ECAT Pre General Science Physics Chapter 5 Circular Motion

Sr	Questions	Answers Choice
1	Satellites are held in orbits around Earth by its:	A. Gravitational field B. Magnetic field C. Own orbital motion D. Own spin motion
2	Centripetal acceleration is also called _____ acceleration	A. Tangential B. Radial C. Angular D. None of them
3	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
4	When a body moves along a circular path with constant speed, it has an acceleration, which is always directed	A. Along the tangent B. Towards the centre C. Away from the centre D. None of them
5	The number of "Earth stations" which transmit signals to satellites and receive signals from them are:	A. 3 B. 24 C. 126 D. 200
6	If a gymnast sitting on a rotating stool with his arms outstretched, brings his arms towards the chest, then its angular velocity will	A. Increase B. Decrease C. Remain constant D. None of these
7	Direction of angular momentum is determined by:	A. Right hand rule B. Head to tail rule C. Left hand rule D. None of them
8	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
9	When angular acceleration is positive, the body rotates:	A. Slower B. Slowest C. Faster D. None of these
10	When body moves along a circular path with constant speed, it has an acceleration, which is always directed;	A. Along the tangent B. Towards the centre C. Away from the centre D. None of them
11	When angular acceleration is positive, the body rotates:	A. Slower B. Slowest C. Faster D. None of these
12	Final velocity of a hoop is _____ the final velocity of a disc having same mass and radius on coming down an inclined plane.	A. Greater than B. smaller than C. Equal to D. None of these
13	Direction of motion _____ in circular motion:	A. Changes off and on B. Changes continuously C. Does not change D. None of them
14	The angular speed of a particle moving along a circular path is 5 Pie rad sec^{-1}, Its period of motion is:	A. 2.5 sec B. 0.06 sec C. 15.7 sec D. 0.4 sec
15	A car is turning around a corner at 10 m/sec as it travels along an arc of circle. If value of centripetal acceleration is 10 m/sec^2 in this case, find radius of the circular path:	A. 1 m B. 5 m C. 10 m D. 15 m

16	The instantaneous acceleration of a body moving with constant speed in a circle:	A. Remains constant B. Is called centripetal acceleration C. Tangential acceleration D. None of these
17	Angular velocity is a:	A. Scalar quantity B. Vector quantity C. Complex quantity D. None of these
18	Angular momentum is a:	A. vector quantity B. Imaginary quantity C. Complex Quantity D. Scalar Quantity
19	A flywheel accelerates from rest to an angular velocity of 7 rad/sec in 7 seconds. Its average acceleration will be:	A. 49 rad/sec² B. 1 rad/sec² C. 0.16 rev/sec² D. Both A and C E. Both B and C
20	_____ plays the same role during angular motion as played by the mass in linear motion	A. Torque B. Angular Momentum C. Moment of a force D. Moment of inertia