ECAT Pre General Science Physics Chapter 3 Motion and Force

Sr	Questions	Answers Choice
1	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
2	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
3	Two projectiles are fired from the same point with the same speed at angles of projection 60° and 30° respectively. Which one of the following is true?	A. Their range will be same B. Their maximum height will be same C. Their landing velocity will be same D. Their time of flight will be same
4	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
5	The consumption source if energy is:	A. Energy from blomass B. Hydroelectric energy C. Geothermal energy D. None of these
6	Newton's laws are adequate for speeds that are	A. low compared with the speed of light B. equal to the speed of light C. greater than the speed of light D. all of them
7	A ball is dropped from a height of 4.2 meters. To what height will take it rise if there is no loss of KE after rebounding?	A. 4.2 m B. 8.4 m C. 12.6 m D. none of these
8	What must be changing when a body is accelerating uniformly?	A. the force acting on a body B. the velocity of the body C. the mass of the body D. the speed of the body
9	The entity which measures the quantity of motion in a body is called	A. force B. energy C. momentum D. power
10	If two bodies of equal masses moving in the same direction collide elastically, then their velocities.	A. Are added B. Are subtracted C. Do not change D. Are exchanged
11	Slope of velocity-time graph represents:	A. Acceleration B. Speed C. Torque D. Work
12	Slope of velocity time graph represents:	A. Acceleration B. Speed C. Torque D. Work
13	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
14	A body walks to his school at a distance of 6 km with a speed of 2.5 km/h and walks back with a constant speed of 5 km/h. His average speed for round trip expressed in km/h is	A. 24/13 B. 10/3 C. 3 D. 4,8
		A. Impulse

15	Rate of change of momentum is called	B. Force C. Torque D. Momentum
16	A body whose momentum is constant must have constant	A. Acceleration B. Velocity C. Force D. None of these
17	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
18	The motion in a plane is the motion in	A. one dimension B. two dimension C. three dimension D. four dimension
19	A ball falls on the surface from 10 m height and rebounds to 2.5 m. if the duration of contact with the floor is 0.01 seconds then the average acceleration during contact is	A. 2100 m/s² B. 1400 m/s² C. 700 m/s² D. 400 m/s²
20	A body is moving with constant velocity of 10 m/sec in the north-east direction. Then its acceleration will be:	A. 10 m/sec² B. 20 m/sec² C. 30 m/sec² D. Zero