MAY 2011 **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) Explain delay loops and jumps with example.

Or

(b) Discuss the multiplication instructions of 8086.

2. (a) Define the following assembler directives :

(i) Assume

(ii) DW

(iii) END

(iv) ENDP.

Or

(b) What is FAR procedure? Explain with example.

3. (a) Discuss the parallel printer interface.

Or

(b) Write a program for printer driver.

4. (a) Discuss the initialization for handshake output in 8255A.

Or

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

5. (a) How 8237 is initialized? Explain in detail.

Or

(b) Draw the diagram of DMA and explain with timing diagram.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

All questions carry equal marks.

6. Discuss the arithmetic instructions of 80286 with examples.

7. Discuss shift and rotate instructions with example.

8. Write assembly language program for comparing strings.

9. Write a program for addition using stack.

10. What are the steps involved in troubleshooting a microcomputer? Explain in detail.

11. Explain the interfacing a microcomputer with stepper motor.

12. Discuss the functions of 8255A programmable parallel port device with internal block diagram.

13. Explain the memory management scheme of 80286.

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