

EVERYDAY PHYSICS

Unit 1

Physics behind Home appliances – Light bulb – Fan – Hair drier – Television – Air Conditioners – microwave ovens – Vacuum cleaners – Dishwasher – Washing machines

Unit 2

How things work – Basic principles – Rape recorder – Taps – Lifts – Submarines – Jet planes – Helicopters – Rockets – fax machines – Pagers – Cellular phones

Unit 3

Demonstration – making a switch board with multiple points – wiring – one lamp controlled by one switch/Two switches – fixing a fuse – soldering – P.C.B Preparation

Unit 4

Study of resistors, chokes, Capacitors and Transformers – multimeter – Basic principles – measurement of resistance, Voltage AC & DC

Unit 5

Servicing of domestic appliances – iron box – mixie – grinder – motor – emergency lamp

Books for Study

1. The Learner's series – Everyday science – Published by INFINITY BOOKS, New Delhi
2. The Hindu speaks on Science, Vol I & II, Kasturi Ranga Publishers, Chennai

Books for Reference

1. Fundamentals of Physics by D. Halliday, R.Rensick and J. Walker, 6th edition, Wiley, NY (2001).
2. Physics, Vols I, II, III by D.Halliday, R.Resnick and K.S.Krane, 4th Edition, Wiley, New York (1994).
3. The Feynmann Lectures on Physics Vols I, II, III by R.P. Feynmann, R.B. Leighton & M. Sands, Narosa, New Delhi (1998).