

## SEVENTH SEMESTER B.TECH. (ENGINEERING) (69) DEGREE EXAMINATION, NOVEMBER 2014

CS 09 705 L07/IT 09 705 L 23—DISTRIBUTED SY

Time: Three Hours

## Part A

Answer all questions.

- I. (a) What are the functionalities of an operating system?
  - (b) Bring out the need for concurrent programming.
  - (c) What is directory service?
  - (d) What do you mean static process scheduling?
  - (e) Enumerate the concepts of distributed shared memory.

 $(5 \times 2 = 10 \text{ marks})$ 

## Part B

Answer any four questions.

- II. (a) Discuss about distributed system architecture in detail.
  - (b) Discuss about memory issues of creating a process and a thread.
  - (c) Explain in detail about any one concurrent programming language.
  - (d) Explain in detail about distributed message passing communication.
  - (e) Write short notes on leader election.
  - (f) Discuss about real time scheduling.

 $(4 \times 5 = 20 \text{ marks})$ 

## Part C

Answer all questions.

III. (a) Enumerate and explain about major design issues of a distributed system.

r

- (b) Discuss in detail about Distributed Computing Environments (DCE).
- IV. (a) Explain in detail about distributed client server model.

Or

(b) Elaborate about time service language mechanisms for synchronization.

V. (a) Discuss in detail about the process of transaction communication.

Or

- (b) Elaborate about distributed message passing communication and request/reply communication.
- VI. (a) Explain in detail about dynamic load balancing mechanisms.

Or

(b) Enumerate and explain the concepts of distributed computer security.

 $(4 \times 10 = 40 \text{ marks})$