Seat N	lo.: _	GUJARAT TECHNOLOGICAL UNIVERSITY		
M.E –II <sup>st</sup> SEMESTER–EXAMINATION – JULY- 2012 Subject code: 1722702 Date: 16/ Subject Name: Ad Hoc Networks Time: 10:30 am – 13:00 pm Total Management				
			arks: 70	
		ons: empt all questions.		
2.	Mal	ke suitable assumptions wherever necessary.  Ires to the right indicate full marks.		
Q.1	(a) (b)	Define Ad hoc Network and discuss the architecture of PRNET. Differentiate infrastructure-based and infrastructure-less networks.	07 07	
Q.2	(a)	Draw schematic of typical ESS and explain the services offered by typical IEEE 802.11 network.	07	
	<b>(b)</b>	List the issues related with ad hoc wireless networks and explain any two in detail.	07	
	(b)	OR  Describe a common method used in alleviating the hidden terminal problem at the MAC layer.	07	
Q.3	(a)	List table driven routing protocols and explain any one with its advantages and disadvantages.	07	
	<b>(b)</b>	Compare tree-based multicast routing protocols with mesh based multicast routing protocols	07	
Q.3	(a)	OR List on demand routing protocols and explain any one with its advantages and disadvantages.	07	
	<b>(b)</b>	Explain WARM (Wireless Ad hoc Real-Time Multicasting Protocol) with its TDMA frame structure.	07	
Q.4	(a) (b)	Why does TCP not performing well in ad hoc wireless networks? Explain QoS enabled Ad hoc On demand Distance Vector (AODV)	07 07	
		Protocol. OR		
Q.4	(a)	Compare various TCP solutions for ad hoc wireless networks.	07	
Q.4	<b>(b)</b>	Explain SWAN (Stateless Wireless Ad hoc Network) Model.	07	
Q.5	(a)	Explain battery scheduling techniques to improve battery lifetime.	07	
	<b>(b)</b>	Discuss the issues and challenges in designing the sensor network.	07	

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(a) Explain Power Aware Multi Access Signaling (PAMAS) protocol.

**(b)** Explain clustered sensor network architecture.

Q.5

**07** 

**07**