



**JB-3100**  
**Second Year B. Sc. (Applied Electronics)**  
**(Sem. III) Examination**  
**March/April – 2013**  
**Electronics : Paper - IV**  
*(Microprocessor Circuits & Application)*

Time : 2 Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दृशावेक निशानीवाणी विगतो उत्तरवही पर अवश्य कपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : S. Y. B. SC. (APPLIED ELECTRONICS) (SEM. 3)</p> <p>Name of the Subject : ELECTRONICS : PAPER - 4</p> <p>Subject Code No. : 3 1 0 0 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : □ □ □ □ □ □</p> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; margin-top: 10px;">Student's Signature</div>
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- (2) Figures to the right indicate full marks.  
(3) All the symbols have conventional meaning

- 1 Answer in brief : 8
- (i) Briefly explain Op code.  
(ii) What do you mean by Instruction cycle in microprocessor?  
(iii) What is Interrupts?  
(iv) List the operating modes of 8255.

- 2 (a) What are the various registers of 8085? Discuss their function. 7  
(b) What are various status flags provided in 8085 ? 7  
Discuss their roles.

**OR**

- 2 (a) Discuss various types of addressing modes in microprocessor. 8  
(b) With help of assembly language write the program to find the smallest number from the series of three numbers. 6

- 3 (a) Explain the functions of program counter, stack pointer and status of flags in 8085 microprocessor. 7  
(b) Write a program to arrange E5, A9, 96, B4, 15H data in ascending order. 7

**OR**

- 3 (a) Discuss how to determine the control word for 8255. 7  
(b) Explain mode 0 and mode 1 operation of 8253. 7
- 4 Write short notes : (any two) 14  
(i) ALU  
(ii) Concept of timing diagram in 8085  
(iii) Logical Instructions of 8085  
(iv) Organization of Programmable Interval Timer 8253.