



SE-8269

B. E. - III (Sem. V) (Comp.) Examination

May / June - 2011

Advance Processors

Time : Hours]

[Total Marks : 100

Instructions :

नीचे दशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी.  
Fillup strictly the details of signs on your answer book.

Name of the Examination :  
B. E. - 3 (SEM. 5) (COMP.)

Name of the Subject :  
Advance Processors

Subject Code No. : 8 2 6 9 Section No. (1, 2,.....) : 1&2

Seat No. :  
[ ] [ ] [ ] [ ] [ ] [ ]

Student's Signature

SECTION - I

Q.1 (a) Answer the following:

10

1. What are conditional and control flags in 8086?
2. How many functional units does 8086 contain?
3. What physical address is represented by:  
(i) 4370 : 561E H  
(ii) 7A32 : 0028 H
4. Explain the following 8086 signals:  
-INTR  
-DT/(R bar)  
-RESET  
-TEST (bar )
5. Explain the difference between NEAR and FAR procedure of 8086 processor.

(b) Attempt any two:

8

1. Differentiate 8085 and 8086.
2. Explain CBW and CWD instructions with example.
3. Explain the concept of segmented memory? What are its advantages?

Q.2 (a) Write an 8086 program for arranging given numbers in ascending order.

8

Or

Write an 8086 program to add the content of array a and array b and store the result in array c. also store carry generated at appropriate place.

- (b) Draw and explain maximum mode of 8086 and state the difference between minimum mode and maximum mode in 8086.

8

- Q.3 (a) Discuss the interrupt system of 8086. Explain interrupt types of 8086. 6
- (b) Attempt any two. 10
1. What do you mean by assembler directives? Explain few of them with suitable example.
  2. Explain even and odd memory bank configuration in 8086.
  3. List addressing modes available in 8086 and explain any two in detail.

### SECTION - I

- Q.4 (a) Answer the following : 10
1. Intel's \_\_\_\_\_ is the first CPU to incorporate the integrated memory management unit.
  2. Which are the operating modes of the 80286?
  3. What do mean by the descriptor?
  4. Enlist the types of descriptor.
  5. What is VLIW?
  6. 80386 do not need any external mathematical data processor. State true or false.
  7. 80486 has introduced \_\_\_\_\_ stage pipeline.
  8. What is MMX?
  9. If data or code segment descriptor E bit is set, it means \_\_\_\_\_.
  10. What is CPL?

- (b) Explain LDT, GDT and IDT with respect to 80286 microprocessor. 6

**OR**

- (b) Explain the conversion from linear address to the physical address in 80386. 6

- Q. 5 (a) Draw and explain 80286 microprocessor architecture. 8

**OR**

- Q. 5 (a) Explain paging with reference to 80386 microprocessor. 8

- (b) Explain memory management unit of 80286. 8

- Q. 6 Attempt any three : 18

1. Differentiate RISC v/s CISC processors.
2. Explain superscalar execution of Pentium.
3. Explain the physical organization of on chip cache.
4. Discuss salient features of Pentium.