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

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

Day: **Thursday** Time: **11.00 AM TO 02.00 PM**
Date: **25/01/2018** **W-2017-2862** Max Marks. 60

N.B.

1) All questions are **COMPULSORY**.
2) Figures to the right indicate **FULL** marks.
3) Assume suitable data **WHEREVER** necessary.

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.

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