

NAME (Print) _____

Borough of Manhattan Community College

Course *Physics 215*

Instructor: *Dr. Hulan E. Jack Jr.*

Date **April 29, 2003**

Quiz 04

A mass $m = 0.5$ kg on a horizontal frictionless plane is attached to a spring of stiffness $k = 50$ N/m. The spring is compressed by to an initial displacement $x_0 = 0.02$ m from equilibrium. Then at this position released from rest.

a. Find the frequency f with which this spring pendulum oscillates.

Sketch FBD of the mass when the spring is displaced from equilibrium . 20 pts

State Physical Principle (s) 20pts

Fill in the details . 20 pts

Solve for f in symbols. Explain what you are doing . (Hint; math model vs physical model.) 40 pts