**B.Sc. DEGREE EXAMINATION, APRIL 2016.**

**II YEAR — IV SEMESTER**

**Major Paper IV — MICROPROCESSORS AND ITS APPLICATIONS**

**Time : 3 hours Max. Marks : 60**

**SECTION A — (10 × 1 = 10 marks)**

**Answer any *TEN* questions.**

1. Define Microprocessor.
2. What do you mean by a bus?
3. How many flags are there in Intel8085 microprocessor?
4. What is an assembler?
5. Define indexing.
6. What is a subroutine?
7. What does stack refer to?
8. Expand INBUF.
9. Explain about the non maskable interrupt.
10. What are the two pins needed for I/O communication?
11. What is memory mapped I/O?
12. Define Opcode.

**SECTION B — (5 × 4 = 20 marks)**

**Answer any *FIVE* questions.**

1. What are the logic instructions available in 8085? Explain.
2. Explain the programming techniques in looping of 8085 with suitable example.
3. What is the difference between counter and time delay?
4. Write the sequence of events in execution of conditional CALL instruction.
5. Illustrate BCD addition with example.
6. What are the problems in implementing 8085 interrupt?
7. Explain DMA with neat diagram.

**SECTION C — (3 × 10 = 30 marks)**

**Answer any *THREE* questions.**

1. Discuss the architecture of 8085 with a neat block diagram.
2. Explain dynamic debugging in detail.
3. Illustrate modulo 10 counter with necessary program and flowchart.
4. Explain BCD to seven segment LED code conversion with example.
5. Give a brief note on 8085 interrupt.

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