

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

P. Pages : 1

Time : Three Hours



GUG/S/19/1344

Max. Marks : 50

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

Either

1. a) What is bouncing of switch? How is it eliminated? Explain the hardware and software debouncing. **1+2+7**

OR

- b) Draw the diagram of ADC0800 interfacing with 8085 microprocessor and Explain its working. **10**

Either

2. a) Explain the measurement of frequency and phase using microprocessor. **10**

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) Explain the architecture of 8086 with the help of block diagram? **10**

OR

- b) Explain the addressing modes of 8086 microprocessor with suitable example. **10**

Either

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

OR

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

5. a) Explain the DIP switch interfacing with microprocessor. **2½**

- b) Draw the block diagram for voltage measurement system using 8085 microprocessor. **2½**

- c) What is assembler directive? Explain any two assembler directives in 8086 microprocessor. **2½**

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