

DELHI PUBLIC SCHOOL, JAMMU

HALF YEARLY ASSIGNMENT

(2017-18)

CLASS: IX

SUBJECT: SCIENCE

CHEMISTRY (Matter in our surroundings, Is matter around us pure &Atoms and molecules)

Q1. The temperature on Kelvin scale is 416K. What is corresponding temperature on Celsius scale ?(1)

Q2. What are the characteristics of matter ?

Q3. Explain why , diffusion occurs more quickly in a gas than in a liquid .

Q4. What is fractional distillation ? What is the use of fractionating column in fractional distillation.(1)

Q5. What is a suspension ? Discuss its properties and give suitable examples .

Q6. Define super saturated solution ?What will happen if a saturated solution is cooled ?

Q7. How will you separate the coloured components of black ink . State the principle involved in the process.

Q8. What are the characteristics of matter ? Discuss in detail .

Q9. State the laws of chemical combination .

Q10. State the postulates and limitations of Daltons atomic theory .

PHYSICS (Motion, Force and Laws of motion & Work and Energy)

Q1. Define uniform velocity and uniform acceleration.

Q2. A body is dropped vertically from a certain height . Draw velocity time graph of the body .

Q3. Draw velocity time graph of a body moving with constant retardation.

Q4. State and explain Newton's 2nd law of motion .

Q5. Why is it difficult for a fireman to hold a hose pipe while putting out fire ?

Q6. Explain briefly any three applications of Newton's 3rd law of motion.

Q7. Calculate the work required to be done to stop a car of 1500kg moving at a velocity of 60km/hr.

Q8. What are various energy transformations that occur when you are riding a bicycle ?

Q9. What is potential energy ? Write an expression for potential energy of an object .

Q10. Explain the difference between energy and power . Give their expressions and the units in which they are measured.

BIOLOGY (Cell, Tissues, Improvement in food resources& Why do we fall ill)

Q1. Define cell . Differentiate between plant and animal cell.

Q2. Draw a well labelled diagram of nucleus and mitochondria .

Q3. Why plasma membrane is called as selectively permeable membrane ?

Q4. Define tissue . Draw a flow chart for various animal tissues .

Q5. What do you mean by epithelial tissue ? What are its features and name its various types ?

Q6. Why there is a need for improvement in food resources?

Q7. What do you mean by hybridization ? What are the steps involved in it ?

Q8. Differentiate between healthy and disease free .

Q9. What are the symptoms and signs of AIDS ?

Q10. Give full forms of the following .

a) RNA

b) DNA

c) HIV