

Roll No.

2205

B. E. 5th Semester (ECE)

Examination – December, 2009

COMPUTER ARCHITECTURE AND ORGANISATION

Paper : CSE-210-E

Time : Three hours]

[Maximum Marks : 100

Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt any *five* questions out of given *eight*.

1. (a) Draw EX-OR gate with the help of four NAND gates only. 5
- (b) Draw the basic block diagram of full adder. 7
- (c) Draw and explain Master slave flip-flop. 8
2. (a) Compare and contrast high level and low level languages. 8
- (b) Compare the Architectures of SISD, MISD & MIMD. Also compare their applications. 12

3. (a) Draw and explain the Architecture of RISC processor. 10
- (b) Write an assembly level program for the management of 10 numbers at memory location 2010 H in ascending order and store the sorted array at 2050 H. 10
4. (a) Compare the pipelined processor with non pipelined processors. 10
- (b) Draw and explain the architecture of 8086. 10
5. (a) What cache coherence ? Explain its remedial actions also. 10
- (b) Explain the concept of static and dynamic memories. 10
6. (a) State and explain Amdahl's law. 5
- (b) Explain the concept of Instruction level and processor level parallelism. 15
7. (a) Explain the instructions : 10
- (i) MOV AH, [2484H]
 - (ii) AAA
 - (iii) AAM
 - (iv) MOV [AH], 2484H
 - (v) MOV. AH, 24H
- (b) What are the various interrupts of 80 × 86. 10

8. Write short notes on :

(i) Associative Cache Organisation

(ii) MIPS

(iii) MFLOPS

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