CC-67

M. Tech. EXAMINATION, May 2017

(Third Semester)

(Re-appear Only)

ECE(Industry Integrated)

MTEC-613-B

EMBEDDED APPLICATION BASED ON
ADVANCED MICROCONTROLLER

Time : 3 *Hours*]   [*Maximum Marks :* 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt any *Five* questions. All questions carry equal marks.

1. Explain the IIR and FIR filter used in AVR microcontroller. **15**

2. Explain the architecture of microcontroller and explain various addressing mode of microcontroller. **15**

3. (a) Define embedded operating system. **15**

   (b) Explain the thumb instruction set use in AVR microcontroller.

4. Write the assembly language programming of embedded system design. **15**

5. Explain the architecture of ARM processor, also explain the programming of ARM model. **15**

6. (a) Explain various features of AVR microcontroller. **15**

   (b) Explain the generation of square wave programming.

7. Explain the microcontroller and also define various types of microcontroller. **15**

8. Write notes on the following : **15**

   (a) RISC *vs* CISC

   (b) UART.