Problem 1

a) No, it is not valid. User-level code should not be able to disable interrupts.

b) No, it is not valid. The reasoning is the same as Part A.

c) No, it is not valid. The reasoning is the same as Part A. In addition, on a multiprocessor system, "disabling interrupts only affects the local processor."

d) Yes, it is valid. Kernel level code can successfully disable hardware interrupts. Since this is a single processor system, masking interrupts on entry to the critical region is effective as no other threads of control will run during this time.

e) No, it is not valid. The reasoning is similar to Part C, because there are other processes that can be running simultaneously, and "disabling interrupts only affects the local processor."