Seat No.: _____ **Enrolment No._____**

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. - SEMESTER– II EXAMINATION – SUMMER 2017

Subject Code: 2724115 **Date: 29/05/2017**

Subject Name: Ad Hoc and Wireless Sensor Network

Time:02:30 PM to 05:00 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)	Why does TCP not perform well in Ad Hoc Wireless Network?	07
	(b)	Compare Wireless Ad Hoc and Wireless Sensor Network. List their applications.	07
Q.2	(a)	Draw IEEE 802.11 Frame Format. Explain it in details.	07
	(b)	Write a short note on challenges and issues in designing Ad-HOC Network.	07
		OR	
	(b)	Explain Hidden and Exposed terminal problems in Ad-Hoc wireless networks.	07
Q.3	(a)	Explain Classifications of Multicast Routing Protocols in Ad Hoc wireless network.	07
	(b)	Explain Radio Propagation Mechanism and Characteristics in wireless communication.	07
		OR	
Q.3	(a)	Explain the Classifications of QoS Solutions in Wireless Ad-HOC Network.	07
	(b)	Discuss the Need for Energy Management in Ad hoc Wireless networks.	07
Q.4	(a)	Draw and explain hardware component of wireless sensor network.	07
	(b)	Explain “Periodic listen and sleep operations” and “Schedule selection and Coordination” in brief.	07
		OR	
Q.4	(a)	Write short note on SPIN protocol.	07
	(b)	Explain challenges and limitations of WSNs.	07
Q.5	(a)	Discuss design issues of transport layer protocol in WSNs.	07
	(b)	Explain Tiny OS for wireless sensor networks.	07
		OR	
Q.5	(a)	Explain performance requirements of MAC layer for wireless sensor networks.	07
	(b)	Write short note on PAMAS.	07

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