

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**ME – SEMESTER–IV (NEW) EXAMINATION – SUMMER 2017**

**Subject Code:2742303****Date:03/05/2017****Subject Name: WIRELESS SENSOR NETWORK FOR IT****Time:02:30 pm to 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Discuss flooding and its variants in WSN along with traffic implosion and overlapping problem. **07**  
(b) Discuss Challenges of WSN. **07**
- Q.2** (a) Discuss ESRT and RMST with respect to TCP. **07**  
(b) Explain Programming paradigms and application programming interfaces? **07**
- OR**
- (b) Explain energy consumption for Sensor nodes. **07**
- Q.3** (a) Write a note on applications of WSN. **07**  
(b) Discuss any three examples of Sensor nodes. **07**
- OR**
- Q.3** (a) Write note on Mate and SenOS. **07**  
(b) What is IoT? Discuss Arduino. **07**
- Q.4** (a) Explain Network Management requirements and design issues. **07**  
(b) Discuss the use of interest and gradient in direct diffusion with proper example. **07**
- OR**
- Q.4** (a) Discuss Routing Challenges in WSN? **07**  
(b) Explain LEACH in detail. **07**
- Q.5** (a) Explain categories of WSN. **07**  
(b) Explain CODA in detail. **07**
- OR**
- Q.5** (a) Explain the performance metrics for MAC protocols. **07**  
(b) Write a short note on S-MAC. **07**

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