

Q.P. Code :37934

[Time: Three Hours]

[Marks:80]



Please check whether you have got the right question paper.

- N.B: 1. Question.No.1 is compulsory.
2. Attempt any Three questions from remaining.

- Q.1 a) Explain Program Status word Register of 8051 Microcontroller 04
 b) Explain Current Program Status Register of ARM7. 04
 c) Explain Assembler Directives in 8051 microcontroller 04
 d) Explain Features of ARM7 04
 e) Explain concept of Cortex-A, the Cortex-R and the Cortex-M. 04
- Q.2 a) Explain the Memory Interfacing of 8051 with 8K*8 Data ROM & 8K*8 PROM 10
 b) Draw & Explain data flow model of ARM7 10
- Q.3 a) Interface ADC 0808 with 8051 microcontroller. write Assembly language Program to convert analog signal which is available on channel no 6 10
 b) Write a program for 8051 microcontroller to generate square waveform of 2kHz & 50% duty cycle at pin P1.5. Assume 8051 is operating at frequency 11.059 MHz 10
- Q.4 a) Explain 8051 Timer operating modes 10
 b) Explain ARM interrupts along with Interrupt Vector Table. 10
- Q.5 a) Explain Addressing modes of ARM7 Processor with example in each. 10
 b) Discuss Digital camera as an Embedded System. 10
- Q.6 Write short notes on (Any Two)
 1. Internal Structure of PORT 1 10
 2. SCON in 8051 10
 3. Interrupts in 8051 10