

## Physics ECAT Pre Engineering Chapter 3 Motion and Force Online Test

Sr	Questions	Answers Choice
1	If the acceleration of a body is not uniform, then velocity-time graph will be:	A. Curve B. Straight line C. Sphere D. All of these
2	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
3	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
4	When the total displacement is divided by total time taken, we get:	A. Velocity B. Average speed C. Average velocity D. None of these
5	The decrease in velocity per unit time is called:	A. Variable Acceleration     B. Average Acceleration     C. Retardation     D. None of these
6	The distance covered by a body in unit time is called.	A. Displacement B. speed C. Velocity D. Both B and C
7	One newton is a force that produces an acceleration of 0.5 m/sec <sup>2</sup> in a body of mass:	A. 2 Kg B. 3 Kg C. 4 Kg D. 8 Kg
8	Force is a:	A. Scalar quantity B. Base quantity C. Derived quantity D. None of these
9	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
10	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
11	Swimming becomes possible because oflaw of motion.	A. First B. Second C. Third D. None of these
12	A dirty carpet is to be cleaned by heating. This is in according withlaw of motion.	A. First B. Second C. Third D. None of these
13	A certain force gives an acceleration of 2 m/sec <sup>2</sup> to a body mass 5 kg. The same force would give a 20 kg object an acceleration of:	A. 0.5 m/sec <sup>2</sup> B. 5 m/sec <sup>2</sup> C. 1.5 m/sec <sup>2</sup> D. 9.8 m/sec <sup>2</sup>
14	Slope of velocity time graph represents:	A. Acceleration  B. Speed C. Torque D. Work
15	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)

