Code No: I0504/R16

M.Tech. I Semester Regular Examinations, January-2017

ADVANCED OPERATING SYSTEMS

(Common to Computer Science and Computer Science & Engineering)

Time: 3 Hours **Max. Marks: 60**

Answer any FIVE Questions
All Questions Carry Equal Marks

1.	a	List out communication primitives and briefly explain design issues in remote procedure calls.	[6]
	b	State and prove Huang's Termination detection algorithm.	[6]
2.	a	Analyze the performance of Singhal's heuristic algorithm by explain it briefly.	[6]
	b	Discuss hierarchical deadlock detection algorithms in detail.	[6]
3.	a	Explain applications of agreement algorithms.	[6]
	b	Describe the mechanisms for building distributed file systems.	[6]
4.	a	Give the advantages of distributed shared memory by explaining its architecture.	[6]
	b	Discuss the four components of a load distributing algorithm.	[6]
5.	a	Define failure recovery. Explain about classification of failures.	[6]
	b	Explain rollback recovery algorithm.	[6]
6.	a	Briefly explain access control list method with its implementation.	[6]
	b	Explain public key cryptography in detail.	[6]
7.	a	Discuss various types of interconnection networks for multiprocessor systems.	[6]
	b	Write short notes on the following: i) User-level threads ii) Kernel-level threads	[6]
8.	a	Discuss briefly serializability theory.	[6]
	b	Explain timestamp based concurrency control algorithms.	[6]

*****