ECAT Physics Chapter 3 Motion and Force

Sr	Questions	Answers Choice
1	If the values of instantaneous and average velocities are equal, the body is said to be moving with	A. uniform acceleration B. uniform speed C. variable velocity D. uniform velocity
2	Body 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
3	Unit of impulse in	A. Newton B. Kg m C. Kg m/s D. Joule
4	A train of 150 m length is going towards north direction at a speed of 10 ms^{-1}. A parrot files at a speed of 5 ms^{-1} towards south direction parallel to the railway track. The time taken by the parrot to cross the train is equal to	A. 12 s B. 8 s C. 15 s D. 10 s
5	The motion of a projectile is	A. one dimension B. two dimension C. three dimension D. all of them
6	Root out the conventional source of energy:	A. Energy from blomass B. hydroelectric energy C. Geothermal energy D. None of these
7	The consumption source if energy is:	A. Energy from blomass B. Hydroelectric energy C. Geothermal energy D. None of these
8	For maximum linear distance of travel, a projectile must be fired at an angle of	A. $0°$ B. $45°$ C. $90°$ D. $60°$
9	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
10	One KWh is equal to:	A. 3.6 x 10^{2}J B. 3.6 KJ C. 3,6 x 10^{1}KJ D. 3,6 MJ
11	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
12	When the mass of the colliding body is much larger than the mass of the body at rest, its velocity after collision.	A. Becomes half B. Becomes zero C. Ramains same D. Becomes double
13	The motion in a plane is the motion in	A. one dimension B. two dimension C. three dimension D. four dimension
14	Force is a:	A. Scalar quantity B. Base quantity

		C. Derived quantity
		D. None of these

15	Range of a projectile is R, when the angle of projection is 30° . Then, the value of the other angle of projection for the same range, is	A. 45° B. 60° C. 50° D. 40°
16	Acceleration in a body is always produced in the directin of:	A. Velocity B. Weight C. Force D. Botha B and C
17	An airplane is flying horizontally with a velocity of 600 km/h and at a height of 1960 m. When it is vertically above a point A on the ground, a bomb is released from it. The bomb strikes the ground, at point B. The distance AB is	A. 1200 m B. 0.33 km C. 3.33 km D. 33 km
18	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
19	The dimension of linear inertia is:	A. MLT^2 B. ML^0T^{-2} C. ML^0T^0 D. MLT^{-1}
20	Ethanol (alcohol) as a type of:	A. Electric fuel B. Bio fuel C. Nuclear fuel D. None of these