Report for Question No 3

1. The code has been written in Matlab.

2. Sample output for 1 run of code:(70000+30000 training + testing combination)

Accuracy for v[o] ===>
Accuracy = 98.1067% (29432/30000)
Accuracy for v[1] ===>
Accuracy = 98.0967% (29429/30000)
Accuracy for v[2] ===>
Accuracy = 97.4833% (29245/30000)
Accuracy for v[3] ===>
Accuracy = 96.1733% (28852/30000)
Accuracy for v[4] ===>
Accuracy = 82.3733% (24712/30000)
Accuracy for v[5] ===>
Accuracy = 82.41% (24723/30000)
0.8220

0.8214

0.8218

0.8234

0.8212

0.9585

Below 6 are the % accuracies of o[i], i=0 to 6.
Maximum % accuracy for v[i]=98.1%
Minimum % accuracy for v[i]=82.37%

Maximum % accuracy for o[i]=95.85%
Minimum % accuracy for o[i]=82.14%

3) o[i] was calculated from v[i] using-
o[0]=XOR(v[1],v[3],v[5])
o[1]=XOR(v[0],v[1],v[3],v[5])
o[2]=XOR(v[0],v[3],v[5])
o[3]=XOR(v[0],v[2],v[3],v[5])
o[4]=XOR(v[0],v[2],v[5])
o[5]=XOR(v[0],v[2],v[4],v[5])