



M.Tech I Semester Supplementary Examinations August/September 2018

EMBEDDED SYSTEM CONCEPTS

(Common to DSCE, DECS, ECE, ES, VLSIES, ESVLSI & VLSIESD)

(For students admitted in 2013, 2014, 2015 & 2016 only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) What are the various classifications of embedded systems?
(b) Explain various technologies in embedded processor design.
- 2 (a) Explain the functionalities of RS232 and RS485 standard serial interface with neat diagram.
(b) Write a detailed note on following: (i) Memory devices. (ii) Component interfacing. (iii) CPU bus.
- 3 (a) Define round robin and explain round robin with interrupts give example.
(b) Discuss selecting an architecture saving memory space.
- 4 Briefly explain debugging technique:
(a) Testing on your host machine.
(b) Instruction set simulators.
- 5 (a) What is the kernel? Give an example for real-time operating system (RTOS).
(b) Explain interrupt service routines in RTOS.
- 6 (a) Explain ARM processor with a neat diagram.
(b) Discuss about ARM data Instructions and move instructions.
- 7 (a) What is the importance of design methodologies?
(b) Explain about CRC CARD methodology in system analysis.
- 8 Write detailed note on following:
(a) GPRS.
(b) Personal digital assistants.
(c) Telephone PBX.
