ECAT Pre General Science Physics Online Test

Sr	Questions	Answers Choice
1	Which of the following pairs does not have identical dimensions?	A. Torque and energy B. Energy and work C. Momentum and impulse D. Mass and moment of inertia
2	Moment of inertia depends upon:	A. Mass B. Selection of axis of rotation C. Both of them D. None of these
3	The displacement of body executing SHM is	A. x_ocoswt B. x_osinwt C. x_osin²wt D. Both A, B
4	The center of mass of a sphere lies at:	A. The axis of the sphere B. Circumference of sphere C. Center of the sphere D. None of them
5	The S.I unit of frequency is	A. Vibrations s⁻² B. Ms⁻¹ C. Hertz D. s⁻¹
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	_____ 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
8	The maximum distance of body from mean position when body is executing SHM is called	A. Time period B. Displacement C. Amplitude D. Frequency
9	The wave form of SHM is	A. Pulsed wave B. Square wave C. Triangular waved D. Sine wave
10	The acceleration of body executing SHM is directly proportional to	A. Applied force B. Amplitude C. Displacement D. Frictional force
11	Centripetal acceleration is also called _____ acceleration	A. Tangential B. Radial C. Angular D. None of them
12	In vibrational motion(SHM)	A. P.E remains conserved B. Average K.E remain constant C. Neither P.E nor K.E remains constant D. Total energy remains constant
13	Vibratory motion is always under	A. Applied force B. Restoring force C. Periodic force D. Gravitational force
14	Acceleration of body executing SHM is always directed towards	A. Extreme position B. Mean position C. Along the direction of motion D. None
15	Which of the following is an example of SHM(in ideal situations)	A. Motion of simple pendulum B. Motion of horizontal spring man system

		C. Motion of violin string D. All of these
16	Which of the following forces is responsible for SHM	A. Applied force B. Restoring force C. Fractional force D. Elastic force
17	SHM is type of _____ motion	A. Vibratory B. Linear C. Circular D. None
18	One radian is:	A. Greater than one degree B. Less than one degree C. Equal to degree D. none of these
19	When angular acceleration is positive, the body rotates:	A. Slower B. Slowest C. Faster D. None of these
20	Direction of motion _____ in circular motion	A. Changes off and on B. Changes continously C. Does not change D. None of them
21	The perpendicular distance from the axis of rotation to the line of action of force is called:	A. Moment arm B. Moment of a force C. Torque D. Non of these
22	Torque is also called:	A. Momentum B. Linear inertia C. Moment of a force D. Mass
23	By convention, torques producing clockwise rotation are taken as:	A. Positive B. Nagative C. Zero D. None of these
24	Which one is conservative force	A. Electric force B. Frictional force C. Normal force D. Air resistance
25	Tick the correct answer:	A. Torque is a vector quantity B. Torque is the turning effect of a force C. Torque is called moment of a force D. All of above
26	Work done is independent of path followed in _____	A. Gravitational field B. Magnetic field C. Electric field D. All of these
27	Work done on a body by gravity in lifting it up to certain height is	A. Maximum B. Minimum C. Zero D. Negative
28	The space around the earth in which its gravitational force acts on a body is called	A. Electric Field B. Gravitational field C. Magnetic field D. Conservative field
29	For measuring the angle between two vectors graphically, we join:	A. Tails of both the vectors B. Tail of one vector with the head of other C. Heads of both the vectors D. None of these
30	The unit of work in CGS system is	A. Joule B. Erg C. Dyne D. Watt