

## ECAT Physics 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	Distance covered by a freely falling body in 2 sec will be	A. 4.9 m B. 19.6 m C. 29.2 m D. 44.1 m
3	If a ball comes back to its starting point after bouncing off the wall several times, then its	A. total displacement is zero B. average velocity is zero C. none of them D. both of them
4	A body of mass 5 kg is acted upon by a constant force of 20 n for 7 seconds. The total change in momentum will be:	A. 10 NS B. 100 NS C. 140 NS D. 200 NS
5	Work done along a closed path in a gravitational field is:	A. Maximum B. Minimum C. Zero D. Unity
6	If the velocity time graph is a straight line parallel to time-axis, then it means that:	A. The body is moving with uniform velocity B. The body is moving with uniform acceleration C. The body is at rest D. None of above
7	A rocket carries its own fuel in the form of	A. liquid only B. liquid or solid C. liquid and solid D. liquid or solid and oxygen
8	Linear momentum is a	A. fixed quantity B. constant quantity C. scalar quantity D. vector quantity
9	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. Remains same D. Becomes double
10	The path described by a projectile is called its	A. orbit B. trajectory C. range D. distance
11	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
12	The dimension of linear inertia is:	A. $MLT^{-2}$ B. $ML^{-1}T^{-2}$ C. $ML^{-1}T^{-1}$ D. $ML^{-1}T^{-1}$
13	The expression $F \times t$ is called impulse if the time 't' is	A. zero B. very large C. very small D. infinite
14	Distance traveled by a body falling from rest in the first, second and third second is in the ration of	A. 1 : 2 : 3 B. 1 : 3 : 5 C. 1 : 4 : 9 D. None of the above
15	The velocity of a projectile is maximum	A. at the point of projection B. just before striking the ground C. at none of them

		D. at both of them
16	The artillery shells travel along parabolic paths under the influence of	A. magnetic field B. electric field C. electromagnetic field D. gravitational field
17	Which of the following statements for an object in equilibrium is not true?	A. The object must be at rest B. The object can be at rest C. The object is moving at constant speed D. The acceleration of the object is zero
18	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
19	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
20	The decrease in velocity per unit time is called	A. deceleration B. acceleration C. uniform acceleration D. variable acceleration