ECAT Physics Chapter 3 Motion and Force Online Test

Sr	Questions	Answers Choice
1	An object thrown upward with an initial velocity at certain angle with the horizontal and moving freely under the action of gravity is called	A. a rocket B. an aeroplane C. a projectile D. a ballon
2	Distance covered by a freely falling body in 2 sec will be	A. 4.9 m B. 19.6 m C. 29.2 m D. 44.1 m
3	The artillery shells travel along parabolic paths under the influence of	A. magnetic field B. electric field C. electromagnetic field D. gravitational field
4	An object thrown in arbitrary direction in space with an initial velocity and moving freely under gravity will follow	A. a circular path B. a straight line C. a hyperbola D. a parabola
5	The motion of a projectile is	A. one dimension B. two dimension C. three dimension D. all of them
6	The motion in a plane is the motion in	A. one dimension B. two dimension C. three dimension D. four dimension
7	The motion of a body in a straight line is the motion in	A. one dimension B. two dimension C. three dimension D. four dimension
8	If m is the mass of the gases ejected per second with velocity v relative to the rocket of mass M, then the acceleration of rocket is	A. a = M/mv B. a = mM/v C. a = mv/M D. a = v/mm
9	A rocket carries its own fuel in the form of	A. liquid only B. liquid or solid C. liquid and solid D. liquid or solid and oxygen
10	A typical rocket consists of fuel	A. more than 60% of launch mass B. less than 60% of launch mass C. less than 80% of launch mass D. more than 80% of launch mass
11	A typical rocket ejects the burnt gases at speeds over	A. 400 ms⁻¹ B. 40000m s⁻¹ C. 40000 ms⁻¹ D. 60000 ms⁻¹
12	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
13	Flight of rocket in the space is an example of	A. Newton's first law B. Newton's third law C. Newton's second law D. all of them
14	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
15	When a shell explodes in mid-air, its fragments fly off in	A. only one direction B. in two direction C. different directions

D. a particular direction