

PPSC Physics Topic 1 Mechanics

Sr	Questions	Answers Choice
1	The magnitude of the instantaneous velocity is called the.	A. Displacement B. Speed C. Acceleration D. Length
2	If a force of 50 N is acting along x axis , then its component along y-axis will be.	A. Zero B. The same C. Of the half magnitude D. Of the double magnitude
3	Simple harmonic motion is a type of	A. rectilinear motion B. Circular motion C. Rotational motion D. Zig Zag motion
4	Two bullets a and b have masses 1 kg and 12 kg respectively.	A. K.E. of B will be twice that of A B. K.E. of A will be twice that of B C. Both have same K.E. D. K.E. of A will be half that of B
5	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
6	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
7	Which of the following is a unit of electric field strength.	A. c m^{-1} B. v m^{-2} C. N C^{-1} D. N V^{-1}
8	Which quantity has dimensions different from the others.	A. Energy per unit volume B. Force per unit area C. Angular momentum per unit mass D. Pressure
9	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
10	Torque is equal to.	A. The product of magnitude of force and acceleration B. The product of magnitude of force and momentum C. The product of magnitude of force and displacement D. The product of magnitude of force and angular velocity
11	92.65 is round off as	A. 92.6 B. 93.00 C. 92.7 D. None of these
12	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. l/rt B. r/lt C. $2/rt$ D. rt
13	When damping is small amplitude of vibrational resonance will be	A. small B. Large C. Infinite D. Un changed
14	When a man jumps off the ground, the reaction force of the ground is.	A. Equal to the weight of the man. B. Smaller than the weight of the man C. Greater than the weight of the man D. Zero

15	By decreasing angle between two vectors their cross product.	A. Increases B. Decreases C. Remains the same D. Vanishes
16	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
17	A force of 50 N acts on a body for 10 s What will be change in momentum.	A. 5 Ns B. 500 Ns C. 200 Ns D. 800 N s
18	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
19	The curve between the acceleration and velocity of a body in SHM is a	A. Circle B. Ellipse C. Square D. Parabola
20	The wave form of SHM is a	A. Sine wave B. Cosine wave C. Square wave D. Electromagnetic wave