B.E. (Comps) (Sem -VIII) (CBCGS) (R-19-20)(C scheme)

Duration: 3hrs |Max Marks:80|

N.B. : (1) Question No 1 is Compulsory.
        (2) Attempt any three questions out of the remaining five.
        (3) All questions carry equal marks.
        (4) Assume suitable data, if required and state it clearly.

1   Attempt any FOUR   [20]
    a   Explain issues in designing Distributed system
    b   Compare NOS and DOS
    c   Explain desirable features of global scheduling algorithm
    d   Explain the need of election algorithm.
    e   Justify how Ricart-Agrawala's algorithm optimized the Message overhead in
        achieving mutual exclusion

2   a   What is Remote procedure call? Explain how transparency is achieved in RPC   [10]
    b   Explain various forms of message oriented communication with suitable   [10]
        example

3   a   What is logical clock? Why are logical clocks required in distributed systems?   [10]
        How Lamport does synchronizes logical clock? Which events are said to be
        concurrent in Lamports timestamp
    b   Explain Chandy -Misra_Hass Algorithm for distributed deadlock detection.   [10]

4   a   Explain different load estimation and process transfer policies used by load   [10]
        balancing algorithms.
    b   Describe code migration issues in details   [10]

5   a   Discuss and differentiate various client consistency models.   [10]
    b   Explain Absolute ordering and Casual ordering process with the help of example   [10]
        for many to many communication.

6   a   List desirable features of distributed File system. How are modifications   [10]
        propagated in file caching schemes?
    b   Discuss Raymonds tree based algorithm of token based in distributed mutual   [10]
        exclusion

                              ****