Reg. No. : $\qquad$
Name : $\qquad$

# VII Semester B.Tech. Degree Examination, July 2009 <br> Branch : Applied Electronics LAB : MICROPROCESSOR LAB (A) 

Time : 3 Hours

1. Write an ALP to separate odd and even numbers from a block of data and arrange them in separate blocks in ascending order.
2. Write an ALP to prove that $(a+b)^{2}=a^{2}+2 a b+b^{2}$ where $a$ and $b$ are 16 bit numbers.
3. Write an ALP to rotate a stepper motor $270^{\circ}$ clockwise and then in anticlockwise by $180^{\circ}$ continuously.
4. Write an ALP to generate the following waveform.

5. Write an ALP to separate odd parity and even parity numbers from a block of data and arrange them in separate blocks in descending order.
6. Write an ALP to multiply two $3 \times 3$ matrices.
7. Write an ALP to find the HCF and LCM of a block of 16 bit numbers.
8. Generate a $3 \phi$ square waveform with a period of 2 m sec and amplitude 5 V using 8255.
