Physics ICS Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	A body travellling in a circle at constatn speed.	A. Has constaltn velocity B. Has an inward radial acceleration C. I not accelerated D. Has an outward radical acceleration
2	When a body oves in circle the angle between its linear velocity and angular velocity is always.	A. Zero B. 60^o C. 45^o D. 90^o
3	Ratational analogue of force is.	A. Torque B. Velocity C. Mass and veight D. Momentum
4	Teh moment of inertial of body depends upon	A. Mass of the body and its distribution about axis of rotation B. Volume of the body C. Kinetic energy of the body D. Angular momentum of the body
5	One radian is equal to.	A. 57.3^o B. 56.3^o C. 360^o D. 58.3^o
6	The rate of change of angular velocity is.	A. Angular velocity B. Angualr aceleration C. Angular displacement D. Angular speed
7	A wheel of radius 2 m turns though an angle of 57.3^{o} It lay out a tangential distance.	A. 2m B. 4 m C. 57.3 m D. 114 .6 m
8	A stone at the end of long string is whirled in verticl circle at a constant speed The tension in the string willbe minimum when the stone is.	A. At the top of the cirlcle B. Halfway down C. At the bottom of circle D. Any where in the circle
9	The dimension of angular velocity is.	A. [LT-1] B. [LT-2] C. [T-1] D. [L-1T]
10	A bodyof mass 10 kg is allowed to fall freely its apparent weight becomes.	A. 0 B. 8.9 N C. 9.8 N D. 10 N
11	Artificial gravity is provided to the satellite by	A. Velocity B. Wetight C. Acceleration D. Rotating aroudn a verticla axis
12	The minimum velocity necessary to put a satellite into the orbit is called.	A. Terminal velocity B. Critical velocity C. Artificial velocity D. Angular Velocity
13	The force needed to bend the normally straight path of the particle into circle is.	A. Gravitational force B. Frictional force C. Centrifugal force D. Centripetal force
14	An object in uniform circular motion make 10 revolution sin 2 secons .Which of the following statement is true.	A. Its period is 2.0 s B. Its period is 20 s C. Its frequency is 5 Hz D. Its frequency is 0.2 Hz

15	When a body is whirled in a horizontal circle by means of a string. The centripetal force is supplied by	A. Mass of a body B. Velocity of a body C. Tension in the string D. Air friction
16	A man inside th artificial satllite feels weightlessness because the force of attrction due to the earth is.	A. Zero at pole B. Balanced by the force of attraction due to the moon C. Equal to the centripetal force D. Non effective due to some prticular design of the satellite
17	a body rotating with angular velocity of 2 rad.s-1 and linear velocity is 2 ms-1, then radiuus of circle is.	A. 1 m B. 0.5 m C. 2 m D. 2.5 m
18	The mud flies off the tyre of a moving bicycle which is along.	A. Tangent B. Normal C. To the centre D. Perpendicular
19	In the absence of external force, the chagne in momentum is.	A. Zero B. Constatn C. Decreasing D. Increasing
20	Law of consrvation of angular momentum is importnat in.	A. Diving B. Gymnastics C. Ice Skating D. All of these