



**A-2998**  
**Second Year B. Sc. (Sem. III) Examination**  
**March/April – 2015**  
**Applied Electronics : Paper - IV**  
**(Microprocessor Circuits & Application)**

Time : Hours]

[Total Marks : 50

**Instructions :**

(1)

<p>नीचे दृष्टावेक निशानीवाणी विगतो कतरवडी पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : S. Y. B. SC. (SEM. 3)</p> <p>Name of the Subject : Applied Electronics - IV (Microproc. Circuits &amp; Appli.)</p> <p>Subject Code No. : 2 9 9 8 Section No. (1, 2,.....): Nil</p>	<p>Seat No. : □ □ □ □ □ □</p> <p style="text-align: center;">Student's Signature</p>
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- (2) Figures to the right indicate full marks.
- (3) All symbols and abbreviations have their usual meaning.
- (4) Q.1 is compulsory.
- (5) Assume data, if necessary.
- (6) Non-programmable calculators are allowing.

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|-----------|--|----|
| 1         | Answer in short :  | 8  |
|           | (a) What is stack ?  |    |
|           | (b) What are the various flags used in 8085 ?  |    |
|           | (c) Explain : (i) SBB C (ii) NOP   |    |
|           | (d) Which interrupt has the 2 <sup>nd</sup> highest priority ?   |    |
| 2         | (a) What do you understand by maskable and non-maskable interrupt ?  | 10 |
|           | (b) Explain the following instructions :   | 4  |
|           | (i) STA 5000H (ii) RLC (iii) HLT (iv) INR D  |    |
| <b>OR</b> |  |    |
| 2         | (a) Explain the instructions use for Rotate operation.   | 10 |
|           | (b) Write a program for 8085 $\mu$ P to store No. 10H at memory location 4200H, 11H at 4201H and 12H at 4202H. | 4  |

- 3 (a) How do the instructions of 8085 is classified based on their length ? Give an example. 10
- (b) Write a program to add two numbers of 8-bit each. 4

**OR**

- 3 (a) Draw the Architectural block diagram of 8085  $\mu$ P and explain in detail the function of each block. 12
- (b) Explain instructions : DAA. 2
- 4 Write short notes on : (any two) 14
- (a) Arithmetic group instruction set
- (b) Difference between a JMP and a CALL instruction
- (c) The 8255 control word format
- (d) SIM Instruction.

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