

## Dynamic

Sr	Questions	Answers Choice
1	At the fairground, the force that balances your weight is	A. Gravitational force B. Electrostatic force C. Centripetal force D. Frictional force
2	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
3	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. $-1/2$
4	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
5	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
6	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
7	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.
8	The rate of change of momentum of free falling body is equal to its.	A. Size B. Velocity C. Weight D. Momentum
9	When we kick a stone, we get hurt. This is due to	A. Inertia B. Momentum C. Reaction D. Velocity
10	A bucket having some water is revolved in a 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
11	A force acts on a body 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
12	Thrust force is a consequence of which law of motion.	A. First B. Second C. Third D. Fourth
13	Which of the following is a non-contact force.	A. Friction B. Electrostatic force C. Air resistance D. Tension in the string
14	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. $p' = -2p$
		A. $m s^{-1}$

15	N kg-1 is equivalent to	B. $\text{m s}^{-2}$ C. $\text{k g ms}^{-1}$ D. $\text{kg m s}^{-2}$
16	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
17	Inertia of a body is related to which of the following quantities	A. Friction B. Force C. Mass D. Weight
18	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
19	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
20	Change in momentum of a body is equal to	A. Force Velocity B. Force Time C. Mass time D. Force