Generalized Nonlinear Prediction with optimal parameters:



*α* can be chosen randomly (for example, *α* = 2 or *α* = 0.5)

How do we find the optimal values of *a*1, *a*2, …., *aL*, *b*1, *b*2, …., *bL*-1?

Mean square error (MSE) is determined from the **test data**

Object function:



*wn* is larger for the recent data and *wn* is smaller for the old data

{*x*[*n*] | *n*1 ≤ *n* ≤ *n*2} are training data

{*x*[*n*] | *n*3 ≤ *n* ≤ *n*4} are test data

*n*1 < *n*2 < *n*3 < *n*4