ECAT Physics Chapter 5 Circular Motion

Sr	Questions	Answers Choice
1	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
2	Which one is related to angular motion:	A. Moment of a force B. Moment of inertia C. Moment of momentum D. None of these
3	A flywheel accelerates from rest to an angular velocity of 7 rad/sec in 7 seconds. Its average acceleration will be:	A. 49 rad/sec^2 B. 1 rad/sec^2 C. 0.16 rev/sec^2 D. Both A and C E. Both B and C
4	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
5	Centripetal acceleration is also called _____ acceleration:	A. Tangential B. Radial C. Angular D. None of them
6	A rotating wheel accelerates up to the value of 0.75 rev/sec^2 after 2 seconds of its start. Its angular velocity becomes:	A. 9.42 rad/sec B. 2.6 rev/sec C. 1.5 rev/sec D. Both A and C
7	Angular momentum is a:	A. vector quantity B. Imaginary quantity C. Complex Quantity D. Scalar Quantity
8	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
9	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these
	The angular velocity of a motorcycle rotating with an angular velocity of 14 rev/sec which is	A. 5 rad/sec^2 B. 10 rad/sec 2

10	The rear wheels of an automobile are rotating with an angular velocity of 14 rev/sec which is reduced to 38 rad/sec in 5 second when brakes are applied. Its angular acceleration is:	B. -10 rev/sec^2 C. -10 rad/sec^2 D. -5 rev/sec^2
11	Moment of inertia depends upon:	A. Mass B. Selection of axis of rotation C. Both of them D. None of these
12	The number of "Earth stations" which transmit signals to satellites and receive signals from them are:	A. 3 B. 24 C. 126 D. 200
13	Conventionally 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 the above
14	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
15	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
16	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
17	The rear wheels of an automobile are rev/sec which is reduced to 38 rad/sec in 5 seconds when brakes are applied. Its angular acceleration is:	A. 5 rad/sec^2 B. -10 rav/sec^2 C. -10 rad/sec^2 D. -5 rav/sec^2
18	Direction of motion _____ in circular motion:	A. Changes off and on B. Changes continuously C. Does not change D. None of them
19	One radian is equal to:	A. 30.3° B. 45.3° C. 50.3° D. 57.3°
20	One radian is	A. Greater than one degree B. Less than one degree C. Equal to one degree D. None of these