

OCTOBER 2012

**P/ID 17457/
RCG/PCAD**

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

1. (a) Explain the structure of an assembly language instruction for 8086. Give example.

Or

- (b) Discuss with an example, the syntax of the following constructs.

(i) Repeat - until

(ii) Delay loop.

2. (a) How are strings manipulated in 8086? Give suitable examples.

Or

- (b) What are assembler directives? Explain any five of them.

3. (a) Explain the need of an 8086 interrupt vector table.

Or

- (b) What is trouble shooting? How is it done with 8086?

4. (a) Differentiate the principle of parallel port and serial port access with 8086.

Or

- (b) How is parallel data sent to a printer in handshake mode? Explain.

5. (a) Write short notes on 8086.

Or

- (b) Write short notes on EDA tools.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

6. Write an assembly language program to perform the following :
- string concatenation
 - string comparison
 - checking a string for palindrome.
7. Using while-do statement, perform matrix addition and subtraction.
8. Explain the concept of recursive procedure with an example.
9. Explain with a neat diagram, how an interrupt controller interfaces with 8086.

10. What is DMA? Discuss its functionality with a neat diagram.
 11. How is a keyboard interfaced with 8086? Explain.
 12. Explain the characteristics of DRAM and interfacing DRAM to a microprocessor.
 13. Describe the architecture of 8086 with a neat diagram.
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