

## Assignment No. II

### Subject:- Microcontroller and its Applications

#### NEC-022

- Q.1 WAP to multiply 0ECH by 25H using the technique of repeated addition.
- Q.2 WAP to load accumulator with the value 55H and complement 700 times.
- Q.3 WAP to toggle all the bits of port1 by sending values 55H and AAH continuously.
- Q.4 Transfer the contents of the register A, R0, R1 respectively of bank 0 to the register B, R0, R1 of bank 1 using stack operations.
- Q.5 WAP to clear 16 RAM locations starting at RAM locations 60H.
- Q.6 Take 5 bytes of data from RAM location 30H to 34H add 03 to each of them and save the result in RAM locations 50H down to 46H.
- Q.7 WAP to get the x value from P1 and send  $x^2$  to P2 continuously.
- Q8 WAP to push 55H into the upper RAM locations 90-99H.
- Q.9 Write the following programs.
- (i) Create a square wave of 50% duty cycle on bit 0 of port 1.
  - (ii) Create a square wave of 66% duty cycle on bit 3 of port 1.
- Q.10 Write an assembly program in 8051 to add two 16 bit numbers stored in external memory. After addition store the results in internal data memory.

**Last Date of Submission is: - 15/02/2017 (Positively by Lunch)**

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