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**CLASS
XII**

**A Complete Lab
Activity Book**

- Introduction
- Lab Experiment
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Lab Manual Physics Cbse Class 12th

Dr R K Gupta



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and principles Thus trying to break the stereotype that subjects like Physics Chemistry and Biology means studying lengthy formulas complex structures and handling complicated instruments we are trying to make education easy fun and enjoyable

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power source 4 To assemble the components of a given electrical circuit 5 To study the variation in potential drop with length of a wire for a steady current 6 To draw the diagram of a given open circuit comprising atleast a battery resistor rheostat key ammeter and voltmeter Make the components that are not connected in proper order and correct the circuit and also the circuit diagram

SECTION B ACTIVITIES

- 1 To study effect of intensity of light by varying distance of the source on an LDR Light Depending Resistor
- 2 To identify a diode a LED a transistor an IC a resistor and a capacitor from mixed collection of such items
- 3 Use a multimeter to i identify the transistor ii distinguish between n p n and p n p type transistor iii see the unidirectional flow of current in case of a diode and a LED iv Check whether a given electronic components e g diode transistor or IC is in working order
- 4 To observe refraction and lateral deviation of a beam of light incident obliquely on a glass slab
- 5 To observe polarisation of light using two polaroids
- 6 To observe diffraction of light due to a thin slit
- 7 To study the nature and size of the image formed by i convex lens ii concave mirror on a screen by using candle and a screen for different distance of the candle from the lens mirror
- 8 To obtain a lens combination with the specified focal length by using two lenses from the given set of lenses

SUGGESTED INVESTIGATORY PROJECT

- 1 To Study Various factors on which the Internal Resistance EMF of a cell depends
- 2 To study the variations in current following in a circuit containing L D R because of variation a In the power of incandescent lamp used to illuminate the L D R Keeping all the lamps in fixed position b In the Distance of a incandescent lamp of fixed power used to illuminate the L D R
- 3 To find the refractive indices of a Water b Oil Transparent using a plane mirror an equiconvex lens made from a glass of known refractive index and an adjustable object needle
- 4 To design an appropriate logic gate combination for a given truth table
- 5 To investigate the relation between the ratio of i Output and Input voltage ii Number of turns in secondary coils and primary coils of a self designed transformer
- 6 To Investigate the dependence of angle of deviation on the angle of incidence using a hollow prism filled one by one with different transparent fluids
- 7 To Estimate the charge induced on each one of the two identical styrofoam balls suspended in a vertical plane by making use of Coulomb's Law
- 8 To study the factors on which the self inductance of a coil depends by observing the effect of this coil when put in series with a resistor bulb in a circuit fed up by an a c source of adjustable frequency
- 9 To study the earth's magnetic field using a tangent galvanometer

APPENDIX Some Important Tables of Physical Constants

Logarithmic and other Tables Lab Manual-Physics-TB-12_E-R Dr R K Gupta, Lab Manual Physics TB 12_E R *Lab Sparks: Amazing Physics - Complete Edition for Classes 6-12: The Ultimate Practical Manual | You Can See, Feel & Explore! | 70+ Experiments from Kitchen Science to Electromagnetism | Aligned with NCERT, CBSE & NEP 2020* KUNDAN KUMAR, 2025-10-13

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[Physics Class - 12](#) Er. Meera Goyal,2023-04-30 Sections A 1 Experiments 2 Activities Sections B 1 Experiments 2 Activities 3 Suggested Investigatory 4 Project Work

Unveiling the Energy of Verbal Artistry: An Mental Sojourn through **Lab Manual Physics Cbse Class 12th**

In some sort of inundated with displays and the cacophony of immediate conversation, the profound energy and mental resonance of verbal beauty usually fade in to obscurity, eclipsed by the continuous barrage of sound and distractions. However, located within the lyrical pages of **Lab Manual Physics Cbse Class 12th**, a fascinating function of fictional splendor that pulses with organic thoughts, lies an unique journey waiting to be embarked upon. Penned with a virtuoso wordsmith, that interesting opus books viewers on a mental odyssey, lightly exposing the latent possible and profound influence stuck within the delicate internet of language. Within the heart-wrenching expanse of the evocative examination, we will embark upon an introspective exploration of the book is key themes, dissect their charming publishing fashion, and immerse ourselves in the indelible impression it leaves upon the depths of readers souls.

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