

**JAYA GROUPS OF INSTITUTION
THIRUNINRAVUR 602024**

**4th Semester – B.E. / B. Tech
Model Exam-I**

Sub. Title : **Microprocessor and Micro controllers**
Sub. Code : **EC6504**
Duration : **3 Hours**

Date : **28.01.2015**
Branch : **CSE**
Max. Marks : **100**

Part A - (10 x 2 = 20) Answer all the Questions:

1. List out the flags available in 8086.
2. In 8086 processor the code segment contains 124B and instruction pointer 341C. Find the memory location addressed by the processor.
3. What is an assembler directives.
4. Compare procedures and macros.
5. State the interrupt priorities of 8086.
6. What are the two operating modes of 8086.
7. Explain the \overline{BHE} and \overline{LOCK} signals of 8086.
8. What is DMA operation.
9. Give the difference between closely coupled and loosely coupled configurations.
10. What is multiprogramming.

Part B – (5 x 16 = 80) Answer As per the Choice:

11. (a) Draw and explain in detail about the architecture of 8086. (16m)

Or

- (b) Explain the addressing modes of 8086 with examples (16m)

12. (a) List out the instructions sets of 8086 and explain them in detail with examples. (16m)

Or

- (b) Explain the assembler directives of 8086 microprocessor in detail. (16m)

13. (a) Discuss in detail the interrupts and interrupt service routine in 8086 processor briefly. (16m)

Or

- (b) With the neat sketch explain the signals of an 8086 processor. (16m)

14. (a) Explain the minimum and maximum mode of 8086 with the timing diagrams. (16m)

Or

- (b) Explain the co-processor and closely coupled configuration with suitable diagrams. (16m)

15. (a) Discuss in detail about the operations of loosely coupled multiprocessor configurations. (16m)

Or

- (b)(i) Explain about I/O programming using 8086. (10m)

- (ii) Write short notes on multiprogramming. (6m)