FOURTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, JUNE 2011

AI 09 404—INTRODUCTION TO MICROPROCESSORS

(2009 Admissions)

Time: Three Hours

Maximum: 70 Marks

Part A

- 1. What are the addressing modes of 8085?
- 2. Write a program to generate a time delay of 1 m. sec.
- 3. What is the function of BIV and EV.
- 4. What is meant by programmable one shot in 8253 timer?
- 5. What is pipelining?

 $(5 \times 2 = 10 \text{ marks})$

Part B

Answer any four questions.

- 6. Explain how a DMA transfer is carried out in 8085.
- 7. Write a program to multiply two 8 bit numbers.
- 8. Explain about memory segmentation in 8086.
- 9. Explain the mode 0 operation of 8255 with an example.
- 10. Explain the principle behind A/D converter.
- 11. Explain about Assemblers.

 $(4 \times 5 = 20 \text{ marks})$

Part C

12. Describe the architecture of 8085 microprocessor.

Or

- 13. Discuss the memory organisation of a microprocessor and also explain how I/O devices are interfaced with the microprocessor.
- 14. Write a program to convert a binary number to a BCD number.

Or

- 15. Write a program to find the average of N numbers.
- 16. Explain the addressing modes of 8086.

Or

- 17. Discuss about the signals present in 8086 processor.
- 18. Describe the operation of 8259.

Or

19. Explain how keyboard/display controller works.

 $(4 \times 10 = 40 \text{ marks})$