[Time: Three Hours]   **[Marks:80]**

Please check whether you have got the right question paper.

N.B: 1.   Question.No.1 is compulsory.
        2.   Attempt any 3 questions from the remaining 5 questions.
        3.   Draw neat diagrams wherever necessary.

Q 1	a)	What are the issues in load distributions?	5
	b)	What are the design issues of Network Operating Systems (NOS)?	5
	c)	What is local clock? With the help of example explain limitation of logical clock.	5
	d)	What are the distributed deadlock handling strategies? Explain.	5
Q 2	a)	Describe two phase commit protocol of fault tolerance.	10
	b)	Explain Distributed Database System. What is the serializability condition in DDBS?	10
Q 3	a)	Write a details notes on cloud OS.	10
	b)	Define Real Time System. Explain types of real time task with example.	10
Q 4	a)	Write the Ho-Ramamurthy's centralize deadlock detection algorithm.	10
	b)	Explain priority inversion in RTOS.	10
Q 5	a)	Write classification of agreement problems in Distributed system.	10
	b)	Explain Readers-writers synchronization problem in distributed operating system.	10
Q 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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