

ECAT Physics Chapter 3 Motion and Force

Cr.	Ougetiens	Anguara Chaise
Sr	Questions	Answers Choice
1	Which of the following statements for an object in equilibrium is not true?	A. The object must be at rest B. The object can be at rest C. The object is moving at constant speed D. The acceleration of the object is zero
2	When a horse pulls a cart, the force that makes the horse run forward is the force exerted by	A. The horse on the ground B. The horse on the cart C. The ground on the horse D. The ground on the cart
3	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
4	The horizontal range of projectile, at a certain place, depends upon	A. the mass of the projectile B. velocity of projection C. angle of projection D. angle as well as velocity of projection
5	A monkey sits on the pan of spring scale kept in an elevator. The reading of the spring scale will be maximum when	A. Elevator is stationary B. Elevator cable breaks and it falls freely towards earth C. Elevator accelerates downwards D. Elevator accelerates upward
6	Which of the following is not a projectile	A. a bullet fired from a gun B. a space ship C. a football in air D. an artillery shell
7	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
8	Velocity is a	A. scalar quantity B. vector quantity C. constant quantity D. none of them
9	Acceleration in a body is always produced in the directin of:	A. Velocity B. Weight C. Force D. Botha B and C
10	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
11	When two protons are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these
12	When body moves with increasing acceleration, its velocity time graph is a	A. straight line B. horizontal straight line C. vertical straight line D. curve
13	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
14	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)

15	A ball is dropped downwards After 1 second another ball is dropped downwards from the same point. What is the distance between them after 3 seconds	A. 25 m B. 20 m
		C. 50 m D. 9.8 m
	The velocity of a body at any instant of its motion is known as	A. average velocity B. instantaneous velocity
16		C. uniform velocity
		D. none of them
	Laws of motion are not valid in a system which is	A. inertial
17		B. non-interial
		C. at rest D. moving with uniform velocity
	Dimensions of velocity are	A. [L] B. [T]
18		C. [LT ⁻¹]
		D. [LT ⁻²]
	The dimension of linear inertia is:	A. MLT ²
19		B. ML ⁰ T ⁻²
		C. ML ⁰ T ⁰ D. MLT ⁻¹
		D. IVIL 1 - Sup 1 - / Sup
20	Root out of the conventional source of energy:	A. Energy from biomass
		B. Hydroelectric energy C. Geothermal energy