CSCA Physics Glossary

Subject Category	Terms
I. Mechanics	radius, maintain, explosion, non-uniform linear motion, scalar, wave velocity, wavelength, reference plane, reference frame, generate, length, impulse, initial velocity, vertical, rough, impact, magnitude, simple pendulum, unit, derived unit, Earth, dynamics, kinetics, momentum, momentum theorem, law of conservation of momentum, kinetic energy, work-energy theorem, inverse proportion, reaction force, range, direction, release, inelastic deformation, component force, negative work, change, height, formula, work, power, concurrent forces, hang, inertia, inertial frame, smooth, International System of Units (SI), resultant force, hertz (Hz), transverse wave, radian, arc length, Hooke's law, sliding friction, restoring force, mechanical wave, mechanical energy, law of conservation of mechanical energy, mechanical vibration, base unit, acceleration, simple harmonic motion, joule (J), angular velocity, stiffness coefficient, static friction, stationary, distance, gram, pull, tension, centimeter, ideal model, ideal experiment, force, decomposition of force, composition of forces, equilibrium of forces, measurement, distance traveled, meter, second, friction, coefficient of friction, final, final velocity, internal, internal force, energy, newton (N), Newton's Second Law, Newton's Third Law, Newton's First Law, collision, frequency, equilibrium, equilibrium position, average velocity, kilogram, kilowatt, curvilinear motion, complete oscillation, elongation, acting object, time, instant, vector, potential energy, conservation, object under force, vertical direction, vertically upward, vertically downward, horizontal direction, horizontally left, horizontally right, horizontal plane, instantaneous velocity, velocity, speed, shorten, spring, elastic force, elastic potential energy, elasticity coefficient, elastic deformation, watt (W), external force, law of universal gravitation, maintain, displacement, physical quantity, object, attraction, system, fall, linear velocity, relative motion, opposite, interaction, identical, phase, deformation, amount of deformation, press, pressure, factor, gravitational force, natural length, central angle, circumference, uniformly accelerated linear motion, uniformly increasing linear motion, uniform circular motion, uniform linear motion, motion, tendency of motion, kinematics, amplitude, direct proportion, positive work, normal force, support force, diameter, linear motion, particle, mass, gravity, gravitational acceleration, gravitational potential energy, center of gravity, period, transformation, state, free fall motion, longitudinal wave, resistance, perform work, point of action, acting force, coordinate system, include, ratio, change, rate of change, expression, crest, trough, initial condition, exist, single slit, kinetic friction coefficient, diagonal, rebound, this point, interference, negligible, pulley, acceleration, absolute value, energy, equilibrium condition, projectile motion, parallel, parallelogram law, upward throw, force analysis, balanced force, elastic limit, condition, equilibrium of an object,

Subject Category	Terms
	relative, mutual, centripetal acceleration, along, original state, state of motion, vibration curve, orthogonal decomposition, rectangular coordinate system, pendulum length, pendulum angle, conservative force, conservative field, wave amplitude, node, wave curve, wave source, wave ray, wavefront, initial phase, ultrasonic wave, infrasonic wave, first cosmic velocity, fixed-axis rotation, recoil, component velocity, buoyant force, non-inertial frame, coplanar forces, resonance, inertial force, resultant velocity, constant force, coefficient of restitution, chaos, angular acceleration, angular frequency, angular displacement, Coriolis force, centrifugal force, critical damping, fluid, law of conservation of energy, projectile, projectile motion, equilibrium state, average power, average speed, sound wave, sound velocity, forced vibration, instantaneous power, elastic medium, elastic body, spring oscillator, perfectly elastic collision, perfectly inelastic collision, relative velocity, centripetal force, rotational vector, coherent sources, tension, vibration equation, gravitational field, damping, standing wave
II.Electromagnetism	ampere (A), Ampere's rule, Ampere force, diverge, north pole, magnetic field, magnetic line of force, magnetic induction, magnetic pole, magnetic force, magnet, magnetic flux, conductor, wire, charged body, geomagnetic field, point charge, electric field, electric field force, electric field strength, electric field line, electromagnetic induction, electric charge, electric quantity, law of conservation of charge, electric power, electric current, current intensity, circuit, capacitance, electric potential, potential difference, voltage, power supply, electron, resistance, rated voltage, rated power, molecular current, volt (V), negative charge, induced current, electrostatic induction, milliampere, charge-to-mass ratio, circular current, circuit loop, Joule's law, weaken, contact electrification, electrostatic induction, electrostatic force, insulator, switch, coulomb (C), Coulomb's law, Coulomb force, Lorentz force, frictional electrification, south pole, ohm (Ω), Ohm's law, repulsion, kiloohm, tangent, law of conservation, actual voltage, actual power, tesla (T), current-carrying solenoid, microampere, weber (Wb), attraction, elementary charge, uniform magnetic field, uniform electric field, right-hand screw rule, strengthen, megaohm, positive charge, direct current (DC), straight current, pointing, proton, neutralization, left-hand rule, ratio, contact each other, closed, closed circuit, parallel connection, pull out, pass through, series connection, vertical direction, magnetic needle, charged particle, unit charge, equal amount, cancel, battery, electromotive force (EMF), capacitor, zero potential, superposition principle, directional motion, Faraday's law, divergence, discharge, insert, induced electromotive force, trajectory, cross section, pole, plate, test charge, contact, electrostatic equilibrium, electrostatic shielding, determine, Lenz's law, lose, convergence, energized, same kind, phenomenon, distance apart, property, right-hand rule, increase, self-induction, hinder, ammeter, semiconductor, transformer, standard cell, superconductor,

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	ballistic galvanometer, sensor, transmission line, magnetic field strength, magnetic material, electromagnetic wave, electromagnetic spectrum, electromagnetic radiation, electromagnet, electromagnetic damping, electrode, dielectric, ionization, galvanometer, current density, current element, permittivity, electric flux, electric potential, betatron, electron beam, electron cloud, resistivity, resistance box, generator, farad (F), Faraday's law of electromagnetic induction, Faraday cylinder, shunt resistor, voltage divider circuit, voltmeter, induced electric field, induction motor, steady current, constant current source, constant voltage source, cyclotron radius, cyclotron, breakdown, elementary charge, alternating current (AC), AC circuit, AC generator, transistor, electroscope, radar, ion beam, sensitivity, solenoid, triode, stimulated emission, bound charge, vortex electric field, accumulator, cathode, permanent magnet, permittivity of vacuum, positive ion, self-induced electromotive force, self-inductance coefficient
III. Thermology	standard atmospheric pressure, repulsion, isochoric process, isothermal process, isobaric process, exothermic, molecule, intermolecular force, molecular thermal motion, macroscopic, piston, ion, ideal gas equation of state, internal energy, pascal (Pa), average kinetic energy, cylinder, heat transfer, thermodynamic temperature, thermology, Celsius temperature, volume, microscopic, temperature, endothermic, pressure, atom, kinetic theory of gases, molecular kinetic energy, molecular potential energy, decrease, diffusion, conservation of energy, air pressure, heat, increase, compression, specific heat capacity, normalization condition, isolated system, closed system, adiabatic process, open system, reversible process, mole, molar heat capacity, expansion, heat engine, thermal equilibrium, thermodynamic system, mechanical equivalent of heat, heat capacity, speed distribution function, statistical law, cyclic process, perpetual motion machine, degree of freedom, quasi-static process, refrigerator
IV. Optics	concave lens, thin lens, imaging formula, propagation, divergent beam, normal line, reflection, reflected ray, angle of reflection, magnification, optically dense medium, optically rare medium, speed of light, light ray, red light, convergent beam, focus, focal length, focal plane, medium, uniform medium, prism, critical angle, angle of deviation, parallel beam, plane mirror, total internal reflection, solar eclipse, incidence, incident ray, angle of incidence, dispersion, real image, lens, convex lens, object distance, image distance, virtual image, shadow, lunar eclipse, refraction, refracted ray, angle of refraction, refractive index, vacuum, rectilinear propagation, violet light, wave–particle duality, monochromatic light, spectrum, light source, infrared ray, visible light, pinhole imaging, diffraction, law of refraction, light intensity, optical path, polarized light, polarizer, double slit, fringe, coherent light, natural light

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V. Modern Physics	extranuclear electron, quantum, energy level, radiation, atomic nucleus, transition, neutron, half-life, saturation current, emissivity, radioactivity, photon, light quantum, photoelectron, photoelectric current, photoelectric effect, nuclear reaction, nuclear energy, red limit, blackbody, ground state, excited state, cutoff frequency, cutoff voltage, quantum number, energy quantum, thermal radiation, hydrogen atom, decay, anode, work function