PPSC Physics Topic 1 Mechanics

Sr	Questions	Answers Choice
1	Light year is a unit of	A. Light B. Velocity C. Time D. Distance
2	when a body accelerates.	A. Its direction always changes B. Its mass always changes C. Its velocity always changes D. It falls towards the earth
3	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. i/rt B. r/it C. 2/rt D. rt
4	The centre of gravity of an irregular shaped object lies at	A. The intersection of diagonals B. The intersection of medians C. Its centre D. The axis of rotation
5	The relation between horse power and watt is.	A. 1 hp = 546 watts B. 1 hp = 746 watts C. 1 hp = 946 watts D. 1 hp = 1000 watts
6	When a projectile reaches the highest point the vertical component of velocity becoems.	A. Small B. Vi cos thetha C. Zero D. Maximum
7	Which of the following is not true.	A. Velocity can be nagative B. Velocity is a scalar C. Speed is a vector D. Speed can be negative
8	The resultant of two force 3 N and 4 N making an angle 90 ^{o} with each other is.	A. 1 N B. 3 N C. 5 N D. 10 N
9	The product of force and duration of impact is called.	A. Density B. Momentum C. Torque D. Impulse
10	A force of 20 N is applied on an elastic spring if the extension produced in the springs to cm, the value of spring constant.	A. 2 Nm-1 B. 20 N m-1 C. 200 N m-1 D. 2,000 N m-1
11	if the line of action of force passes through the axis of rotation of origin, then torque is.	A. Maximum B. Negative C. Zero D. 1
12	Which of the following quantities associated with SHM does not vary periodically.	A. velocity B. Displacement C. Acceleration D. Total energy
13	Vectors are ofhen spilt into two or more orthogonal components what is true of these components.	A. they are perpendicular B. They are parallel C. They are antiparallel D. They have same magnitude
14	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
15	A body is termed as perfectly elastic if.	A. It can move freely B. Its surface is perfectly somooth C. It is not affected by an external force

		D. It recovers the original shape when the deforming force is remover
16	The reluctance of a body to start moving is called.	A. Mass B. Weight C. Force D. Inertia
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 the vector sum of all the torques is zero then	A. 1st condition is satisfied B. 2nd condition is satisfied C. Centre of mass is lowered D. Gravity becomes zero
19	An astronaut in an earth satellite will observe the sky as	A. Light blue B. Deep blue C. White D. Black
20	If gravitational field is not uniform over the extended object or system of point masses the centre of mass and centreof gravity will	A. Be antiparallel B. Not coincide C. Coincide D. Be perpendicular