

**R09**

Code No: 58014

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech IV Year II Semester Examinations, May - 2016****COMPUTER SYSTEM ORGANIZATION****(Electrical and Electronics Engineering)****Time: 3 Hours****Max. Marks: 75****Answer any Five Questions  
All Questions Carry Equal Marks**

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- 1.a) Explain different types of computers and Bus structure.  
b) Find 2's complement of (i) 0000 (ii) 1101 (iii) 0011  
c) Perform (i) 1-100-0101 (ii) 0111-1010 [5+5+5]
2. What is micro operation? Explain 4-bit Arithmetic circuit with example. [15]
- 3.a) Explain stack organization.  
b) Discuss about RISC processors. [7+8]
4. What is micro programmed control? Explain. [15]
5. What is virtual memory? Explain. [15]
- 6.a) Explain about the need for DMA.  
b) Discuss about priority interrupt. [7+8]
7. What is pipelining? Explain its advantages and disadvantages and write about array processors. [15]
- 8.a) Write difference between multiprocessors and multi computers.  
b) Explain about inter-processor communication and Synchronization in multiprocessor systems. [7+8]

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