

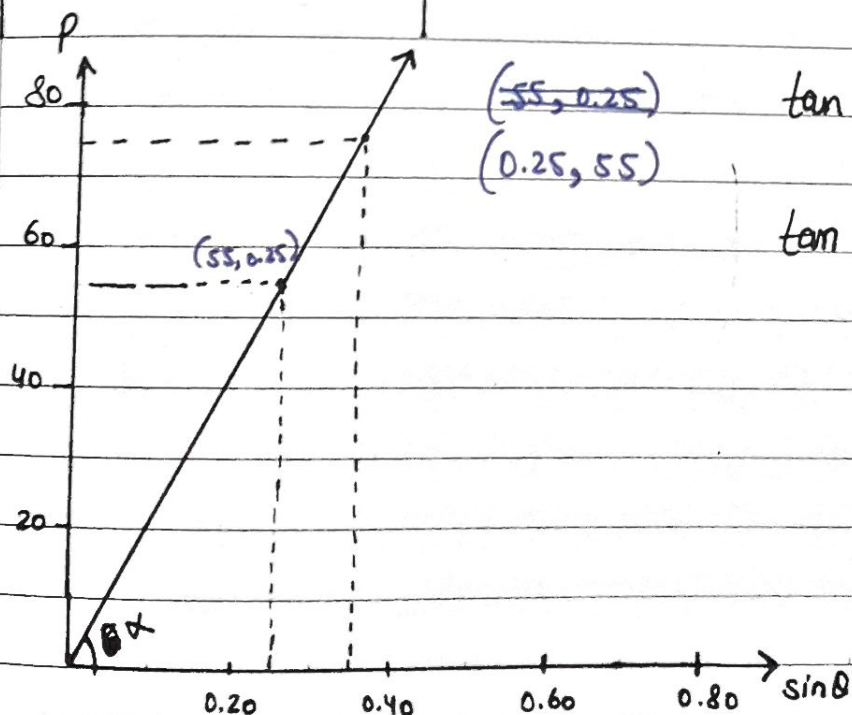
## EXPERIMENT - 6

# Aim → To find the coefficient of friction on an inclined plane using force vs.  $\theta$  graph.  
(angle of inclination)

$P$  = weight of pan + weight

$\theta$  = angle of inclination

Sno.	$P$	$\sin \theta$	$P/\sin \theta$
1.	$20 + 35 = 55$	$\sin 15^\circ = 0.25$	$55/0.25 = 220$
2.	$20 + 55 = 75$	$\sin 20^\circ = 0.34$	$75/0.34 = 220.5$
3.	$75 + 20 = 95$	$\sin 25^\circ = 0.42$	$95/0.42 = 226.1$
4.	$95 + 20 = 115$	$\sin 30^\circ = 0.5$	$115/0.5 = 230$



Teacher's Signature .....