GOVERNMENT GENERAL DEGREE COLLEGE AT PEDONG



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Memo No: 40/18

Date: 16.07.2018

Tender Notice Department of Physics

Sealed Quotations are invited from the reputed firms/benefited suppliers for the supply of Instruments listed below for **Physics Department**. Quotation must be submitted in original, clearly mentioning all levies, taxes, installation/delivery charges at college site, etc., failing which tender is summarily rejected. The last date for submitting Quotation will be 23rd July, 2018, up to 16.30 hours. In case the date of issue/receipt of the opening of Quotation is declare holiday for unexpected reason the quotation will issued/ receipt/ opened on the next working day at same time. The Quotation document is not refundable. The Officer-in-Charge, Govt. General Degree College at Pedong reserved the right to accept/reject any or all of the Quotations without assigning any reason thereof. No quotations will be accepted without valid documentation in the name of supplier.

List of equipments needed for Department of Physics:

- 1. Complete apparatus to analyze elliptically polarized Light by using a Babinet's compensator.
- 2. Sextant for measurement of height of a building
- 3. Complete apparatus to measure Moment of Inertia of flywheel
- 4. Complete apparatus to measure Young's modulus of wire by Optical Lever
- 5. Complete apparatus to measure Modulus of rigidity by Maxwell's Needle
- 6. Complete apparatus to determine the frequency of an electric tuning fork by Melde's experiment and verify λ^2 -T law

- Complete apparatus to measure Thermal conductivity of Cu by Searle's method
- 8. Complete apparatus of Quink's tube method for paramagnetic solution
- 9. Complete apparatus to measure Thermal conductivity of Cu by Angstrom's method
- 10. Complete apparatus of Full adder IC
- 11. Complete apparatus of IC for flip flops(JK and D-type)
- 12. Complete apparatus of 4 bit counter
- 13. Complete apparatus of 4 bit shift register(series and parallel)
- 14. Complete apparatus of 555 timer
- 15. Complete apparatus to measure Plank's constants using photo detector using black body radiation
- 16. Complete apparatus of Photo electric effect kit. (complete set)
- 17. Complete apparatus to measure Ionization potential of mercury (complete set).
- 18. Complete set up for absorption line in rotational spectrum of iodine vapour.
- 19. Complete set up for measuring e/m by magnetic focusing method.
- 20. Complete set up for measuring e/m by bar magnet.
- 21. Complete set up for Tunnel diode.
- 22. Complete set up for Laser sources(four colors)
- 23. Complete set up for He-Ne laser.
- 24. Complete set up to determine the refractive index of liquid by total internal reflection using Wollaston's air-film.
- 25. Complete set up for Zero crossing detector and comparator.
- 26. Complete set up for electronic spin resonance using magnetic field as function of resonance frequency.
- 27. Complete set up for Zeeman effect.
- 28. Complete set up for CCD s for quantum experiments.

- 29. Complete set up for Measurement of susceptibility of paramagnetic solution (Quinck`s Tube Method)
- 30. Complete set up to measure the Magnetic susceptibility of Solids. (20K)
- 31. Complete set up to determine the Coupling Coefficient of a Piezoelectric crystal
- 32. Complete set up to measure the Dielectric Constant of a dielectric Materials with frequency
- 33. Complete set up to determine the complex dielectric constant and plasma frequency of metal using Surface Plasmon resonance (SPR)
- 34. Complete set up to determine the refractive index of a dielectric layer using SPR
- 35. Complete set up to study the PE Hysteresis loop of a Ferroelectric Crystal.
- 36. Complete set up to draw the BH curve of Fe using Solenoid & determine energy loss from Hysteresis.
- 37. Complete set up to measure the resistivity of a semiconductor (Ge) with temperature by four-probe method (room temperature to 1500° C) and to determine its band gap.
- 38. Complete set up to determine the Hall coefficient of a semiconductor sample.
- 39. Complete set up to verify the law of Malus for plane polarized light.
- 40. Complete set up to study dependence of radiation on angle for a simple Dipole antenna.
- 41. Complete set up to verify the Stefan's law of radiation and to determine Stefan's constant.
- 42. Complete set up to determine the Boltzmann constant using V-I characteristics of PN junction diode.
- 43. Complete set up to determine the refractive Index of (1) glass and (2) a liquid by total internal reflection using a Gaussian eyepiece.
- 44. Complete set up to study the polarization of light by reflection and determine the polarizing angle for air-glass interface.

- 45. Complete set up to determine the wavelength and velocity of ultrasonic waves in a liquid (Kerosene Oil, Xylene, etc.) by studying the diffraction through ultrasonic grating.
- 46. Complete set up to study the reflection, refraction of microwaves.
- 47. Complete set up to study Polarization and double slit interference in microwaves.
- 48. Complete set up for Millikan's oil drop experimental set up.