

OCTOBER 2013

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

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL questions.

All questions carry equal marks.

1. (a) Discuss with example.
 - (i) Machine language
 - (ii) Assembly language
 - (iii) High level language.

Or

- (b) What are the logical instructions in 8086?
Explain.

2. (a) What is FAR procedure? Explain.

Or

- (b) What is the use of Macros? And write short notes on Macros.

3. (a) What is polling? Write the disadvantages of polling.

Or

- (b) Differentiate memory mapped I/O and I/O mapped I/O.

4. (a) Draw a diagram for controlling speed of DC motor using feedback from tachometer and explain.

Or

- (b) Explain about process control system based on 8086.

5. (a) Write short notes on EDA Tools.

Or

- (b) What is a Co-processor? Explain the use of Co-processors.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

All questions carry equal marks.

6. Draw the 8086 internal architecture and explain the functions of each unit.

7. Compare Macros and Procedures with example.

2 **P/ID 17457/RCG/
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8. What is Assembler Directives? Explain the use of each directive.
 9. What are the steps followed in troubleshooting in a microcomputer? Explain.
 10. Explain how seven segment displays are interfaced with microcontroller.
 11. Draw the architecture of 80386 and explain each component.
 12. Discuss cache memories in detail.
 13. Explain the complete set of 80286.
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