SB-0611

First Year B. Sc. Examination

March / April – 2011

Electronics : Paper - II

(Computer Science) (New Course)

Time : **3** Hours]   [Total Marks : **70**

Instructions :

(1)

니체 દર્શાવેલ ☛ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fillup strictly the details of ☛ signs on your answer book.

Name of the Examination :
☛ **F. Y. B. Sc.**

Name of the Subject :
☛ **Electronics - 2 (Computer Science) (New)**

☛ Subject Code No. : | **0** | **6** | **1** | **1** | ☛ Section No. (1, 2,.....) : **Nil**

Seat No. :

Student's Signature

(2)   All questions are compulsory
(3)   Figures to the right indicate full marks
(4)   Assume data wherever necessary

1   Write Very Short Answers :   **14**
(1)   When zero flag becomes '1' ?
(2)   Explain the use of DB and DW in assembler.
(3)   If the CS = 1343 and IP = 0100, what is the physical
        address ?
(4)   What is the special importance of CX register ?
(5)   Explain the instructions JZ and JNZ.
(6)   Explain the rotate instructions giving examples.
(7)   Explain how RET instruction works.

2   (a)   Explain the term addressing modes. Discuss   8
              any two addressing modes in detail.
      (b)   Explain the concept of memory segmentation   6
              and its advantages.

OR

2   (a)   Discuss the arithmetic group of instructions. Show   8
              how BCD numbers are handled.
      (b)   Discuss the flags of 8086. Write a program to   6
              calculate the length of a string.

SB-0611]   **1**   **[Contd...**

3   (a)   What do you mean by a microprocessor?
Discuss the architecture of 8086 microprocessor. Explain the importance of bus interface unit.

        (b)   What are effective addresses and physical addresses explain giving examaples.

OR

3   (a)   What are procedure call ? Explain using examples?   **8**

        (b)   Write a procedure to calculate the number of words in a string.   **6**

4   (a)   What are Assembler directives? Explain any two with examples.   **8**

        (b)   Write a program to find the maximum and minimum values from an array numbers.   **6**

OR

4   (a)   Discuss the conditional jump instructions supported by 8086.   **8**

        (b)   Write a program to calculate the number of 1's in register AX.   **6**

5   Write short notes : (any **two**)   **14**

    (1)   Logic instructions

    (2)   Assembly language

    (3)   Pin diagram of 8086

    (4)   Uses of Stack Segment.

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