Roll No .....

MEVD - 105

M.E./M.Tech., I Semester

Examination, June 2014

Embedded Micro Controller Programming

Time : Three Hours

Maximum Marks : 70

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

1. a) Explain briefly about the very long Instruction word processor.
   b) Differentiate between microprocessors and micro controllers.

2. a) Discuss the architectural issues of CISC and RISC processors.
   b) Explain the working of a DMA controller.

3. a) Explain briefly about EEPROM and flash memory.
   b) Discuss the serial and parallel communication protocols.

4. a) With the help of block diagram explain the architecture of 8051 microcontroller.
   b) Discuss the working and application of USART.

4. a) Obtain the transformation equations for rotating three phase windings of synchronous machine . 7
   b) Draw the phasor diagram for non salient pole alternator and write voltage and power equations using the phasor diagrams. 7

5. Describe the various reactances and time constants, and how deduce these parameters using the short circuit oscillograms (characteristics) with the help of graph papers (log/semi log etc). 14

6. Obtain the pork's transformation for the synchronous machines. What do you mean by porks inverse transformation. Then find the value of operational impedances. 14

7. a) Explain in brief the approximate method apply for the power system analysis. 7
   b) What do you mean the analysis of line to line short circuit in the power system occurs. 7

8. Write a short notes on the following: 14
   a) Steady state analysis of schrage motor
   b) Cross field commutator machines
   c) The problem of power system analysis.