

# Delhi Public school, Jammu

## Assignment-1<sup>st</sup>

(April month, 2018)

**Subject: Science**

**Class: 9<sup>th</sup>**

**Total questions: 15**

### Physics:

Q1: (a) Name the devices which measures 1) distance covered 2) speed of vehicles.

(b) Give SI unit of 1) displacement and 2) velocity.

Q2: Give the significance/importance of 1) x-t and 2) v-t graphs.

Q3: Derive the equations of motion graphically;

$$1) v = u + at \quad 2) S = ut + \frac{1}{2}at^2 \quad \text{and} \quad 3) 2aS = v^2 - u^2.$$

Q4: (a) Define uniform circular motion with example.

(b) Name the physical quantities which remains constant and which varies in it.

Q5: Give difference between uniform linear motion and uniform circular motion.

### Chemistry:

Q1: What are the characteristics of the particles of matter?

Q2: Give reason;

(a) Why does our palm feel cold when we pit some acetone or petrol or perfume on it?

(b) Why ice at 273K more effective in cooling than water at the same temperature?

Q3: Define evaporation. What are the factors evaporation?

Q4: Define diffusion. What are the factors which determine the rate of diffusion of a liquid in another liquid?

Q5: Distinguish between solid, liquid and gas in tabular form.

### Biology:

Q1: Who discovered cell and how? Why the plasma membrane is called a selectively permeable membrane?

Q2: Give difference between Prokaryotic cell and Eukaryotic cell.

Q3: Explain Lysosomes and Mitochondria with their functions.

Q4: Why is the cell called the structural and functional unit of life?

Q5: Give difference between Animal cell and Plant cell.