



JUNIOR PHYSICS OLYMPIAD (JPO)

Syllabus – 2026 - 2027

Class : X

UNIT 1: Advanced Kinematics

- Relative motion
- Projectile motion
- Vector resolution
- Two-dimensional motion

UNIT 2: Advanced Dynamics

- Newton's Laws
- Friction
- Circular motion
- Centripetal force

UNIT 3: Gravitation

- Orbital motion
- Escape velocity
- Artificial satellites

UNIT 4: Electricity

- Electric current
- Potential difference
- Resistance
- Ohm's Law
- Resistivity
- Series and parallel circuits
- Electrical power
- Heating effect

UNIT 5: Magnetism and Electromagnetism

- Magnetic field
- Field lines
- Electromagnets
- Electric motor
- Electromagnetic induction
- Generator

UNIT 6: Optics

- Reflection
- Refraction
- Mirrors
- Lenses
- Human eye
- Optical instruments
- Total internal reflection