Physics ECAT Pre Engineering 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 degree D. none of these
2	_____ 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
3	Satellites are held in orbits around Earth by its:	A. Gravitational field B. Magnetic field C. Own orbital motion D. Own spin motion
4	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
5	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
6	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of them
7	The net force acting on a 100 kg man standing in an elevator accelerating downward with a = 9.8 m sec^{-2} comes out to be	A. 980 N B. 580 N C. 1380 N D. Zero
8	A body moving along the circumference of a circle of radius R completes one revolution. The radius of the covered path to the angle subtended at the center is:	A. Radius of the circle B. Twice the radius C. Thrice the radius D. None of these
9	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
10	A point on the rim of a wheel moves 0.2 m where the wheel turns through an angle is 14.3 degrees. The radius of the wheel is:	A. 0.05 m B. 0.08 m C. 0.8 m D. 0.008 m
11	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
12	A point on the rim of a wheel moves 0.2 m when the wheel turns through an angle of 14.3 degrees. The radius of the wheel is:	A. 0.05 m B. 0.08 m C. 0.8 m D. 0.008 m
13	Einstein's theory about gravity if better than Newton's because it gave explanation of:	A. Inverse square law B. Bending of light C. Both A and B D. None of above
14	Direction of angular momentum is determined by:	A. Right hand rule B. Head to tail rule C. Left hand rule D. None of them
15	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. 8.1×10^7 N B. 625 N C. 6250 N D. None of these

16	Conventional the angular Velocity is Directed at an angle of:	A. 90° to the axis of rotation B. 30° to the axis of rotation C. 0° to the axis of rotation D. None of above
17	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
18	The number of "Earth Stations" which transmit signals to satellites and receive signals fro them are	A. 3 B. 24 C. 126 D. 200
19	One radian is	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
20	Which one is related to angular motion:	A. Moment of a force B. Moment of inertia C. Moment of momentum D. None of these