

## Physics ICS Part 1 Chapter 3 Online Test

Sr	Questions	Answers Choice
1	When a body moves in circle the angle between its linear velocity and angular velocity is always.	<p>A. <math>0^\circ</math></p> <p>B. <math>60^\circ</math></p> <p>C. <math>45^\circ</math></p> <p>D. <math>90^\circ</math></p>
2	Law of conservation of angular momentum is important in.	<p>A. Diving</p> <p>B. Gymnastics</p> <p>C. Ice Skating</p> <p>D. All of these</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	Rotational analogue of force is.	<p>A. Torque</p> <p>B. Velocity</p> <p>C. Mass and weight</p> <p>D. Momentum</p>
5	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>
6	A 1000 kg truck is turning round a corner of radius 100 m with speed 72 km/h, centripetal force is .....N.	<p>A. 2</p> <p>B. 40</p> <p>C. 400</p> <p>D. 4000</p>
7	SI Unit of angular momentum is.	<p>A. <math>\text{Js}</math></p> <p>B. <math>\text{Kgmsec}^3</math></p> <p>C. <math>\text{kgm}^2\text{s}^{-1}</math></p> <p>D. <math>\text{kgms}^{-2}</math></p>
8	A bottle of soda water is grasped from the neck and swung briskly in vertical circle. Near which portion of the bottle do the bubbles collect.	<p>A. Near the bottom</p> <p>B. In the middle of bottle</p> <p>C. Bubbles remain distributed throughout</p> <p>D. Near the neck of the bottle</p>
9	An object in uniform circular motion makes 10 revolutions in 2 seconds. Which of the following statements is true.	<p>A. Its period is 2.0 s</p> <p>B. Its period is 20 s</p> <p>C. Its frequency is 5 Hz</p> <p>D. Its frequency is 0.2 Hz</p>
10	SI Unit of angular displacement	<p>A. Meter</p> <p>B. Radian</p> <p>C. Kilometer</p> <p>D. Centimeter</p>
11	One radian is equal to.	<p>A. <math>57.3^\circ</math></p> <p>B. <math>56.3^\circ</math></p> <p>C. <math>360^\circ</math></p> <p>D. <math>58.3^\circ</math></p>
12	The rate of change of angular velocity is.	<p>A. Angular velocity</p> <p>B. Angular acceleration</p> <p>C. Angular displacement</p> <p>D. Angular speed</p>
13	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>
14	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 the 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 ..</p>

		nim</p> D. <p>All the above</p>
15	When a body is whirled in a horizontal circle by means of a string. The centripetal force is supplied by	A. <p>Mass of a body</p> B. <p>Velocity of a body</p> C. <p>Tension in the string</p> D. <p>Air friction</p>
16	The direction of motion of a particle moving in a circle is along the	A. <p>Normal&nbsp;</p> B. <p>Tangent</p> C. <p>Away from centre</p> D. <p>Towards the centre</p>
17	A wheel of radius 2 m turns through an angle of $57.3^\circ$ It lay out a tangential distance.	A. <p>2m</p> B. <p>4 m</p> C. <p>57.3 m</p> D. <p>114 .6 m</p>
18	The work doen by the centripetal force is.	A. <p>Zero</p> B. <p>Minimum</p> C. <p>Maximum</p> D. <p>Negative work</p>
19	Moment off inertia depends upon	A. <p>Mass</p> B. <p>Selection of axis of rotation</p> C. <p>Both a and b</p> D. <p>Speed of the body</p>
20	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. <p>At the top of the circle</p> B. <p>Halfway down</p> C. <p>At the bottom of circle</p> D. <p>Any where in the circle</p>