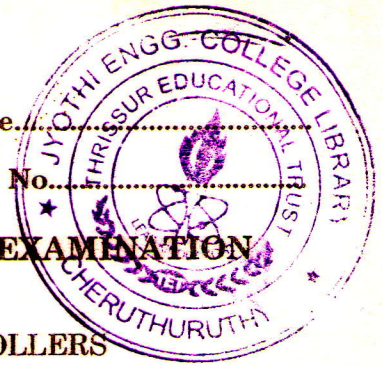


C 47568 EE

Name.....

Reg. No.....



**SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION
JUNE 2008**

EE 2K 601—MICROPROCESSORS AND MICROCONTROLLERS

Time : Three Hours

Maximum : 100 Marks

Answer all questions.

- I. (a) What are the features of max mode operation in 8086 processor chip ?
(b) Explain the different addressing modes of 8086 processor.
(c) Explain the BSR mode of operation of 8255 for a specific application.
(d) Explain the features of DMA controller.
(e) Classify the differences between 80386 and pentium processor.
(f) Explain the features of TSS in 80386 architecture.
(g) Explain the features of special function registers of 8051.
(h) Explain any five bit operatable instructions of 8051.

(8 × 5 = 40 marks)

- II. (a) Classify the instruction set of 8085 processor with five set of instruction for each type.

Or

- (b) Classify the instruction set of 8086 processor with five set of instruction for each type.

- III. (a) With suitable block diagram explain the organisation of 8259 interrupt controller.

Or

- (b) With suitable block diagram explain the organisation of 8251 programmable communication interface.

- IV. (a) Explain the features by :

(i) Descriptors table.

(ii) Selectors.

Or

- (b) With suitable block diagram explain the organization of Superscalar Architecture.

- IV. (a) Explain with suitable hardware how 8051 microcontroller could be used for Timing Control application. Explain with a specific example.

Or

- (b) Explain with suitable hardware the interfacing concept of 8051 with a 12 kg. stopper motor. Also write an ALP to move the shaft by 36° in the both the directions.

(4 × 15 = 60 marks)