

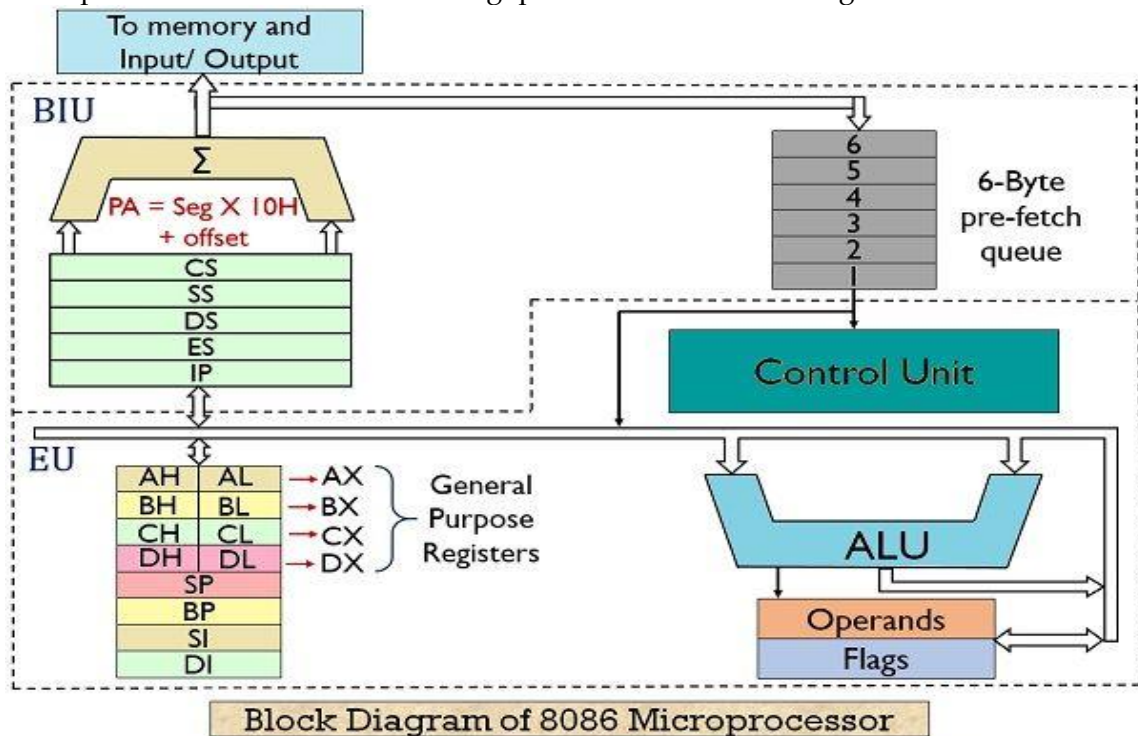
**EEE 302: Microprocessors & Interfacing**  
**Semester: Spring 2022**  
**Course Instructor: FMA**  
**Date: February 27, 2022**  
**Section-1**  
**QUIZ-1**

**Time: 25 minutes**

**Total Marks: 40**

Answer all the questions. Do not use notes, books, and mobiles

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



Electronics Desk

- A. Why control unit sends a signal to BIU after decoding? What is the significance of it??
- 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, 32GB.