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

Sr	Questions	Answers Choice
1	The entity which measures the quantity of motion in a body is called	A. force B. energy C. momentum D. power
2	Root out the conventional source of energy:	A. Energy from blomass B. hydroelectric energy C. Geothermal energy D. None of these
3	The direction of the acceleration is the same as that of	A. speed B. velocity C. both of them D. none of them
4	Unit of impulse in	A. Newton B. Kg m C. Kg m/s D. Joule
5	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
6	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
7	Find the total displacement of a body in 8 seconds starting from rest with an acceleration of 20 cm/s^2	A. 0.064 m B. 640 cm C. 64 cm D. 64 m
8	In above figures, tell which set of graphs shows that a body is moving with uniform velocity:	A. (i) and (ii) B. (ii) and (iii) C. (iii) and (iv)
9	When a shall explodes a mid-air, the total momentum of its fragments is	A. less than the momentum of shell B. equal to the momentum of shell C. greater than the momentum of shell D. none of them
10	A particle of mass 0.5 g moving along x-axis is located of x_1= 15 m at t_1= 5s and x_2= 33 m at t_2= 13s its average velocity is	A. 6 m s⁻¹ B. 2.45 m s⁻¹ C. 2.25 m s⁻¹ D. 4.45 m s⁻¹
11	Bodies failing freely under gravity provide good example of motion under	A. non-uniform acceleration B. uniform acceleration C. variable acceleration D. increasing acceleration
12	A motorist travels A to B at a speed at 40 km/h and returns at speed of 60km/h. His average speed will be	A. 40 km/h B. 48 km/h C. 50 km/h D. 60 km/h
13	The second law gives the relationship between	A. mass and velocity B. force and acceleration C. velocity and acceleration D. mass and weight
14	A certain force gives an acceleration of 2 $m/sec^2$to a body mass 5 kg. The same force would give a 20 kg object an acceleration of:	A. 0.5 m/sec² B. 5 m/sec² C. 1.5 m/sec² D. 9.8 m/sec²
15	A vehicle of mass 120 kg is moving with a uniform velocity of 108 km/h. The force required to stop the vehicle in 10s is	A. 120 x 10.8 N B. 180 N C. 720 N D. 360 N

16	Inertial frame of references are those frame of references which are moving with	A. increasing velocity B. decreasing velocity C. constant velocity D. all of them
17	A typical rocket consumes about	A. 100 kg s⁻¹of fuel B. 1000 kg s⁻¹of fuel C. 10000 kg s⁻¹of fuel D. 100000 kg s⁻¹of fuel
18	When a body is moving with uniform positive acceleration, the velocity- time graph is a straight line. Its slope is	A. zero B. negative C. positive D. non-existing
19	Slope of velocity-time graph represents:	A. Acceleration B. Speed C. Torque D. Work
20	Newton's laws are adequate for speeds that are	A. low compared with the speed of light B. equal to the speed of light C. greater than the speed of light D. all of them