Reg. No. :

Question Paper Code: 51Q03

M.E. DEGREE EXAMINATION, NOV 2018

First Semester

Computer Science and Engineering

15PCS103- ADVANCED OPERATING SYSTEMS

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - A $(5 \times 20 = 100 \text{ Marks})$

1.	(a)	(i) How can you prevent deadlock?	CO1- U	(10)				
		(ii) Explain deadlock recovery methods.	CO1- U	(10)				
Or								
	(b)	Explain the various scheduling algorithms with example.	CO1- U	(20)				
2.	(a)	Briefly explain in detail about communication primitives. Or	CO2- U	(20)				
	(b)	Explain in detail about global state detection algorithm.	CO2- U	(20)				
3.	(a)	Identify and explain the protocol where the decision to abort or commit is taken by the coordinator. Design a protocol where no site is designated to be a coordinator.	CO3- App	(20)				
Or								
	(b)	Describe synchronous check pointing algorithm. In this algorithm	CO3- App	(20)				

when a process receiving a Take_a_tentative_ckpt message, will send it to all the processes that are in its ckpt_cohort set. Is this necessary? Justify your answer.

4.	(a)	Explain in detail about cyclic schedulers.	CO4- U	(20)
		Or		
	(b)	Explain in detail about the methods of handling resource sharing.	CO4- U	(20)
5.	(a)	Explain in detail about file system in Linux.	CO5- Ana	(20)
		Or		
	(b)	Explain in brief about inter process communication in Linux System.	CO5- Ana	(20)