



NIRJA SAHAY DAV PUBLIC SCHOOL, KANKE, RANCHI

SUMMER VACATION HOLIDAY HOMEWORK, 2018-19

CLASS:- IX

SUBJECT- SCIENCE

CHEMISTRY

- 1) Write name of any ten gases with their molecular formula.
- 2) Define the following terms:
Diffusion, Fluid, Intermolecular space, Kinetic energy
- 3) Explain an activity with related diagram showing diffusion of:
 - a) Liquid in liquid
 - b) Gas in gas
- 4) Explain why:
 - a) Rate of diffusion is maximum in gasses.
 - b) Solids are incompressible.
 - c) An iron almirah is solid at room temperature.
 - d) Liquids have definite volume but no definite shape.
- 5) Write and learn the symbols of first thirty elements.

BIOLOGY

- 1) Differentiate between plasma membrane and cell wall on the basis of structure, function and location.
- 2) Define : Endocytosis , Membrane biogenesis
- 3) Draw well labeled diagram of –
 - a) T.S of parenchyma tissue
 - b) T.S of collenchyma tissue

PHYSICS

1. Define average speed. A bus travels a distance of 120 km with a speed of 40 km/h and returns with a speed of 30 km/h. Calculate the average speed for the entire journey.
2. Define uniform and non-uniform motion. Write one example for each.
3. What does the odometer of an automobile measure?
4. Define uniform acceleration. What is the acceleration of a body moving with uniform velocity?
5. Derive the equation of motion $v = u + at$, using graphical method.
6. Differentiate between speed and velocity.