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 x 2 = 20)
(Answer all questions)
1. Explain R-type instruction format using an example
2. 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?
8. 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
11. 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
   (i) $0.4_{10}$ and $-0.5332_{10}$
   (ii) $9.99_{10} \times 10^3$ and $1.61_{10} \times 10^2$