PPSC Physics Full Book

Sr	Questions	Answers Choice
1	A body is equilibrium may not have	A. Momentum B. Velocity C. acceleration D. K.E.
2	A body is in a static equilibrium, only when it is	A. Moving with uniform velocity B. Moving with variable velocity C. Moving with uniform acceleration D. at rest
3	A body is said to be in translations equilibrium, only if the vector sum of all the forces acting on it becomes.	A. Double B. Zero C. Maximum D. Quadruples
4	A body is said to be in complete equilibiurm when	A. It attains translational equilibrium B. Vector sum of all the forces is zero C. Vector sum of all the torques is zero D. Vector sum of all the torque and forces is zero
5	The 1st condition of equilibriums satisfied if.	A. Linear acceleration is zero B. Angular acceleration is zero C. The vector sum of all the forces is zero D. The vector sum of all the torque is increase
6	The condition of complete equilibrium is satisfied if.	A. Vector sum of all the torques is zero B. Vector sum of all the forces is zero C. Vector sum of all the forces and torques is zero D. Angular acceleration is zero
7	If the vector sum of all the torques is zero then	A. 1st condition is satisfied B. 2nd condition is satisfied C. Centre of mass is lowered D. Gravity becomes zero
8	If the resultant of all the forces acting on a body is zero then the body is in	A. Translation equilibrium B. Rotational equilibrium C. Equilibrium D. Dynamic equilibrium
9	If gravitational field is not uniform over the extended object or system of point masses the centre of mass and centreof gravity will	A. Be antiparallel B. Not coincide C. Coincide D. Be perpendicular
10	A point mass moves through a circular arc of length 'l' and radius 'r' in time 't' what is the angular velocity about the centre of the circle.	A. i/rt B. r/it C. 2/rt D. rt
11	Which of the following quantities is zero about the centre of mass of body.	A. Mass B. acceleration C. Moment D. Angular acceleration
12	The centre of gravity of an irregular shaped object lies at	A. The intersection of diagonals B. The intersection of medians C. Its centre D. The axis of rotation
13	The point of which the whole weight of the body acts	A. zero point B. Centre of mass C. Centre of gravity D. Equilibrium
14	The centre of gravity of an object is also called.	A. Centre of buoyancy B. Centre of mass C. Centre of the body

		D. Torque
15	A force passing through the centre of gravity of a body	A. Causes its translational motion B. Causes its rotational motion C. Holds the body in equilibrium D. Produces both translational and rotational motion.
16	The centre of gravity of a rectangular or parallel gram shaped plate is.	A. At the centre B. At the intersection of diagonals C. At the intersection of medians D. At the axis of rotation
17	The centre of gravity of a cylinder is.	A. At the intersection of medians B. At the centre C. At the middle point of axis D. At the intersection of diagonals
18	The centre of gravity of a body is	A. The centre of the body B. The point at the mass of the body acts C. The point at which the whole weight of the body acts D. The point of rotation
19	The centre of mass of a system is a point where an applied force causes the system to move.	A. With rotation B. Without rotation C. Fastly D. Slowly
20	A force applied at centre of mass of a body	A. Does not produce any torque B. Produces torque C. Produces acceleration D. Produce couple
21	The point of which an applied force produces a linear acceleration but no rotation is called.	A. Centre of the body B. Centre of the mass C. Centre of gravity D. Weight of the body
22	For which of the following objects is the centre of mass equidistant from every point on its surface	A. An unsharpened pencil B. A gramophone record C. An egg D. A table tennis ball
23	If a force 5 N applied parallel to a moment arm 5 m then torque will be	A. 0 N m B. 5 N m C. 10 N m D. 25 Nm
24	If the K.E. of a body becomes four times of its initial value the new momentum will be.	A. Half B. Same C. Four time D. Double
25	When the velocity of body is doubled which one is doubled too.	A. K.E. B. P.E C. Momentum D. Acceleration
26	An object travels at constant speed around a circle of radius 1.0 m in 1.0 s the magnitude of its acceleration is.	A. zero B. 1.0 m s-2 C. 2 m s-2 D. 4 pi2 m s-2
27	Which of the following statement is correct for a particle moving in a horizontal circle with constant angular velocity.	A. The linear momentum is constant but the K.E. varies B. The K.E. is constant but the linear momentum varies C. Both K.E. and linear momentum are constant D. Both speed and linear velocity are constant.
28	When a force of 4 N acts on a body of mass 2 kg for a time of 2 s, the rate of change of momentum is.	A. 2 kg ms -1 B. 4 kg ms-1 C. 8 kg m s-1 D. 16 kg m s-1
29	Which of the following is not an elastic collision	A. A man jumps on a cart B. A bullet embedded in a block C. Colliding of two glass balls D. Colliding of two tennis balls
30	When net torque acting on a system is zero which of the following will be constant.	A. Force B. Angular momentum C. Linear momentum D. Linear impulse