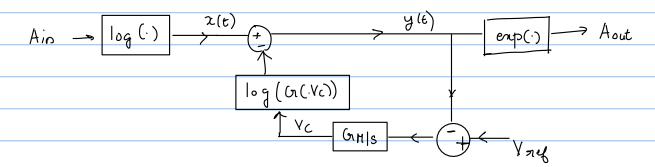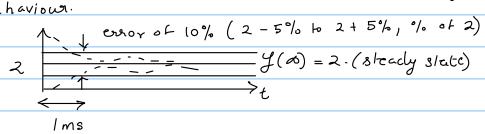AV314 - Assignment 8

1) Draw the block diagram of an AGC loop which is used to automatically control the average power of a signal, so that the signal put out from the AGC loops has a constant power.

2) The AGC loop that was discussed in class was:

Assuming that $G(V_c) = e^{aV_c}$, design a, G_M, and V_{ref} so that $y(t)$ has the following behaviour.

error of 10% ($2 - 5\%$ to $2 + 5\%$, % of 2)

$y(\infty) = 2$. (steady state)

The $y(t)$ response should converge to the interval as shown above in 1ms.