

OCTOBER 2011

P/ID 17410/RBL

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Write a note on the following :
 - (i) Word lengths.
 - (ii) Addressable memory.Or
 - (b) What is stack pointer? Discuss.
2. (a) Explain the various temporary data registers.
Or
 - (b) Write a note on the basic instruction types.
3. (a) What are I/O ports? Discuss.
Or
 - (b) What are the registers in 8051? Explain.
4. (a) What is parallel I/O? Explain.
Or
 - (b) Write a note on Modems.

5. (a) How do you prepare the specification?
Explain.

Or

- (b) Explain the application of microprocessors in temperature control.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Explain the basic microprocessor block diagram and programming model in detail.
7. Explain the various addressing modes.
8. Write a note on the instruction set of 8085.
9. Explain the architecture of 8051 with a neat diagrams.
10. Give a brief note on X86 addressing modes.
11. Write a note on digital to analog interfaces.
12. Write a short note on Intel 8255.
13. How do you implement and test the design of a microprocessor based product? Explain.