**Motion**

Motion involving translation and rotation at the same time.

**Linear Motion**

Movement of the body where all parts move in the same direction at the same time along a line.

**Angular Motion**

Movement of a body part around the axis of rotation.

**Momentum**

It is the product of mass and velocity of an object.

**Distance**

The path travelled by the body from point A to point B.

**Displacement**

Change of position of the body.

**Speed**

Distance divided by the change in time.

**Max Velocity**

The top speed an object can or is capable of reaching.

**Velocity**

Displacement divided by the change in time.

**Projection**

The angel a body is projected into the air in relation to horizontal.

**Thrust**

Push suddenly or violently into a specified direction.

**Impulse**

Force (Vector) over time. Impulse applied to an object produces an equivalent vector change in its linear momentum, also in the same direction.

**Vector**

A quantity having direction as well as magnitude, especially as determining the position of one point in space relative to another.

**Acceleration**

Rate of change of velocity over time.

**Deceleration**

To decrease the velocity of

**Eccentric Torque**

A force applied at a perpendicular distance from the center of gravity of an object.

**Angular Distance**

The total of all angular changes of a rotating body.

**Angular Displacement**

The difference between the initial and final angular position of a rotating body.

**Angular Speed**

The angular distance travelled divided by the time taken to cover the distance.

 **Angular Velocity**

The rate of change of angular displacement over time.

**Angular Acceleration**

The rate of change of angular velocity.

**Projectile Motion**

An airborne body that is only affected by the forces of gravity and air resistance.

**Angle of projection**

The angle at which a body is projected into the air in relation to the horizontal.

**Kinetic Energy**

Energy that a body possesses by virtue of being in motion.

**Potential Energy**

The energy of a body or a system with respect to the position of the body or the arrangement of the particles of the system.

**Gait**

Human gait is defined as bipedal, biphasic forward propulsion of center of gravity of the human body, in which there are alternate sinuous movements of different segments of the body with least expenditure of energy. This is all affected difference in limb movement patterns, overall velocity, forces, kinetic and potential energy cycles, and changes in the contact with the surface (Ground, Floor etc.).

**Triple Extension** Movement that involves 3 sets of joints. Movement from bent position in which these joints are primed to a fully extended position in which all joints are essentially locked.

**Bio-motor Skills**

Strength, Speed, Endurance, Flexibility and Coordination.

**Intermuscular**

The interaction between muscles or muscle groups.

**Intramuscular**

Pertaining to what is going on inside the muscle. (Nerves and cells)