

**DELHI PUBLIC SCHOOL, JAMMU**  
**(PRE C.T-1) ASSIGNMENT**  
**SESSION (2019-2020)**

**CLASS: IX**

**SUBJECT: SCIENCE**

**CHEMISTRY (CHAPTER: MATTER IN OUR SURROUDINGS)**

Q1. The conversion of gas into liquid on cooling is called

- a) Condensation
- b) Melting
- c) Freezing
- d) Boiling

Q2. A gas fills the vessel in which it is kept, because

- a) Of weak intermolecular attractive forces
- a) Of strong intermolecular attractive forces
- b) Of rigidity
- c) Of fixed volume

Q3. A few substances are arranged in the increasing order of forces of attraction between their particles. Which one of the following represents a correct arrangement?

- a) Water, air, wind
- b) Air, sugar, oil
- c) Air, oil, sugar
- d) Salt, juice, air

Q4. Which of the following is most suitable for summer?

- a) Cotton
- b) Nylon
- c) Polyester
- d) Silk

Q5. a) Define latent heat of vapourization.

b) Describe an activity to show the presence of water vapours in air.

Q6. Give reasons.

- a) A gas exerts pressure on the walls of the container in which it is kept.
- b) A desert cooler cools better on a hot dry day.
- c) We can get smell of hot sizzling food sitting several meters away.

Q7. a) Explain the sublimation of ammonium chloride with the help of well labelled diagram.

b) How does wind speed and temperature affect the rate of evaporation?

**BIOLOGY( CHAPTER: THE FUNDAMENTAL UNIT OF LIFE)**

Q1.What happens if some grapes are placed in strong salt solution?

- a) They swell
- b) They shrink
- c) Both (a) and (b)
- d) None of these

Q2. Organelle without a cell membrane is:

- a) Ribosomes
- b) Nucleus
- c) Mitochondria
- d) Chloroplast

Q3.Human erythrocytes lack:

- a) Mitochondria
- b) Nucleus
- c) Golgi apparatus
- d) All of these

Q4. Cell membranes are:

- a) Impermeable
- b) Freely permeable
- c) Selectively Permeable
- d) None of these

Q5.With the help of an activity, demonstrate the process of osmosis.

Q6. How does Amoeba obtain its food?

OR

Tabulate the differences between a bacterial cell and human cell.

Q7. a)How are Chromatin, Chromatid and Chromosomes related to each other?

b) What are genes? Give any two functions of genes.

Q8. List the various organelles in cell. Write one function of each.

**PHYSICS (CHAPTER: MOTION)**

Q1. Retardation is a

- a) Vector      b) Scalar      c) Tensor      d) None of these

Q2. Physical quantity which changes in uniform circular motion is

- a) Speed      b) Time period      c) Velocity      d) Radius

Q3. Define uniform circular motion.

Q4. Under which condition displacement is zero.

Q5. Graphically derive equation,  $2as = v^2 - u^2$

OR

Give difference between linear motion and uniform circular motion.

Q6. A body covers half the displacement with velocity 36km/hr and next half of the displacement with 54km/hr. Find the average velocity.

Q7. a) Define velocity and acceleration and give their S.I Unit.

b) Give difference between uniform and non-uniform uniform with graph.

OR

a) A body changes its velocity from 54km/hr to 18km/hr in 10s. Find the acceleration of the body.

b) Give difference between speed and velocity.