

Roll No. Total No. of Pages: 02

Total No. of Questions: 18

B.Tech. (EE) (2012 Onwards E-III) (Sem.-7)

EMBEDDED SYSTEMS Subject Code: BTEE-805E M.Code: 71946

Time: 3 Hrs. Max. Marks: 60

INSTRUCTION TO CANDIDATES:

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

Answer briefly:

- 1. In what ways CISC and RISC processors differ?
- 2. List the important considerations when selecting a processor.
- 3. Give the limitations of polling technique.
- 4. Define Semaphore.
- 5. What is data memory?
- 6. Define Message Queue
- 7. What are the types of scheduling?
- 8. What is code memory?
- 9. Define Real Time Clock (RTC).
- 10. What is shared data problem?

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SECTION-B

- 11. Explain the concept of DMA.
- 12. Discuss about In-circuit emulator and watchdog timer.
- 13. Explain the functions of various buses used during transfer of data.
- 14. Explain the software tools in designing of an embedded system.
- 15. Compare the advantages and disadvantages of data transfer using serial and parallel port devices.

SECTION-C

- 16. Explain how interrupt routines are handled in embedded systems?
- 17. Explain process management and memory management in embedded system.
- 18. Explain the possible steps involved in build process of embedded control system.

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NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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