Reg. No.:			

## Question Paper Code: 13354

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2012.

## Fifth Semester

Electronics and Communication Engineering

## 080290030 — MICROPROCESSORS AND APPLICATIONS

(Regulation 2008)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A —  $(10 \times 2 = 20 \text{ marks})$ 

- 1. List the flags of 8085.
- 2. Distinguish between memory mode I/O and I/O mode I/O.
- 3. How is memory segmented in 8086?
- 4. Distinguish between minimum and maximum mode operation of 8086.
- 5. State intersegment bracking.
- 6. Define an assembler.
- 7. List the two types of control words in 8255.
- 8. State the difference b/n ADC and DAC.
- 9. What is the difference between DRAM and SRAM?
- 10. What is the need for I/O interfacing?

## PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) Explain the addressing modes of 8085 with example.

Or

- (b) Write an 8085 assembly language program to perform sorting in ascending order, using bubble sort technique, and explain the same.
- 12. (a) Draw the internal block diagram of 8086 microprocessor and explain the function of each block.

Or

- (b) Explain the hardware and software interrupts of 8086.
- 13. (a) Illustrate the usage of string instructions of 8086 with an example.

Or

- (b) Write an 8086 ALP to perform multiplication of 32 bits  $\times$  32 bits and explain the same.
- 14. (a) Provide a brief overview of the working of 8279 keyboard/display controller chip.

Or

- (b) With a neat diagram explain the interfacing of 8257 in an 8085 based system.
- 15. (a) Explain in detail programmed I/O and Interrupt driven I/O.

Or

(b) What is DMA Interfacing? Explain with example.

13354