University of Asia Pacific

Department of Basic Sciences & Humanities

Courses Title: Physics Sessional **Course Code: Phy 102**

List of the Experiments:

1. M_1- Determination of the acceleration due to gravity "g" by a compound pendulum.
2. M_2- Determination of the Young's modulus by the flexure of a beam (Bending method).
3. M_3- Determination of the modulus of rigidity of a wire by dynamical method.
4. M_4 - Determination of the spring constant and effective mass of a loaded spring.
5. M_5- To determine the surface tension of water by capillary tube method.

6. E_1- Determination of the line frequency by Lissajous figures using an oscilloscope and a function generator and verification of the calibration of the Time/Div knob at a particular position for different frequencies.
7. E_2- Determination of the resistance of the galvanometer by half deflection method.
8. E_3- Determination of the specific resistance of a wire using a meter bridge.
9. E_4-Determination of the value of the resistance by a post office box and verify the laws of resistance.

10. O_1- Verification of the Malus law.
11. O_2- Determination of the focal length and hence the power of a convex lens by displacement method by an optical bench.
12. O_3- Determination of the radius of curvature of a lens by Newton's rings.
13. O_4- Determination of the specific rotation of a sugar solution by means of polarimeter.

14. S_1- Determination of the variation of the frequency of the tuning fork with the length of a sonometer (n-l curve) under given tension and hence determination of the unknown frequency of a tuning fork
15. S_2- To determine the velocity of sound by acoustic transducer.

16. MP_1- Determination of the threshold frequency of a Photo cathode and verification of the Plank's constant.

17. H_1- Determination of the specific heat capacity of a liquid by the method of cooling.