Roll No ...................................

## MEVD - 205

### M.E./M.Tech., II Semester

Examination, December 2015

### Embedded Computing System Design

*Time : Three Hours*

*Maximum Marks : 70*

*Note :* i)   Attempt any five questions.
ii)  All questions carry equal marks.

1. a) What are the challenges in designing Hardware and Software components?

   b) What are the various precautions that must be taken into account while designing an embedded system?

2. a) What you mean by parallelism within the instructions, give an example?

   b) Explain the data operations and control of flow in embedded system.

3. a) What are the differences between ARM and SHARC processors?

   b) What are the different interrupts are available in an ARM processors?

4. a) What is data compression, discuss by giving an example.

   b) Discuss the various bus protocols in an ARM processor.

5. a) What are the various parameters should be considered while designing a program for embedded system?

   b) What are the different ways to minimize the program size?

6. a) How one can minimize the execution time? Illustrate with a suitable example.

   b) Discuss the effect of program size and execution time on the performance of CPU.

7. a) Discuss various design issues in development of an Embedded system.

   b) What are the different models of program in Embedded system?

8. Write short notes on (Any Two) :

   i)   System design techniques

   ii)  System Analysis

   iii) Quality assurance

   With respect to Embedded system design.

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