## B.E. Eighth Semester (Electronics Engineering / Electronics & Telecommunication / Electronics & Communication Engineering) (C.B.S.)

## **Elective - II: Wireless Sensor Network**

KNT/KW/16/7551/7563 P. Pages: 2 Time: Three Hours Max. Marks:80 Notes: All questions carry marks as indicated. 1. Solve Question 1 OR Questions No. 2. 2. Solve Question 3 OR Questions No. 4. 3. 4. Solve Question 5 OR Questions No. 6. Solve Question 7 OR Questions No. 8. 5. Solve Question 9 OR Questions No. 10. 6. 7. Solve Question 11 OR Questions No. 12. 8. Due credit will be given to neatness and adequate dimensions. 9. Assume suitable data whenever necessary. 10. Illustrate your answers whenever necessary with the help of neat sketches. 1. Draw and explain the Basic Block diagram of wireless sensor Node. 7 a) Write a short note on wireless sensor. Network environment. b) OR 7 Write a short note on commercial approach of wireless sensor network. 2. a) b) Describe the characteristics of wireless sensor network. What are the WSN protocols? Explain it in brief. 3. 7 a) Explain IEEE 802.15.4 WPAN standard in brief. b) OR Write a short note on MAC layer for WSN. 4. a) Write the different approaches for WSN in physical layer. b) 5. Explain in brief the concept of data dissemination. a) Write the different issues in designing & routing protocols. b) OR Write a short note on routing strategies of WSN. a) What are the sensor network protocol? Explain it in brief. b) 7. What is transport control protocols? a) Explain.

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	8.	a)	Write the traditional transport control protocols.	7
		b)	Write a short note on.	7
			i) ATP ii) CODA iii) ESRT	
	9.	a)	Draw & explain the middleware architecture of WSN.	7
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		b)	What do you mean by middleware? Explain in brief.	6
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E	10.	a)	Write a short note on existing middleware.	7
12		b)	Explain the Baric principle of middleware for WSN.	6
)	11.	a)	What is network management? What are the basic requirement for network management.	7
		b)	Write a short note on traffic management issues.	6
			OR	
	12.	a)	Write the design issues for network management for performance.	7
		b)	Draw & explain MANNA Architecture in detail.	6
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