M=2

Gain(14T,6F)=B(14/20)=0.88

(14T[11T,3F];6F[3T,3F])->Gain(A) = 0.88 – [14/20\*B(11/14) + 6/20\*B(3/6)] = 0.88 - 0.7\*0.75 - 0.3\*1 = 0.05

(10T[7T];10F[7T])->Gain(B) = 0.88 – [10/20\*B(7/10) + 10/20\*B(7/10)] = 0.88 – 0.5\*0.88\*2 = 0

(13T[10T];7F[4T])->Gain(F) = 0.88 – [13/20\*B(10/13) + 7/20\*B(4/7)] = 0.88 – 0.65\*0.78 - 0.35\*0.99 = 0.14

(15T[13T];5F[1T])->Gain(H) = 0.88 – [15/20\*B(13/15) + 5/20\*B(1/5)] = 0.88 - 0.75\*0.57 - 0.25\*0.72 = 0.27

(14F[10T];4S[4T];2N[0T])->Gain(Pat) = 0.88 – [14/20\*B(10/14) + 4/20\*B(4/4) + 2/20\*B(0/2)] = 0.88 – 0.7\*0.86 - 0.2\*0 - 0.1\*0 = 0.28

(15$[11T];2$$[2T];3$$$[1T])->Gain(Pr) = 0.88 – [15/20\*B(11/15) + 2/20\*B(2/2) + 1/20\*B(1/3)] = 0.88 – 0.75\*0.84 - 0.1\*0 - 0.15\*0.92 = 0.11

(4T[2T];16F[12T])->Gain(Rr) = 0.88 – [4/20\*B(2/4) + 16/20\*B(12/16)] = 0.88 – 0.2\*1 - 0.8\*0.81 = 0.03

(5T[3T];15F[11T])->Gain(Rs) = 0.88 – [5/20\*B(3/5) + 15/20\*B(11/15)] = 0.88 – 0.25\*0.97 - 0.75\*0.84 = 0.01

(2FR[1T];8TH[6T];8BU[6T];2IT[1T])->Gain(Ty) = 0.88 – [2/20\*B(1/2) + 8/20\*B(6/8) + 8/20\*B(6/8) + 2/20+B(1/2)] = 0.88 – 0.1\*1\*2 - 0.4\*0.81\*2 = 0.03

(6A[4T];6B[5T];6C[5T];2D[0T])->Gain(Est) = 0.88 – [6/20\*B(4/6) + 6/20\*B(5/6) + 6/20\*B(5/6) + 2/20\*B(0/2)] = 0.88 – 0.3\*0.92 - 0.3\*0.65\*2 - 0.1\*0 = 0.2

=>Root = Pat

Error = 4/20 = 0.2

newW = 1/80

S = 4/20 + 16/80 = 2/5

W(X2,X5,X9,X10) = 1/20 / 2/5 = 1/8

W(others) = 1/80 / 2/5 = 1/32