Ch 9 Exercise

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?

The area of the information on the I/O gadget, the beginning area of the square of information in memory, the size of the square to be moved and the heading of move, perused (I/O → memory) or compose (memory → I/O).

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

Surveying is an instrument where the CPU checks the gadget for preparation. This is commonly the situation with I/O gadgets. On the off chance that the I/O gadget is occupied the CPU re-visitations of different undertakings. The principle disservice is that the CPU consistently checks whether the IO gadgets is accessible. Surveying is somewhat more productive than caught up with pausing. Hinder driven I/O is a superior method to play out a similar undertaking.

9.12 In general, what purpose does an interrupt serve? Stated another way, suppose there were no interrupts provided in a computer. What capabilities would be lost?

Hinder is a sign shipped off the processor showing that a function needs critical consideration. An essential case of hinder is that when we are playing a game on our cell phone and we get a call the game is delayed and we have to reply or reject the call.

There are two kinds of intrude on programming and equipment. Equipment hinder is set off by equipment. For eg Keystrokes on console or snap of mouse.

A product hinder can be as a sub routine call.

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".

1 Hz = 1 Cycle/Second

1 GHz = 10^9 Cycles/Second

4GHz = 4 * 10^9 Cycles/Second

Ans : For 5 seconds number of instructions = 20*10^9 instructions.