

ECAT Physics Chapter 3 Motion and Force

Qr.	Questions	Anguara Chaica
Sr	Questions	Answers Choice
1	A body of mass 5 kg is acted upon by a total change n momentum will be:	A. 10 NS B. 100 NS C. 140 NS D. 200 NS
2	A body is dropped from a tower with zero velocity, reaches ground in 4s. The height of the tower is about	A. 80 m B. 20 m C. 160 m D. 40 m
3	A railway engine (mass 10^4 kg) is moving with a speed of 73 km/h. The force which should be applied to bring it to rest over a distance of 20 m is	A. 3,600 N B. 7,200 N C. 10,000 N D. 100,000 N
4	A ball is dropped from a height of 4.2 meters. To what height will take it rise if there is no loss of KE after rebounding?	A. 4.2 m B. 8.4 m C. 12.6 m D. none of these
5	The expression F x t is called impulse if the time 't' is	A. zero B. very large C. very small D. infinite
6	If speed of electron is 5×10^5 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
7	When the mass of the colliding body is much larger than the mass of the body at rest, its velocity after collision.	A. Becomes half B. Becomes zero C. Ramains same D. Becomes double
8	A dirty carpet is to be cleaned by heating. This is in according withlaw of motion.	A. First B. Second C. Third D. None of these
9	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
10	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 half 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
11	The consumption source if energy is:	A. Energy from blomass B. Hydroelectric energy C. Geothermal energy D. None of these
12	The vertical and horizontal range will be equal id angle of projection is	A. 76 ° B. 45 ° C. 60 ° D. 120 °
13	Velocitv is a	A. scalar quantity B. vector quantity

	· · · • · ·	C. constant quantity D. none of them
14	Tick the conservative force:	A. tension in a string B. Air resistance C. Elastic spring force D. Frictional force
15	What must be changing when a body is accelerating uniformly?	A. the force acting on a body B. the velocity of the body C. the mass of the body D. the speed of the body
16	What will be the ratio of the distance moved by a freely falling body from rest in 4th and 5th seconds of journey?	A. 4:5 B. 7:9 C. 16:25 D. 1:1
17	Velocity of a body changes if	A. direction of the body changes B. speed of the body changes C. neither speed nor direction changes D. either speed or direction changes
18	In above figures, tell which set of graphs shows that a body is moving with uniform velocity:	A. (i) and (ii) B. (ii) and (iii) C. (iii) and (iv)
19	When the surfaces are coated with a lubricant, then they	A. Stick to each other B. Slide upon each other C. Roll upon each other D. None of these
20	If the instantaneous velocity of a body does not change. the body is said to be moving with	A. average velocity B. uniform velocity C. instantaneous velocity D. variable velocity