**[PHYSICS](http://www.result.pk)**

[For Class IX (marks 65)](http://www.result.pk)

**[1. PHYSICAL QUANTITIES AND MEASUREMENT](http://www.result.pk)**

[1.1 Introduction to Physics](http://www.result.pk)

[1.2 Physical quantities](http://www.result.pk)

[1.3 International system of units](http://www.result.pk)

[1.4 Prefixes (multiples and sub multiples](http://www.result.pk)**[)](http://www.result.pk)**

[1.5 Standard form / scientific notation](http://www.result.pk)

[1.6 Measuring instruments](http://www.result.pk)

[i. metre rule](http://www.result.pk)

[ii. vernier callipers](http://www.result.pk)

[iii. screw gauge](http://www.result.pk)

[iv. physical balance](http://www.result.pk)

[v. stopwatch](http://www.result.pk)

[vi. measuring cylinder](http://www.result.pk)

[1.7 An introduction to significant figures](http://www.result.pk)

**[2. KINEMATICS](http://www.result.pk)**

[2.1 Rest and motion](http://www.result.pk)

[2.2 Type of motion (Translatory, rotatory, vibratory)](http://www.result.pk)

[2.3 Terms associated with motion;](http://www.result.pk)

[i. Position](http://www.result.pk)

[ii. Distance and displacement](http://www.result.pk)

[iii. Speed and velocity](http://www.result.pk)

[iv. Acceleration](http://www.result.pk)

[2.4 Scalars and Vectors](http://www.result.pk)

[2.5 Graphical analysis of Motion;](http://www.result.pk)

[i. Distance-time graph](http://www.result.pk)

[ii. Speed-time graph](http://www.result.pk)

[2.6 Equations of Motion;](http://www.result.pk)

[i. S = vt](http://www.result.pk)

[ii. v](http://www.result.pk)[f](http://www.result.pk) [= v](http://www.result.pk)[i](http://www.result.pk) [+ at](http://www.result.pk)

[iii. S = v](http://www.result.pk)[i](http://www.result.pk)[t + ½ at](http://www.result.pk)[2](http://www.result.pk)

[iv. $v\_{f}^{2}-v\_{i}^{2}$ = 2 a S](http://www.result.pk)

[2.7 Motion due to gravity](http://www.result.pk)

**[3. DYNAMICS](http://www.result.pk)**

[3.1 Momentum](http://www.result.pk)

[3.2 Newton’s laws of motion](http://www.result.pk)

[3.3 Friction](http://www.result.pk)

[3.4 Uniform circular motion](http://www.result.pk)

**[4. Turning Effect of Forces](http://www.result.pk)**

[4.1 Forces on bodies](http://www.result.pk)

[4.2 Addition of forces](http://www.result.pk)

[4.3 Resolution of forces](http://www.result.pk)

[4.4 Moment of a force](http://www.result.pk)

[4.5 Principle of moments](http://www.result.pk)

[4.6 Centre of mass](http://www.result.pk)

[4.7 Couple](http://www.result.pk)

[4.8 Equilibrium](http://www.result.pk)

[4.9 Stability](http://www.result.pk)

**[5. GRAVITATION](http://www.result.pk)**

[5.1 Law of gravitation](http://www.result.pk)

[5.2 Measurement of mass of earth](http://www.result.pk)

[5.3 Variation of ‘g’ with altitude](http://www.result.pk)

[5.4 Motion of artificial satellites (simple treatment)](http://www.result.pk)

**[6. WORK AND ENERGY](http://www.result.pk)**

[6.1 Work](http://www.result.pk)

[6.2 Energy forms](http://www.result.pk)

[6.3 Kinetic energy and Potential energy](http://www.result.pk)

[6.4 Major sources of energy](http://www.result.pk)

[6.5 Efficiency](http://www.result.pk)

[6.6 Power](http://www.result.pk)

**[7. PROPERTIES OF MATTER](http://www.result.pk)**

[7.1 Kinetic molecular model of matter](http://www.result.pk)

[7.2 Density](http://www.result.pk)

[7.3 Pressure](http://www.result.pk)

[7.4 Atmosphere pressure](http://www.result.pk)

[7.5 Pressure in liquids](http://www.result.pk)

[7.6 Up thrust](http://www.result.pk)

[7.7 Principle of floatation](http://www.result.pk)

[7.8 Elasticity](http://www.result.pk)

[7.9 Stress, strain and Young’s modulus](http://www.result.pk)

**[8. THERMAL PROPERTIES OF MATTER](http://www.result.pk)**

[8.1 Temperature and heat](http://www.result.pk)

[8.2 Thermometer](http://www.result.pk)

[8.3 Specific heat capacity](http://www.result.pk)

[8.4 Latent heat of fusion](http://www.result.pk)

[8.5 Latent heat of vaporization](http://www.result.pk)

[8.6 Evaporation](http://www.result.pk)

[8.7 Thermal Expansion](http://www.result.pk)

**[9. TRANSFER OF HEAT](http://www.result.pk)**

[9.1 The three process of heat transfer](http://www.result.pk)

[9.2 Conduction](http://www.result.pk)

[9.3 Convection](http://www.result.pk)

[9.4 Radiation](http://www.result.pk)

[9.5 Consequences and everyday application of heat transfer](http://www.result.pk)

**[RECOMMENDED REFERENCE BOOKS FOR CLASS IX](http://www.result.pk)**

 [The question paper will be syllabus oriented. However, the following book is recommended for reference and supplementary reading:](http://www.result.pk)

 [1. Physics 9](http://www.result.pk)

 [Caravan Book House, Lahore](http://www.result.pk)