

Code No: **R41042****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, March - 2017****EMBEDDED SYSTEMS****(Common to Electronics & Communication Engineering and  
Electronics & Computer Engineering)****Time: 3 hours****Max. Marks: 75****Answer any FIVE Questions  
All Questions carry equal marks****\*\*\*\*\***

- 1 Discuss overview of the various interfaces for On Board Communication.
- 2 Explain Non Operational Quality Attributes of embedded systems.
- 3
  - a) Explain digital combinational circuits with example.
  - b) Write note on i) Multiplexer(MUX) ii) De-Multiplexer(D-MUX)
- 4 Explain the different 'embedded firmware design' approaches in detail.
- 5
  - a) What is device driver? Explain its role in the OS context.
  - b) Explain Non-Preemptive Scheduling.
- 6
  - a) Explain In System Programming (ISP) for firmware embedding.
  - b) Explain the steps involved in the Out-Of-Circuiting Programming.
- 7 Explain Simulators, In Circuit Emulator (ICE) and debuggers and their role in embedded firmware debugging.
- 8
  - a) Discuss the quality assurance and testing of the embedded system design.
  - b) Write the Features of a typical Simulator.