RADHAKRISHNAN VIDYALAYA

Brahman toil, Durga Asthan & Nai Bazar, Muz.

HOLIDAY HOME WORK 2019-2020

Class: IX   Subject : Science & Tech.

Section – A : Physics

1. Can the magnitude of the displacement be equal to the distance travelled by an object? Explain giving an example.

2. A farmer moves along the boundary of a square field of side 10m in 40seconds.What will be the magnitude of displacement of the farmer at the end of 2 minutes 20 seconds?

3. What do you mean by uniform and non-uniform motion?

4. An object travels 16m in 4 seconds and then another 16m in 2 seconds. What is the average speed of the object?

5. Under what conditions is the magnitude of average velocity of an object equal to its average speed?

6. A car accelerates uniformly from 18km/h to 36km/h in 5s.Calculate

    (i) the acceleration and

    (ii) the distance covered by the car in that time.

Section – C : Chemistry

1. Explain the characteristics of the particles of matter.

2. a) Tabulate the differences in the characteristics of the three states of matter.

    b) Comment on the following:
        Rigidity, compressibility and fluidity

3. Why does the temperature remain constant during the change of state?

4. Liquids generally have lower density as compared to solids. But you must have observed that ice floats on water. Why?

5. Give reasons for the following:
        a) A gas completely fills the vessel in which it is kept.
        b) A gas exerts pressure on the walls of the container.

Section – B : Biology

1. Enumerate the role of lysosmes in animal cell.

2. A person takes concentrated solution of salt, after sometime, he start vomiting what is the phenomenon responsible for such situation? Explain.

3. What is membrane biogenesis? Mention the organelle involved.

4. Very briefly, describe the following:

    i)   Golgi bodies are secretory in function

    ii)   Nucleoid in bacteria

    iii)   Importance of Vacuoles in plant cell

5. How is prokaryotic cell different from eukaryotic cell? Explain with the help of diagram.

6. Write down the differences between plasmolysis and turgidity.

7. Give an account of different components of nucleus and also mention their function

Model :- Make a 3 – d Model of Animal cell   or   Plant Cell .