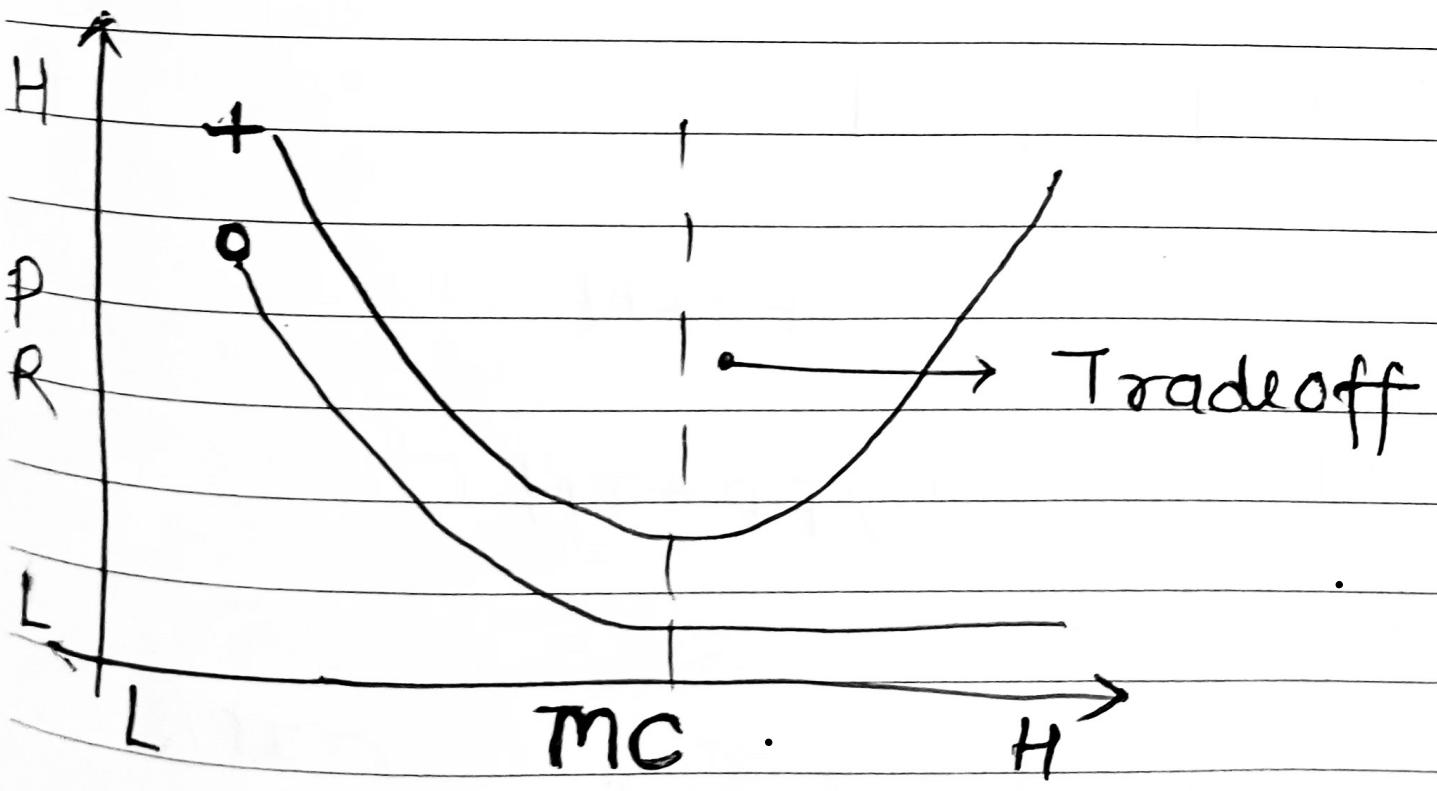
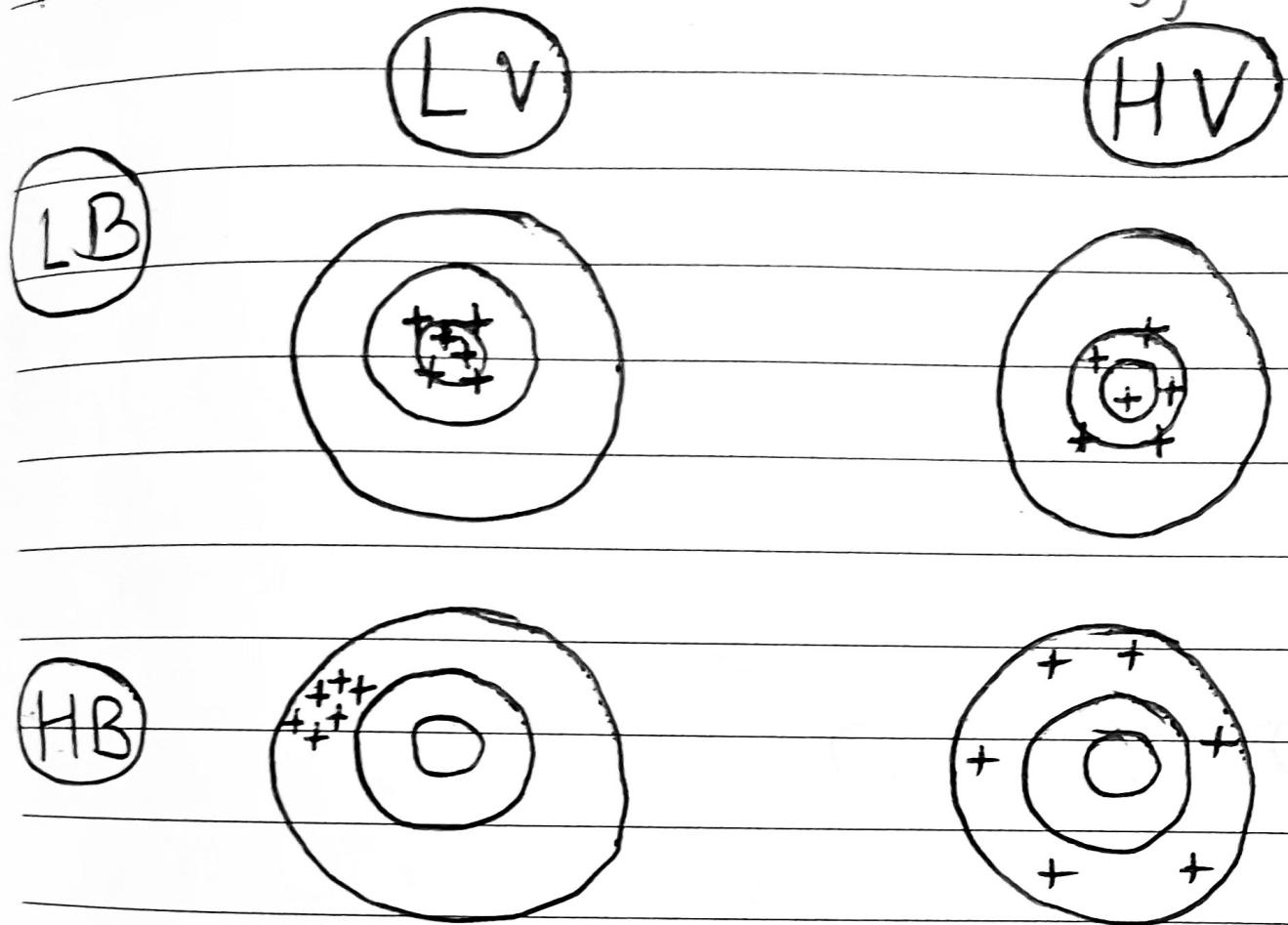
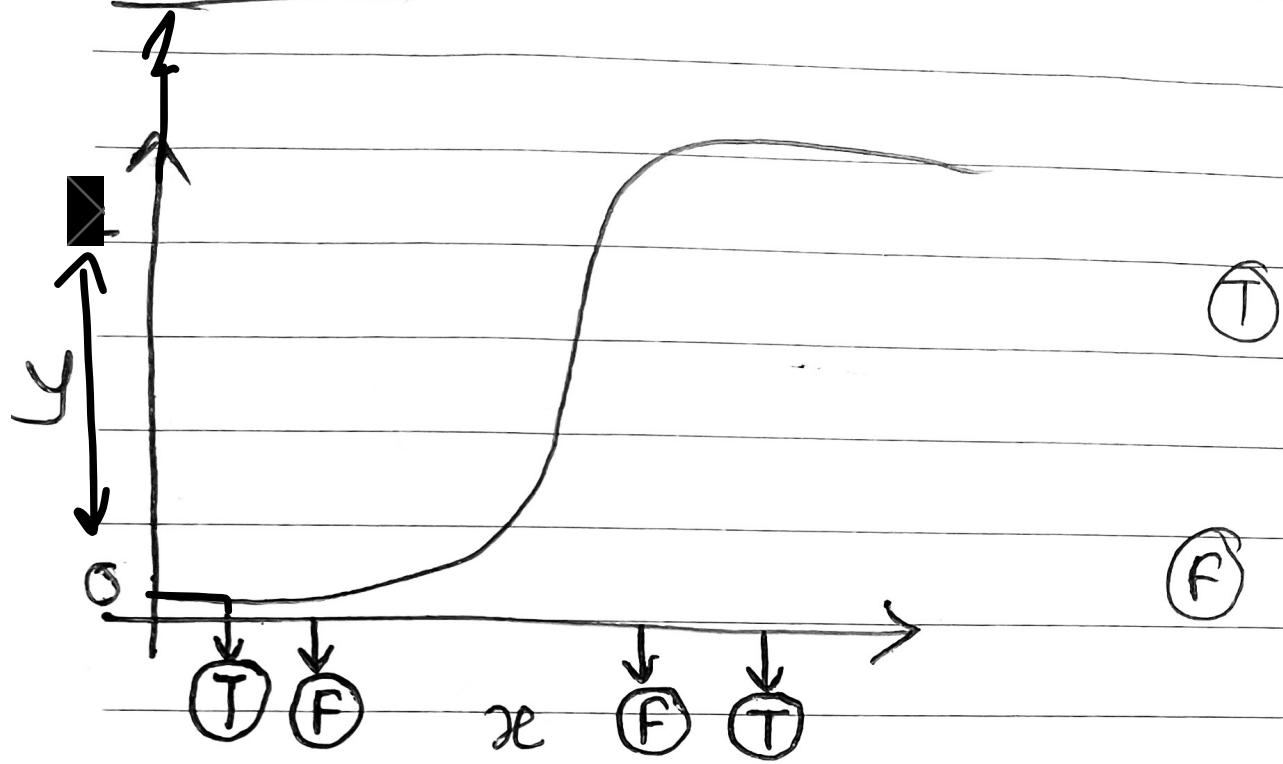


# Bias - Variance Tradeoff



# ROC



		T	F	(A)
T		TP	FP	
(P)	F	FN	TN	

$$TPR = TP / (TP + FN)$$

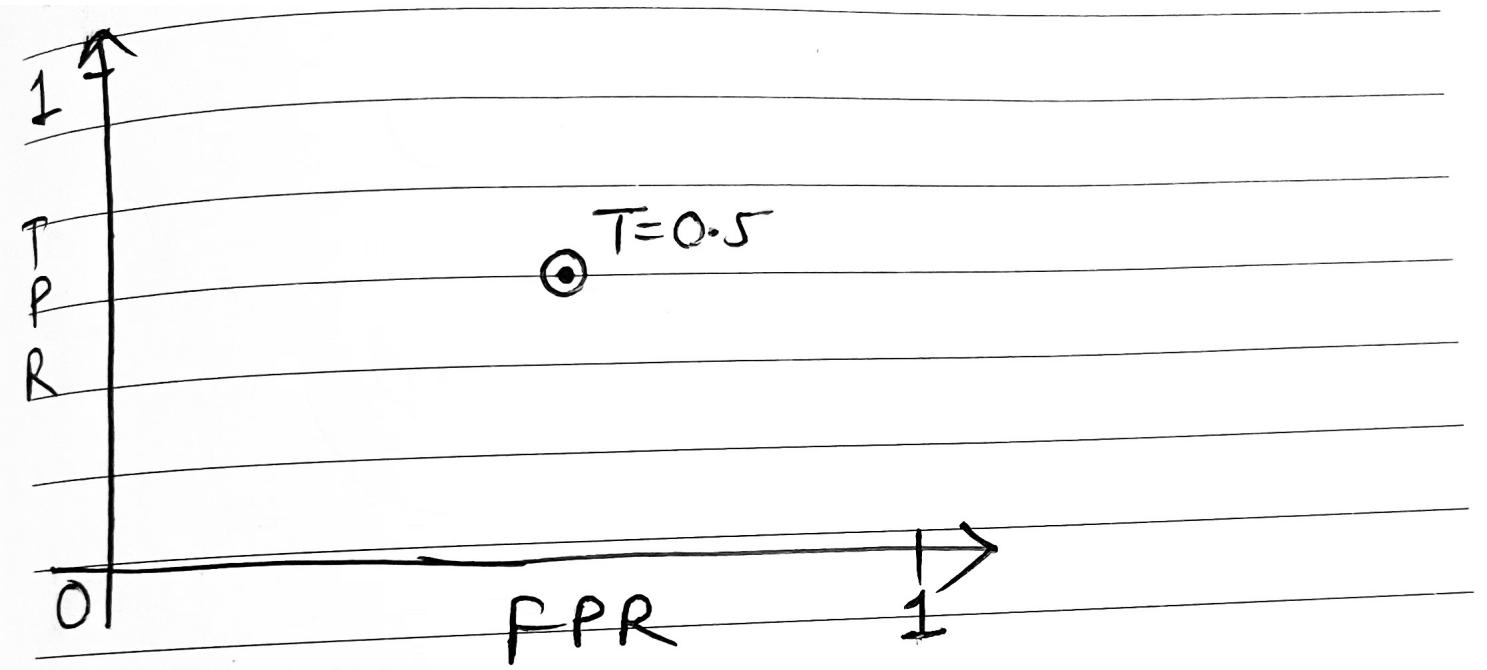
$$FPR = FP / (FP + TN)$$

at  $T = 0.5$ .

$\frac{1}{2}$	$\frac{1}{2}$
$\frac{1}{2}$	$\frac{1}{2}$

$$\frac{1}{2} = 0.5 \rightarrow TPR$$

$$\frac{1}{2} = 0.5 \rightarrow FPR$$



Best or worst threshold?  
plot all 'T' on above plot.

