(10 Marks)

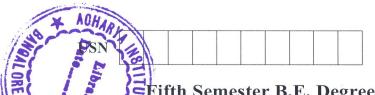
(10 Marks)

(10 Marks)

(10 Marks)

7

networks.



Pime: 3 hrs.

Fifth Semester B.E. Degree Examination, Dec.2019/Jan.2020 Sensors and Networks

Max. Marks: 100

Note: Answer any FIVE full questions, selecting at least TWO full questions from each part.

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		PART - A			
1	a.	What is sensor? List and explain sensor performance characteristics. (10)			
	b.	What are the guidelines offered to select and install measurement systems fo	1		
			(10 Marks)		
		possible decardoj.	(101111111)		
2	0	With neat block diagram, explain smart sensor.	(10 Mayles)		
4	a.		(10 Marks)		
	b.	Discuss present trend in sensor technology and IC sensors.	(10 Marks)		
3	a.		(10 Marks)		
	b.	Explain wireless instrument architecture.	(10 Marks)		
		A V			
4	a.	Explain processor subsystem employed in computer architectures such as Von	Neumann.		
		Harvard and Super-Harvard architecture.	(10 Marks)		
	b.	Compare Serial Peripheral Interface and Inter-Integrated Circuit (I ² C).	(10 Marks)		
	0.	compare serial recipitati interface and interface circuit (1°C).	(10 Marks)		
		DADT D			
_		$\frac{PART - B}{PART - B}$			
5	a.	Explain OSI model with a neat diagram.	(10 Marks)		
	b.	Explain IEEE 802 network model with a neat diagram.	(10 Marks)		
6	a.	Explain the design guidelines and challenges of broadcasting, multicasting and	geocasting		
		mechanisms in WSNs.	(10 Marks)		
	b.	With neat diagram, explain multicasting mechanisms for Two-Tier Data Diss	semination		
		(TTDD) that provides location-based multicasting mechanisms.	(10 Marks)		

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b. List the different reliable transport protocols for wireless sensor networks.

a. Explain network topologies supported by the IEEE 802.15.4 MAC layer.

Explain ZigBee functional layer architecture and protocol stack.

Discuss different congestion control protocols used in transport layer for wireless sensor