PPSC Physics Topic 1 Mechanics

Sr	Questions	Answers Choice
1	One light year is equal to.	A. 9.46 x 10¹⁵ cm B. 9.46 x 10¹⁵ m C. 9.46 x 10¹⁵ km D. 7.88 x 10¹⁴ m
2	Which of the following is SI base unit for temperature.	A. Celsius B. Kelvin C. Fahrenheit D. Rankine
3	Which vector gives the displacement from one point another in space.	A. Null vector B. Position vector C. Unit vector D. Distance vector
4	The amplitude of a vibrating body placed in a resistive medium.	A. Increases exponentially with time B. Decreases exponentially with time C. Remains constant with time D. Cannot be observed
5	For the angular momentum of a system to remains constant, the external torque should be	A. small B. Large C. Neither small nor large D. zero
6	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
7	If the dot product of two non zero vectors vanishes the vectors will be.	A. any scalar quantity B. Any negative number C. Its magnitude but not direction D. Its magnitude and direction
8	For which of the following objects is the centre of mass equidistant from every point on its surface	A. An unsharpened pencil B. A gramophone record C. An egg D. A table tennis ball
9	When the lift is moving upward with an acceleration then weight of the object will be.	A. w = ma B. w - ma C. w D. 2 w
10	The acceleration due to gravity	A. Has the same value everywhere in space B. Has the same value every where on the earth C. varix with altitude on the earth D. Is great her on the moon owing to its smaller diameter
11	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
12	When a body acceleatres.	A. Its direction always chances B. It mass always changes C. It velocity always changes D. It falls towards the earth
13	If a body is moving with constant velocity then	A. Its acceleration is zero B. Its direction may be changing C. Its speed may be changing D. Its acceleration is constant
14	Planets move around the sun due to.	A. Centrifugal force B. Centripetal force C. Gravitational pull between them

		D. Frictional force between them
15	If the rate of change of momentum w.r.t Time is zero then	A. Momentum is a function of time B. Momentums is not conserves C. Momentum is constant D. The impulse is into he same direction as the momentum
16	A force of 50 N acts on a body for 10 s the change in momentum will be.	A. 5 N s B. 200 Ns C. 500 Ns D. 800 N s
17	The rate of change of angular momentum of a body is equal to.	A. Applied force B. Moment of inertial C. Applied torque D. Impulsive force
18	The diver spins faster when moment of inertia becomes	A. Smaller B. Greater C. Double D. zero
19	The gravitational force between two bodies does not depends upon.	A. The product of their masses B. Their separation C. The sum of their masses D. The constant of gravitation
20	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