F 9063 (Pages : 2) Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, NOVEMBER 2011

Eighth Semester

Computer Science and Engineering/ Information Technology

DISTRIBUTED COMPUTING (Elective–II) (RT)

[Supplementary]

Time : Three Hours Maximum : 100 Marks

Part A

Answer **all** *questions.*
Each question carries 4 *marks.*

1. Define distributed systems ? What are its characteristics ?
2. Define transparency ? List the various types of transparency ?
3. With the help of figure explain the file service architecture ?
4. Write a note on AFS.
5. Describe marshalling ?
6. What you mean by message passing ? How it is achieved ?
7. Explain the thread scheduling mechanism in distributed systems ?
8. Differentiate static and dynamic scheduling ?
9. Define transaction recovery ?
10. With example explain Byzantine failures ?

(10 × 4 = 40 marks)

Part B

Each question carries 12 *marks.*

11 Explain the various design issues in distributed systems ? (12 marks)

Or

12 Describe the following :

(i) System architecture of Amoeba. (4 marks)

(ii) Process management in Amoeba. (4 marks)

(iii) Communicaiton in Amoeba. (4 marks)

13. Write in detail the implementation of file system ? (12 marks)

Or

Turn over

14. Write note on :

    (a) Name space. (3 marks)

    (b) Name resolution. (3 marks)

    (c) DNs. (6 marks)

15. Explain the various clock synchronization algorithms used in distributed systems. (12 marks)

Or

16. Write a note on the following :—

    (a) Strict consistency. (4 marks)

    (b) Weak consistency. (4 marks)

    (c) Entry consistency. (4 marks)

17. With figure explain the sender initiated algorithm ? (12 marks)

Or

18. Explain the bidding algorithm in detail ? (12 marks)

19. Explain the following :—

    (a) Deadlock prevention. (6 marks)

    (b) Deadlock detection. (6 marks)

Or

20. List the different types of faults ? With figure explain the fault tolerance using active replications ? (12 marks)

(5 × 12 = 60 marks)