

**FACULTY OF INFORMATICS****B.E. 2/4 (I.T.) II – Semester (Old) Examination, June 2016****Subject: Computer Organization and Microprocessor****Time: 3 Hours****Max.Marks: 75****Note: Answer all questions from Part A. Answer any five questions from Part B.****PART – A (25 Marks)**

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|----|--|---|
| 1  | Write about memory hierarchy   | 3 |
| 2  | What is the role of DAA instruction and describe with example                    | 2 |
| 3  | What is the purpose of TLB?  | 3 |
| 4  | Write primary feature of 8259A   | 3 |
| 5  | Discuss working of stacks and subroutines  | 3 |
| 6  | Define virtual memory  | 2 |
| 7  | List two data transfer instructions  | 2 |
| 8  | Differentiate RISC and CISC  | 3 |
| 9  | Explain the following 8085 instructions with examples<br>i) ADC C<br>ii) ORI 50H | 2 |
| 10 | List different types of interrupts in 8085                                       | 2 |

**PART – B (5x10 = 50 Marks)**

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|-------|---|--------|
| 11 a) | Explain interrupt service routine in detail.  | 4      |
| b)    | Write an ALP for 8085 to multiply two 8-bit number.   | 6      |
| 12    | Explain the following:<br>a) SRAM, synchronous and asynchronous DRAM<br>b) Describe Bus Arbitration and explain its types | 4<br>6 |
| 13    | Discuss different types of addressing modes of 8085.  | 10     |
| 14    | Explain in detail about 8279 key board and display controller.  | 10     |
| 15    | Explain in detail about 8254 CWR.   | 10     |
| 16 a) | Discuss about the metrics used to measure the performance of memory system.   | 5      |
| b)    | Explain in detail about DMA controller.   | 5      |
| 17    | Explain internal architecture of 8085 with neat diagram.  | 10     |

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