ECAT Pre General Science Physics Chapter 3 Motion and Force Online Test

Sr	Questions	Answers Choice
1	If the velocity time graph is a straight line parallel to the time-axis, then it means:	A. The body is moving with uniform velocity B. The body is moving with uniform acceleration C. The body is at rest D. None of these
2	The magnitude of the force producing an acceleration of 10 m/sec^{2}in a body of mass 500 grams is:	A. 3 N B. 4 N C. 5 N D. 6 N
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4	A body is moving with constant velocity of 10 m/sec in the north-east direction. Then its acceleration will be:	A. 10 m/sec² B. 20 m/sec² C. 30 m/sec² D. Zero
5	A body of mass 5 kg is acted upon by a constant force of 20 n for 7 seconds. The total change in momentum will be:	A. 10 NS B. 100 NS C. 140 NS D. 200 NS
6	When brakes are applied to a fast moving car, the passenger will be thrown:	A. Forward B. Backward C. Downward D. none of these
7	Which one of the following is dimensionless:	A. Acceleration B. Velocity C. Density D. Angle
8	The dimension of linear inertia is:	A. MLT² B. ML⁰T⁻² C. ML⁰T⁰ D. MLT⁻¹
9	A ball is dropped from a height of 4.2 meters. To what height it will rise if there is no loss of KE after rebounding?	A. 4.2 m B. 8.4 C. 12.6 D. None of these
10	A body moving with an acceleration of 5 m/sec^{2}started with velocity of 10 m/sec. What will be the distance traversed in 10 seconds?	A. 150 m B. 250 m C. 350 m D. 400 m
11	The short distance between two points direction from its initial point to final point is called:	A. Velocity B. Displacement C. Speed D. Distance
12	Ethanol (alcohol) is a type of:	A. Electric fuel B. Bio fuel C. Nuclear fuel D. None of these
13	Root out the conventional source of energy:	A. Energy from blomass B. hydroelectric energy C. Geothermal energy D. None of these
14	Blomass includes:	A. Crop residue B. Natural vegetation C. Animal dung D. All of these
15	The consumption source if energy is:	A. Energy from blomass B. Hydroelectric energy C. Geothermal energy

		D. None of these
16	One KWh is equal to:	A. 3.6 x 10²J B. 3.6 KJ C. 3,6 x 10¹KJ D. 3,6 MJ
17	The velocity given to a body to go out of the influence of earth's gravity is known as:	A. Terminal velocity B. Orbital velocity C. Escape velocity D. None of these
18	When two protons are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these
19	A body of weight 1 N has a kinetic energy of 1 joule when its speed is:	A. 1.46 m sec⁻¹ B. 2.44 m sec⁻¹ C. 3.42 m sec⁻¹ D. 4.43 m sec⁻¹
20	Tick the conservative force:	A. tension in a string B. Air resistance C. Elastic spring force D. Frictional force
21	Work done along a closed path in a gravitational force is:	A. maximum B. Minimum C. Zero D. Unity
22	The time rate of change of displacement is called:	A. Time B. Acceleration C. Speed D. Velocity
23	One newton is a force that produces an acceleration of 0.5 m/sec^2 in a body of mass:	A. 2 kg B. 3 kg C. 4 kg D. 8 kg
24	Force is a:	A. Scalar quantity B. Base quantity C. Derived quantity D. None of these
25	An object is dropped from a height of 100 m. Its velocity at the moment it touches the ground is:	A. 100 m/sec B. 140 m/sec C. 1960 m/sec D. 196 m/sec
26	Bodies which falls freely under gravity provides good example of motion under:	A. Uniform acceleration B. Non-uniform acceleration C. Uniform velocity D. None of these
27	Swimming becomes possible because of_____law of motion:	A. First B. Second C. Third D. None of these
28	A dirty carpet is to be cleaned by heating. This is an accordance with____ law of motion:	A. First B. Second C. Third D. None of these
29	A certain force gives an acceleration of 2 m/sec2 to a body if mass 5 kg. The same force would give a 29 kg object an acceleration of:	A. 0.5 m/sec2 B. 5 m/sec2 C. 1.5 m/sec2 D. 9.8 m/sec2
30	Slope of velocity-time graph represents:	A. Acceleration B. Speed C. Torque D. Work