Seat 1	No.: Enrolment No	_
GUJARAT TECHNOLOGICAL UNIVERSITY M. E SEMESTER – II • EXAMINATION – SUMMER • 2014 Subject code: 1722702 Date: 27-06-2014 Subject Name: Ad Hoc Networks		
•	e: 02:30 pm - 05:00 pm Total Marks: 70	
Instru	 Attempt all questions. Make suitable assumptions wherever necessary. Figures to the right indicate full marks. 	
Q.1 (a) (b)	Distinguish the cellular networks and Ad Hoc wireless networks. List the technical challenges for PRNETs and explain its architecture.	[7] [7]
Q.2 (a) (b)	Explain all the components of typical IEEE 802.11 network. Explain the applications of Ad Hoc wireless networks. OR	[7] [7]
(b)	Explain the challenges facing Ad Hoc Mobile Networks.	[7]
Q.3 (a) (b)	Explain AODV routing protocol with its advantages and disadvantages. Explain zone routing protocol with its advantages and disadvantages. OR	[7] [7]
Q.3 (a)	Explain the characteristics of an ideal routing protocol for Ad Hoc wireless	[7]
(b)	networks. Explain the hidden and exposed station problems and set of tables maintained in wireless routing protocol.	[7]
Q.4		[7]
(a) (b)	Compare tree-based multicast routing protocols with mesh based multicast routing protocols. Discuss issues and challenges in providing QoS in Ad hoc wireless networks.	[7] [7]
Q.4	OR	
(a) (b)	Explain the challenges in designing wireless sensor networks. Explain any one quality of service solution at MAC layer.	[7]
Q.5		

Explain the network security requirements and how security is ensured for multi-

[7]

[7]

[7]

[7]

Explain the architecture reference model for multicast routing protocol.

Explain Feedback based TCP with advantages and disadvantages.

Explain battery scheduling techniques in detail.

(a)

(b)

Q.5

(a)

(b)

layer attacks?