

Roll No.

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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (ECE) EL-I (2018 & Onwards Batch) (Sem.-I)

WIRELESS SENSOR NETWORKS

Subject Code : MTEC-PEIX-18-1

M.Code : 75174

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWELVE marks.

- Q1 a) Explain sensor network architecture in detail.
 b) Explain Ad Hoc network.
- Q2 a) Explain micaZ, Imote2, tmote hardware and its utility.
 b) Explain tinyOS and Contiki software and its application.
- Q3 a) How nesC is used in wireless sensor network programming?
 b) Differentiate between QualNet and Opnet commercial platforms
- Q4 a) Explain the types of sensor network protocols.
 b) Explain the details of experimental platforms ns-2.
- Q5 a) Explain the role of routing in network layer protocol.
 b) Explain the node discovery protocol.
- Q6 a) Explain multi-hop and cluster based protocols.
 b) Explain Bluetooth low energy phenomenon.
- Q7 Write short notes on :
 a) Data dissemination
 b) Query processing
- Q8 a) Explain sensor deployment mechanism.
 b) Explain sensor grid and sensor web in detail.

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.