Exam No: _____

GANPAT UNIVERSITY

B. TECH SEM- V (MC) REGULAR EXAMINATION– NOV-DEC 2016

2MC503 : Microcontroller

TIME: 3 HRS **TOTAL MARKS: 60**

Instructions: (1) This Question paper has two sections. Attempt each section in separate answer book.
(2) Figures on right indicate marks.
(3) Be precise and to the point in answering the descriptive questions.
(4) Assume crystal frequency **4 MHz**.

SECTION: I

Q.1 Attempt All.

A. Draw and explain the block diagram of 8086. **(04)**

B. Write down the 8051 architecture specific features. **(03)**

C. Explain assembling and linking a PIC program. **(03)**

OR

Q.1 Attempt All.

A. Draw and explain the pin diagram of 8085. **(04)**

B. What is difference between microprocessor and microcontroller? **(03)**

C. Differentiate RISC and CISC architecture in PIC. **(03)**

Q.2 Attempt All.

A. A switch is connected to pin RC1. Write an ALP to check the status of the switch and if SW=0 then send 'N' else send 'Y' to PORTB. **(04)**

B. Write an ALP to find the greater number form the two data store in file register 14H and 15H and store greater number in 17H. **(03)**

C. Write an ALP to toggle the bits of PORTC with 1 second delay continuously. **(03)**

OR

Q.2 Attempt All.

A. Assume that programing ROM space starting at 250H contains "UVPCE GANPAT UNIVERSITY". Write an ALP to bring it into CPU one byte at a time and place the bytes in RAM location starting at 40H. **(04)**

B. Write an ALP to mask the even bits (bit 0, 2, 4, 6) of file register 45H. **(03)**

C. Write an ALP to toggle the LED 10 times connected with bit 4 of PORTB with 500 µsecond delay. **(03)**