Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER– II EXAMINATION – SUMMER 2016

Subject Code: 2724403 **Date: 24/05/2016**

Subject Name: Ad Hoc Networks

Time: 10:30 am – 01:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**

Q.1	**(a)**	Draw Schematic of IEEE 802.11 (WLAN) Network Architecture and explain the services offered by it.	**07**
	(b)	Explain Hidden and Exposed terminal problems in Ad-Hoc Wireless networks.	**07**
Q.2	**(a)**	What is PRNET? Draw and explain architecture of PRNET and also discuss challenges of PRNET.	**07**
	(b)	Explain AODV Protocol for Ad-Hoc Wireless Network in Detail.	**07**
		OR	
	(b)	Explain "Why does TCP not perform well in Ad-Hoc Wireless Networks?"	**07**
Q.3	**(a)**	Explain CGSR Protocol for Ad-Hoc Wireless Network in Detail.	**07**
	(b)	Which are the Challenges and issues in providing Security in Ad-Hoc Network and Discuss network layer attacks in Ad-Hoc Wireless Networks.	**07**
		OR	
Q.3	**(a)**	Give the Classification of Multicast Routing Protocols and Explain MAODV Protocol in detail.	**07**
	(b)	Discuss Issues in Designing a Routing Protocol for Ad Hoc Wireless Networks.	**07**
Q.4	**(a)**	Explain the MZRP (Multicast Zone Routing Protocol) in detail.	**07**
	(b)	Explain SWAN (Stateless Wireless Ad hoc Network) Model.	**07**
		OR	
Q.4	**(a)**	Explain key issues involved in QoS Routing in Ad-Hoc Networks.	**07**
	(b)	Explain battery scheduling techniques with required neat sketches.	**07**
Q.5	**(a)**	What is need of energy management in Ad-Hoc Wireless Networks? Explain in detail.	**07**
	(b)	Compare tree-based multicast routing protocols with mesh-based multicast routing protocols	**07**
		OR	
Q.5	**(a)**	Define Wireless Sensor Network and Explain Clustered Sensor Network Architecture.	**07**
	(b)	Explain ATCP in detail.	**07**

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