

## ECAT Physics Chapter 3 Motion and Force Online Test

Sr	Questions	Answers Choice
1	Earth is considered to be	A. a non-inertial frame B. an inertial frame C. an accelerated frame D. none of the above
2	When a person jumps off the ground, the reaction force of the ground is	A. greater than the weight of the person B. smaller than the weight of the person C. equal to the weight of the person D. zero
3	In equation $F=ma$ , then mass 'm' is	A. rest mass B. variable mass C. inertial mass D. gravitational mass
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	Laws of motion are not valid in a system which is	A. inertial B. non-inertial C. at rest D. moving with uniform velocity
6	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
7	When a force is applied on a body, several effects are possible Which of the following effect could not occur?	A. the body rotates B. the body speeds up C. the mass of the body decreases D. the body changes its direction
8	For a fixed force, larger is the mass of a body the	A. greater is its acceleration B. smaller is its acceleration C. smaller is its weight D. zero is its acceleration
9	Inertia mass and gravitational mass are	A. opposite B. identical C. identical when there is no friction D. all of them
10	The effect of applying a force on a moving body is to change	A. its direction of motion only B. its speed of motion only C. both the direction and speed of motion D. its inertia only
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	The mass of the object is a quantities measure of its	A. speed B. velocity C. acceleration D. inertia
13	A 5 kg mass is falling freely, the force acting on, it will be	A. 19.6 N B. 9.8 N C. 5 N D. Zero
14	The discuss used by athlete has a mass of 1 kg, its weight in newton is	A. 9.8 N B. 80 N C. 98 N D. 100 N
		A. $10 < b > N < /b >$

A mass of 5kg moves with an acceleration of  $10\text{ m s}^{-2}$  force applied is

B.  $50\text{ N}$

C.  $2\text{ N}$

D.  $20\text{ N}$

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