PPSC Physics Topic 1 Mechanics

Sr	Questions	Answers Choice
1	The moment of linear momentum is called.	A. Torque B. Couple C. Impulse D. Angular momentum
2	A stone is whirled in a vertical circle at the and of a string when the stone is at the highest position, tension in the string is	A. Maximum B. Zero C. Equal to weight of the stone D. Less than weight of the stone.
3	Solar cells are thin wafers made from	A. Uranium B. Nickel C. Silicon D. Cadmium
4	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
5	The international acceptable scientific notation of a number 123.4 is	A. 12.34 x 10¹ B. 1.234 x 10² C. 1.234 x 10³ D. 0.123 x 10³
6	Which of the following physical quantity has different units as compared to others.	A. Weight of a body B. Tension of a string C. Buoyant force D. Electromotive force
7	A girl weighing 400 N takes 4 s to run up the stairs How much P.E. does she gain if height of the stairs is 3 m.	A. 120 J B. 400 J C. 200 J D. 1200 J
8	A car is travelling with uniform acceleration the road has check posts every 100 m When the car passes one post , it has a speed of 10 m s-1 and when passes the next one its speed is 20 ms-1 What is the cars acceleration.	A. 0.67 m s-2 B. 1.5 m s2 C. 2.5 m s-2 D. 6.0 m s-2
9	An object travels at constant speed around a circle of radius 1.0 m in 1.0 s the magnitude of its acceleration is.	A. zero B. 1.0 m s-2 C. 2 m s-2 D. 4 pi2 m s-2
10	The value of 'g' is maximum	A. Above the earth's surface B. Below the earth's surface C. At the earth's surface D. At the centre of earth
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	When net torque acting on a system is zero which of the following will be constant.	A. Force B. Angular momentum C. Linear momentum D. Linear impulse
13	The equal and opposite forces acting on a body form	A. Angular momentum B. Linear momentum C. Torque D. Couple
14	A particle performs SHM of amplitude 0.020 and frequency 2.5 Hz. What is its maximum speed.	A. 0.050 m s-1 B. 0.125 m s-1 C. 0.314 m s-1 D. 0.75 m s-1
15	Oscillatory motion is always under	A. An applied force B. Restoring force and inertia C. A periodic force D. A gravitational force

16	Which of the following is the magnitude of the gravitational force and is not the inherent property of the body.	A. Mass B. Weight C. Speed D. Length
17	If slope of velocity time graph gradually decreases, then a body is said to have	A. Negative acceleration B. Positive acceleration C. Uniform velocity D. Variable velocity
18	If a body a moving with constant acceleration the velocity time graph will be a	A. zig zag B. Straight line C. Constant value D. zero value
19	The SI unit of torque.	A. kg m2 B. kg ms-2 C. kg m2 s-2 D. kg ms -1
20	When a projectile reaches the highest point the vertical component of velocity becoems.	A. Small B. Vi cos thetha C. Zero D. Maximum