

10CS/1S841

Eighth Semester B.E. Degree Examination, June/July 2015 **AD-HOC Networks**

Time: 3 hrs.

Max. Marks: 100

Note: Answer FIVE full questions, selecting

		Note: Answer 11v L jun questions, selecting		
		at least TWO questions from each part.	1	
			/	
		PART - A		
1	a.	List and explain different applications of Ad-hoc wireless network.	(05 Marks)	
	b.	Explain the issues that makes wireless sensor network a distinct category of ad-ho-	nct category of ad-hoc wireless	
		networks.	(05 Marks	
	C.	Discuss the major issues, one need to consider while designing a MAC protocol	for Adhoo	
		wireless network.	(10 Marks	
		C/X		
2	a.	What are the design goals to be met while designing a MAC protocol for Adhoc ne	etworks?	
_	u.	What are the design goals to be met with design goals	(06 Marks	
	b.	Explain the classification of MAC protocols.	(04 Marks	
	c.	Explain with example, a working principle of Five-Phase-Reservation Protocol (F	PRP).	
		Explain with example, a working principle of the result of	(10 Marks	
3	a.	Mention the factors to be considered while making scheduling decisions.	(04 Marks	
	b.	Explain the operation of Distributed Priority Scheduling (DPS) protocol.	(08 Marks	
		Explain the working principle of multi-channel MAC (MMAC) protocol.	(08 Marks	
	C.	Explain the working principle of until-channel wise (white) protocol.	(JO Mains	
		William the description of the language and the service protection of the service potential and the service protection of	1.9	
4	a.	What are the characteristics of an ideal routing protocol for adhoc wireless networ	.K.	

(04 Marks)

Explain the classification of routing protocols.

(08 Marks)

Explain the working principle of wireless routing protocol.

(08 Marks)

PART - B

- Explain zone based hierarchical link state routing protocol with example. (10 Marks) 5 Explain the operation of Fisheye State Routing Protocol (FSRP). (10 Marks)
- Explain the issues in designing transport layer protocols for adhoc wireless networks. a.

(10 Marks) With a neat diagram, explain the operation of adhoc-TCP (ATCP) protocol. (10 Marks)

- Discuss the requirements and challenges in security provisioning for adhoc wireless (10 Marks) networks.
 - What is key management? Explain symmetric key algorithm with example. (10 Marks)
- Explain the issues in providing QoS in adhoc wireless network. (10 Marks) (10 Marks)
 - Discuss the working principle of Ticket-based QoS routing protocol.

2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8=50, with oc treated as malpractice. Important Note: 1. On completing your answers, com, sorily draw diagonal cross lines on the remaining blank pr