

## Dynamic

Sr	Questions	Answers Choice
1	Inertia of a body is related to which of the following quantities	A. Friction B. Force C. Mass D. Weight
2	Thrust force is a consequence of which law of motion.	A. First B. Second C. Third D. Fourth
3	A lubricant is usually introduced between two surfaces to decrease friction. The lubricant.	A. Decreases temperature B. Provides rolling friction C. Prevents direct contact of the surfaces D. Acts as ball bearings
4	SI unit of linear momentum is	A. $\text{kgm}^{-1} \text{s}^{-1}$ B. $\text{kg m s}^{-1}$ C. $\text{kg m}^2 \text{s}^{-1}$ D. Nm
5	An object with a mass 5 kg moves at 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
6	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
7	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. $p' = -2p$
8	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
9	An object of mass 1 kg placed at earth's surface experiences a force of.	A. 1 N B. 9.8 N C. 100 N D. Any Value
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	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
12	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. Inertia of water D. Action and Reaction balance each other
13	Net force on the body falling in air with uniform velocity is equal to.	A. Zero B. Weight of the body C. Air resistance on the body D. Difference of weight of body and air resistance on it.
14	A particle of mass $m$ moving with a velocity $v$ collides with another particle of the same mass at rest. The velocity of the first particle after collision is.	A. 0 B. $v$ C. $-v$ D. $-1/2$

15	What we kick a stone, we get hurt This is due to	A. Inertia B. Momentum C. Reaction D. Velocity
16	The rate of change of momentum of free falling body is equal to its.	A. Size B. Velocity C. Weight D. Momentum
17	A large force acts on an objet for a very short interval of time. In the case, it is easy to determine.	A. Magnitude of force B. Time interveal C. Product of force and time D. None of these
18	An object will continue its motion with constant acceleration until	A. The resultant force is at right angle B. The resultant fore 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
19	A force acts on a boyd for 2 seconds and it produces 50 kg m/s chagne in its momentum. The force acting on the body	A. 25 N B. 100 N C. 2 N D. 50 N
20	Change in momentum of a body is equal to	A. Force Velocity B. Force Time C. Mass time D. Force