

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***\*\*\*\*\*****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]