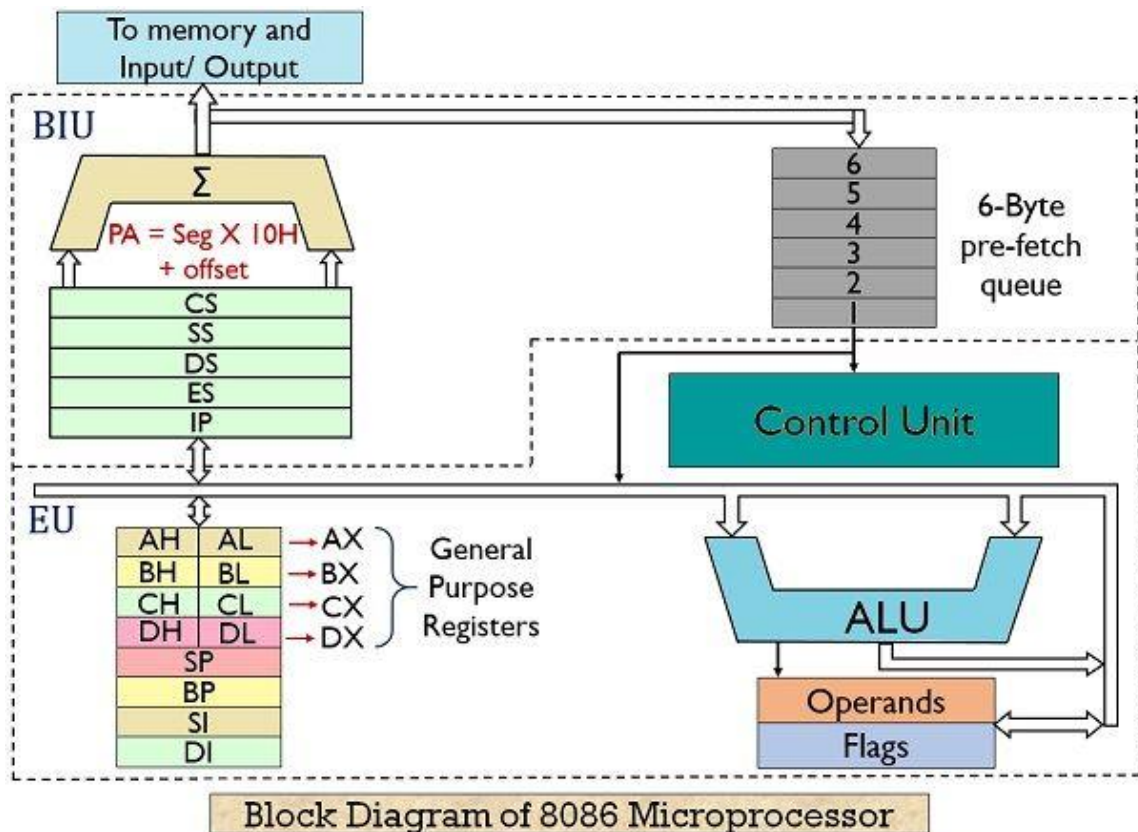**East West University**
Department of EEE

EEE 302: Microprocessors & Interfacing
Semester: Fall 2021
Course Instructor: FMA
Date: November 7, 2021
Section-1
QUIZ-1

Time: 30 minutes **Total Marks: 40**

<u>Answer all the questions. Do not use notes, books, and mobiles</u>

1. In the following diagram, you have the internal architecture of the Intel 8086 microprocessor. Answer the following questions refer to this diagram.

Block Diagram of 8086 Microprocessor

A. Define register. How many registers are there in the BIU unit?

B. What is 6- byte prefetch queue? How does it enhance the total system performance?

C. Why is the address generation circuit located in the bus interface unit? Justify your answer.

D. What can be stored in memory by the Intel 8086 microprocessor? Break down the following in the power of 2: 64MB, 16KB, 32GB.