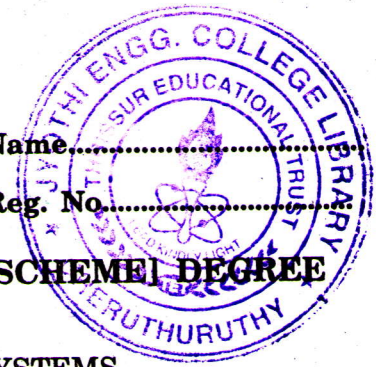


**D 11938**

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Name.....

Reg. No.....



**SEVENTH SEMESTER B.TECH. (ENGINEERING) [09 SCHEME] DEGREE  
EXAMINATION, NOVEMBER 2016**

**CS 09 705 L07/IT 09 705 L23—DISTRIBUTED SYSTEMS**

Time : Three Hours

Maximum : 70 Marks

**Part A**

*Answer all questions.  
Each question carries 2 marks.*

- I. (a) Define DCE.  
(b) What is the fundamental idea of distributed computing ?  
(c) State the need for inter-process communication.  
(d) Define name service.  
(e) Define distributed shared memory.

(5 × 2 = 10 marks)

**Part B**

*Answer any four questions.  
Each question carries 5 marks.*

- II. (a) Write a short note on the operating system functionalities.  
(b) Discuss about the client-server model.  
(c) Explain message communication with an example.  
(d) Write the steps involved in dynamic load sharing and load balancing.  
(e) Explain the leader election process mechanism.  
(f) Discuss about the security imposed on distributed computer model.

(4 × 5 = 20 marks)

**Part C**

*Answer all questions.  
Each question carries 10 marks.*

- III. (a) Explain the design issues involved in distributed operating system.  
*Or*  
(b) Explain the working of the DCE with its architecture.

**Turn over**



IV. (a) Explain the pseudocode involved in the working of concurrent processes.

Or

(b) Explain the time services language mechanism for synchronization.

V. (a) Explain the communication mechanisms involved in interprocess communication.

Or

(b) Explain the types of directory services with examples.

VI. (a) Explain in detail about the distributed process scheduling concept.

Or

(b) Compare and contrast static process scheduling and dynamic process scheduling.

(4 × 10 = 40 marks)