

PPSC Physics Chapter 1 MECHANICS

Sr	Questions	Answers Choice
1	The gravitational strength on the surface of moon is 1.6 N kg^{-1} What will be the mass and weight of an object respectively on the surface of the moon.	A. 10 kg , 1.6 N B. 10 Kg , 16 N C. 16 Kg, 10 N D. 16 kg, 160 N
2	A body of mass 8 kg moves along a circle of radius 4 m with constant speed of 88 m s^{-1} The centripetal force on the body is.	A. 10 N B. 128 N C. 48 N D. 148 N
3	A man in an elevator ascending with an acceleration will feel that his weight.	A. Has increased B. Has decreased C. Remains the same D. Vanishes
4	If the roads are not banked	A. A vehicle will turn over B. A vehicle will not travel along with curve C. Tyres and bearing are damaged D. Roads will be spoiled
5	The minimum velocity needed to put a satellite into the orbit	A. Terminal velocity B. Escape velocity C. Critical velocity D. Linear velocity
6	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}
7	The angular momentum of a body about a fixed point is conserved if its velocity	A. Decreases B. Increases C. Remain the same D. Becomes zero
8	The diver spins faster when moment of inertia becomes	A. Smaller B. Greater C. Double D. zero
9	In rotational motion the quantity which plays the same role as the inertial mass in rectilinear motion.	A. Angular momentum B. Linear momentum C. Moment of inertia D. Torque
10	The SI unit of angular momentum is.	A. $\text{kg m}^{-1} \text{ s}$ B. $\text{kg m}^2 \text{ s}$ C. kg m s^{-1} D. $\text{kg m}^2 \text{ s}^{-1}$
11	The angle subtended at the centre of a circle by an arc equal to its radius is equal to.	A. One rotation B. One radian C. One degree D. One revolution
12	Kinetic and potential energies are	A. Not inter convertible B. Inter convertible C. Two forms of torque D. Not related with each other
13	the consumption of energy by a 60 watt bulb in 2 s is	A. 0.02 J B. 30 J C. 120 J D. 60 J
14	Work has the same dimensions as that of	A. Power B. Linear momentum C. Angular momentum D. Torque
15	A body of mass 3 kg lies on the surface of the table 2 m high it is moved on the surface 4 m the change in P.E. will be.	A. 9.8 J B. 6 J C. Zero D. 200 J

		D. 329 J
16	When speed of a moving body becomes double.	A. Its K.E. is doubled B. Its acceleration is doubled C. Its P.E. is doubled D. Its momentum is double
17	The consumption of energy by a 60 W bulb in 2 s is	A. 0.02 J B. 30 J C. 60 J D. 120 J
18	If an athlete uses 50 J of energy to lift a load in 2 s his muscular power is.	A. 125 W B. 250 W C. 500 W D. 1,000 W
19	If velocity is doubled then	A. Momentum increase 4 time and K.E. increase 2 times B. Momentum increases 2 times and K.E. remains constant C. Momentum increases 2 times and K.E. increases 4 times D. Both momentum and K.E. remain constant
20	The unit of energy are the same as that of	A. Force B. Power C. Work D. Efficiency