



**RB-3979-80**  
**B. Sc. (IT) (Sem. IV) Examination**  
**April / May – 2010**  
**Microprocessor & Assembly Language**  
*(New Course)*

Time : 3 Hours]

[Total Marks : 70

**RB-3979**

**Instruction :**

<p>नीचे दशांशवले निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : <b>B. Sc. (IT) (Sem. 4)</b></p> <p>Name of the Subject : <b>Microprocessor &amp; Assembly Language</b></p> <p>Subject Code No. : <b>3</b> <b>9</b> <b>7</b> <b>9</b> Section No. (1, 2,.....): <b>1</b></p>	<p>Seat No. :</p> <table border="1" style="width: 100%; height: 20px;"><tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr></table> <div style="border: 1px solid black; border-radius: 15px; padding: 10px; text-align: center; margin-top: 10px;">Student's Signature</div>						

- (2) Write section I and Section II in **separate** sheets (with different subject code).
- (3) Draw the Figure and give example whenever necessary.

1 Answer following questions:

- (1) Explain following instructions : (any **four**) 8
- (a) MOV
  - (b) LOOPZ
  - (c) CMPS
  - (d) ADD
  - (e) CALL
  - (f) AND

2 Answer the following questions in detail : (any **three**) 18

- (1) Explain :
- (i) Debugger
  - (ii) Assembler

- (2) Explain the functions of following pins of 8086
    - (i) +VCC
    - (ii) NMI
    - (iii) A16-A19
    - (iv) ALE
    - (v) RESET
    - (vi) CLK
  - (3) Explain the FLAG register for 8086
  - (4) Explain the addressing modes for 8086
- 3 Explain 8086 architecture with the help of block diagram. 9**

## RB-3980

### Instruction :

नीचे दृशाविले निशानीवाणी विगतो उत्तरवही पर अवश्य लभवी.  
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Name of the Examination :  
B. Sc. (IT) (Sem. 4)

Name of the Subject :  
Microprocessor & Assembly Language

Subject Code No. : 3 9 8 0 Section No. (1, 2,.....): 2

Seat No. :

Student's Signature

(2) Write section I and Section II in **separate** sheets (with different subject code).

(3) Draw the Figure and give example whenever necessary.

4 Answer the following questions : 10

(i) Draw the block diagram of 80286 microprocessor.

(ii) Describe the following directives, DB, ENDS, DW, MACRO, OFFSET

5 Answer following questions in detail : (any **three**) 18

(i) Draw the block diagram of the 8051 microcontroller.

(ii) Explain interrupt vector table and INT-1,INT-0

(iii) Explain the TMOD-register and timer mod-1 and timer mod-2 for 8051 microcontroller

(iv) Explain the flag register for 80386 microprocessor.

6 Write program to calculate factorial for 6 number and store result in data segment memory. 7

OR

6 Write program to transfer 10 numbers from data segment to extra segment memory. 7