Unit-4 Assignment-5 (Deadline August 5)

1. Do the Comparison between PROM, PAL, PLA.

2. Implement the following Boolean functions using PROM

$$F_1(A_1, A_0) = \Sigma m(1,2) \qquad F_2(A_1, A_0) = \Sigma m(0,1,3)$$

3. Implement the following function using PLA

$$A(x,y,z) = \Sigma m(1,2,4,6)$$
$$B(x,y,z) = \Sigma m(0,1,6,7)$$
$$C(x,y,z) = \Sigma m(2,6)$$

4. Design a BCD to Excess 3 code converter and implement using suitable PLA.

5. Design a combinational circuit using a ROM. The circuit accepts a 3-bit number and generates an output binary number equal to the square of the input number