

Physics ECAT Pre Engineering Chapter 3 Motion and Force

Sr	Questions	Answers Choice
1	The consumption source if energy is:	A. Energy from biomass B. Hydroelectric energy C. Geothermal energy D. None of these
2	When brakes are applied to a fast moving car, the passengers will be thrown:	A. Forward B. Backward C. Downward D. None of these
3	Acceleration produced in a body by a force varies	A. inversely as the applied force B. directly as the applied force C. directly as the mass of the body D. none of them
4	Slope of velocity time graph represents:	A. Acceleration B. Speed C. Torque D. Work
5	The entity which measures the quantity of motion in a body is called	A. force B. energy C. momentum D. power
6	During the projectile motion, the horizontal component of velocity	A. changes with time B. remains constant C. becomes zero D. decreases with time
7	Change in momentum is one second is called:	A. Impulse B. Force C. Energy D. Work
8	If speed of electron is 5×10^5 m/s. How long does it take one electron to transverse 1 m?	A. 1×10^6 B. 2×10^6 C. 2×10^5 D. 1×10^5
9	If d is the displacement of the body in time t, then its average velocity will be	A. $v = \frac{d}{t}$ B. $v = \frac{d}{t} \times t$ C. $v = \frac{d}{t}$ D. $v = \frac{d}{t}$
10	Flight of rocket in the space is an example of	A. Newton's first law B. Newton's third law C. Newton's second law D. all of them
11	Slope of velocity-time graph represents:	A. Acceleration B. Speed C. Torque D. Work
12	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
13	Ethanol (alcohol) is a type of:	A. Electric fuel B. Bio fuel C. Nuclear fuel D. None of these
14	In an elevator moving vertically up with an acceleration 'g' the force exerted on the floor by a passenger of mass M is	A. Mg B. $\frac{1}{2} Mg$ C. Zero D. $2 Mg$
		A. Becomes half

15	When the mass of the colliding body is much larger than the mass of the body at rest, its velocity after collision.	B. Becomes zero C. Remains same D. Becomes double
16	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
17	When two protons are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these
18	If rope of lift breaks suddenly. The tension exerted by the surface of lift is (a =Acceleration of lift)	A. mg B. $m(g+a)$ C. $m(g - a)$ D. 0
19	Tick the conservation force:	A. Tension in a string B. Air resistance string C. Elastic spring force D. Frictional force
20	Acceleration of a body is positive, if the velocity of the body is	A. constant B. increasing C. decreasing D. none of them