

## ECAT Pre General Science Physics Chapter 3 Motion and Force Online Test

Sr	Questions	Answers Choice
1	Ethanol (alcohol) is a type of:	A. Electric fuel B. Bio fuel C. Nuclear fuel D. None of these
2	Which quantity has the same dimension as that of impulse?	A. KE B. Power C. Momentum D. Work
3	Suppose the water flows out from a pipe at 3kg s <sup>-1</sup> and its velocity changes from 5m s <sup>-1</sup> to zero on striking the wall, then the force exerted by water on wall will be	A. 5 N B. 10 N C. 15 N D. 20 N
4	Laws of motion are not valid in a system which is	A. inertial B. non-interial C. at rest D. moving with uniform velocity
5	The range of projectile is 50 m whenθ is inclined with horizontal at 15°. What is the range whenθ becomes 45°?	A. 400 m B. 300 m C. 200 m D. 100 m
6	When two protons are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these
7	A car moves for half of its time at 80 km/h and rest half of time at 40 km/h, The total distance covered is 60 km. What is the average speed of the car?	A. 60 km/hr B. 80 km/hr C. 120 km/hr D. 180 km/hr
8	A motorist travels A to B at a speed at 40 km/h and returns at speed of 60km/h. His average speed will be	A. 40 km/h B. 48 km/h C. 50 km/h D. 60 km/h
9	Which one of the following is dimensionless.	A. Acceleration B. Velocity C. Density D. Angle
10	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
11	Linear momentum is a	A. fixed quantity B. constant quantity C. scalar quantity D. vector quantity
12	The consumption source if energy is:	A. Energy from blomass B. Hydroelectric energy C. Geothermal energy D. None of these
13	Body which falls freely under gravity provides good example of motion under:	A. Uniform acceleration     B. Non-uniform acceleration     C. Uniform velocity     D. None of these
14	Swimming becomes possible because oflaw of motion:	A. First B. Second C. Third D. None of these
15	The shortest distance between two points directed from its initial point to final point is called:	A. Velocity B. Displacement C. Speed

		D. Distance
16	If m means mass of gases objected per second from a rocket and v shows the change in velocity, than mv is named as:	A. Force B. Energy C. work D. impulse
17	Rate of change of momentum is called	A. Impulse B. Force C. Torque D. Momentum
18	By which velocity a ball be projected vertically so that the distance covered by it in 5th seconds is twice the distance it covers in its 6th second ( $g=10m/s^2$ )	A. 58.8 m/s B. 49 m/s C. 65 m/s D. 19.6 m/s
19	The collision in which KE is conserved but momentum is not conserved is called:	A. Elastic collision B. Inelastic collision C. any these D. None of these
20	When two protons are brought closer potential energy of both of them:	A. Increases B. Decreases C. Remains same D. None of these