Experiments

1 Write an ALP to

i) multiply two 16-bit binary numbers.

ii) add two 64-bit numbers.

2 Write an ALP to find the sum of first 10 integer numbers.

3 Write an ALP to find factorial of a number.

4 Write an ALP to add an array of 16-bit numbers and store the 32-bit result in internal RAM.

5 Write an ALP to find the square of a number (1 to 10) using look-up table.

6 Write an ALP to find the largest/smallest number in an array of 32 numbers.

7 Write an ALP to arrange a series of 32-bit numbers in ascending/descending order.

8 i) Write an ALP to count the number of ones and zeros in two consecutive memory locations.

ii)Write an ALP to Scan a series of 32-bit numbers to find how many are negative.

9 Interface a Stepper motor and rotate it in clockwise and anti-clockwise direction.

10 Interface a DAC and generate Triangular and Square waveforms.

11 Display the Hex digits 0 to F on a 7-segment LED interface, with a suitable delay in between.

12 Interface a simple Switch and display its status through Relay, Buzzer and LED.