Roll No. ☐☐☐☐☐☐☐☐☐☐☐☐   Total No. of Pages : 02

Total No. of Questions : 18

B.Tech.(ECE) (2012 to 2017 E-III) (Sem.–7)
WIRELESS SENSOR NETWORK
Subject Code : BTEC-920
M.Code : 71925

Time : 3 Hrs.   Max. Marks : 60

INSTRUCTION TO CANDIDATES :
1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

Answer briefly :

1. Define Wireless sensor network.

2. Define packet delivery ratio.

3. What is contention based protocol?

4. What is hybrid routing?

5. List the component of sensor node.

6. Define quality of service.

7. Why cryptographic approach is not suitable for wireless sensor network?

8. Write two examples of node level simulator.

9. Explain two objectives of sensor node deployment

10. What is scalabity?

SECTION-B

11.   Present an overview of localization in wireless sensor networks.

12.   Appraise the quality of service related measures in wireless sensor networks.

13.   How energy aware routing works?

14.   Explain node architecture in detail.

15.   Write short note on Berkeley motes.

SECTION-C

16.   Explain Node level Simulators in detail with example.

17.   Write short note on :

   a)   SPAN

   b)   ASCENT.

18.   a)   How power listening mode is used to conserve energy in B- MAC protocol?

   b)   How duty cycle approach is used to transit between listen state and sleep state in S-MAC protocol?

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.