**PHY1002 Physics Laboratory**

**Short Report**

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| Name: |  | Student ID: |  |
| Group: |  | Date of Experiment: |  |

**Experiment 2. Large Amplitude Pendulum**

1. For small amplitude pendulum, plot the angular acceleration vs. time curve. Does it fit the theoretical curve * = -A20* sin *(At + )*? What does the minus sign do? And explain any discrepancy.

2. For large amplitude pendulum, plot the angular displacement curve vs. time curve and answer the following questions:

(a) Is this curve sinusoidal?

(b) What is the displacement/acceleration corresponding to the turning point, when the speed is zero or maximum? Point out the places in your plot. (plot velocity/acceleration vs. time, if necessary)

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**Notes:**

* **Submit soft copies online.**
* **Once submitted, no further modification allowed.**
* **Due date: “D + 7”, “D” = Date of Experiment.**
* **Please don’t exceed 2 pages, with normal margin and 1.0 line space.**
* **No figure is required if not specified.**