T.Y.B.Sc. (With Credits)-Regular-Semester 2012 Sem V
B.Sc.3516-Electronics Paper-I (Compulsory)
(Microprocessor, Interfacing & PPI Devices)

P. Pages : 1

Time : Three Hours

1665

Max. Marks : 50

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Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and labelled diagram wherever necessary.

1. Either

a) Draw the block diagram of 8085µp and explain ALU and general purpose registers. **7+3**
What is multiplexing bus? State the advantages of multiplexing bus.

OR

b) Explain the fetch operation and Execution operation. **6+4**
Explain the memory read cycle with timing diagram.

2. Either

a) What are addressing modes? Explain all addressing modes of 8085µp with suitable **6+4**
example.
Explain the meaning of following instructions
i) MOV M, r   ii) STA address
iii) SHLD address   iv) MV1 r, data

OR

b) Write the assembly language program for addition of two 8-bit number for 8085µp. Store **5+5**
the result in memory location.
What is subroutine? Explain operation of subroutine.

3. Either

a) Explain memory mapped I/O scheme and I/O mapped I/O scheme. **6+4**
Draw the memory interfacing diagram with 8085 microprocessor and explain it.

OR

b) Differentiate between synchronous and asynchronous data transfer scheme. **4+6**
Explain the interrupt driven data transfer state its advantage.

4. Either

a) Draw the block diagram of Intel 8255 PPI and explain it. **6+4**
Explain any two operating modes of 8255 PPI.

OR

b) Draw the block diagram of Intel 8257 programmable DMA controller and explain it. **6+4**
Explain the control word format of 8253 interval timer.

5. a) What is flag register? Explain any two flag in 8085µp. **2½**
b) What is flowchart? Draw the various symbol of flowchart. **2½**
c) Explain the need of interfacing. **2½**
d) Draw the block diagram of 8253 programmable counter / Interval timer. **2½**

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