

**DELHI PUBLIC SCHOOL, JAMMU**  
**ASSIGNMENT (2017-18)**

**SUB: SCIENCE**

**CLASS:IX**

**PHYSICS**

- Q1. We say that displacement can be +ve, -ve, or 0. Give example for each case.
- Q2. A body is moving in such a way that in every 10 seconds it covers a distance of 15 m. What do you conclude from the statement.
- Q3. A bus is moving in a crowded area. What type of motion does it possess?
- Q4. What do you mean by the term motion?
- Q5. Write any two points to distinguish between uniform and non-uniform velocity.
- Q6. Does uniform motion mean the same as the uniform velocity? Explain.
- Q7. Explain why gun recoils after firing a bullet.
- Q8. Why do we fall in a forward direction when a moving bus brakes to a stop and fall backwards when it accelerates from rest?
- Q9. It is difficult to balance our body when we accidentally step on a peel of banana. Explain why.
- Q10. An object of mass 100kg is accelerated uniformly from a velocity of 5m/s to 8m/s in 6 seconds. Calculate the initial and final momentum of the object. Also; find the magnitude of the force exerted on the object?

**TOPICS: MOTION , FORCES AND LAWS OF MOTION**

**CHEMISTRY**

- Q1. Suggest a method to liquify atmospheric gases.
- Q2. What type of clothes should we wear in summer?
- Q3. Why is ice at 273k more effective in cooling than water at the same temperature?
- Q4. What are pure substances?
- Q5. Compare the properties of metals and non-metals.
- Q6. Give reasons:
- i) Liquids generally have lower density as compared to solids. But we observe ice floats on water. Why?
  - ii) We can easily move our hands in air but to do same through the block of wood, we need a karate expert. Why?
- Q7. Define melting. How does the process of melting takes place?
- Q8. What are mixture? Discuss its properties.
- Q9. What is sublimation? Give examples of substances which undergo Sublimation.
- Q10. Discuss the factors affecting evaporation.

**TOPIC: MATTER IN OUR SURROUNDINGS, IS MATTER AROUND US PURE**

## **BIOLOGY**

- Q1. Where are proteins synthesized inside the cell?
- Q2. Which organelle is known as the powerhouse of the cell? Why?
- Q3. Name the regions in which parenchyma tissue is present.
- Q4. Write three functions of Cork.
- Q5. Write a note on Vascular tissue.
- Q7. Explain the structure and function of Xylem.
- Q8. What is the function of bone, cartilage, ligament and tendon?
- Q9. i) What are the different types of muscles?  
ii) What are the main functions of connective tissue?
- Q10. i) Differentiate between tendons and ligaments.  
ii) Write a note on adipose tissues.

**TOPICS: THE FUNDAMENTAL UNIT OF LIFE, TISSUES**