PPSC Physics Chapter 1 MECHANICS

Sr	Questions	Answers Choice
1	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
2	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
3	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
4	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
5	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
6	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
7	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
8	Which of the following quantities is zero about the centre of mass of body.	A. Mass B. acceleration C. Moment D. Angular acceleration
9	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
10	The point of which the whole weight of the body acts	A. zero point B. Centre of mass C. Centre of gravity D. Equilibrium
11	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
12	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.
13	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
14	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
15	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
16	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
17	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
18	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
19	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
20	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