

ECAT Pre General Science Online Test

Sr	Questions	Answers Choice
1	According to the law of conservation of linear momentum, the total linear momentum of an isolated system	A. increases B. decreases with time C. remains constant D. none of them
2	The expression $F \times t$ is called impulse if the time 't' is	A. zero B. very large C. very small D. infinite
3	In the expression $F \times t$, the force F is	A. total force B. instantaneous force C. average force D. all of them
4	The quantity $F \times t$ is called as	A. momentum B. velocity C. acceleration D. impulse
5	Rate of change of momentum is called	A. Impulse B. Force C. Torque D. Momentum
6	The SI units of momentum is	A. kg m s^{-2} B. kg ms C. kg m s^2 D. N-s
7	The direction of the linear momentum is the direction of	A. speed B. velocity C. weight D. none of them
8	Linear momentum is a	A. fixed quantity B. constant quantity C. scalar quantity D. vector quantity
9	The linear momentum of the body is defined as	A. $p=ma$ B. $p=1/2ma$ C. $p=mv$ D. $p=1/2mv$
10	If the objects of different masses move with the same velocity, then it is more difficult to stop the	A. lighter of the two B. massive of the two C. any one of them D. both of them
11	Earth is considered to be	A. a non-inertial frame B. an inertial frame C. an accelerated frame D. none of the above
12	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
13	In equation $F=ma$, then mass 'm' is	A. rest mass B. variable mass C. inertial mass D. gravitational mass
14	The second law gives the relationship between	A. mass and velocity B. force and acceleration C. velocity and acceleration D. mass and weight
15	Laws of motion are not valid in a system which is	A. inertial B. non-inertial C. at rest

		D. moving with uniform velocity
16	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
17	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
18	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
19	Inertia mass and gravitational mass are	A. opposite B. identical C. identical when there is no friction D. all of them
20	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
21	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
22	The mass of the object is a quantities measure of its	A. speed B. velocity C. acceleration D. inertia
23	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
24	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
25	A mass of 5kg moves with an acceleration of 10m s^{-2} force applied is	A. $10 < b > \text{N} < /b >$ B. $50 < b > \text{N} < /b >$ C. $2 < b > \text{N} < /b >$ D. $20 < b > \text{N} < /b >$
26	Acceleration produced in a body by the 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
27	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
28	A non-inertial frame of reference is that frame of reference in which	A. $< b > a < /b > = 0$ B. $< b > a < /b > > 0$ or $< b > a < /b > < 0$ C. $< b > v < /b > = 0$ D. none of them
29	An inertial frame of reference is that frame of reference in which	A. $< b > a < /b > = 0$ B. $< b > a < /b > > 0$ C. $< b > a < /b > < 0$ D. all of them
30	Newton's laws are adequate for speeds that are	A. low compared with the speed of light B. equal to the speed of light C. greater than the speed of light D. all of them