B.Sc.T.Y.(with Credits)-Regular-Semester 2012 Sem VI

B.Sc.4517 - Electronics Paper-I (Compulsory)
Microprocessor, Interfacing and Microcontrollers

P. Pages : 1 **GUG/S/18/5634**

Time : Three Hours * 1 6 6 4 * Max. Marks : 50

Notes : 1. All questions are compulsory and carry equal marks.
2. Draw a neat diagram waverer necessary.
3. Use of log table/calculator is allowed.

Either

1. a) Draw block diagram and Explain. **10**
i) Interfacing of LED display.
ii) Interfacing of 7 segment display with microprocessor.

OR

b) What is bouncing of switch? How is it eliminated? Explain the software de-bouncing? **2+3 +5**

Either

2. a) Explain the measurement of frequency and phase using microprocessor. **5+5**

OR

b) What is delay subroutine? Explain the delay subroutine using one register? Write a program for delay subroutine using one register? **2+3 +5**

Either

3. a) Draw a block diagram of 8086 microprocessor and explain its working. **10**

OR

b) What is addressing mode? Explain the addressing mode of 8086 microprocessor. **10**

Either

4. a) Explain the following of 8051 microcontroller. **10**
i) Internal RAM organisation
ii) Special function register.
iii) Internal ROM.
iv) PORT.

OR

b) Explain the use of PSW in 8051? Write a program in 8051 microcontroller for substraction of two 8-bit numbers. **5+5**

5. a) Draw a schematic diagram of multidigit display using microprocessor. **2½**

b) Draw the block diagram of current measurement system using 8085μp. **2½**

c) State any five data transfer instruction in 8086 μp. **2½**

d) Write features of 8051 microcontroller. **2½**

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