

Physics ECAT Pre Engineering Chapter 3 Motion and Force Online Test

| Sr | Questions | Answers Choice |
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| 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 m s^{-2} force applied is

B. 50 N

C. 2 N

D. 20 N
