

Q11 :

a.

mov eax, [dword eax] ; Get the low 32 bits of TSC

mov edx, [dword eax + 4] ; Get the high 32 bits of TSC

mov esi, 150000000 ; 50ms \* 3.0 GHz \* 10<sup>6</sup> cycles/ms

add eax, esi

adc edx, 0

loop\_start:

rdtsc

cmp eax, [dword eax]

ja loop\_start

cmp edx, [dword eax + 4]

jae loop\_start

Q11: b.

1.

Cs	A1	A0	Address	Port
11000100	0	0	310 H	Port A
11000100	0	1	311 H	Port B
11000100	1	0	312 H	Port C
11000100	1	1	313 H	Control Register

Port selection:

Cs	A1	A0	selects
0	0	0	Port A
0	0	1	Port B
0	1	0	Port C
0	1	1	Control Register

2.

the control word is 1000000010

82H

