

GUJARAT TECHNOLOGICAL UNIVERSITY**BE SEM-VI Regular Examination May 2011****Subject code: 162002****Subject Name: Micro Processors and Micro Controllers****Date: 17/05/2011****Time: 10.30 am – 01.00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain Architecture of 8085 microprocessor. **07**
(b) Give the Difference between microprocessor and microcontroller. **07**

- Q.2** (a) Explain Architecture of 8051 microcontroller. **07**
(b) Explain addressing modes of 8051 microcontroller. **07**

OR

- (b) Classify instruction set of 8085 according to word size. Give suitable example for each. **07**

- Q.3** (a) Explain memory interfacing with schematic diagram **07**
(b) Explain memory mapped Input/Output with example. **07**

OR

- Q.3** (a) Give the difference between polling and interrupt method of 8085 microprocessor. **07**
(b) Explain bus architecture of 8085 Microprocessor with figure. **07**

- Q.4** (a) Write a program with flowchart of 8085 to count continuously in hexadecimal from FFH to 00H in a system with a 0.5 micro second clock period . Use register C to set up a one millisecond delay between each count and display the number at one of the output ports. **07**
(b) Write a program of 8085 to convert 2-Digit BCD number into Binary number. **07**

OR

- Q.4** (a) Explain TMOD register of 8051 with example. **07**
(b) What is the Interrupt Priority in the 8051 microcontroller and Explain Interrupt Priority Register of 8051. **07**

- Q.5** (a) Write a program in 8051 to addition of two 16-bit numbers. **07**
(b) Write a program in 8051 to convert binary number to BCD number. **07**

OR

- Q.5** (a) Explain Flag Bits and The Program Status Word Register of 8051 microcontroller. **07**
(b) What is assembler directives? Explain following directives. **07**
ORG, EQU, END
