



SB-3823

B. Sc. (IT) (Sem. IV) Examination
March / April – 2011
Microprocessor & Assembly Language

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दर्शायेव निशानीवाणी विगतो उत्तरवडी पर अवश्य कपनी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="B. Sc. (IT) (Sem. 4)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="Microprocessor & Assembly Language"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="8"/> <input type="text" value="2"/> <input type="text" value="3"/>	<input type="text" value="Student's Signature"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	

- 1 Answer following questions : 16
- (a) Explain following instruction of 8086 microprocessor 8
with examples (any four)
- (i) MOV
 - (ii) ADD
 - (iii) CMP
 - (iv) Push
 - (v) RCR
- (b) Draw 8086 block diagram and explain its execution 8
Unit (EU)
- 2 Answer the following questions in detail (any three) 18
- (i) Explain
- (a) ADO-AD15
 - (b) INTR
 - (c) \overline{RD}
 - (d) ALE
 - (e) $M\sqrt{IO}$
 - (f) Hold pins of 8086 microprocessor.
- (ii) Draw and explain Instruction template of 8086 microprocessor.

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[Contd...

- (iii) Explain assembler and Linker.
 - (iv) Describe
 - (a) stack pointer (SP)
 - (b) general-purpose registers
 - (c) Destination index (DI) register.
- 3** Answer the following question in detail (any three) **18**
- (i) Draw the block diagram of 80286 microprocessor and explain Real time mode of 80286 microprocessor.
 - (ii) Draw and explain timing diagram for memory read operation in minimum mode.
 - (iii) Explain immediate addressing mode, register addressing mode, direct memory addressing mode.
 - (iv) Describe the following directives of 8086 microprocessor (any three)
 - (a) DQ
 - (b) DB
 - (c) segment
 - (d) Length
- 4** Answer the following questions (any three) **18**
- (i) What is interrupt vector table ? Explain INT-0 from interrupt vector table of 8086.
 - (ii) What is UART communication ? Explain timer mod-0, mod-1 of 8051 micro controller.
 - (iii) Write a note on Flag register of 8086 microprocessor.
 - (iv) Write program for fibonacci series of 6-number and store final result in data segment memory.
 - (v) Write Program for average of 10 numbers of consecutive memory location's data from data segment and store final result in memory.
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