

PPSC Physics Topic 1 Mechanics

Sr	Questions	Answers Choice
1	Where should be the centre of gravity of a body.	A. It must be within the body B. It must be outside the body C. It may be near but not essentially within the body D. It changes its position after sometime
2	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
3	Which of the following pair of physical quantities have the same dimension.	A. Momentum and pressure B. Energy and work C. Linear and angular momentum D. Force and surface tension
4	A body is equilibrium may not have	A. Momentum B. Velocity C. acceleration D. K.E.
5	a 5 kg mass is falling freely the force acting on it will be.	A. 0 N B. 9.8 N C. 5 N D. 19.6 N
6	The period of a geostationary satellite is.	A. 32 hours B. 72 hours C. 48 hours D. 96 hours
7	Restoring force in SHM is.	A. Centripetal B. Frictional C. Conservative D. Non conservative
8	Which one of the following is not a dimensionless quantity.	A. Radian B. pi C. Decibel D. Force
9	An object falls freely under gravity the vertical equilibrium of the body inside is	A. Stable B. Unstable C. Neutral D. Unknown
10	The resultant of two force 3 N and 4 N making an angle 90° with each other is.	A. 1 N B. 3 N C. 5 N D. 10 N
11	Which example best illustrates the conservation of electrical energy to chemical energy.	A. Starting a car B. Generating hydroelectric power C. Changing an accumulator D. Melting a fuse
12	If gravitational field is not uniform over the extended object or system of point masses the centre of mass and centre of gravity will	A. Be antiparallel B. Not coincide C. Coincide D. Be perpendicular
13	Which one of the following is not true.	A. velocity can be negative B. velocity is a vector C. Speed is a scalar D. Speed can be negative
14	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
15	Which of the following is not a unit of plane angle.	A. Degree B. Radian C. Gradian

D. Steradian

16	If mass attached to a spring increases then its time period.	A. Increases B. Decreases C. Remains constant D. Decreases slightly
17	The weight of a man in an elevator moving down with an accelerating of 9.8 m s^{-2} will be come	A. Half B. Zero C. 9.8 N D. Double
18	Which of the following is a conserfative force.	A. Electric force B. Frictional force C. Normal force D. propulsion force of a rocket
19	Simple harmonic motion is a type of	A. rectilinear motion B. Circular motion C. Rotational motion D. Zig Zag motion
20	Which of the following statements concerning G and g is true.	A. g is scalar white g is a vector B. g is inversely proportional to the mass of the planet C. g is independent of the mass of the planet D. both G and g have the same units