Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER- II (Old course)• REMEDIAL EXAMINATION - SUMMER 2015
Subject Code: 1724102 Date:13/05/2015
Subject Name: Wireless Ad-hoc and Sensor Networks
Time: 02:30 pm to 5:00 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) (b)	Compare cellular network and wireless Ad-hoc network. Explain the issues for designing a wireless sensor network.	07 07
Q.2	(a) (b)	Explain any one application of Wireless Sensor Network. Discuss briefly issues related with Routing protocol for Ad-hoc Wireless Networks.	07 07
		OR	
	(b)	Discuss DSR Routing algorithm for Ad-hoc Network with its Advantages and Disadvantages.	07
Q.3	(a)	(1)Define (i) Polling (ii) Reservation.	02
		(2)Explain Schedule selection and coordination for sensor-MAC protocol.	05
	(b)	(2)Explain Low-Energy Adaptive Clustering Hierarchy Routing protocol for Wireless Sensor Network.	07
		OR	
Q.3	(a)	(1)Define (i)Hidden Node (ii) Exposed Node	02
		(2)Briefly explain different operating modes in piconet.	05
	(b)	Explain various drawback of flooding and state the way to address this shortcomings of flooding technique	07
Q.4	(a)	Explain various problems which make TCP and UDP unsuitable for WSN.	07
	(b)	Explain SPIN-BC protocol in wireless sensor network. OR	07
Q.4	(a)	Explain CODA (Congestion Detection and Avoidance) protocol.	07
•	(b)	Explain Localization in Wireless sensor network.	07
Q.5	(a)	Explain the problem of bootstrapping in wireless sensor network.	07
	(b)	Explain predictive congestion control.	07
		OR	
Q.5	(a)	Explain security threats for a wireless sensor network.	07
	(b)	Explain access control and data exchange with message passing for sensor-MAC protocol.	07
