JANUARY WORKSHEET NO. 1

Class- IX   **Date- 14/1/2022**

Name-   **Subject- Science**

Roll No.-   **(PHYSICS, CHEMISTRY & BIOLOGY)**

PHYSICS

1. Define the following terms
   a. Work was done
   b. Energy
   c. Mechanical energy
   d. Kinetic energy
   e. Potential energy
   f. Power
   g. Commercial unit of energy.
2. What will be the kinetic energy of a body when its mass is made four-time and the velocity is doubled?
3. If we lift a body of 7 kg vertically upwards to a height of 10 m, calculate the work done in lifting the body.
4. Establish a relationship between SI unit and commercial unit of energy.
5. Write down the energy transformation taking place a. In electric bulb b. In torch c. In the thermal power station d. In solar cell e. Electric heater.
6. A horse of mass 200 kg and a dog of mass 20 kg are running at the same speed. Which of the two possesses more kinetic energy? How?

CHEMISTRY

1. Calculate the mass of 0.2 moles of oxygen gas.
2. Calculate the number of molecules present in 4.5 g of water.
3. Calculate the mass of 1.2×10^{21} molecules of calcium carbonate.
4. What do you understand by molecules of element and molecules of compound? Explain with the help of examples.
5. What is an ion? What are the ions present in Al_2O_3.

BIOLOGY

1. Define health.
2. What is the immediate cause of infectious diseases?
3. Name any two sexually transmitted disease.
4. What is immunity?
5. What are congenital diseases ? write one example .