

**M. TECH. –III (COMPUTER ENGINEERING) (CBCS – 2015
COURSE) : WINTER - 2017**

SUBJECT: SELF STUDY - I - SENSOR NETWORK AND EMBEDDED SYSTEM

Day: **Thursday**
Date: **25/01/2018**

W-2017-2862

Time: **11.00 AM TO 02.00 PM**
Max Marks. **60**

N.B.

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Assume suitable data **WHEREVER** necessary.
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- Q.1** Explain energy consumption of sensor node on the basis of operation state. (10)
OR
Explain the concept of Event - based programming with neat diagram. (10)
- Q.2** Explain the "Wake up radio concepts" in detail. (10)
OR
What are the different routing protocols in wireless sensor network? Explain the energy efficient routing with neat diagram. (10)
- Q.3** Explain state-centric programming in detail. (10)
OR
Write a short note on following concept. (10)
a) Node - level software platforms
b) Node - level simulators
- Q.4** With detail structure explain designing of hardware & software component of embedded system. (10)
OR
What are the types of embedded system? Classify the processors in embedded system. (10)
- Q.5** Explain the step wise designing and debugging with microprocessor . (10)
OR
Explain different memory types used in embedded system with its characteristics. (10)
- Q.6** How C++ can be effectively used for developing embedded system applications. (10)
OR
Explain the following terms with respect to C language. (10)
a) Modifiers
b) Statements
c) Loops
d) Pointers
e) queues.