ECAT Pre General Science Physics Chapter 5 Circular Motion

Sr	Questions	Answers Choice
1	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of them
2	A 1000 Kg car travelling with a speed of 90 km/hr turns around a curve of radius 0.1 km. The necessary centripetal force comes out to be:	A. 8.1 X 10⁷N B. 625 N C. 6250 N D. None of these
3	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
4	The number of "Earth stations" which transmit signals to satellites and receive signals from them are:	A. 3 B. 24 C. 126 D. 200
5	One radian is equal to:	A. 30.3° B. 45.3° C. 50.3° D. 57.3°
6	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
7	Formula for calculating moment of inertia of the bodies of one pair is same. Tick the answer.	A. Disc, sphere B. sphere, hoop C. Thin rod, hoop D. Hoop,disc
8	_____ 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
9	A rotating body tends to be slower, when its angular acceleration is:	A. Positive B. Negative C. Zero D. Infinity
10	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
11	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
12	The number of countries who manage the largest satellite system is:	A. 3 B. 24 C. 126 D. 200
13	Which one is related to angular motion:	A. Moment of a force B. Moment of inertia C. Moment of momentum D. None of these
14	Direction of motion _____ in circular motion	A. Changes off and on B. Changes continuously C. Does not change D. None of them
15	When angular acceleration is positive, the body rotates:	A. Slower B. Slowest C. Faster

		D. None of these
16	In rotational motion, analogue of force F us called:	A. Couple B. Torque C. Mass D. Moment of intertia
17	Direction of angular momentum is determined by:	A. Right hand rule B. Head to tail rule C. Left hand rule D. None of them
18	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
19	A toy car moves around a circular track of radius 0.3 m at the rate of 120 rev/min. The speed V of the car is:	A. 38 m/sec B. 3.8 m/sec C. 0.6 m/sec D. None of these
20	When an object moves with a uniform angular velocity, then its instantaneous angular velocity is equal to:	A. Zero B. Its average velocity C. Its angular displacement D. None of these