ECAT Physics Chapter 3 Motion and Force

Sr	Questions	Answers Choice
1	The motion in a plane is the motion in	A. one dimension B. two dimension C. three dimension D. four dimension
2	One KWh is equal to:	A. 3.6 x 10²J B. 3.6 KJ C. 3.6 x 10¹KJ D. 3.6 MJ
3	During the upward motion of the projectile, the vertical component of velocity.	A. Decreases B. Increases C. Remains constant D. None of these
4	The path followed by the projectile is known as:	A. Cycle B. Hyperbola C. Trajectory D. Route
5	A body is thrown from a height h with speed u, it hits the ground with speed V	A. The value of V is maximum if the body is thrown vertically downward B. The value of V is maximum if the body is thrown vertically upwards C. The value of V is minimum if the body is thrown horizontally D. The value of V does not depend on the direction of which it is thrown
6	Distance covered by a freely failing body n the first second of its motion will be:	A. 4.9 m B. 9.8 m C. 19.6 m D. 29.4 m
7	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
8	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
9	Acceleration produced in a body by the force varies	A. inversely as the applied force B. directly as the applied force C. directly as the mass of the body D. none of them
10	The instantaneous velocity is define as the limiting value of Δd/Δt on the time intervalΔt approaches to	A. zero B. maximum C. minimum D. infinity
11	In the expression F x t, the force F is	A. total force B. instantaneous force C. average force D. all of them
12	The mass of a body measured by a physical balance in a lift at rest is found to be m, if the lift is going up with an acceleration a, its mass will be measured as	A. m (1 - a/g) B. m (1 + a/g) C. m D. Zero
13	According to the law of conservation of linear momentum, the total linear momentum of an isolated system	A. increases B. decreases with time C. remains constant D. none of them
14	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

15	Rocket engines lift a rocket from the earth surface, because hot gas with high velocity	A. Push against the air B. React against the rocket and push it up C. Heat up the air which lifts the rocket D. Push against the earth
16	The mass of the object is a quantities measure of its	A. speed B. velocity C. acceleration D. inertia
17	If a ball comes back to its starting point after bouncing off the wall several times, then its	A. total displacement is zero B. average velocity is zero C. none of them D. both of them
18	Velocity of a body changes if	A. direction of the body changes B. speed of the body changes C. neither speed nor direction changes D. either speed or direction changes
19	The distance covered by a body in unit time is called.	A. Displacement B. speed C. Velocity D. Both B and C
20	Acceleration in a body is always produced in the directin of:	A. Velocity B. Weight C. Force D. Botha B and C