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3	**MOTION IN A STRAIGHT LINE** **3.1** Introduction Position, path length and displacement Average velocity and average speed Instantaneous velocity and speed Acceleration Kinematic equations for uniformly accelerated motion Relative velocity	
4	**MOTION IN A PLANE** Introduction Scalars and vectors Multiplication of vectors by real numbers Addition and subtraction of vectors. graphical method Resolution of vectors Vector addition. analytical method Motion in a plane Motion in a plane with constant acceleration Relative velocity in two dimensions Projectile motion Uniform circular motion	
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6	**WORK, ENERGY AND POWER** Introduction Notions of work and kinetic energy : The work- energy theorem Work Kinetic energy Work done by a variable force The work-energy theorem for a variable force The concept of potential energy The conservation of mechanical energy The potential energy of a spring Various forms of energy : the law of conservation of energy Power Collisions	
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8	**OSCILLATIONS** Introduction Periodic and oscillatory motions Simple harmonic motion Simple harmonic motion and uniform circular motion Velocity and acceleration in simple harmonic motion Force law for Simple harmonic Motion Energy in simple harmonic motion Some systems executing Simple Harmonic Motion	

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