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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)

<p>નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : F. Y. B. Sc.</p> <p>Name of the Subject : Electronics - 2 (Computer Science) (New)</p> <p>Subject Code No. : 0 6 1 1 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : □ □ □ □ □ □</p> <div style="border: 1px solid black; border-radius: 15px; height: 60px; margin-top: 10px; display: flex; align-items: center; justify-content: center; padding: 10px;">Student's Signature</div>
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- (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 any two addressing modes in detail. 8

(b) Explain the concept of memory segmentation and its advantages. 6

OR

2 (a) Discuss the arithmetic group of instructions. Show how BCD numbers are handled. 8

(b) Discuss the flags of 8086. Write a program to calculate the length of a string. 6

- 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.
