



SRI **VIDYA
ARADHANA
ACADEMY**
| LATUR | NANDED
P C M B

11th | 12th | Repeater

NEET

CET

JEE
(Mains/Adv.)



SCHOLARSHIP TEST SYLLABUS FOR 10th MOVING 11th STUDENTS

Light-Reflection and Refraction : Reflection of Light, Spherical Mirrors, Mirror Formula and Magnification, Refraction of Light, Refractive Index, Lenses & Image Formation in lens using Ray diagram, Lens Formula & Magnification, Power of a lens, Partial & Total Internal Reflection

Electricity : Electric Current & Circuit, Electric Potential & Potential Difference, Circuit-Symbol of Components, Ohm's Law, Factors Affecting Resistance of Conductor, System/Combination of Resistors (Series & Parallel), Heating Effect of Electric Current, Electric Power

Magnetic Effect of Electric Current (MEEC) : Magnetic Field & Field Lines, Magnetic Field due to Current carrying conductor(Straight Conductor, Circular Loop, Solenoid), Force on a Current carrying conductor in magnetic field, Heating Effect of Electric Current, Domestic Electric Circuit

Magnetism : Types of Magnet, Properties of Magnet, Magnetic & Non-magnetic Materials, Magnetic Compass, Electromagnets, Use of Magnets, Magnetic Field

EMI : A.C. and D.C., Electric Generator,

Temperature & Heat : Thermo-metry, Effect of Heat (Thermal Expansion), Transfer of Heat, Latent Heat, Regulation, Anomalous Behaviour of Water, dew point & Humidity, Unit of Heat, Specific heat capacity, Heat Exchange

Sound : Production of Sound Waves & Its propagation, Perception of Sound, Vibrations, Audible and Inaudible Sounds, Noise Pollution, Reflection & Absorption of Sound

Chemical Effect of Electric Current : Electric Current, Conductivity of liquid, Chemical Effects of Electric Current, Electroplating

Force & Pressure : Definition & Explanation, Effect of Force (Shape & State), Types of Force (Contact force, Non-contact force), Pressure, Pressure due to liquid & gases, Atmospheric Pressure

Friction : Factors Affecting Friction, Need of Friction, Increasing or Reducing Friction, Fluid Friction

Work & Energy : Work, Work done by constant force, Energy, Forms of Energy (K.E. & P.E.), Transformation of Energy, Observation of Energy, Power-Rate of doing work

Motion : Motion in Straight Line, Uniform & non-uniform Motion, Distance & Displacement, Speed & Velocity, Acceleration, Graphs (x-t, v-t & at), Equation of motion, Uniform Circular motion (U cm)

Laws of Motion : Balanced & unbalanced force, Newton's Laws of Motion (I, II, & III), Conservation of momentum

Gravitation : Universal law of gravitation, Free fall (Acceleration due to gravity), Motion under gravity, mass & weight, Thrust & Pressure, Pressure in fluids, Archimedes Principle, Kepler's Law, Escape Velocity