



JUNIOR PHYSICS OLYMPIAD (JPO)

Syllabus – 2026 - 2027

Class : VII

UNIT 1: Motion and Speed

- Distance
- Displacement
- Speed
- Average speed
- Uniform and non-uniform motion

UNIT 2: Introduction to Vectors

- Magnitude
- Direction
- Scalar quantities
- Vector quantities
- Displacement vectors
- Force vectors
- Resultant displacement
- Navigation problems

UNIT 3: Newton's Laws of Motion

- Concept of inertia
- Newton's First Law
- Newton's Second Law
- Newton's Third Law
- Everyday applications
- Action-reaction pairs

UNIT 4: Force and Pressure

- Balanced and unbalanced forces
- Pressure
- Pressure in solids
- Pressure in liquids
- Atmospheric pressure

UNIT 5: Heat

- Temperature
- Heat transfer
- Conduction
- Convection
- Radiation
- Thermal expansion

UNIT 6: Light

- Reflection
- Multiple reflections
- Kaleidoscope
- Periscope
- Image formation

UNIT 7: Electricity and Magnetism

- Current
- Circuit symbols
- Electromagnets
- Magnetic fields