

**FACULTY OF ENGINEERING**  
**B.E. 2/4 (CSE) II – Semester (Main) Examination, June 2014**

**Subject : Microprocessors and Interfacing**

**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  | Write four differences between microprocessors and microcontrollers.                          | 2 |
| 2  | List the addressing modes of 8085 with example for each.                                      | 3 |
| 3  | Exchange the contents of PSW (ODO) and TMOD (89) using HXHG instruction.                      | 3 |
| 4  | Explain about the control word format of 8255A programmable peripheral interface in I/O mode. | 3 |
| 5  | Explain about the DAA instruction of 8085 microprocessor.                                     | 2 |
| 6  | Explain about 8085 interrupts.  | 3 |
| 7  | Explain about the flag register of 8086 microprocessor.                                       | 2 |
| 8  | What are the advantages of using segment registers in 8086?                                   | 2 |
| 9  | Explain all the rotate operations of 8051 microcontroller.                                    | 3 |
| 10 | Explain about conditional return of 8085 microprocessor.                                      | 2 |

**PART – B (50 Marks)**

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|----|---|----|
| 11 | Explain about 8085 microprocessor functional block diagram.                   | 10 |
| 12 | Draw and describe the timing diagram for OUT 01 instruction.                  | 10 |
| 13 | a) Explain the programming model of 8057 microcontroller with diagram.        | 5  |
|    | b) Explain the internal RAM organization of 8051 with the diagram.            | 5  |
| 14 | Explain about the programmable peripheral interface Intel 8255A with diagram. | 10 |
| 15 | Explain about the programmable Interrupt controller 8259A                     | 10 |
| 16 | Explain the addressing modes of 8086 microprocessor.                          | 10 |
| 17 | Write short notes on the following :  |    |
|    | a) A/D converter of 8085  | 4  |
|    | b) Features of advanced processors  | 8  |
|    | c) Jump and call instructions of 8085 microprocessors                         | 2  |

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