UM-SJTU JOINT INSTITUTE
PHYSICS LABORATORY
DATA SHEET (EXERCISE 5)

Name: _____   Student ID: _____

Name: _____   Student ID: _____

Group: _____   Date: _____

NOTICE. Please remember to show the data sheet to your instructor before leaving the laboratory. The data sheet will not be accepted if the data are recorded with pencil or modified by correction fluid/tape. If a mistake is made in recording a datum item, cancel the wrong value by drawing a fine line through it, record the correct value legibly, and ask your instructor to confirm the correction. Please remember to take a record of the precision of the instruments used.

You are required to hand in the original data with your lab report, so please keep the data sheet properly.

	$10T$ [__] $\pm$ ____ [__]
1	
2	
3	
4	

Table 1. Measurement of the natural frequency.

Damping Selection:_____

Amplitude [__] $\pm$ ____ [__]		Amplitude [__] $\pm$ ____ [__]		$\ln(\theta_i/\theta_{i+5})$
θ_0		θ_5		
θ_1		θ_6		
θ_2		θ_7		
θ_3		θ_8		
θ_4		θ_9		
The average value of $\ln(\theta_i/\theta_{i+5})$				

$10T =$ _____[__] $\pm$ ____ [__]

Table 2. Measurement of the damping coefficient.

Instructor's signature: _____

Damping Selection:_____

	$10T$ [__] $\pm$ ____ [__]	φ [__] $\pm$ ____ [__]	θ [__] $\pm$ ____ [__]
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30			

Table 3. θ vs. ω and φ vs. ω characteristics.

Damping Selection:_____

	$10T$ [__] $\pm$ ____ [__]	φ [__] $\pm$ ____ [__]	θ [__] $\pm$ ____ [__]
1			
2			
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Table 4. θ vs. ω and φ vs. ω characteristics.

Instructor's signature: _____