

## Dynamic

Sr	Questions	Answers Choice
1	Conservation of Linear momentum is equivalent to.	A. Newton's First law of motion B. Newton's second law of motion C. Newton's third law of motion D. None of these
2	Thrust force is a consequence of which law of motion.	A. First B. Second C. Third D. Fourth
3	A bucket having some water is revolved in vertical circle. Water does not spill out, even the bucket is upside down, due to.	A. Centrifugal force on water B. Weight of water C. Inertial of water D. Action and Reaction balance each other
4	N kg <sup>-1</sup> is equivalent to	A. m s <sup>-1</sup> B. m s <sup>-2</sup> C. k g ms <sup>-1</sup> D. kg m s <sup>-2</sup>
5	At the fairground, the force that balances your weight is	A. Gravitational force B. Electrostatic force C. Centripetal force D. Frictional force
6	Inertia of a body is related to which of the following quantities	A. Friction B. Force C. Mass D. Weight
7	Change in momentum of a body is equal to	A. Force Velocity B. Force Time C. Mass time D. Force
8	A force acts on a boy for 2 seconds and it produces 50 kg m/s change in its momentum. The force acting on the body	A. 25 N B. 100 N C. 2 N D. 50 N
9	A ball with initial momentum $p$ hits a solid wall and bounces back with the same velocity. Its momentum $p$ after collision will be.	A. $P' = p$ B. $P' = -P$ C. $P' = 2P$ D. $P' = -2P$
10	A book of mass 5 kg is placed on the table, the magnitude of net force acting on the book is.	A. 0 N B. 25 N C. 5 N D. 10 N
11	A large force acts on an object for a very short interval of time. In the case, it is easy to determine.	A. Magnitude of force B. Time interval C. Product of force and time D. None of these
12	When a hanging carpet is beaten by stick Dust flies off the carpet It is mainly due to.	A. Action force on carpet B. Inertia of dust C. Reaction force by carpet D. Rate of change of momentum of carpet
13	An object will continue its motion with constant acceleration until	A. The resultant force is at right angle B. The resultant force on it begins to increase C. The resultant force on it begins to decrease D. The resultant force is at right angle to its tangential velocity
14	SI unit of linear momentum is	A. kgm <sup>-1</sup> s <sup>-1</sup> B. kg m s <sup>-1</sup> C. kg m <sup>2</sup> s <sup>-1</sup> D. kg m s <sup>-2</sup>

		D. Nm
15	The force which moves the car is	A. Force of friction between road tyre B. Force developed by engine C. Uniform velocity D. Water split on the road
16	A force of 5 N is applied to a body weighing 10 N. Its acceleration in $\text{m/s}^2$ is	A. 0.5 B. 2 C. 5 D. 50
17	Which of the following is a non-contact force.	A. Friction B. Electrostatic force C. Air resistance D. Tension in the string
18	When we kick a stone, we get hurt. This is due to	A. Inertia B. Momentum C. Reaction D. Velocity
19	An object with a mass of 5 kg moves at a constant velocity of $10 \text{ ms}^{-1}$ . A constant force then acts for 5 seconds on the object and gives it a velocity of $2 \text{ ms}^{-1}$ in the opposite direction. The force acting on the object is.	A. -12 N B. 5 N C. -10 N D. -15 N
20	The rate of change of momentum of a free falling body is equal to its.	A. Size B. Velocity C. Weight D. Momentum