## Assignment #3 FPGA Based System Design (Spring 2013) Electronics Engineering Department Sub-Campus Chakwal

## Problem 1.

Draw the State Diagram of sequence detector which detects the first letter of your name and write Verilog code of the state diagram along with testbench.

Alphabet	Encoding
A	00000
В	00001
С	00010
D	00011
Е	00100
F	00101
G	00110
Н	00111
Ι	01000
G	01001
K	01010
L	01011
М	01100
Ν	01101
0	01110
Р	01111
Q	10000
R	10001
S	10010
Т	10011
U	10100
V	10101
W	10110
Х	10111
Y	11000
Z	11001

Note:

*i.* Each Assignment submitted should have title page which should include Assignment number, Your Name, Reg. No, Section, Subject Name, Teachers Name and Date.