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

Question Paper Code : 21291

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Eighth Semester

Computer Science and Engineering

CS 2056/CS 804 — DISTRIBUTED SYSTEMS

(Common to Information Technology)

(Regulation 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define IPC.

2. What do you meant by marshaling?

3. Write two examples for RPC.

4. Define thread.

5. Mention the components of File service architecture.

6. How DNS does differ from GNS?

7. What is a need for logical clock?

8. Define election in Distributed systems.

9. Write two implementation issues of shared memory.

10. What are the services are done by the CORBA?

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain the characteristics of distributed systems. (8)

(ii) Discuss the various web challenges in Distributed systems. (8)

Or

(b) (i) Discuss the different API are used in Internet. (8)

(ii) Explain pipe and message queue IPC with example (8)

12. (a) Explain in detail the various components of RMI in java with suitable example. (16)

Or

(b) Briefly discuss the architecture of distributed OS in detail. (16)

13. (a) Compare and contrast between DNS and GNS with their advantages and disadvantages. (16)

Or

(b) Explain the file service architecture in detail with its implementation issues and advantages. (16)

14. (a) Describe the following giving suitable examples :

(i) Global start. (4)

(ii) Logical time. (4)

(iii) Mutual Exclusion. (8)

Or

(b) (i) Explain the synchronization with physical and logical clocks. (8)

(ii) Explain distributed debugging scenarios with example. (8)

15. (a) (i) Discuss the design and implementation issues of shared memory. (10)

(ii) Discuss the consistency in Ivy. (6)

Or

(b) Describe the distributed design of implementation issues in CORBA. (16)

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