by load sharing? Explain any one algorithm of load sharing to manage resources. (8)