R19

Reg. No:

SIDDHARTH INSTITUTE OF ENGINEERING & TECHNOLOGY:: PUTTUR
(AUTONOMOUS)
M.Tech II Year I Semester Regular Examinations January 2021
WIRELESS SENSOR NETWORKS
(VLSI)

Time: 3 hours   Max. Marks: 60

(Answer all Five Units **5 x 12 = 60** Marks)

UNIT-I

1	Explain the various challenges and potential applications of wireless sensor networks.	12M

OR

2	a	With neat diagram, explain sensor network architecture.	6M
	b	Explain the various buses used in WSN.	6M

UNIT-II

3	a	Explain in detail about the Imote2 with its architecture.	6M
	b	Tabulate and compare the various OS employed in WSN.	6M

OR

4	a	Explain in detail the OS architecture of MANTIS.	6M
	b	Explain the concept of multithreading.	6M

UNIT-III

5	Discuss in detail the operation of any two routing protocols used in WSN.	12M

OR

6	a	Discuss in detail the wireless channel and communication fundamentals of Physical layer.	6M
	b	Illustrate the classification of MAC protocols.	6M

UNIT-IV

7	a	Explain data dissemination in wireless sensor networks.	6M
	b	Summarize the design goals and solutions of data dissemination.	6M

OR

8	a	Discuss the Directed diffusion protocol and its variants.	6M
	b	Elaborate the Receiver decided protocols.	6M

UNIT-V

9	a	What are the deployment objectives of a wireless sensor network?	6M
	b	Summarize the various fault tolerance techniques used in WSN.	6M

OR

10	a	Highlight the implementation of cognitive radio in WSN.	6M
	b	Highlight the Challenges and research issues for WSN.	6M

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