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B.E. 4th Semester (I.T.) Examination, May-2010

**COMPUTER ARCHITECTURE AND
ORGANISATION**

Paper-CSE-210-E

Time allowed : 3 hours]

[Maximum marks : 100

Note : Attempt any five questions out of eight.

1. (a) Draw the logical diagram of BCD adder and explain. 10
(b) What is Race around condition and how Master slave flip flop rectifies it ? 10
2. (a) Compare and contrast SISD, MISD, MIMD computer architecture and operation. 10
(b) Explain the concept of MFLOPS. 10
3. (a) Compare and contrast RISC with CISC processors. 10
(b) Draw and explain the basic block diagram of 8086. 10

4. (a) What is micro instruction sequencing ?
Explain with the help of suitable example. 10
- (b) What is pipelining ? How performance of processor is improved with the help of pipelining ? 10
5. Write short notes on : 20
- (a) Memory parameters
- (b) ROM organisation
- (c) Direct mapped cache organisation.
6. (a) Compare and contrast instruction level and processor level parallelism. 10
- (b) What are the various requirements for the implementation of parallelism ? How it is implemented ? What are its real time applications ? 10

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7. (a) Enumerate and explain various interrupts available with 8086. 10
- (b) Explain all the addressing modes of 8086. 10
8. Write short notes on :
- (a) Performance Metrics
- (b) Associative memory
- (c) Control Flow. 20