ST. LAWRENCE HIGH SCHOOL

A JESUIT CHRISTIAN MINORITY INSTITUTION

- **Subject- Physics** **Answers of Worksheet- 3** **Class – IX**
- **Date-9.04.2020** **1st** Term

Topic – work ,energy and power (numerical based)

Q. Choose the correct option

1.When a body falls freely under gravity than the work done by the gravity is

A. positive

2.When a gas filled in a cylinder fitted with a movable piston is allowed to expand the work done by the gas is positive

B. False

3.When a body slides against a rough horizontal surface, the work done by friction is

C.Negative

4.When a body is lifted, the work done by the gravitational force is positive

B. false.

5.When a body moving in circular path, the work done by the body is

D.Zero

6.when a coolie walks on a horizontal platform with a load on his head ,the work done by the coolie on the load is zero

A.true

7.A gardener pushes a lawn roller through or distance of 20 metre .If he applies a force of 20Kg weight in a direction inclined at 60 degree to the ground. Find the work done by him g is 9.8 metre per second square.

B.1960

8.A person is holding a bucket by applying a force of 10 Newton. He moves over a horizontal distance of 5m and then climbs up a vertical distance of 10 metre. Find the total work done by him.

B.150 J

9.A moving hammer drives a nail into the wood. It has kinetic energy.

A.True

10.A bullet fired from a gun can Pierce a target due to its.

C.kinetic energy

11.How much time will be required to perform 520 J of work at the rate of 20 W?

A.24 s

12.A student carries a bag weighing 50kg from the ground floor to his class on the 1^{st} floor that is 2 metre high. The work done by the boy is

B.10J

13.The power of an engine is 5 kW.Find the work done by it in 1hour

A.18000000J

14.In a tug of war, the work done by the winner and the loser are

A.negative and positive

15.A bullet of mass 10 g travels at 400m per second its kinetic energy will be

A.800J

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