3.

error when the hypothesis +ve and target –ve or vice versa.

So,

Error in target = µ

So, no error = 1 − µ

P error = 1 − λ

P no error = λ

Error in approximating y = (1 − λ) **(1 −** µ**) + µ** λ

Answer = e

4.

to be independent of µ

expanding the expression: (1 − λ) **(1 −** µ**) + µ** λ

= 1 - µ **-** λ + λµ + λµ

= 1 **-** λ + - µ (2λ - 1)

from above,

2λ - 1 should be equal to 0

so λ = ½ = 0.5

answer = B