Delhi public school Jammu
Session 2021-2022
Foundation worksheet

Class XII Subject: Physics

The recapitulation of following concepts:

- **Vectors:**

  The vector has a very important role in the application of Physics. Vector analysis provides a concise notation for presenting equations arising from mathematical formulations of physical and geometrical problems. Many of the results are obtained only using the concept of Vectors. So, Vectors is something which you should be absolutely conversant, specially vector products, component of vectors, unit vectors , parallelogram law of vector addition, Triangle law of vector addition, resolution of vector, cross product and dot product of vectors.

- **Work:**

  All those Energy, work, force relations, cases that you are introduced in class XI, keep popping up in XII Class Chapters. The concept of work will be given to the student as in the physics many application involves the concept of work done by constant force or variable force. So student will be able to understand the difference between the methods to calculate the work using constant force and work done using variable force.

- **Gravitation**:

  The recapitulation of the chapter gravitation is to be done as the concept of gravitation is analogous to the concept of electrostatics which will help the student to understand the chapter electrostatics in easy way. Topics like newton's law of gravitation in vector form, principal of superposition of gravitational forces, gravitational field, gravitational potential, gravitational potential energy are to be revised.

- **Oscillations:**

  The concept of oscillations and graphs as it will help the student to understand the chapter of alternating current and Wave optics in a better way. Also the students will be able to relate the concepts with phase and phasor diagrams .

- **Waves:**

  Waves should be worked at. It's got its Sister chapter coming in XII : wave optics and EM waves. So, it'd be better that you have worked upon the wave nature. Taken, you also did numericals. Wave motion as a method of energy propagation and properties of waves, the cases of superposition of waves , relation between phase difference and path difference are to be taken / revised for better understanding .