

Physics ECAT Pre Engineering Chapter 3 Motion and Force

Cr.	Questions	Answers Choice
Sr	Questions	
1	Force is a:	A. Scalar quantity B. Base quantity C. Derived quantity D. None of these
2	A cold soft drink is kept on the balance. When the cap is opened, then the weight	A. Increases B. Decreases C. First increases, then decreases D. Remains same
3	A boat of mass 40 kg is at rest, A dog of mass 4 kg moves in the boat with a velocity of 10 m/s. What is the velocity of boat?	A. 4 m/s B. 2 m/s C. 8 m/s D. 1 m/s
4	The distance covered by a body in unit time is called.	A. Displacement B. speed C. Velocity D. Both B and C
5	Inertia mass and gravitational mass are	A. opposite B. identical C. identical when there is no friction D. all of them
6	A car travels first half distance between two places with a speed of 30 km/h and remaining half with a speed of 50 km/h. The average speed of the car is	A. 37.5 km/h B. 10 km/h C. 42 km/h D. 40 km/h
7	When two protons are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these
8	The velocity given to a body to go out of the influence of earth's gravity is known as:	A. Terminal velocity B. Orbital velocity C. Escape velocity D. None of these
9	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
10	Which of the following is not a projectile	A. a bullet fired from a gun B. a space ship C. a football in air D. an artillery shell
11	Inertial frame of references are those frame of references which are moving with	A. increasing velocity B. decreasing velocity C. constant velocity D. all of them
12	A typical rocket consumes about	A. 100 kg s ⁻¹ of fuel B. 1000 kg s ⁻¹ of fuel C. 10000 kg s ⁻¹ of fuel D. 100000 kg s ⁻¹ of fuel
13	Rate of change of momentum is called	A. Impulse B. Force C. Torque D. Momentum
14	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
15	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

16	The velocity of a body at any instant of its motion is known as	A. average velocity B. instantaneous velocity C. uniform velocity D. none of them
17	An object thrown upward with an initial velocity at certain angle with the horizontal and moving freely under the action of gravity is called	A. a rocket B. an aeroplane C. a projectile D. a ballon
18	A ball is dropped vertically down and it takes time t to reach the ground. At time t/2	A. The ball had covered exactly had the distance B. The velocity of the ball was V/3 where V is the velocity when it reached the ground C. The ball had covered less than half the distance D. The ball had covered more than half the distance
19	If the objects of different masses move with the same velocity, then it is more difficult to stop the	A. lighter of the two B. massive of the two C. any one of them D. both of them
20	The path followed by the projectile is known as:	A. Cycle B. Hyperbola C. Trajectory D. Route