MDCAT Physics Chapter 3 Rotational and circular motion Online Test

Sr	Questions	Answers Choice
1	Torque is necessary for producing.	A. angular speed B. linear acceleration C. angular acceleration D. none of these
2	Angular displacement in rotational motion is expressed in	A. m B. m² C. Nms-1 D. Nm s
3	On slightly disturbing a body which is an unstable equilibrium, its center of gravity	A. rises B. falls C. remains constant D. first rises then falls
4	A stone attached to one end of a string is revolved around a stick so that the string winds on the stick and gets shortened) What is conserved)	A. angular momentum B. kinetic energy C. linear momentum D. none of the above
5	The ratio of the SI unit to the C)G.S unit of torque is.	A. 10⁷ B. 10⁹ C. 10⁰ D. 10³
6	A couple produces	A. linear motion B. rotational motion C. both (A) and (B) D. None
7	Two satellites are going around the earth at a height of 250 km and 450 km respectively. If angular speed for both is same, then centripetal acceleration will be.	A. more for first B. more for second C. same for both D. nothing can be decided
8	What happens to the centripetal acceleration of a particle, when its speed is doubled and angular velocity is halved?	A. halved B. doubled C. remain unchanged D. becomes four times
9	If the radius of the circular path of particle going around the circle is doubled without changing its frequency of rotation, then centripetal force on it is.	A. doubled B. halved C. unchanged D. quadrupled
10	A body of mass m tied to a string is moved in a vertical circle of radius r. the difference in tensions at the lowest point and the highest point is.	A. 2 mg B. 4 mg C. 6 □g D. 8 mg