

N.B.1) Question No.1 is compulsory.

- 2) Attempt any three questions out of remaining five questions.
- 3) Assume suitable data whenever required but justify the same.
- 4) Assumptions made should be clearly stated.

1. (a) Explain Readers -Writers synchronization problem in Distributed operating system 10  
(b) Explain and analyze Raymond's tree based algorithm 10
2. (a) Describe two phase commit protocol of fault tolerance 10  
(b) Explain Distributed Database System. What is the serializability condition in DDBS? 10
3. (a) Write a note on cloud OS 10  
(b) Define Real Time System. Explain types of real time task with example 10
4. (a) Write the Ho-Ramamurthy's centralize deadlock detection algorithm 10  
(b) Explain priority inversion in RTOS 10
5. (a) Write classifications of agreement problems in Distributed system 10  
(b) Explain different issues of load Distribution 10
6. (a) What are the ways of implementing backward error recovery? Explain in detail. 10  
(b) Explain Rate monotonic scheduling algorithm in RTOS 10

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