8. (a) Explain the basic requirements which have to be satisfied by sensor node hardware. **10**

(b) List various performance mesaurement perameters for WSNs. **5**

CC821

M. Tech. EXAMINATION, May 2019

(Third Semester)

(B Scheme) (Re-appear Only)

ECE/Industry Integrated

MTEI605B

WIRELESS SENSOR NETWORKS

Time : 3 *Hours*]   [*Maximum Marks :* 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. All questions carry equal marks.

Unit I

1. (a) Discuss about quality of WSN (Wireless Sensor Network). **8**

   (b) Draw and explain WSN architecture. **7**

2. (a) What are various challenger faced by Wireless and Wired Networks. **8**

   (b) Discuss various enabling technologies which have contributed toward WSN. **7**

Unit II

3. (a) Explain Mathematically the concept of Energy consumption of Sensor Nodes. **7**

   (b) What are various Gateway Concepts for single node architectures. **8**

4. Write short notes on the following : **8+7**

   (a) Choice of Modulation Scheners in WSN

   (b) Future Direction of WSN.

Unit III

5. (a) Discuss design considerations involved in design of Transceiver for WSN. **10**

   (b) Explain the steps involved in assignment of MAC addresses. **5**

6. (a) Can a protocol for wired network be used for WSN. Justify the response. **10**

   (b) Enlist various MAC protocols for WSN's. **5**

Unit IV

7. (a) What are various software platforms used for network simulations. Explain any *one* in detail. **10**

   (b) Discuss various challenges in Topology Control and Time Synchronization of WSN. **5**