

ECAT Pre General Science Physics Chapter 3 Motion and Force Online Test

Sr	Questions	Answers Choice
1	Tick the conservative force:	A. tension in a string B. Air resistance C. Elastic spring force D. Frictional force
2	If the water falls from a dam into a turbine wheel 19.6 m below, then the velocity of water at the turbine, is (Take g=9.8 m/s 2)	A. 9.8 m/s B. 19.6 m/s C. 39.2 m/s D. 98.0 m/s
3	A train is moving with a velocity of 25 m/s and a car is moving behind it by a velocity of 8 m/s in same direction. The relative velocity of train with respect to car is	A. 17 m/s B. 33 m/s C. 17.5 m/s D. none
4	The second law gives the relationship between	A. mass and velocity B. force and acceleration C. velocity and acceleration D. mass and weight
5	A monkey sits on the pan of spring scale kept in an elevator. The reading of the spring scale will be maximum when	A. Elevator is stationary B. Elevator cable breaks and it falls freely towards earth C. Elevator accelerates downwards D. Elevator accelerates upward
6	A projectile on its path gets divided into two pieces at its highest point. Which is true?	A. Momentum increases B. Momentum decreases C. Kinetic energy increases D. Kinetic energy decreases
7	A body starting from rest covers a distance of 0.45 Km and acquires a velocity of 300 Kmh ⁻¹ . its acceleration will be	A. 7.71 m s ⁻² B. 0.5m s ⁻² C. 0.15m s ⁻² D. 0.092m s ⁻²
8	Unit of impulse in	A. Newton B. Kg m C. Kg m/s D. Joule
9	Force is a:	A. Scalar quantity B. Base quantity C. Derived quantity D. None of these
10	An airplane is flying horizontally with a velocity of 600 km/h and at a height of 1960 m. When it is vertically above a point A on the ground, a bomb is released from it. The bomb strikes the ground, at point B. The distance AB is	A. 1200 m B. 0.33 km C. 3.33 km D. 33 km
11	A lift is descending at a constant speed V. A passenger in the lift drops a coin. The acceleration of the coin towards the floor will be	A. Zero B. g Cg D. V + g
12	Change in momentum is one second is called:	A. Impulse B. Force C. Energy D. Work
13	Root out the conventional source of energy:	A. Energy from blomass B. hydroelectric energy C. Geothermal energy D. None of these
14	When we consider the average velocity of a body, then the body is moving in	A. straight line B. curved path C. may be in a straight or curved path D. none of them
		A. The body is moving with uniform velocity

15	If the velocity time graph is a straight line parallel to time-axis, then it means that:	B. The body is moving with uniform acceleration C. The body is at rest D. None of above
16	A body moving with an acceleration of 5 m/sec ² started with velocity of 10 m/sec. What will be the distance traversed in 10 seconds?	A. 150 m B. 250 m C. 350 m D. 400 m
17	The projectile attains maximum horizontal range when it is projected at an angle of	A. 30 ° B. 45 ° C. 60 ° D. 75 °
18	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
19	The magnitude of the force producing an acceleration of 10 m/sec ² in a body of mass 500 grams is:	A. 3 N B. 4 N C. 5 N D. 6 N
20	A person is sitting in a traveling train and facing the engine. He tosses up a coin and the coin falls behind him. It can be concluded that the train is	A. Moving forward and gaining speed B. Moving forward and losing speed C. Moving forward with uniform speed D. Moving backward with uniform speed