

ECAT Physics Chapter 5 Circular Motion

Sr	Questions	Answers Choice
1	Direction of motion_____ in circular of motion:	A. Changes off and on B. Changes continuously C. Does not change D. None of them
2	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
3	A car is 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
4	Circular motion is an example of motion in:	A. One dimension B. Two dimensions C. Three dimensions D. None of these
5	_____ 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
6	INTELSAT operates at frequencies 4, 6, 11, 14 having unit of:	A. KHz B. MHz C. GHz D. BHz
7	Centripetal acceleration is also called _____ acceleration	A. Tangential B. Radial C. Angular D. None of these
8	Conventionally the angular velocity is directed to 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 the above
9	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
10	The number of "Earth stations" which transmit signals to satellites and receive signals from them are:	A. 3 B. 24 C. 126 D. 222

11	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
12	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
13	A rotating body tends to be slower, when its angular acceleration is:	A. Positive B. Negative C. Zero D. Infinity
14	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
15	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
16	The useful unit of the angular displacement in SI unit is:	A. Degree B. Revolution C. Radian D. Metre
17	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
18	One radian is equal to:	A. 30.3° B. 45.3° C. 50.3° D. 57.3°
19	When angular acceleration is positive, the body rotates:	A. Slower B. Slowest C. Faster D. None of these
20	Angular velocity is a:	A. Scalar quantity B. Vector quantity C. Complex quantity D. None of these