Code No: **PT42043C**   **R13**   Set No. 1

IV B.Tech II Semester Regular/Supplementary Examinations, April - 2018
EMBEDDED SYSTEMS
(Electronics and Communications Engineering)

Time: 3 hours   Max. Marks: 70

Question paper consists of Part-A and Part-B
Answer ALL sub questions from Part-A
Answer any THREE questions from Part-B
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PART–A *(22 Marks)*

1. a) Write the Hardware components used in Embedded system.   [4]
    b) Write the differences between microprocessor and micro controller.   [3]
    c) What is the usage of embedded C in embedded systems?   [4]
    d) Classify and list the source files of processor dependent and processor independent. [3]
    e) Differentiate deassembler and decompiler.   [4]
    f) What is the importance of simulator?   [4]

PART–B *(3x16 = 48 Marks)*

2. a) Explain about core of embedded system.   [8]
    b) Explain about PCB and passive components of Embedded system.   [8]

3. a) Explain the I/O types used in embedded hardware design.   [8]
    b) Explain the significance of timer and counting devices in embedded Hardware design. [8]

4. a) Explain about the Interrupt service mechanism.   [8]
    b) Discuss the embedded firmware design approaches.   [8]

5.   What is Hardware Software Co-design? Explain the important Hardware Software trade-offs in hardware software partitioning.   [16]

6. a) Explain about the integrated development environment.   [8]
    b) Discuss the role of target hardware debugging in system development.   [8]

7.   Explain the Laboratory Tools
    a) Simple LED Tests and Logic probe
    b) Oscilloscope.   [16]