Total No. of Questions: 8]

SEAT No. : ____

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[6004]-884
B.E. (E&TC)
WIRELESS SENSOR NETWORKS
(2015 Pattern) (Semester-II) (Elective-IV) (404192C)

Time : 2½ Hours] ***[Max. Marks : 70***

Instructions to the candidates:

1) ***Neat diagrams must be drawn wherever necessary.***
2) ***Figures to the right side indicate full marks.***

Q1) a) What are the design constraints and challenges of WSN? Explain in brief. **[6]**

b) What are the challenges faced by 6 LOWPAN protocol and how they can be overcome? **[6]**

c) Explain the role of MAC protocol state and explain the design criteria for MAC Protocols. **[8]**

OR

Q2) a) Explain backward error control and forward error control with the help of neat diagrams. **[8]**

b) Explain various properties of wireless links. **[6]**

c) Compare Zigbee with Bluetooth protocol. **[6]**

Q3) a) What are the challenges in localization? **[6]**

b) Write a short note on Geographical clustering and random clustering. **[6]**

c) What is meant by full network broadcost? **[4]**

OR

Q4) a) Explain directed diffusion in WSN. **[6]**

b) What is meant by "hop based" rounting? what are its advantages? **[6]**

c) What are routing challenges in WSN? **[4]**

P.T.O.

Q5) a) What is data aggregation in WSN? What are its advantages? **[10]**

b) Explain compressive sampling in detail. **[8]**

OR

Q6) a) List various attacks that are possible in WSN. Explain any two of them in detail. **[10]**

b) Explain security issues in WSN. **[8]**

Q7) a) What are general problems for deploying WSN applications? **[8]**

b) Write a short note on Early WSN deployments. **[8]**

OR

Q8) a) Explain top down design approach in design of WSN. **[8]**

b) What is tasting and validation in WSN application? **[8]**