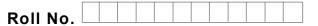
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Total No. of Questions : 08

M.Tech.(IT) (E3)(2015 & Onwards) (Sem.-3) WIRELESS SENSOR NETWORKS Subject Code : MTIT-302 Paper ID : [74153]

Time: 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries TWENTY marks.

Ι	a.	Write down the different types of applications where wireless sensors can be use Also list various characteristic requirements of sensors. (1)	
	b.	Differentiate among Wireless sensor networks and Mobile ad-hoc networks. (19))
II	Ex	plain briefly : (20))
	a.	Temperature and Pressure Sensors	
	b.	Humidity Sensors	
	c.	Optical Sensors	
III	a.	Compare single hop versus multiple hop networks with suitable example. (1)))
	b.	Explain the basic principles for design and optimizing the wireless sensor networks.	
))
IV	a.	Discuss the various design issues for designing of physical layer and transceivers of Wireless sensor networks. (1)	
	b.	Describe the three different classes of MAC protocol in detail. (1)))
V	a.	How S-MAC protocol avoids idle listening, collisions, and overhearing? Also expla S-MAC fragmentation and NAV setting. (19)	
	b.	Discuss the address allocation and assignment mechanism of WSNs with suitab example. (1	
VI	a.	How to judge the efficacy and quality of a topology-control algorithm? (19)))
	b.	Describe the node clustering algorithm for wireless sensor networks. (1)))
VII		scuss the various challenges faced in node localization and positioning of sensors SNs. (2)	
VIII	W	rite a note on : (2)))
	a.	Berkeley Motes	
	b.	State centric programming	

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