



**METHODIST**  
**COLLEGE OF ENGINEERING AND TECHNOLOGY**  
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**Assignment - 1**

**Short Answer Questions (write any five questions)**

1. Name all of the general purpose registers in INTEL 80x86 families and some of their special functions.
2. What are assembler directives? How are they different from instructions?
3. Draw the write cycle timing diagram for 8086 minimum mode operation.
4. Bring out the differences between procedures and macros.
5. What are the functions of 8086 pins  
a) DT/R b) DEN c) READY d) BHE e) TEST f) LOCK
6. What is the purpose of instruction Queue in 8086?
7. Brief the evolution of Intel x86 series microprocessor.
8. List the various operations of flag register in 8086 processor.
9. What is stack? Write its role in CALL instruction.

**Long Answer Questions (All are compulsory)**

1. Draw and explain the architecture of 8086 Microprocessor.
2. Explain in detail 8086 memory segmentation.
3. Draw and explain minimum and maximum mode pin operations of 8086.
4. Explain various addressing modes of 8086 with example of each.
5. Explain the data transfer and branching instructions of 8086 with examples.
6. Explain the Arithmetic, logical and string manipulation instructions of 8086 with examples.