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?

## 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.



**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.**