## Assignment No. II

## **Subject:-** Microcontroller and its Applications

## <u>NEC-022</u>

- 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 : - 16/03/2016 (Positively by Lunch)

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