

ECAT Physics Chapter 3 Motion and Force

Sr	Questions	Answers Choice
1	One KWh is equal to:	A. 3.6 x 10 ² J B. 3.6 KJ C. 3.6 x 10 ¹ KJ D. 3.6 MJ
2	During the upward motion of the projectile, the vertical component of velocity.	A. Decreases B. Increases C. Remains constant D. None of these
3	A 120 m long train is moving in a direction with speed 20 m/s. A train B moving with 30 m/s in the opposite direction and 130 m long crosses the first train in a time	A. 6 s B. 36 s C. 38 s D. None of these
4	The expression F x t is called impulse if the time 't' is	A. zero B. very large C. very small D. infinite
5	In equation F=ma, then mass 'm' is	A. rest mass B. variable mass C. inertial mass D. gravitational mass
6	Acceleration of a body at any particular instant during its motion is known as	A. average acceleration B. uniform acceleration C. instantaneous acceleration D. all of them
7	Newton's laws are adequate for speeds that are	A. low compared with the speed of light B. equal to the speed of light C. greater than the speed of light D. all of them
8	If speed of electron is 5 x 10^5 m/s. How long does it take one electron to transverse 1 m?	A. 1 x 10 ⁶ B. 2 x 10 ⁶ C. 2 x 10 ⁵ D. 1 x 10 ⁵
9	Slope of velocity-time graph represents:	A. Acceleration B. Speed C. Torque D. Work
10	The product of force and time is called change in:	A. Momentum B. Impulse C. Force D. Both a and b
11	For maximum linear distance of travel, a projectile must be fired at an angle of	A. 0 ° B. 45 ° C. 90 ° D. 60 °
12	The displacement coincides with the path of the motion when a body moves is a	A. curved line B. straight line C. may be curved or straight D. none of them
13	When a shall explodes a mid-air, the total momentum of its fragments is	A. less than the momentum of shell B. equal to the momentum of shell C. greater than the momentum of shell D. none of them
		

The path described by a projectile is called its A car travels first half distance between two places with a speed of 30 km/h and remain half with a speed of 50 km/h. The average speed of the car is The dimension of linear inertia is:	A. orbit B. trajectory C. range D. distance A. 37.5 km/h ing B. 10 km/h C. 42 km/h D. 40 km/h A. MLT ² B. ML <span 10.5pt;="" 107%;="" arial,="" background-image:="" background-position:="" font-family:="" font-size:="" initial;="" initial;<="" line-height:="" sans-serif;="" style="font-size: 10.5pt; line-height: 107%; font-family; Arial, sans-serif; background-image: initial; background-size: initial; background-size: initial; background-size: initial; background-</th></tr><tr><td>half with a speed of 50 km/h. The average speed of the car is</td><td>ing B. 10 km/h C. 42 km/h D. 40 km/h A. MLT<sup>2</sup> B. ML
17 The dimension of linear inertia is:	B. ML