****Name:Xunzhi Li****

****ID:10457500****

****9.5**** Suppose you wish to send a block of data to a tape drive for storage using DMA. What information must be sent to the tape controller before the DMA transfer can take place?

I/O instructions

Memory address

Disk address

Size of block

Read or write

Initiate transfer

****9.7** What is polling used for? What are the disadvantages of polling? What is a better way to perform the same job?**

Polling is the continuous checking of various input devices in rotation at frequent intervals. It could tie up the CPU in an input loop which is not efficient use of CPU optimally. A wastage of CPU resources. A betterway would be to introduce an interrupt which is a perfection situation for an interrupt routine to handle.

****Chapter 9 Calculation Exercise**** ”If my CPU runs at 4.0GHz, and on average takes 10 clock cycles to complete an instruction, how many instructions will be completed in the time it takes to type "MY CPU IS RUNNING NOW"? Assume it takes 5 seconds to type the message. Show your work and how you arrived at the solution”

4.0GHZ means 4\*10^9HZ-----------------4\*10^9 cycle /second

SO answer is : 4\*10^9\*5/10=2,000,000,000 instructions