Physics ECAT Pre Engineering Chapter 5 Circular Motion

Sr	Questions	Answers Choice
1	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
2	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to degree D. none of these
3	Centripetal acceleration is also called _____ acceleration	A. Tangential B. Radial C. Angular D. None of them
4	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
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6	When angular acceleration is positive, the body rotates:	A. Slower B. Slowest C. Faster D. None of these
7	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of them
8	Which one is related to angular motion:	A. Moment of a force B. Moment of inertia C. Moment of momentum D. None of these
9	If a gymnast is 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. Remains constant D. None of these
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11	One radian is	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
12	Moment of inertia depends upon:	A. Mass B. Selection of axis of rotation C. Both of them D. None of these
13	Centripetal acceleration is also called _____ acceleration	A. Tangential B. Radial C. Angular D. None of these
14	Angular velocity is a:	A. Scalar quantity B. Vector quantity C. Complex quantity D. None of these
15	When a body moves with a constant speed in a circle:	A. No work is done on it B. No acceleration is produced in the body

		C. Velocity remains constant D. None of these
16	A disc rolls down a hill and its speed at bottom is found to be 11.4 m/sec. Height of the hill is then nearly:	A. 10 m B. 12 m C. 13 m D. 15 m
17	Direction of motion_____ in circular of motion:	A. Changes off and on B. Changes continuously C. Does not change D. None of them
18	A body can have constant velocity when it follows:	A. A circular path B. A rectilinear path C. Trajectory of a projectile D. None of these
19	Radian is defined as the angle subtended at the center of a circle by an arc of:	A. Length equal to its diameter B. Length equal to its radius C. Any length D. None of these
20	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