Code No: **R41042**   **R10**   **Set No. 1**

IV B.Tech I Semester Supplementary Examinations, Oct/Nov - 2018
EMBEDDED SYSTEMS
(Electronics and Communications Engineering)

Time: 3 hours   **Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks
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1 a) Define Embedded system and explain the classification of embedded systems. [8]
   b) Discuss the applications of Embedded system.   [7]

2 a) Explain one domain-specific example of embedded systems.   [8]
   b) Describe the working principle of Washing machine.   [7]

3 a) Explain the I/O types of embedded hardware design.   [8]
   b) Discuss about the PCB layout design.   [7]

4 a) What is ISR? Discuss about the different types of ISR.   [8]
   b) Differentiate C versus Embedded C in Embedded firmware design.   [7]

5 a) Explain about Multiprocessing and Multitasking of real time operating
       system.   [8]
   b) What is RTOS? What are the different types of operating systems?   [7]

6 a) Explain the concept of integration of Hardware and Firmware.   [8]
   b) Explain the different computational models in the embedded system design.   [7]

7 a) What is compilation? Explain the types of files generated on cross-
       compilation.   [8]
   b) Explain about the Emulators and debugging.   [7]

8   Write a short notes on
      a) Pre-processors
      b) Interpreters   [15]