

ECAT Physics Chapter 3 Motion and Force Online Test

Sr	Questions	Answers Choice
1	Suppose the water flows out from a pipe at 3 kg s^{-1} and its velocity changes from 5 m s^{-1} to zero on striking the wall, then the force exerted by water on wall will be	A. 5 N B. 10 N C. 15 N D. 20 N
2	A snooker ball moving with velocity V collides head on with another snooker ball of same mass at rest. If the collision is elastic, the velocity of second snooker ball is	A. Zero B. Infinity C. V D. $2V$
3	Which quantity has the same units as impulse	A. force B. work C. linear momentum D. acceleration
4	The product of force and time is called	A. acceleration B. linear momentum C. angular momentum D. impulse
5	The entity which measures the quantity of motion in a body is called	A. force B. energy C. momentum D. power
6	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
7	The expression $F \times t$ is called impulse if the time ' t ' is	A. zero B. very large C. very small D. infinite
8	In the expression $F \times t$, the force F is	A. total force B. instantaneous force C. average force D. all of them
9	The quantity $F \times t$ is called as	A. momentum B. velocity C. acceleration D. impulse
10	Rate of change of momentum is called	A. Impulse B. Force C. Torque D. Momentum
11	The SI units of momentum is	A. kg m s^{-2} B. kg ms C. kg m s^2 D. N-s
12	The direction of the linear momentum is the direction of	A. speed B. velocity C. weight D. none of them
13	Linear momentum is a	A. fixed quantity B. constant quantity C. scalar quantity D. vector quantity
14	The linear momentum of the body is defined as	A. $p=ma$ B. $p=1/2ma$ C. $p=mv$ D. $p=1/2mv$
15	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

