

PPSC Physics Topic 1 Mechanics

Sr	Questions	Answers Choice
1	If the resultant of two forces, each of magnitude F have the magnitude F , angle between the forces will be.	A. 30° B. 80° C. 90° D. 120°
2	If the slope of velocity time graph is increasing with time the body is said to have.	A. Positive acceleration B. Average acceleration C. Uniform acceleration D. Retardation
3	The pascal is not the SI derived unit of.	A. Pressure B. Stress C. work D. Tensile strength
4	The term radius of gyration relates to.	A. Moment of force B. Moment of inertia C. Law of gravitation D. simple harmonic motion
5	Linear acceleration of a point moving in a circle of radius 30 cm with angular acceleration of 0.5 rad s^{-2} is	A. 1.5 cm s^{-2} B. 2.5 cm s^{-2} C. 10 cm s^{-1} D. 15 cm s^{-2}
6	Which of the following is conserved in SHM	A. K.E. B. P.E. C. Total energy D. Electrical energy
7	For maximum range angle of projection of the projectile should be	A. 45° B. 90° C. 120° D. 180°
8	In rotational motion, the analogue of force is.	A. moment of inertia B. Moment of force C. Torque D. Rotational inertia
9	In a projectile motion, the horizontal range depends upon.	A. Initial velocity B. Velocity at the highest position C. angle of projection D. Vertical component of velocity
10	A body in equilibrium may not have	A. Velocity B. Momentum C. Acceleration D. K.E
11	The SI unit of coefficient of viscosity of	A. kg m s^{-1} B. $\text{kg m}^{-1} \text{ s}^{-1}$ C. $\text{kg m}^{-1} \text{ s}^{-1}$ D. kg ms^{-2}
12	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
13	Time period of a simple pendulum depends upon.	A. Thickness of the thread B. Mass of the pendulum C. Length of the pendulum D. Amplitude of vibration
14	A man of mass 100 kg is standing in an elevator. The net force acting on the man reads its weight when the elevator is going up with acceleration 4 m s^{-2} would be.	A. 100 N B. 590 N C. 490 N D. 980 N
15	In any collision between two bodies there need not the conservation of	A. Linear momentum B. Angular momentum C. Total energy D. Kinetic energy

16	A physical quantity not directly involved in rotating motion is.	A. Moment of inertia B. Mass C. Angular velocity D. Torque
17	tuning a radio set is an example of.	A. Musical resonance B. Electrical resonance C. Mechanical resonance D. Damping
18	If average acceleration is equal to instantaneous acceleration then the body's said to be moving.	A. Negative acceleration B. Positive acceleration C. uniform acceleration D. Variable acceleration
19	Two vectors of magnitudes 5 N and 7 N respectively are acting on a body if the angle between them is a right angle, their resultant vector will be.	A. 2 N B. 4 N C. 6 N D. 8 N
20	Which pair of the following forces has a resultant force of 2 N.	A. 1 N and 1 N B. 1 N and 3 N C. 1 N and 2 N D. 2 N and 2 N
