WBPSC Inspector of Legal Metrology Exam Pattern

Name of the Subject	Number of Questions	Total Marks	Duration of the exam
Physics of Higher Secondary Standard	50 Questions		
The arithmetic of Madhyamik Standard	25 Questions	100 Marks	1 hour 30 min
General Studies	25 Questions		

WB Inspector of Legal Metrology Syllabus - Subject Wise

Physics of Higher Secondary Standard

Motion and forces

Linear motion

- Acceleration
- Center of mass
- Force
- Mass
- Momentum
- Newton's laws of motion
- Speed
- Velocity
- Work (physics)

Rotational motion

- Angular momentum
- Angular velocity
- Centrifugal force
- Centripetal force
- Circular motion
- Tangential velocity
- Torque

Conservation of energy and momentum

- Conservation of energy
- Elastic collision
- Energy

- Inelastic collision
- Inertia
- Kinetic energy
- Moment of inertia
- Momentum
- Potential energy
- Rotational energy

Electricity and magnetism

- Ampère's circuital law
- Capacitor
- Coulomb's law
- Diode
- Direct current
- Electric charge
- Electric current
- Electric field
- Electric potential energy
- Electron
- Faraday's law of induction
- Ion
- Inductor
- Joule heating
- Lenz's law
- Magnetic field
- Ohm's law
- Plasma (physics)
- Resistor
- Transistor
- Transformer
- Voltage

Heat

- Entropy
- The first law of thermodynamics
- Heat
- Heat transfer
- The second law of thermodynamics
- Temperature
- Thermal energy
- Thermodynamic cycle
- Volume (thermodynamics)
- Work (thermodynamics)

Waves

- Diffraction
- Doppler effect
- Frequency
- Harmonic oscillator
- Hooke's law
- Interference (wave propagation)
- Light
- Longitudinal wave
- Transverse waves
- Polarization (waves)
- Radio waves
- Reflection
- Refraction
- Refractive index
- Transverse wave
- Snell's law
- Sound
- Vibrating string
- Wave
- Wavelength
- Standing Waves

Gravity

- Gravitational potential
- Newton's law of universal gravitation
- Universal Gravitational Constant

Math

- Euclidean vector
- Motion graphs and derivatives
- Scalar (physics)
- Newtonian Mechanics
- Pythagorean theorem

The arithmetic of Madhyamik Standard

Algebra foundations:

- Solving equations & inequalities
- Working with units
- Linear equations & graphs
- Forms of linear equations

- Systems of equations
- equalities (systems & graphs)
- Functions

High School geometry

- Geometry foundations
- geometry
- Transformations
- Congruence

Trigonometry

- Trigonometry with right triangles
- Trigonometry with general triangles
- The unit circle definition of sine, cosine, and tangent

General Studies

- Current events of national and international importance
- History of India and Indian National Movement
- Indian and World Geography
- Indian Polity and Governance
- Economic and Social Development
- General issues on Environmental ecology, Bio-diversity, and Climate Change
- General Science