□ PHYS1050	/□PHYS1250			
Ref. (Staff Use)				

Pre-Laboratory Worksheet Experiment NE03 - Faraday's Law of Induction Department of Physics The University of Hong Kong

Na	me:	Student ID:	Date:	
Re	emark: Please submit P	re-Laboratory Worksheet to laborator	ry technician when you arrive the labora	tory
Ba	ckground informati	on:		
1.	With the aid of F	<i>igure 1</i> , prove Total Energy Los	$t = \Delta U = mgl(1 - \cos\theta)$ where l	is the distance
	from the pivot poi	nt to the center of mass of the co	oil wand and $ heta$ is the angular pos	ition of the coil