

OCTOBER 2012

P/ID 17410/RBL

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) What are ALU registers? Discuss.
Or
(b) Write a note on the following :
 - (i) Word lengths
 - (ii) Addressable memory.
2. (a) Discuss the various addressing modes.
Or
(b) What is the need for microprocessor I/O? Explain.
3. (a) Explain the interrupt system in 8051 microcontroller.
Or
(b) Write a brief note on X86 hardware.
4. (a) Give a brief overview on parallel I/O.
Or
(b) Write a short note on modems.

5. (a) What is regulatory compliance testing?
Explain.

Or

- (b) Write a note on the design tools for microprocessor development.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Explain the architectural characteristics of a basic microprocessor.
7. Explain the programming model and block diagram of microprocessor.
8. Explain the instruction set of 8085 microprocessor.
9. What do you mean by polling and interrupts? Discuss.
10. Explain the architecture and programming model of 8051.
11. Explain the addressing modes of X86.
12. Write a note on digital - to - analog and analog to digital interfaces.
13. Explain the application of microprocessors in temperature control.