MCA-646 MCA-06/ PGDCA-05

M.C.A./P.G.D.C.A. DEGREE/DIPLOMA EXAMINATION – JUNE 2008.

First Year/Second Semester

INTRODUCTION TO COMPUTER ORGANISATION

Time: 3 hours Maximum marks: 75

Answer for 5 marks questions should not exceed 2 pages.

Answer for 10/15 marks questions should not exceed 5 pages.

PART A — $(5 \times 5 = 25 \text{ marks})$

Answer any FIVE questions.

- 1. Convert the following decimal numbers to binary
 - (a) 32
 - (b) 89
 - (c) 298.

- 2. Draw a Karnaugh Map for five variables.
- 3. Write short notes on Direct Memory Access.
- 4. Define control unit and write its functions.
- 5. What is Micro-programmed control unit?
- 6. List out various components of 8086 microprocessor.
- 7. Differentiate between COM and EXE programs.

PART B —
$$(5 \times 10 = 50 \text{ marks})$$

Answer any FIVE questions.

- 8. Explain Multiplexer and Decoder detail.
- 9. Explain the following:
 - (a) Optical Memories
 - (b) Charge Coupled Devices
 - (c) Magnetic Bubble Memories.
- 10. Explain the basic structure of the CPU with a neat diagram.
- 11. Discuss the basic organization of ALU.

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- 12. Define microinstruction and write its types and formats.
- 13. Discuss the brief outline of 68000 microprocessor.
- 14. Write an assembly language program to find largest among 10 numbers.

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