Name CG. COLLEGE Name Reg. No. 200 ATION TO

SIXTH SEMESTER B.TECH. (ENGINEERING) DEGREE EXAMINATION, DECEMBER 2010

EE 04 602—MICROPROCESSORS AND MICRO-CONTROLL

Time: Three Hours and as benefited at our welquib COLLs wod, as reached a desimum

Maximum : 100 Marks

Answer all questions.

- I. (a) List the addressing modes supported by 8086 instruction set.
 - (b) Distinguish between minimum mode and maximode of operation of 8086.
- (c) What is meant by DMA? Name and explain about different ways in which DMA operation can be carried out.
 - (d) Draw the framing for the character (whose ASCII Code is 404) in asynchronous serial communication and explain.
 - (e) Differentiate between real and protected mode of operation of 80386.
 - (f) What is meant by bank switching with reference to memory system of Pentium? Explain.
 - (g) Name the flag bits of 8051 micro-controller and explain the use of each one.
 - (h) List the interrupt sources of 8051 along with their vector address. Also explain how the priority of these interrupts can be varied.

 $(8 \times 5 = 40 \text{ marks})$

II. (a) Draw the pin diagam of 8086 in its minimum mode of operation and explain the use of each signal pin.

Or

- (b) Discuss about:
 - (i) Loosely coupled configuration.
 - (ii) Closely coupled configuration.
 - (iii) Queue with reference to 8086.
- III. (a) With the help of diagram, explain how 8255 can be interfaced to 8086.

Or

- (b) Explain how 8279 controls keyboard and screen segment LED dispaly.
- IV. (a) Explain the use of the following signals of 80386 microprocessor:
 - (i) \overline{BE}_0 to \overline{BE}_3 .

(ii) M/IO.

(iii) ADS.

(iv) READY.

(v) LOCK.

(vi) HOLD.

(vii) PEREQ.

(viii) BUSY.

(ix) $\overline{\text{ERROR}}$.

(x) INTR.

(xi)

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(b) Explain the terms:	•		
(i) Superscalar architecture.	ESTER RITECH CENCIL	MAS HTXIS	
(ii) Memory bank switching	in Pentium. NOTTANIMAX		
(iii) Hyper Threading Techno	ICROPROCESSORS AND A	JEE 04 602N	
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V. (a) Explain with the help of diagram,		aced to 8051 micro-co	ontroller.
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with anitall 1	modes supported by 8051 instru		
rango ta musimanda ta es	homizsur ban sbom mumicina na		
(ii) Write a nested delay loop usi	ing 8051 instructions.	what is meant by tan be carried out.	7 marks)
II Code is 404) in asynchropous seria			
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	the following signals of 80386 m		
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