

TE Sem V CAO - EXTC (REV) may-2006

2090-06.

(REVISED COURSE) K.T. Exam

TV-8352

(3 Hours)

[Total Marks : 100

N.B. Attempt any five questions.

1. Explain CPU organization and operation with reference to register set, instruction set and addressing modes. What improvements do you suggest to enhance the performance of this CPU ? 20
 2. (a) Explain Booths algorithm for multiplication of signed numbers. 10
(b) Explain with neat diagram the datapath of a floating point ALU. 10
 3. (a) Give the design of a GCD processor using classical method. 10
(b) With the help of a neat diagram explain working of a microprogrammed control unit. 10
 4. (a) Compare RISC and CISC computers. 10
(b) Explain IO processor and CPU interaction with suitable block diagram. 10
 5. (a) Show how virtual memory is mapped into physical memory using paging. 10
(b) Write detailed note on cache memory. 10
 6. (a) Explain any two techniques of bus arbitration. 10
(b) Explain DMA operation with suitable block diagram. 10
 7. (a) Explain Flynn's classification of parallel processing systems. 10
(b) With neat figures explain the working of a four stage instruction pipeline. 10
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