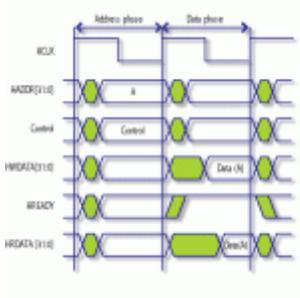


*Advanced Microprocessor is a guide to the understanding of software and hardware aspects of microprocessor, and the design and testing aspects of microprocessor-based system. It is designed for the students, engineers and electronic/computer technicians and focuses on its theory and applications. Seeing its importance, it has been introduced in the syllabus of Engineering. The Advanced Microprocessor Model Question Paper is just a suggestion for the students which includes the most important questions of the subject.*



## Advanced Microprocessor

Paper- (ECE- 423E)

Maximum time- 3 hrs

Maximum marks-100

1. Student have to do 5 question among all.
2. Attempt at least one ques from each unit.

### Section-A

#### Ques 1.

(a) What do you understand by addressing mode and what is data flow architecture of microprocessor?  
(10 marks)

(b). What is the difference between RISC and CISC processor? Explain with Example.

(c) What is virtual memory? Explain with their advantage and disadvantage?  
(10 marks)

#### Ques 2.

**(a)** Draw and explain Pin diagram of 8086? Also explain the concept of Memory segmentation in microprocessor with diagram.  
(10 marks)

**(b)** What to you mean by cache memory? How does it speed up the program execution?

**(c)** What do you mean by Descriptor table? Explain with diagram.  
(10 marks)

## **Section-B**

### **Ques 3.**

**(a)** Explain Real and Virtual mode in 80286? Also explain the mapping of virtual memory with physical memory and also tell the phenomenon of using page table in microprocessor? (10 marks)

**(b)** What are the four major architectural advancement in 80486 over 80386? What are the data types supported by 80486?  
(5 marks)

**(c)** Draw and discuss the register organization of 80486?  
(2 marks)

**(d)** Explain the data flow architecture of microprocessor?  
(3 marks)

### **Ques 4.**

**(a)** Explain the memory paging mechanism in microprocessor?

**(b)** Write any 5 addressing modes used in microprocessor?

**(c)** Classify the instruction set of Pentium processor?

**(d)** Explain the internal architecture of 80386?  
(20 marks)

## **Section-C**

### **Ques 5.**

**(a)** Explain the flag register format of 80286 with a suitable figure?

**(b)** Describe the control word, tag word and status word structure of microprocessor 80386.  
(20 marks)

**Ques 6.**

**(a)** With the neat diagram explain the interfacing of 80287 with 80286 microprocessor and

distinguish between 80387 and 80287.  
(20 marks)

**Section-D**

**Ques 7.**

**(a)** What is the basic features of 80486.

**(b)** Write all instruction set using in 80487 with complete description.

**(c)** Interfacing of 80386 with 80387.

**(d)** Features of 80287 with suitable diagram.  
(20 marks)

**Ques 8.** Explain the following

**(a)** Pentium processor

**(b)** History of microprocessor

**(c)** Intel family

**(d)** Task management  
(20 marks)