# Fourth Semester B.Tech Degree Examination, April 2015

(2013 scheme)

# 13.403 COMPUTER ORGANISATION & ARCHITECTURE (AT)

(Model Question Paper)

Time:3 Hours

Max.Marks:100

## PART-A (10 x2 = 20)

(Answer all questions)

- 1. Explain R-type instruction format using an example
- State the addressing mode used for the instruction beq \$s1,\$s2,25
- 3. Explain the advantages of edge triggered clocking methodology
- 4. State the difference of the instructions:

j 2500 jal 2500

- 5. Show the data path for instruction fetch.
- 6. How are blocks in cache replaced?
- 7. What is memory interleaving?
- Briefly explain RAID.
- 9. What do you mean by stall?
- 10. What are priority interrupts?

## PART-B

(Explain anyone full question from each module)

## Module I

- a). Explain the hardware implementation of restoring division algorithm, Also divide
  1001 by 0010 using restoring division algorithm (10)
  - b). Multiply the following numbers with necessary steps

(10)

- (i) 0.4 10 and -0.533210
- (ii) 9.99<sub>10</sub> x 10 10 and 1.61<sub>10</sub> x 10<sup>-2</sup>

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