

C 44406

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**SEVENTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, JUNE 2013**

CS 09 L07/IT 09 705 L23—DISTRIBUTED SYSTEM

(2009 Scheme – Supplementary)

Time : Three Hours

Maximum : 70 Marks

Part A

Answer all questions.

- I. (a) Mention about the functionalities of an operating system.
- (b) State the characteristics of a distributed system.
- (c) What are the concurrent programming languages ?
- (d) Differentiate a thread and a process.
- (e) What is meant by distributed process scheduling ?

(5 × 2 = 10 marks)

Part B

Answer any four questions.

- II. (a) Write about the principle of operation involved in distributed computing.
- (b) Explain the working of the client-server model.
- (c) Write a short note on directory services in inter-process communication.
- (d) Differentiate static process scheduling and dynamic process scheduling with examples.
- (e) What is meant by real time scheduling ? Give an example.
- (f) Write a short note on mutual exclusion.

(4 × 5 = 20 marks)

Part C

Answer all questions.

- III. (a) With a neat sketch, explain the working of the distributed system architecture.

Or

- (b) Write in detail about the distributed computing environment.

- IV. (a) Discuss in detail about the working of threads.

Or

- (b) Explain the techniques used to implement the synchronization concept.

Turn over

V. (a) Explain the different types of inter-process communication.

Or

(b) Explain the algorithm involved in distributed leader election.

VI. (a) Explain any *two* methods used to implement the distributed process scheduling mechanism.

Or

(b) Explain the real-time scheduling mechanism with necessary examples.

(4 × 10 = 40 marks)