CLASS: M.TECH   SEMESTER : I
BRANCH: CSE   SESSION : MO/19

SUBJECT: IT503 WIRELESS SENSOR NETWORKS

TIME: 3:00 HOURS   FULL MARKS: 50

INSTRUCTIONS:
1. The question paper contains 5 questions each of 10 marks and total 50 marks.
2. Attempt all questions.
3. The missing data, if any, may be assumed suitably.
4. Before attempting the question paper, be sure that you have got the correct question paper.
5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.

Q.1(a)	Differentiate between traditional networks and wireless sensor networks.	[5]
Q.1(b)	Describe the single sensor node architecture with appropriate diagram.	[5]
Q.2(a)	Define wireless sensor network. Explain in brief about the challenges in designing a wireless sensor network.	[5]
Q.2(b)	Explain event-driven localization in details.	[5]
Q.3(a)	Differentiate between contention based MAC protocol and contention free MAC protocol.	[5]
Q.3(b)	What are the advantages and disadvantages of the TRAMA MAC protocol?	[5]
Q.4(a)	Explain SPIN protocol in details. Also explain SPIN-PP and PIN-BC.	[5]
Q.4(b)	Explain about efficient flooding routing protocols.	[5]
Q.5(a)	Explain middleware architecture and middleware principles for wireless sensor networks.	[5]
Q.5(b)	Explain active and passive attacks with the appropriate diagrams.	[5]

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