Seat No.: Er		Seat No.: Enrolment N	nrolment No	
		GUJARAT TECHNOLOGICAL UNIVI M.E -IIst SEMESTER-EXAMINATION - JULY		
	S	Subject code: 1724102	Date: 09/07/20	12
		Subject Name: Wireless Ad hoc and Sensor Networks		
		Гіте: 10:30 am – 13:00 pm	Total Marks:	70
		Instructions:		
		1. Attempt all questions.		
		2. Make suitable assumptions wherever necessary.		
Λ 1	(2)	3. Figures to the right indicate full marks.		
Q.1	(a) 1.	State comparisons between Cellular Network and wireless ad hoc network.		(4)
	2.	Explain power management in wireless ad hoc network in very brief.		(3)
	(b)			
	1.	Draw basic architecture of wireless sensor network and explain in brief.		(4)
Q.2	2. (a)	Briefly explain one of the applications of mesh-based wireless sensor netwo	ork.	(3)
~	1.	Draw the architecture of wireless sensor node and explain in brief.		(4)
	2.	List out various design constraints for wireless sensor networks		(3)
	(b) 1.	Draw OSI reference model of wireless sensor network and explain in brief.		(4)
	2.	Briefly explain term <i>fairness</i> in wireless sensor networks.		(3)
		OR		
	(b)	Briefly explain various methods to reduce collision in wireless sensor netwo	orks.	(07
Q.3	(a)			,
	1.			(4)
	2	Briefly explain schedule selection and Co-ordination in S-MAC		(2)
	2. (b)			(3)
	1.	Briefly explain Low energy Adaptive Clustering Hierarchy Based routing to	echnique in wireless	(4)
	2	sensor Network.		(2)
	2.	List out various routing strategies in wireless sensor Networks OR		(3)
Q.3	(a)	Write short note on IEEE 802.15.4 LR-WPANs		(7)
	(b)	Did in an annual company		. A
	1. 2.	Briefly explain SPIN-BC protocol in wireless sensor networks List out various drawbacks of flooding technique in wireless sensor network	79	(4)
Q.4	(a)	State various problems which makes TCP and UDP unsuitable for wireless		(3)
	1.	Briefly explain Congestion Detection and Avoidance algorithm with re	ference to wireless	(4)
	2. (b)	sensor network		(3)
	1.	State functions of Network management protocol in wireless sensor network	ζS.	(3)
	2.	Briefly explain localization in wireless sensor networks.		(4)
Q.4	(a)	OR		
Ų. 4	(a) 1.	Write short note on PSFQ protocol with reference to wireless sensor networ	ks.	(4)
	2.	Briefly explain ATP for wireless sensor network.		(3)
	(b)	Write short note on network management architecture for wireless conserve	atworks	(A
	1. 2.	Write short note on network management architecture for wireless sensor networks Explain Active localization in wireless sensor networks	AWUIKS.	(4)
Q.5	(a)	List out various threats which can affect the security of wireless sensor net	works	(7)
	(b)	Briefly explain admission control in wireless sensor Network		(7)
Q.5	(a)	OR Briefly explain Predictive Congestion Control		(7)
	(b)	State problems of bootstrapping security in wireless sensor network.		(7)
