

CSE 341 Microprocessor

Fall 2022

Quiz 4

Full Marks - 15

ANSWER ALL THE QUESTIONS

Time: 30 mins

Name_____ ID_____

Section _____

[CO4] 1. **Describe** the role of the Interrupt Service Register [ISR], Interrupt Mask Register [IMR], and Interrupt Request Register. [6 marks]

[C04] 2. Suppose, you need to service 24 hardware interrupts on your 8086 microprocessor.

- a. **State** the name of the process to connect multiple PICs with the microprocessor. [1 mark]
- b. **Explain** how PICs have connected to the master PIC. [2 marks]
- c. **Calculate** the minimum number of PICs required. [2 marks]

[C05] 3. **Illustrate** the way DMA operates. You may draw a diagram if you need. [4 marks]