



## ST. LAWRENCE HIGH SCHOOL

### A JESUIT CHRISTIAN MINORITY INSTITUTION

Subject- Physics Answers of Worksheet- 14 Class - IX

Date-14.04.2020 1<sup>st</sup> Term

### Question.1: If a bus starts suddenly, the passengers in the bus will tend to fall

(a) In the direction opposite to the direction of motion of bus.

### Question.2: An athlete runs some distance before taking a long jump because

(d) By running the athlete gives himself larger inertia of motion.

# Question.3: A rider on a horseback falls back when horse starts running all of a sudden because

(c) Inertia of rest keeps the upper part of body at rest whereas the lower part of the body moves forward with the horse.

### Question.4: Inertia is a property of a body by virtue of which the body is

(d) Unable to change by itself the state of rest or uniform motion in a straight line.

### Question.5: Qualitative definition of force is given by

(a) Newton's first law of motion.

#### Question.6: SI unit of force is

(b) Newton.

Question.7: A driver accelerates his car first at the rate of 1.8 m/s $^2$  and then at the rate of 1.2 m/s $^2$ . The ratio of the two forces exerted by the engine in the two cases will be

(d) 3: 2

Question.8: Newton's law of motion gives the measure of

(a) Force
Question.9: An object will continue to accelerate until
(b) The resultant force on it is zero.
Question.10: A canon after firing recoils due to
(c) Newton's third law of motion.
Question.11: A rocket or jet engine works on the principle of (b) Conservation of momentum
Question.12: kg.m/s² is the unit of
(d) Force
Question.13: Rate of change of momentum is equal to (c) Force
Question.14: When an object undergoes acceleration
(d) A force always acts on it.
Question.15: When a net force acts on an object, the object will be accelerated in the direction of the force with acceleration proportional to

(a) The force on the body.

Teacher- Piyali Halder