FACULTY OF INFORMATICS

B.E. 2/4 (IT) II – Semester (Main) Examination, May 2013

Subject: Computer Organization and Microprocessors

Time: 3 Hours   **Max.Marks: 75**

Note: Answer all questions from Part A. Answer any five questions from Part B.

PART – A (25 Marks)

1.   What is DMA?   (3)
2.   Define memory mapped I/O.   (3)
3.   Explain the function of ALE and IO/M signals in the 8085 architecture.   (3)
4.   What is the difference between SRAM & DRAM?   (2)
5.   Define virtual memory.   (2)
6.   List the major components of 8251A programmable communication interface?   (2)
7.   Write the control word format in the BSR mode?   (2)
8.   What is the purple of 'TLB'?   (3)
9.   Explain the address capability of 8085 as 64 KB.   (2)
10. Write the differences between multiprocessors and multicomputers.   (3)

PART – B (50 Marks)

11.   Explain the internal architecture of the 8085 microprocessor.   (10)

12.(a) Describe the DMA controller.   (5)
  (b) What is Bus Arbitration and explain its types?   (5)

13.(a) Write short notes on interface circuits with example.   (5)
  (b) Explain about interrupts.   (5)

14.(a) Write short notes on Buses of a Computer System.   (5)
  (b) Write short notes on secondary storage.   (5)

15.   Explain different data transfer instructions with examples.   (10)

16.   Write an ALP to multiply two 16-bit numbers with an example.   (10)

17.(a) Explain the concept of 8251 US ART.   (5)
  (b) Illustrate interface keyboard and seven-segment display.   (5)

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