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Code No: A0502, A5802
JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.Tech I Semester Examinations, March/April 2011
COMPUTER ORGANIZATION
(COMMON TO COMPUTER SCIENCE, COMPUTER SCIENCE AND
ENGINEERING)

Time: 3hours   **Max. Marks: 60**

Answer any five questions
All questions carry equal marks
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1.a) Explain Booth multiplication algorithm.
  b) List various error detection codes.   [12]

2.a) Design a 4-bit combinational circuit decrementer using four full-adder circuits.
  b) Describe reduced instruction set computer.   [12]

3.a) Explain the difference between a microprocessor and a micro program.
  b) Describe micro programmed control organization.   [12]

4.a) List the applications of parallel processing.
  b) Write a detail note on performance measures and metrics.   [12]

5.a) Discuss various types of ROM.
  b) Explain virtual memory address translation.   [12]

6.a) Compare and contrast isolated I/O with memory mapped I/O.
  b) Explain Bit-oriented protocol.

7. Explain different conflicts in instruction pipeline and also the conflict resolution
    strategies.   [12]

8.a) Perform data flow architecture evaluation.
  b) Give a note on parallel arbitration logic.   [12]

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