ECAT Pre General Science Physics Chapter 3 Motion and Force

Sr	Questions	Answers Choice
1	When a body is moving on a surface, the force of friction is called	A. Static friction B. Dynamic friction C. Limiting friction D. Rolling friction
2	A projectile on its path gets divided into two pieces at its highest point. Which is true?	A. Momentum increases B. Momentum decreases C. Kinetic energy increases D. Kinetic energy decreases
3	If the objects of different masses move with the same velocity, then it is more difficult to stop the	A. lighter of the two B. massive of the two C. any one of them D. both of them
4	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
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	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°
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	Swimming becomes possible because of_____law of motion:	A. First B. Second C. Third D. None of these
9	Newton's first law is also called:	A. Law of torque B. Law of force C. Law of inertia D. None of these
10	If the acceleration of a body is negative, then slope of the velocity-time graph will be:	A. Zero B. Positive C. Negative D. Infinity
11	A ball is dropped from a certain height and another ball is projected horizontally from the same point. Which of the following statement is correct?	A. Both hit the ground at the same velocity B. Both hit the ground at the same speed C. The change of velocity during the path for both balls is the same D. The change of speed during the path for both balls is the same
12	A force of 50 dynes is acted on a body of mass 5 g which is at rest, for an interval of 3 seconds, then impulse is	A. 0.15 x 10⁻³Ns B. 0.98 x 10⁻³Ns C. 1.5 x 10⁻³Ns D. 2.5 x 10⁻³Ns

13	The product of force and time is called	A. acceleration B. linear momentum C. angular momentum D. impulse
14	Distance traveled by a body falling from rest in the first, second and third second is in the ration of	A. 1 : 2 : 3 B. 1 : 3 : 5 C. 1 : 4 : 9 D. None of the above
15	The path described by a projectile is called its	A. orbit B. trajectory C. range D. distance
16	If the instantaneous velocity of a body does not change. the body is said to be moving with	A. average velocity B. uniform velocity C. instantaneous velocity D. variable velocity
17	Two bodies of masses 1 kg and 5 kg are dropped gently form the top of a tower. A a point 20 cm from the ground both the bodies will have the same	A. Momentum B. Kinetic energy C. Velocity D. Total energy
18	A person is sitting in a traveling train and facing the engine. He tosses up a coin and the coin falls behind him. It can be concluded that the train is	A. Moving forward and gaining speed B. Moving forward and losing speed C. Moving forward with uniform speed D. Moving backward with uniform speed
19	A body is dropped from a tower with zero velocity, reaches ground in 4s. The height of the tower is about	A. 80 m B. 20 m C. 160 m D. 40 m
20	Two bullets are fired simultaneously, horizontally and with different speeds from the same place. Which bullet will hit the ground first?	A. The faster one B. Depends on their mass C. The slower one D. Both will reach simultaneously