

Physics ICS Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	One radian is equal to.	<p>A. 57.3°</p> <p>B. 56.3°</p> <p>C. 360°</p> <p>D. 58.3°</p>
2	A 1000 kg truck is turning round a corner of radius 100 m with speed 72 km/h, centripetal force isN.	<p>A. 2</p> <p>B. 40</p> <p>C. 400</p> <p>D. 4000</p>
3	When a ball is rotation in a circular path at the end of string is released. It will move.	<p>A. To the centre</p> <p>B. A way from the centre</p> <p>C. Along the tangent</p> <p>D. Opposite to the motion</p>
4	An astronaut is orbiting around the Earth in a large capsule. Then.	<p>A. He will be in a state of weightlessness with respect to capsule</p> <p>B. He is freely falling towards the Earth</p> <p>C. A ball projected at an angle has a straight line path as observed by him</p> <p>D. All the above</p>
5	In one revolution the angular displacement covered is.	<p>A. 60°</p> <p>B. 90°</p> <p>C. 360°</p> <p>D. 180°</p>
6	A body travelling in a circle at constant speed.	<p>A. Has constant velocity</p> <p>B. Has an inward radial acceleration</p> <p>C. Is not accelerated</p> <p>D. Has an outward radial acceleration</p>
7	Artificial gravity is provided to the satellite by	<p>A. Velocity</p> <p>B. Weight</p> <p>C. Acceleration</p> <p>D. Rotating around a vertical axis</p>
8	In the absence of external force, the change in momentum is.	<p>A. Zero</p> <p>B. Constant</p> <p>C. Decreasing</p> <p>D. Increasing</p>
9	The force needed to bend the normally straight path of the particle into a circle is.	<p>A. Gravitational force</p> <p>B. Frictional force</p> <p>C. Centrifugal force</p> <p>D. Centripetal force</p>
10	The minimum velocity necessary to put a satellite into the orbit is called.	<p>A. Terminal velocity</p> <p>B. Critical velocity</p> <p>C. Artificial velocity</p> <p>D. Angular Velocity</p>
11	The time rate of change of angular displacement is called.	<p>A. Linear velocity</p> <p>B. Linear Acceleration</p> <p>C. Angular Acceleration</p> <p>D. Angular velocity</p>
12	SI Unit of angular displacement	<p>A. Meter</p> <p>B. Radian</p> <p>C. Kilometer</p> <p>D. Centimeter</p>
13	The work done by the centripetal force is.	<p>A. Zero</p> <p>B. Minimum</p> <p>C. Maximum</p> <p>D. Negative work</p>
		<p>A. Diving</p>

14	Law of conservation of angular momentum is important in.	<p>B. <p>Gymnastics</p></p> <p>C. <p>Ice Skating</p></p> <p>D. <p>All of these</p></p>
15	The mud flies off the tyre of a moving bicycle which is along.	<p>A. <p>Tangent</p></p> <p>B. <p>Normal</p></p> <p>C. <p>To the centre</p></p> <p>D. <p>Perpendicular</p></p>
16	The direction of motion of a particle moving in a circle is along the	<p>A. <p>Normal</p></p> <p>B. <p>Tangent</p></p> <p>C. <p>Away from centre</p></p> <p>D. <p>Towards the centre</p></p>
17	If arc distance is equal to two times of radius of circle, then angle traced will be.	<p>A. <p>30°</p></p> <p>B. <p>40°</p></p> <p>C. <p>1 rad</p></p> <p>D. <p>2 rad</p></p>
18	The moment of inertia of body depends upon	<p>A. <p>Mass of the body and its distribution about axis of rotation</p></p> <p>B. <p>Volume of the body</p></p> <p>C. <p>Kinetic energy of the body</p></p> <p>D. <p>Angular momentum of the body</p></p>
19	A stone at the end of long string is whirled in vertical circle at a constant speed. The tension in the string will be minimum when the stone is.	<p>A. <p>At the top of the circle</p></p> <p>B. <p>Halfway down</p></p> <p>C. <p>At the bottom of circle</p></p> <p>D. <p>Any where in the circle</p></p>
20	Rotational analogue of force is.	<p>A. <p>Torque</p></p> <p>B. <p>Velocity</p></p> <p>C. <p>Mass and weight</p></p> <p>D. <p>Momentum</p></p>